

The Role of Furniture in Personalizing Learning Environments

*How furniture can meet the needs of students in these rapidly changing times
A Case Study of Saint Paul Public Schools - St. Paul, Minnesota*

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First, a quick survey...

- Go to www.socrative.com
- Go to “Student Login”
- Enter Teacher’s Room code: SPPSFACILITIES
- Take 7 question quiz



First, a quick survey...

1. Furniture play a significant role in learning

2-7. Please indicate the extent to which the furniture in the classroom supports...

- Student interactions
- Flexibility in different learning structures
- Student group work
- Physical needs of the students
- Student comfort
- Teacher comfort



Learning Objectives

- How to have furniture standards in a continually evolving arena
- Understand the role that furniture plays in supporting student-defined environments
- Explore the role of feedback and analysis in refining furniture standards
- Explore how FFE can help create contemporary learning environments in older buildings





Vision Statement:

Imagine every student inspired, challenged, and cared for by exceptional educators.

Imagine your family welcomed, respected and valued by exceptional schools.

Imagine our community united, strengthened, and prepared for an exceptional future.

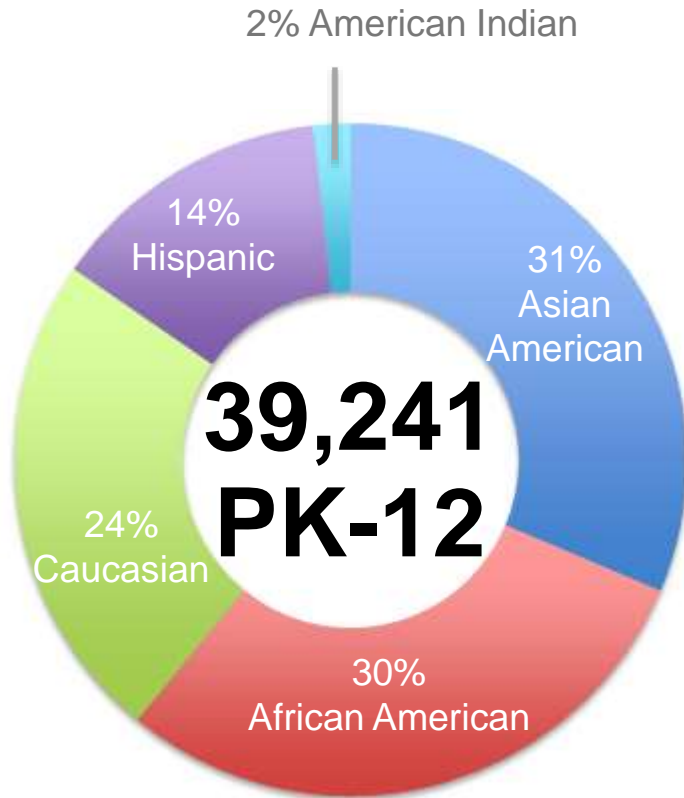
Saint Paul Public Schools:
Where imagination meets destination.

Mission Statement:

To provide a premier education for all.



District-at-a-Glance



- Students speak **100+ languages** and dialects
- **4,000*** students new to SPPS each year; 2,000* at the secondary level
- **17%** of students require **special education** services
- **73%** of students eligible for **free or reduced-price lunch**
- **2,000*** students experience **homelessness** during the school year

