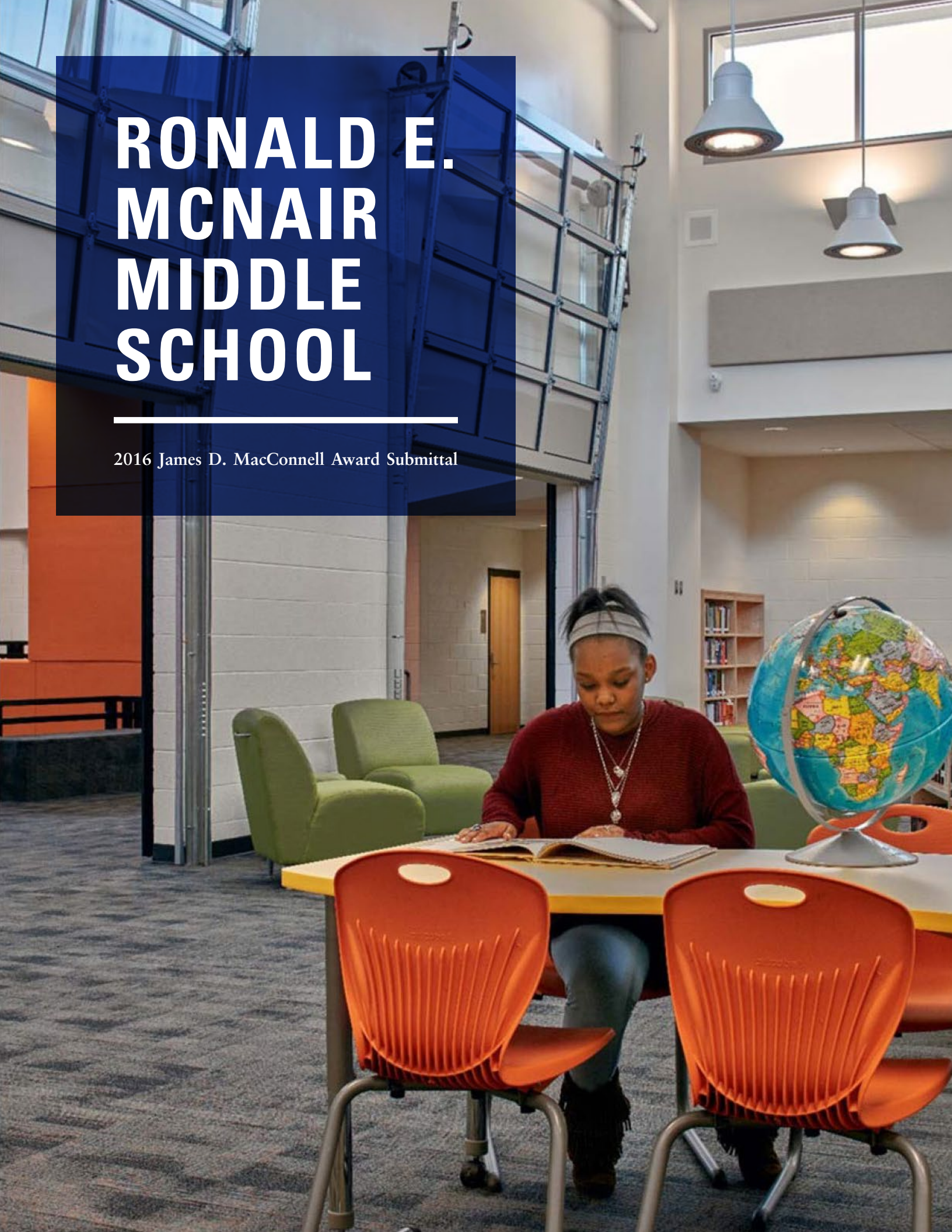


# RONALD E. MCNAIR MIDDLE SCHOOL

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2016 James D. MacConnell Award Submittal







BEFORE YOU  
CAN MAKE A  
DREAM COME  
TRUE, YOU  
MUST FIRST  
HAVE ONE.

Ronald E. McNair, Physicist & NASA Astronaut

## EXECUTIVE SUMMARY

### *Rethinking the Middle School Prototype*



#### THE SETTING

In 2012, the leadership at Fulton County Schools was looking for an opportunity. They had expended a great amount of time and energy bringing in new leaders that could offer fresh ideas for learning and teaching: a new superintendent focused on evolving the district's culture to embrace change and accountability for raising test scores and graduation rates; a new deputy superintendent of academics embraced personalized learning so each student could move through the curriculum at their own pace; and this vision was fully supported by the new program management team, who demonstrated an unyielding commitment to the academic leadership's adoption of personalized learning goals.

#### THE VISION

Their opportunity was the Ronald E. McNair Middle School, *the lowest performing school in the district*, and the vision was clear. As the first replacement school to be delivered by this team, McNair was selected to fully embrace a new direction for the district – a direction that the leadership had recently developed in a new strategic plan; one that prioritized personalized learning and acknowledged the diversity of teaching and learning styles. Staff was challenged to create a facility to reflect that purpose. This was the path forward for the district to achieve their main goal: to **reduce the achievement gap and improve test scores**, and they understood that good planning and communications were central to this strategy.

#### THE QUESTIONS

This enthusiastic new team was not however immune from many of the same challenges facing districts nationally. Can a single project be enhanced with all the newest attributes of 21st century learning in a district that prides itself on equity? Can a building project support and be supported in a historically underperforming school community? And arguably most important, ***can the capital plan's original budget and schedule support a new purpose-designed model facility?***

#### THE APPROACH

The new Ronald E. McNair Middle School in College Park, GA is a 187,000 SF facility configured on two levels that is the first school in the district to incorporate the principles of the Immersive Learningscape and Collaborative, Neighborhood-based learning environments into its design. The district, which uses a prototype design strategy for all of its new school projects, decided at the beginning of this project to explore a new approach to its school environments, deviating from the more typical 'self-contained classroom with double-loaded corridors' model that its current prototype design is based, and asked the design team to re-design the interior layout to create an interactive, collaborative environment to connect and energize the academic areas of the school.



# SCOPE OF WORK + BUDGET

*Same SF, Same \$, Transformative Design*

Although the vision of the district to re-examine the culture and configurations of their facilities had been established, it was still important to them to maintain an overall organizational structure that had some relationship to their prototype design. For that reason, the challenge presented to the design team was to re-imagine the learning spaces and improve on the other areas of the design. Because of the timing, updates to the educational specifications had not yet been incorporated, so input from the leadership and community charrettes would be directly synthesized into the new design, and would later be incorporated into a new facility program.

The program included instructional spaces to accommodate 1,200 6th, 7th, & 8th grade students, with a core capacity that would allow them to expand in the future to a limit of 1,500 students. Spaces included

core curriculum classrooms, science labs, specialty classrooms (foreign language, special education, and gifted), and career tech labs (healthcare science, business, engineering technology), as well as art labs, music labs, media center, gymnasium, cafeteria & kitchen. Many areas within the school were re-examined from the previous prototype design, including the Entry Commons, which was redesigned to improve circulation and supervision.

## FAST FACTS

- Owner:** Fulton County Schools
- # of Students:** 1200
- Grades Housed:** 6<sup>th</sup> - 8<sup>th</sup> Grades
- % of Free / Reduced Lunch Students:** 100%
- Date of Occupancy:** January 2016
- Site Size:** 48.66 Acres
- Gross Building Area:** 187,180 SF
- # of Floors:** 2
- Area / Student:** 155.98 SF
- Project Cost (Including Site):** \$ 31,554,000
- Cost / SF:** \$168.20 / SF
- Project Cost (Excluding Site):** \$24,800,000
- FFE Cost (Furniture, IT, AV):** \$998,000





# COMMUNITY ENGAGEMENT PROCESS

*For Community, By Community*

# ENVISION THE FUTURE OF SCHOOLS IN FULTON COUNTY

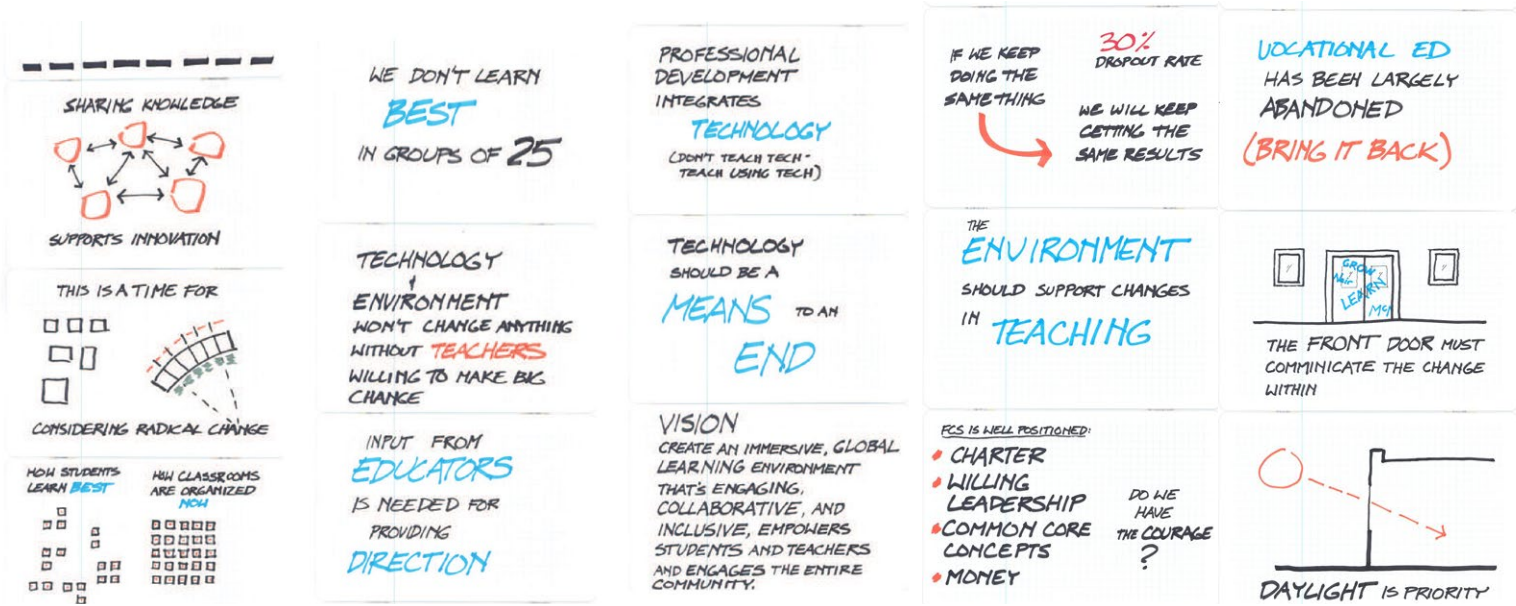


Everyone in the room has an idea of what the school should be, but this collaborative process where all stakeholders are included really brings our individual ideas together so we can create one idea.

Dr. Muri, Former Deputy Superintendent of Academics, Fulton County Schools

Staying true to Dr. MacConnell’s fundamental research of integrating school construction with child development, curriculum, and instructional methods, Fulton County Schools’ Ronald E. McNair Middle School exemplifies the power of Vision, Collaboration, Creativity and Resourcefulness, and what is possible when a whole community comes together to rethink their school.

Located in an underachieving area of the school district, the school leadership knew they needed to reach out and connect with the community to develop this project and the ideas it represented if they wanted it to be a success. A new facility can provide renewed enthusiasm and pride in a community, but the district wanted to go beyond their standard product to introduce something truly special, a school that would be used as a model for the rest of the county, moving forward.







We don't want to design spaces for what we know today. We want to design spaces for tomorrow.

Dr. Muri, Former Deputy Superintendent of Academics, Fulton County Schools

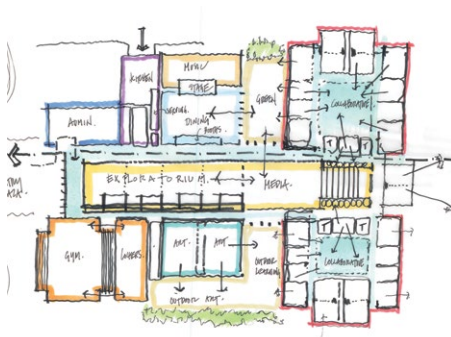
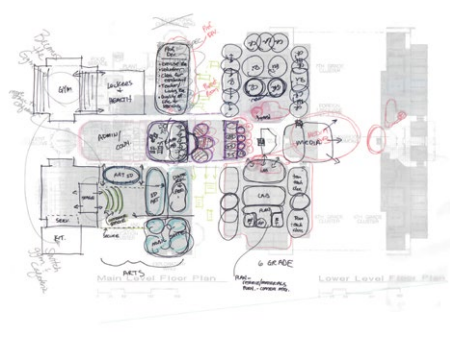
## INITIAL CHARRETTE

Because the district wanted to break out of their standard facility design process, they reached out to a nationally recognized thought leader in transformational educational environments to align the district leadership, school staff and community stakeholders by conducting a two-day, interactive design charrette. The charrette was held in one of the previous prototype schools – one whose design would have been constructed for the McNair project as well.