*Approximate numbers

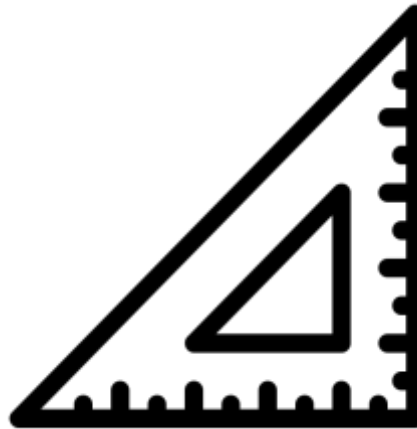


SPPS Facilities Portfolio

72 facilities



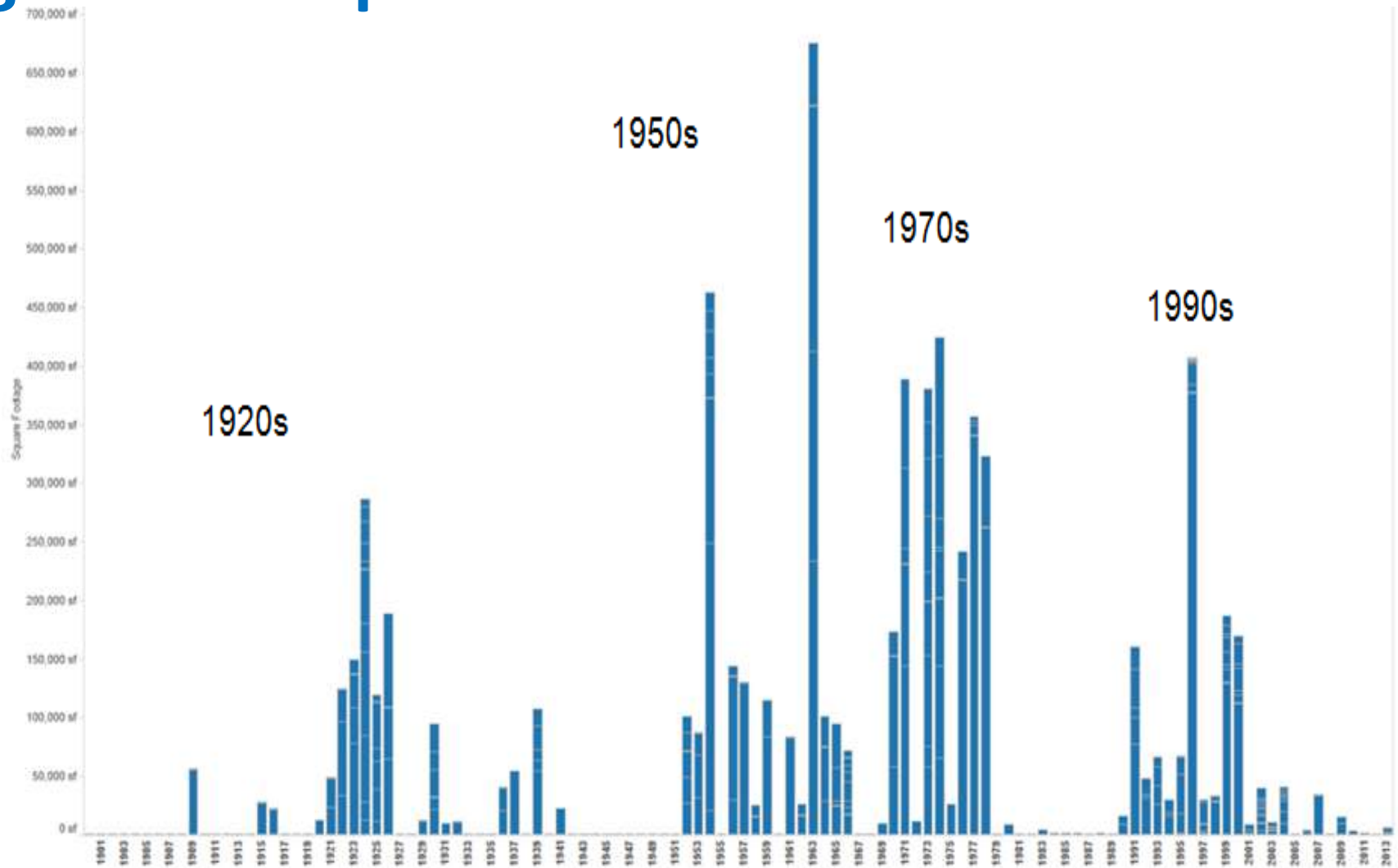
7.3 million square
feet of space



465 acres of land



Age of SPPS' portfolio



Long Term History



Randolph Heights, 1960 (Minnesota Historical Society)