**Day 1** – the group of 50+ was shown a presentation introducing them to the concepts included in project-based learning and examples of what those environments could do and how they could look. This was followed by a series of exercises giving the attendees opportunities to share their thoughts & experiences – ideas that were collected and organized for further discussion. With the group now more familiar and aware of the possibilities and challenges involved in creating a new learning environment, they were subdivided into six teams and were asked to develop a plan that would incorporate those ideas that they wanted to be part of the re-envisioned facility. These plans were then presented to the rest of the group at the end of the day.

After the end of the day 1 session, the charrette team reviewed the key takeaways from the days work and prepared a synthesized analysis to present the following day.

**Day 2** – the charrette team presented their analysis and recommendations of the presentations made the day before. Many of the participants from day 1 had taken the time to reflect on the ideas presented the previous day and offer additional insights on concepts discussed the day before. All the participants have a new sense of energy and excitement towards the possibilities of how the new McNair MS will develop.

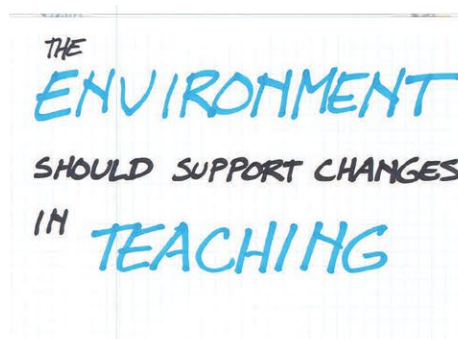
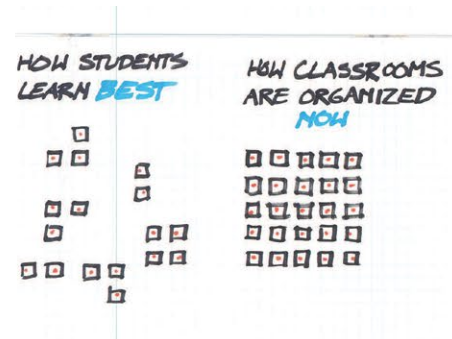
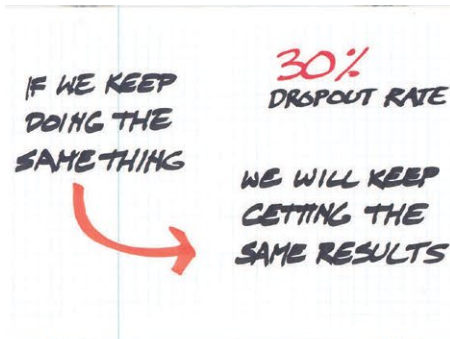


## MS PRINCIPAL PRESENTATION

With the overwhelming success of the initial charrette, a select group of MS principals and key district leaders participated in a follow up workshop to ensure the new design resolved any challenges or limitations of the existing prototype. This produced an added layer of insight as to priorities, trends, and other considerations.

## COMMUNITY WORK SESSIONS

After collecting and organizing all of the initial charrette and workshop data and developing some initial concept organizations, several community work sessions were conducted at the existing McNair facility. Feedback was broad and well-intentioned; the rich history of the evolution of the neighborhood was interesting and inspiring. All comments were documented, evaluated, and thoroughly considered as the design progressed.







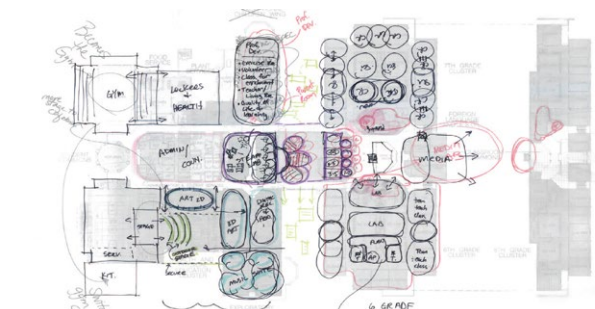
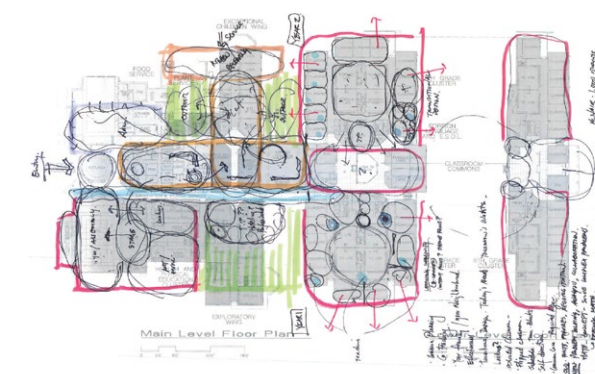
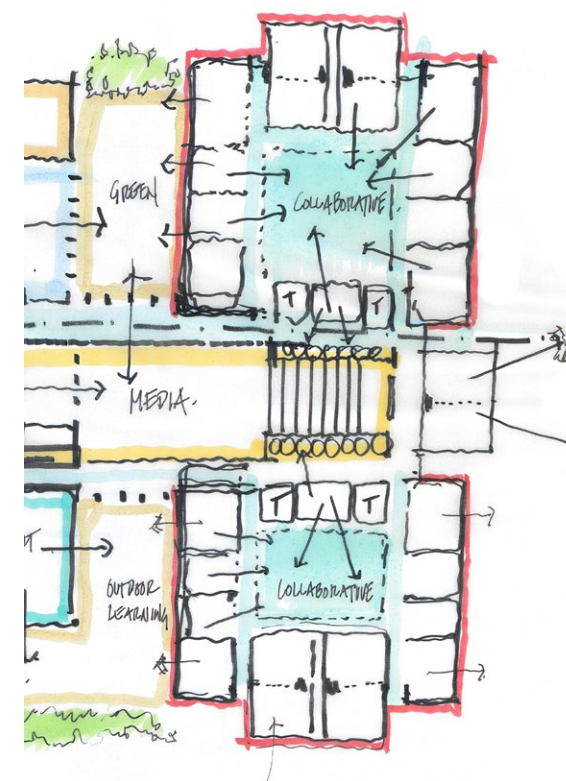
I believe that these cross-functional Charettes are exactly how we should go about coming up with our Next Generation of school environments.



This process was an eye-opening experience.

Patrick Burke, Deputy Superintendent of Operations,  
Fulton County Schools

Teacher Voice, McNair MS, Fulton County Schools



To see your vision go from just ideas to being sketched right there in front of you is just an amazing process, because you get to pull from all stakeholders in the same place.

Lori Bolds, Former Principal, McNair Middle School





# CHARETTE RESULTS

FULTON COUNTY FUTURE SCHOOLS VISION STATEMENT

**Create an immersive, global learning environment that is engaging, collaborative, and inclusive, empowers students and teachers, and engages the entire community.**



## PROJECT GOALS

- Open spaces within the school
- Open-view classrooms – students and work on “display”
- Design functional outdoor learning environments
- Larger, flexible learning space
- Differentiated spaces for differentiated learning
- Incorporate technology to support, not drive, education
- Embrace and implement global study and outreach
- Space to be engaging, inclusive, student-centered
- Teaming amongst students and teachers
- Empower students and teachers
- Staging progress of implementation – traditional, transitional, transformational
- Places in the school for community access
- Combine stage/café/media center – a new learning space



# EDUCATIONAL ENVIRONMENT

*Reinventing the Prototype*



This concept is liberating. The space configuration lends itself to many types of learning. Something authentic will happen here.

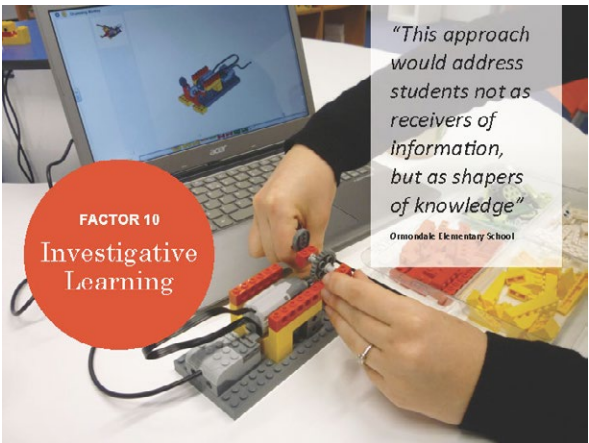
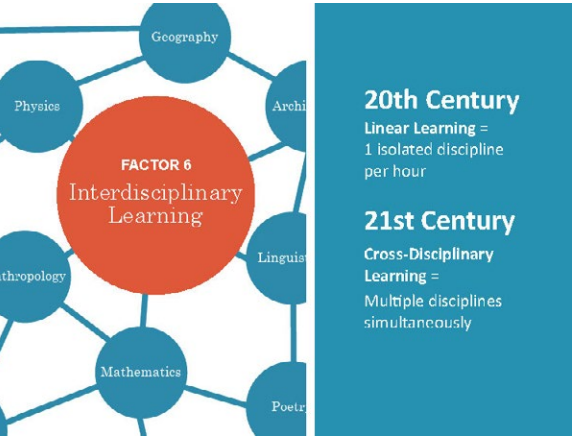
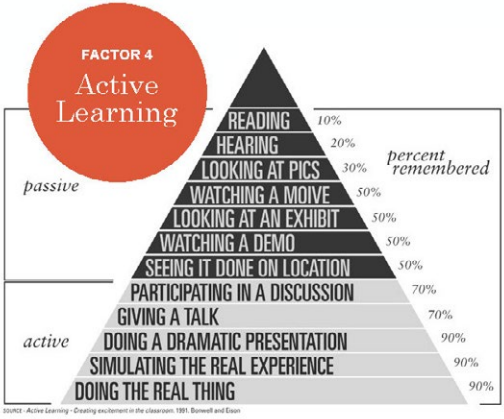
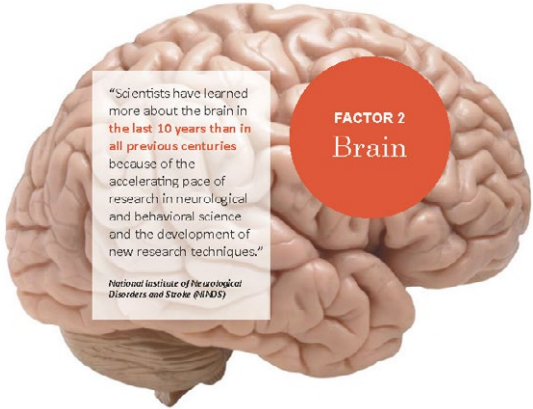
Dr. Lisa Hastey, Principal, Ridgeview MS, Fulton County Schools