Note: 34 students in this picture



Randolph Heights, 2015

Note: 26 students per class, average

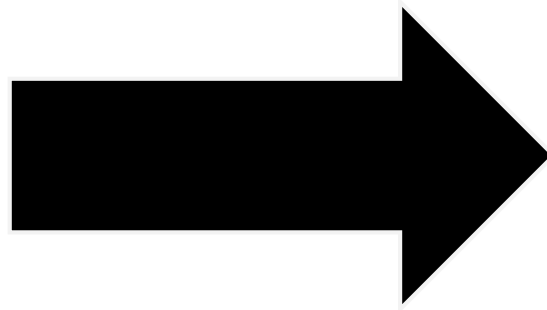


Developing philosophies: Education

Industrial



1865



Personalized



2015



Developing philosophies: Facility Planning

Expert-based



1865

Community-based



2015



Our 21st Century Learners

- Our eighth grade students have never lived in a world without Google
- Preparing our students for jobs that don't yet exist
- Kindergartners today will retire in 2067 and be the ones to solve many emerging issues
- More than ever, our students need to be collaborative, creative and adaptable



Design for Learning

NOT THIS...

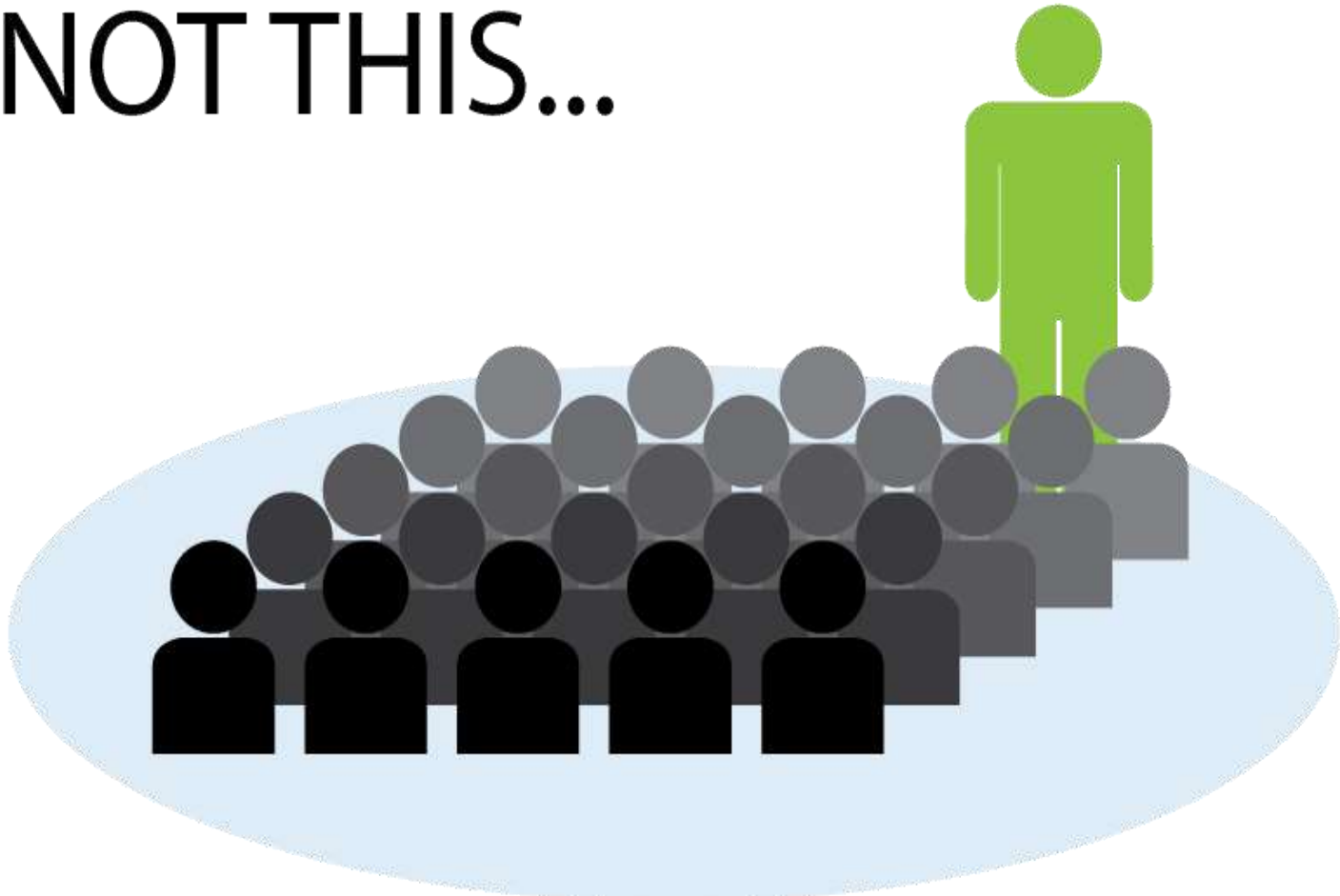


Image courtesy of Cuningham Group Architects & American Architectural Foundation



Design for Learning

THIS...