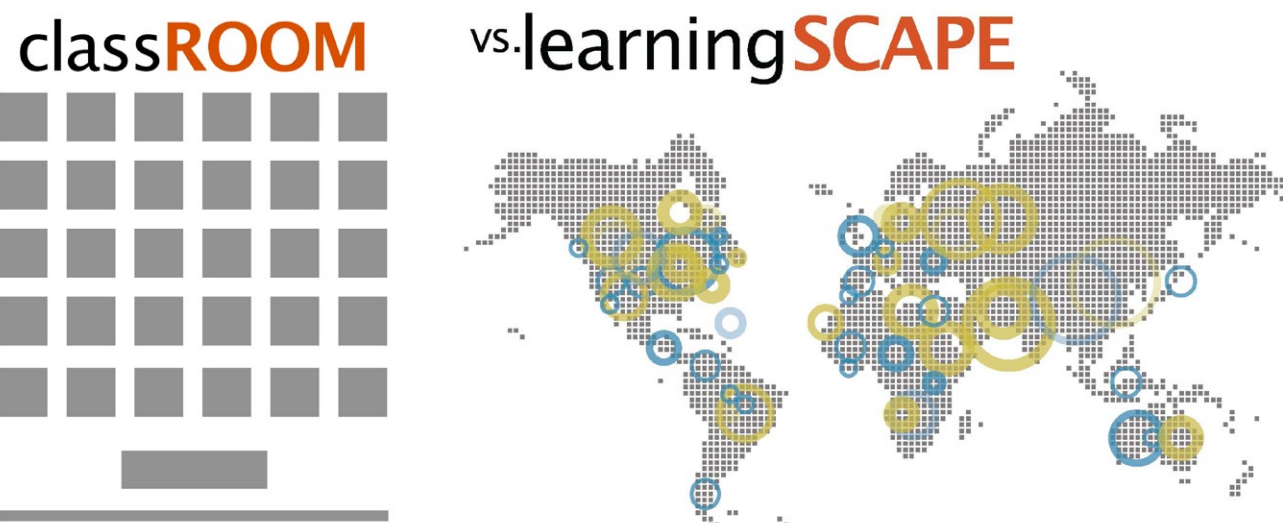
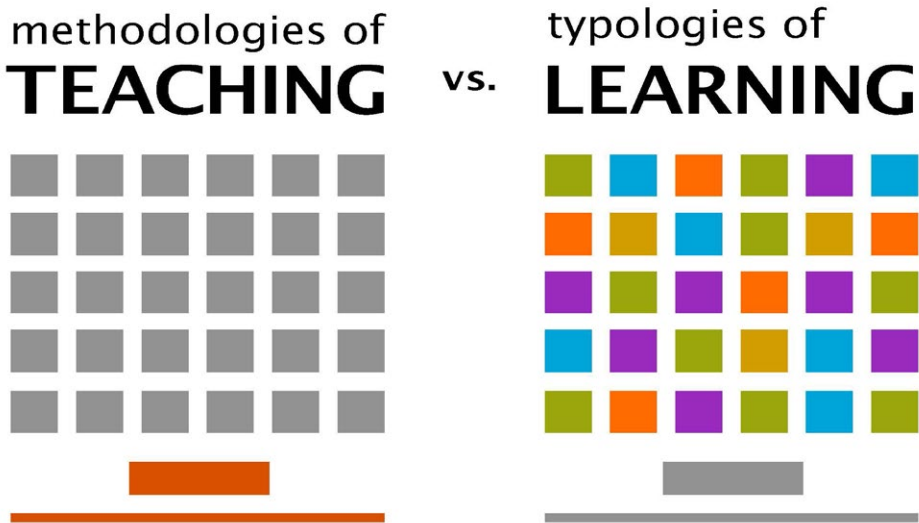
# THE LEARNING REVOLUTION

*A Paradigm Shift in Learning for the Innovation Age*



## PERSONALIZED LEARNING

## LEARNING HAPPENS EVERYWHERE





# IMMERSIVE LEARNINGSCAPE

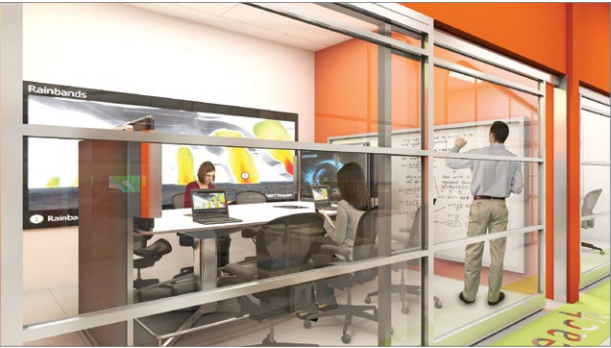
*A Transformative Approach to 21st Century Learning*

## KEY ISSUES ADDRESSED BY THE IMMERSIVE LEARNINGSCAPE

- |   |  |   |
|---|--|---|
| 1. Multiple Modalities of Learning              | 4. Flexibility, Adaptability, within an Engaging and Active Learning Environment | 6. Support Personalization and Differentiation  |
| 2. Teaching and Learning of 21st Century Skills |  | 7. Support Transdisciplinary Curriculum that Addresses Effective STEAM Project-Based Learning |
| 3. Integration of Technology with Learning      | 5. Perform as an Innovation Lab  |   |



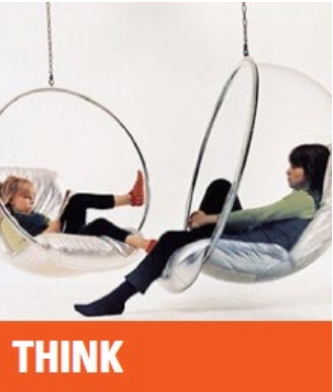
**discover** "workshop" spaces for learning via hands-on testing and exploration



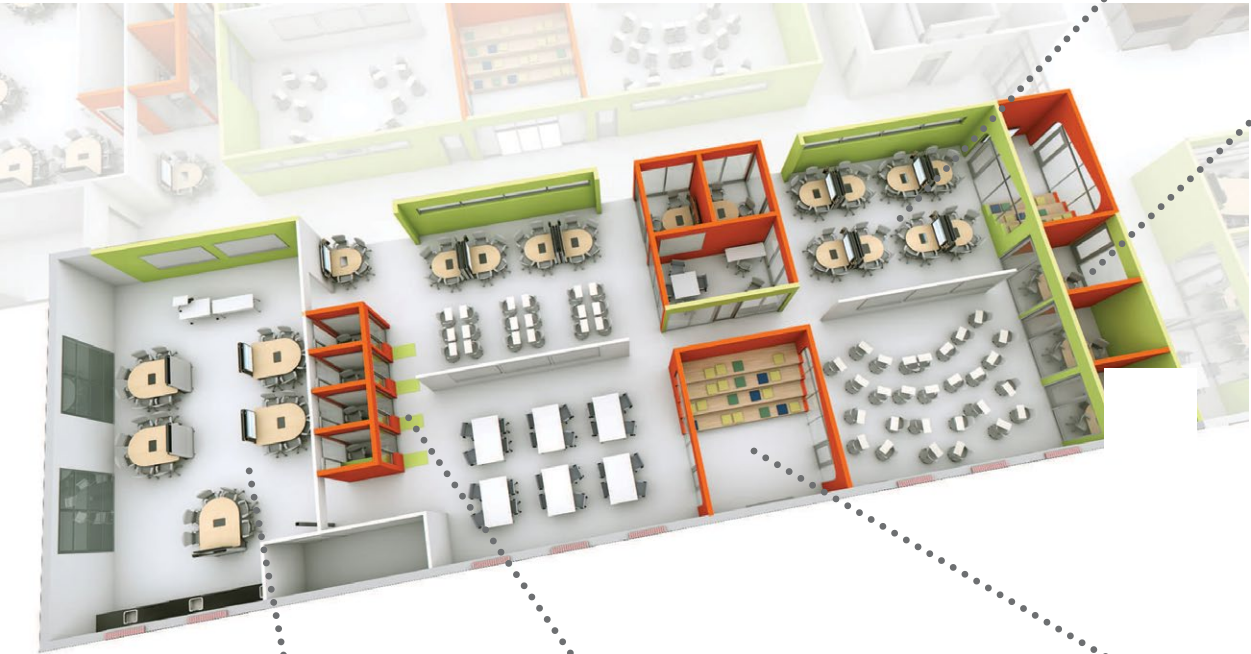
**exchange** communal spaces for social learning and co-planning