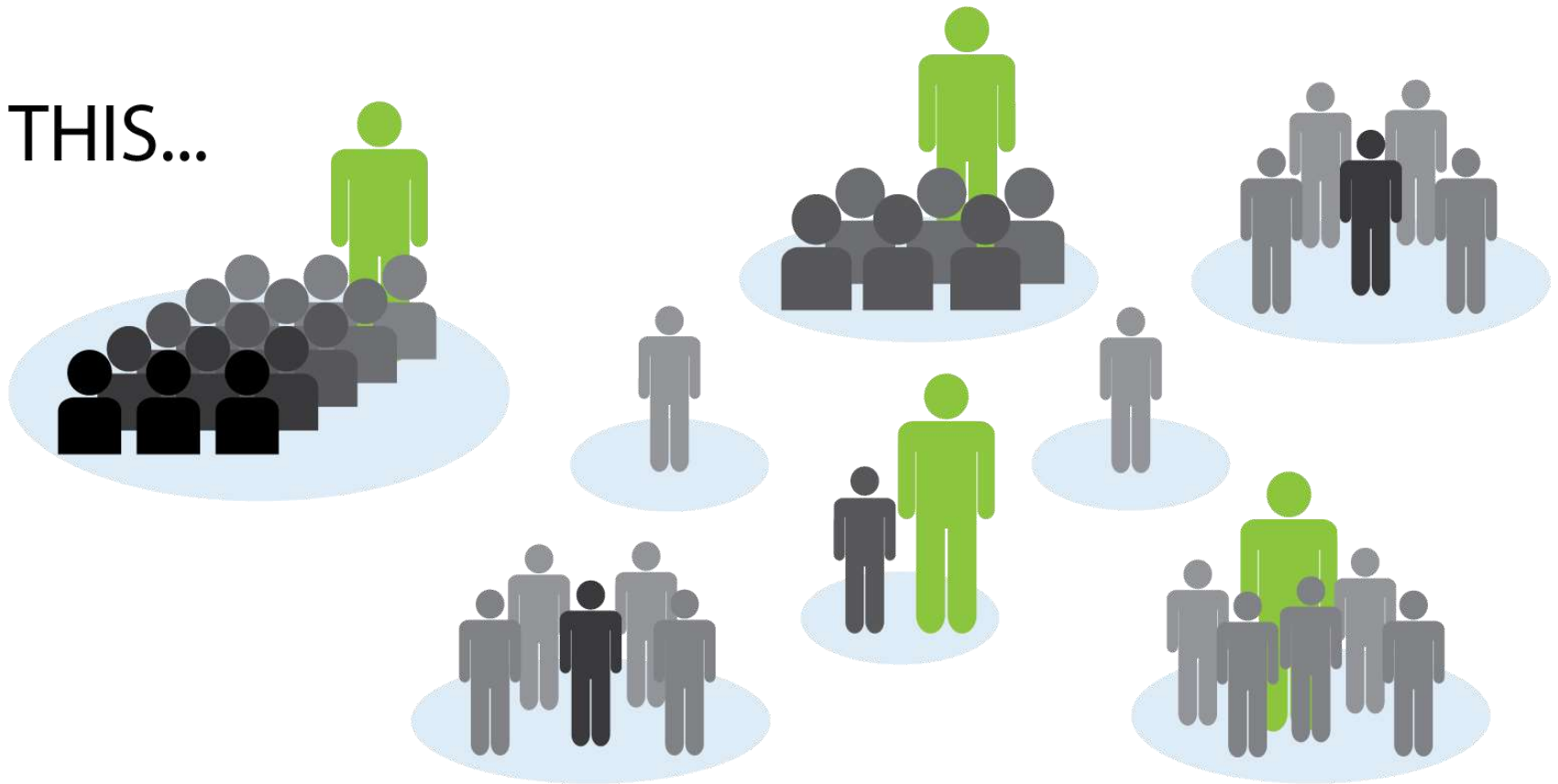


Image courtesy of Cuningham Group Architects & American Architectural Foundation



Personalized Learning @ SPPS

Personalized Learning is an instructional strategy that tailors teaching and learning to Saint Paul Public School's diverse student body. Through Personalized Learning:

- **Teachers** have access to resources that support rich, rigorous instruction aligned to district standards while nurturing individual learning styles.
- **Students** have multiple ways to access information, think critically and demonstrate what they've learned.
- **Student voice and choice** is integral to student engagement and the classroom experience. With Personalized Learning, students are taught how to advocate and take responsibility for their learning.



Role of Furniture in 21st Century Learning

Furniture should:

- Be an integral part of an intentional learning environment
- Reinforce the collaborative, flexible, adaptable learning environment
- Be comfortable and ergonomically appropriate for students



Galtier Elementary

- Improvements coordinated with significant program change
- Partnership of American Architectural Foundation, Target Corporation, Saint Paul Public Schools
- Extensive Design Thinking process / charrette



Why is furniture important?

- Teaching and learning has changed – furniture must adapt as well
- New teaching environments call for different furniture and design (i.e. STEM)
- Technology is changing rapidly
- Furniture needs to allow *movement*



Impetus for change

- Integrate into Facilities Master Plan
 - Support the District's Strategic Plan, *Strong Schools, Strong Communities*
 - Enhance Personalized Learning initiatives
 - Edify 1:1 device initiative
 - Support District's Racial Equity policy
 - Create a furniture standards program to replace all Student furniture in the District
 - Break the current **90 year** replacement cycle budget
- Reinforce best business practices / SOPs



How SPPS purchases furniture

Historically:

- Purchasing the same pieces for decades
 - Cost, longevity, matched adjacent existing furniture
- Sent out items to all schools with no way of tracking the useful lifespan
- Filled holes where we needed, more reactionary than planning

Now:

- Centralized point of control
- Design Process
 - Choose neutral colors
- Mass roll-outs
 - Need pervasive application to see benefit & adoption
 - Improve entire schools as a time, redistributing surplus to fill gaps at other schools



Furniture standardization in a large district

Benefits

- Rigor in design and selection
- Better pricing
- Simplifies moving furniture within and between buildings
- Fosters equity among schools
- Helps create relationship with vendors and manufacturers so that issues get resolved

Challenges

- Has to speak to the breadth of programming offered
- Should not unnecessarily limit student and educator choice
- Must constantly evolve