## design opportunities

- community
- connectivity
- transformation



The Immersive Learningscape is designed as a landscape of various learning environments that address what we see as 5 typologies of learning: Think, Create, Discover, Impart and Exchange. Each of these typologies requires very specific needs (space, technologies, furniture, acoustics, etc.) in order to be effective for today's students' learning process. The main goal of the design is to respond to the needs of our future leaders: support teamwork, interdisciplinary learning, communication skills, critical thinking skills, problem solving, creative thinking, technology skills, and the passion for learning.



**create** flexible team spaces for project-based learning and collaboration



**think** intimate spaces for individual investigation, critical thinking and assessment



**impart** gathering spaces for short lectures, break-outs and distance learning



# PHYSICAL ENVIRONMENT

## *A Transformative Approach to 21st Century Learning*

Fulton County Schools is a large district in the metro Atlanta area that extends both north and south of the city of Atlanta that is separated at its center by another school district – Atlanta Public Schools. FCS operates 59 elementary schools, 19 middle schools, and 17 high schools, along with other learning centers, throughout the county. They have effectively utilized a prototype philosophy for many years as a way to maintain parity among all of its diverse communities. The original plan for the McNair Middle School Replacement was to re-use the existing prototype middle school design, which had been previously constructed in 9 other locations and was a very successful and highly regarded plan.

The transformation of the plan took its cues from insights gleaned from stakeholder input at the design charrettes, with the challenge to create a collaborative and flexible environment unique to the needs of the students of this school. This goal was achieved by implementing the following concepts:

### ***Create ‘Learning Neighborhoods’ within the grade-level wings***

The existing 6th, 7th, and 8th grade wings, which previously contained individual classrooms & science labs, were reconfigured into learning neighborhoods that contain 4 classroom areas and 1 science lab, along with a variety of smaller collaborative spaces and a centrally

located teacher planning area. The area is configured so that students can circulate among the different areas without having to leave the neighborhood, and the teaching team can plan lessons that may change between the different available spaces depending on course content.

***Re-envision the Media Center*** By re-making the Media Center as a more open, active space that is more accessible, with an emphasis on technology, assistance, and exchange of ideas, the area has been directly connected to adjacent learning environments that extend and open up the media center area.

***Showcase Special Career Technology Labs*** Spaces that exhibit project-based learning activities are organized along main corridors and include windows to create visual interest.

***Introduce new finishes that better support acoustics & maintenance*** New floor finishes including stained, polished concrete and antimicrobial carpet were used for the first time, taking into consideration the importance of acoustics and indoor air quality, as well as providing the first school in the district with no floors to wax.

***Selection of new furniture components*** The district had to completely rethink its furniture products, understanding how important the correct furniture was to ensuring the success of the new spaces.



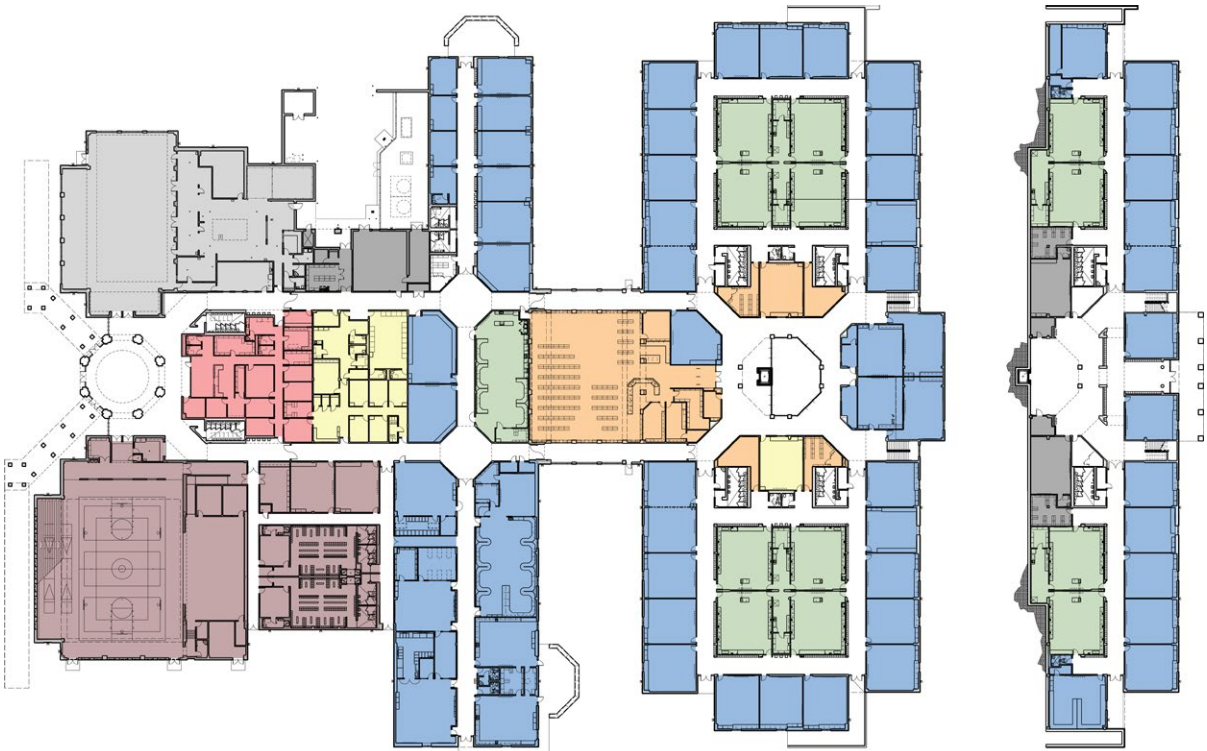




We know HOW they learn and WHAT they need to learn. Our challenge is what to do with that information. We need environments, technology, space, and opportunities to act upon that information to personalize and differentiate learning to each and every child.