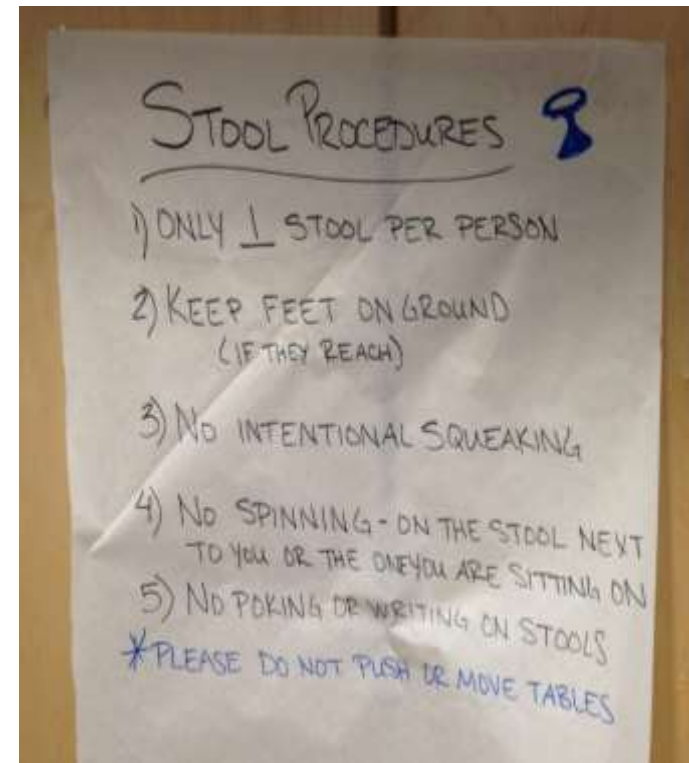
Creating Furniture Standards – Process

1. Value, Vision, Principles
2. Research options
3. Request samples
4. Create pilot rooms
5. Procurement of items
6. Perform Professional Development



Change Management for Staff

- How do you manage such a big change?
 - Performed professional development with staff
 - Provided furniture pictures and drawings of classroom layouts
 - Sent out pre- and post-occupancy surveys
 - Continue to answer questions, observe classrooms, listen to feedback



Professional Development with Staff

- Spoke at staff meetings
- Shared resources: videos, books, research
- Working with Office of Teaching and Learning for future Professional Development
 - How to teach in a collaborate learning environment
 - Need staff and administrators to champion the change
 - Everyone should work together



Furniture Standards – Final Solution



Furniture Standards – Final Solution



Implementation

	2014	2015	2016
Major Renovation - All New Furniture	Parkway Montessori & Middle 484 students Grades 6-8 \$223,000	Galtier Elementary 182 students Grades Pre-K-5 \$179,000	
Minor Renovation - All New Furniture	Riverview Elementary 336 students Grades Pre-K-5 \$294,000	Open World Learning Secondary 361 students Grades 6-12 \$519,000	
No Changes to Physical Space - All New Furniture		Humboldt Secondary 1141 students Grades 6-12 \$953,000	Ramsey Middle 675 students Grades 6-8 \$278,000* Hazel Park Prep Academy 741 students Grades Pre-K-8 \$331,000*



Design, Data, and Feedback

- Did small scale “pilot” spaces
- Held limited focus groups for programs with specific programmatic needs (e.g. Montessori Middle School)
- Created pre-occupancy and post-occupancy surveys to staff regarding furniture and its role in the learning environment



Survey Results

“How often do you change the configuration of your classroom?”

New furniture, accompanied by:	Regularly (Pre)	Regularly (Post)
Major Renovation	70%	84%
Minor Renovation	72%	62%
No Changes	67%	64%



Survey Results

“Furniture plays a significant role in learning”

New furniture, accompanied by:	Agree (Pre)*	Agree (Post)
Major Renovation	100%	76%
Minor Renovation	100%	85%
No Changes	85%	81%

*Limited survey respondents for Pre-Occupancy Survey



Survey Results

**“The furniture in the classroom supports
student interactions”**

New furniture, accompanied by:	Agree (Pre)*	Agree (Post)
Major Renovation	50%	85%
Minor Renovation	65%	82%
No Changes	60%	82%

*Limited survey respondents for Pre-Occupancy Survey



Survey Results

“The furniture in the classroom supports **flexibility in different learning structures**”