Dr. Muri, Former Deputy Superintendent of Academics, Fulton County Schools

*A Transformative Approach to 21st Century Learning*



Old Prototype



New Prototype





# A NEW PROTOTYPE FOR 21ST CENTURY LEARNING



## MULTI-MEDIA

Think-scape  
Create-scape  
Discovery-scape

## GRADE LEVEL / SKILL MASTERY NEIGHBORHOODS

5 Teachers / 120 students  
Think-scape (2)  
Create-scape (1)  
Discovery-scape (4)  
Impart-scape (3)  
Exchange-scape (6)



7th GRADE

## FORUM

Impart-scape  
Exchange-scape

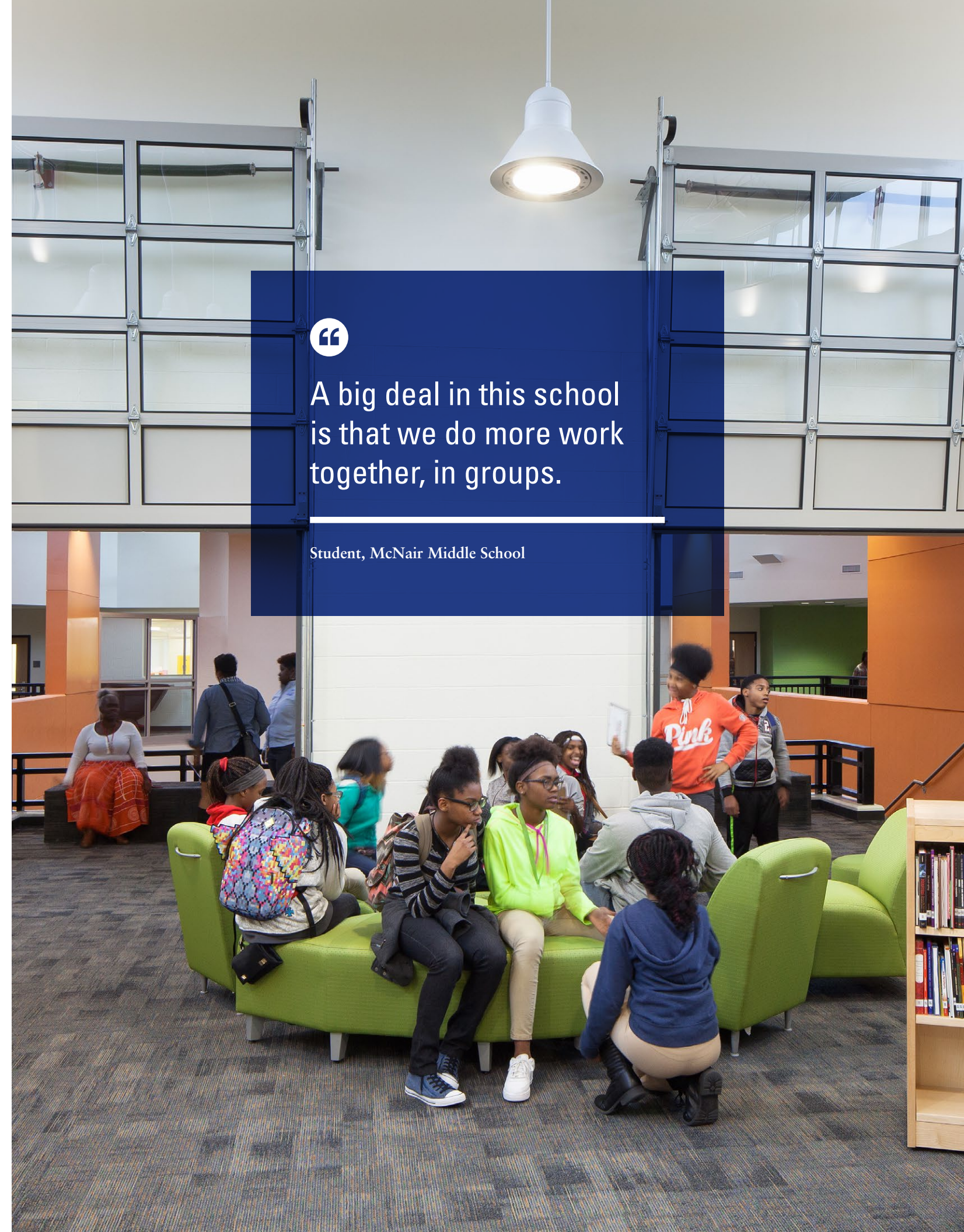
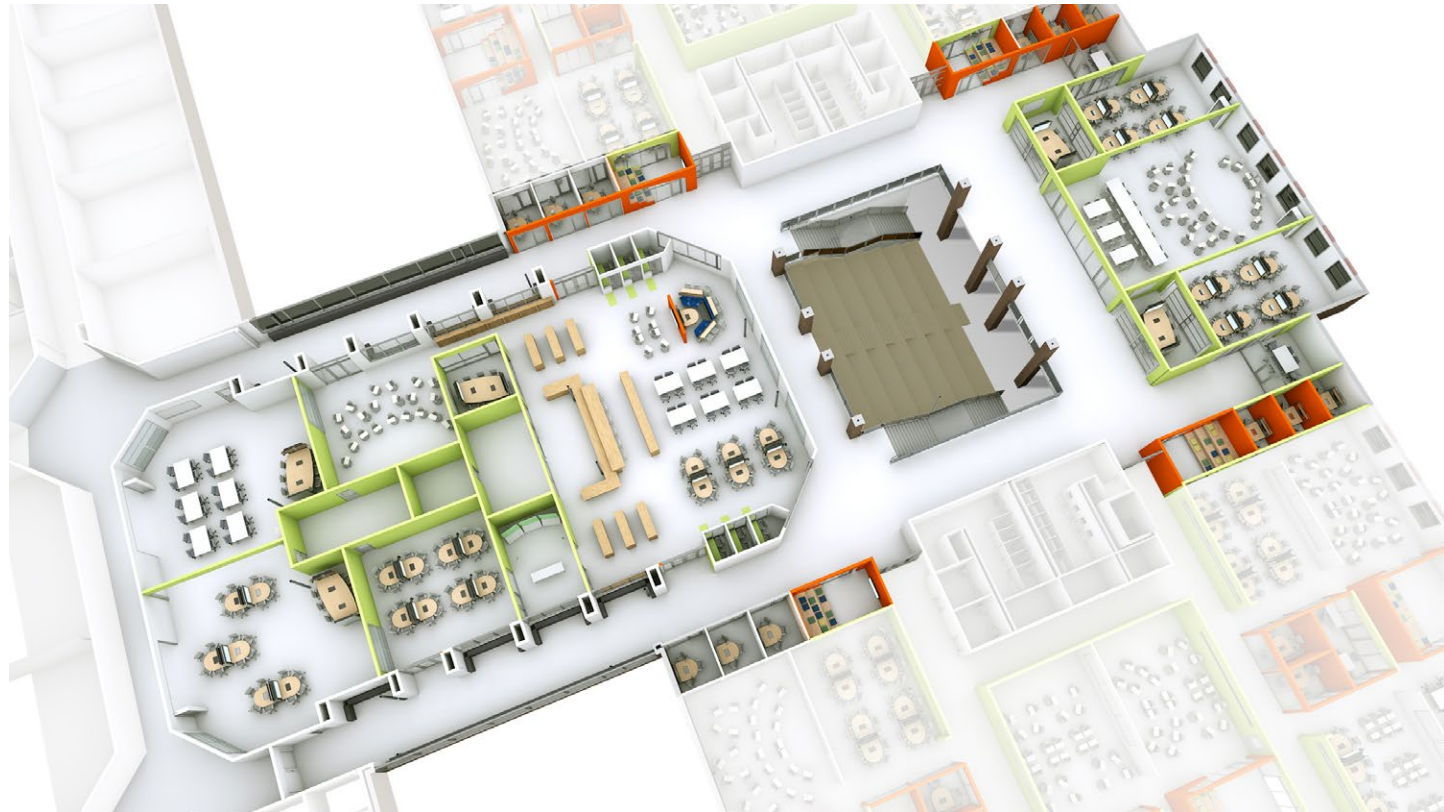
6th GRADE