New furniture, accompanied by:	Agree (Pre)*	Agree (Post)
Major Renovation	20%	70%
Minor Renovation	38%	75%
No Changes	49%	77%

*Limited survey respondents for Pre-Occupancy Survey



Survey Results

**“The furniture in the classroom supports
student group work”**

New furniture, accompanied by:	Agree (Pre)*	Agree (Post)
Major Renovation	50%	91%
Minor Renovation	73%	88%
No Changes	61%	79%

*Limited survey respondents for Pre-Occupancy Survey



Survey Results

“The furniture in the classroom supports **the physical needs of students**”

New furniture, accompanied by:	Agree (Pre)*	Agree (Post)
Major Renovation	33%	55%
Minor Renovation	40%	82%
No Changes	45%	62%

*Limited survey respondents for Pre-Occupancy Survey



Survey Results - Comments

- *“Gives our students the opportunity to pick how they want to learn. They can **find what works best for them** and change how they work/learn everyday if they want.”*



Survey Results - Comments

- *“Students really enjoy the wiggly chairs and they have allowed students who have struggled in the past to stay on task or in a seat to be **focused while being able to move.**”*
- *“Students have more pride in their environment. Students are able to **work in groups more productively** and my room has had more of a **cooperative approach.**”*



Our bumps and bruises

Failures

- Operational and pedagogical needs are occasionally cross-purpose
- Meeting educators where they are, finding the right way to push a school culture
- Our process is still adult-centered
- More advocacy on modifying teacher furniture

Successes

- Enhanced belief by educators and administration in the power of furniture in Personalized Learning contexts
- Established furniture replacement as part of district-wide Facilities Master Plan



Future direction of SPPS standards program

- We need to enhance the **student voice** in our design and evaluation processes
- **Codifying** the “standards” and the process
- Adoption of formal **Furniture Replacement Plan**
- Continue to partner with our educators



Creating Furniture Standards – Budgeting

- Established approximate \$5 per gross sq ft cost
 - Gross square footage for whole building
 - Inclusive of student and staff furniture
- True cost of implementation
 - Delivery, assembly, and installation costs
 - Just-in-time delivery to sites versus centralized assembly and distribution



Eastern Heights Elementary

- Educators aggressively trying to push boundaries of Personalized Learning
- Cleared out underutilized Media Center and added a variety of furniture
- 2nd Grade Team teaches:
 - Half of each day on their own in traditional classrooms
 - Half of each day together in this modified Learning Studio



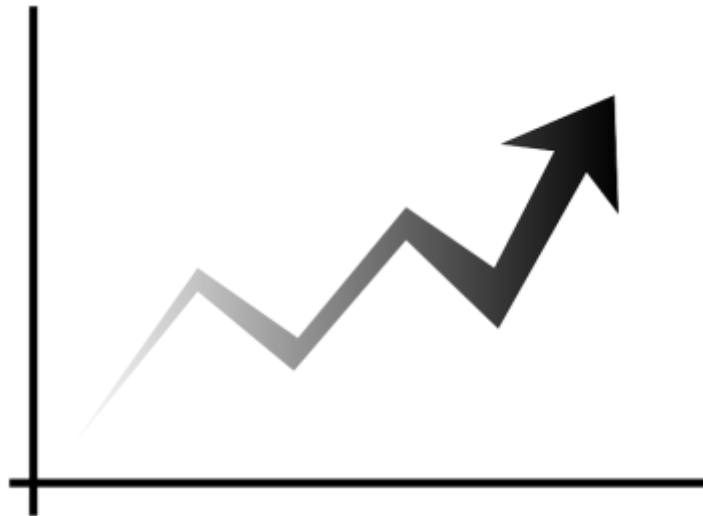
Takeaways

- Separate kit of parts
- Constantly evolving
- Design process and feedback
- Part of the budgeting and planning



Final question for you...

How would you measure the success of a furniture program?



Questions?



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Resources:



http://facilities.spps.org/role_of_furniture

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