3 NEIGHBORHOODS



# RETHINK INQUIRY SPACE

*Designing for Collective Learning*



A big deal in this school is that we do more work together, in groups.

Student, McNair Middle School







IMPART

“

The Forum is one of our prized possessions. It gives us the Wow factor, yet it is cozy and personal with good acoustics.

Luqman Abdur-Raman, Principal, McNair Middle School





The Forum becomes  
and extension of the  
Knowledge Hub, an  
Exchange Space for social  
and academic interactions.

Design Team





Transparency in the school is critical to create a vibrant culture of sharing ideas, exhibit student work, and accountability.

Design Team







The colors, light, and design  
contribute to this school  
being the happy place.

Assist. Principal, McNair Middle School





# RETHINK THE NEIGHBORHOOD

*Designing for 21st Century Skills & Supporting Innovation*



Spaces in the school should lead to break-out groups meeting to share ideas and problem-solve.

Luqman Abdur-Raman, Principal, McNair Middle School

CREATE





I see the Impart rooms as an evolution of the students' learning process. Students have to understand early on that in real world problem-solving, it is not all about lecture, or group work, it is also about coming together to present and share ideas.

Luqman Abdur-Raman, Principal, McNair Middle School





**IMPART**



**EXCHANGE**



**CREATE**



**CREATE**





In the past, technology has been an outsider in the process of designing a school. Technology has been an add-on. With this charette process, it has given us the opportunity to integrate technology in the design of the school. It is supporting personalization and differentiation.

Timothy Dunn , Director IT Program Management,  
Fulton County Schools

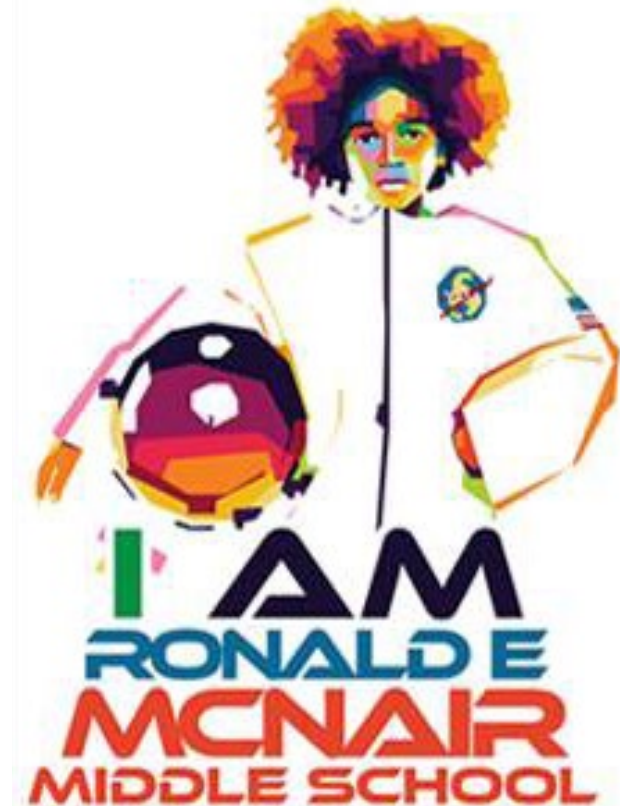
THINK







DISCOVER



Our students come from lower socio-economic status. In some instances it means gloom. When they come to school, this should be their happy place. School should always be a bright spot for our hearts, minds and our thinking. Everything in this school, colors, furniture, space, is positive compared to old McNair.

Assist. Principal, McNair Middle School

## RESULTS

### *Designing for Collective Learning*

#### ***How the project achieves educational goals/objectives***

The new spaces and reorganization of the McNair Middle School design is the first example of a facility in the district to have the variety and types of spaces that can truly accommodate a new way of teaching and learning in the district. As the realization that a project-based, hands-on active learning approach will be beneficial to all parties, and as the staff learns how to maximize the unique organization of the school, the school is poised to see great results.

#### ***How the project achieves school district goals***

The re-envisioning of the Ronald E. McNair Middle School was a giant leap for the district that knew it wanted to raise the bar for academic environments in the county and the state. By creating this state of the art facility that fully integrates all of the characteristics identified through an inclusive, exhaustive programming process, they

have successfully set a new course for facility teaching and learning standards that will continue to develop throughout the county. The lessons learned through this re-design process have already been incorporated into four additional middle school addition projects for the district, and they have recently restructured their Educational Specifications to allow for the designs of these types of environments.

#### ***How the project achieves community goals***

By including the community throughout the design process, it has given them an increased sense of empowerment, to know that their voice was heard and valued. With all stakeholders increasingly focused on greater student engagement, better testing, and an overall preparedness to advance to the next level, the new facility has been warmly welcomed, with high expectations.