

2014 Exhibition of School Planning and Architecture

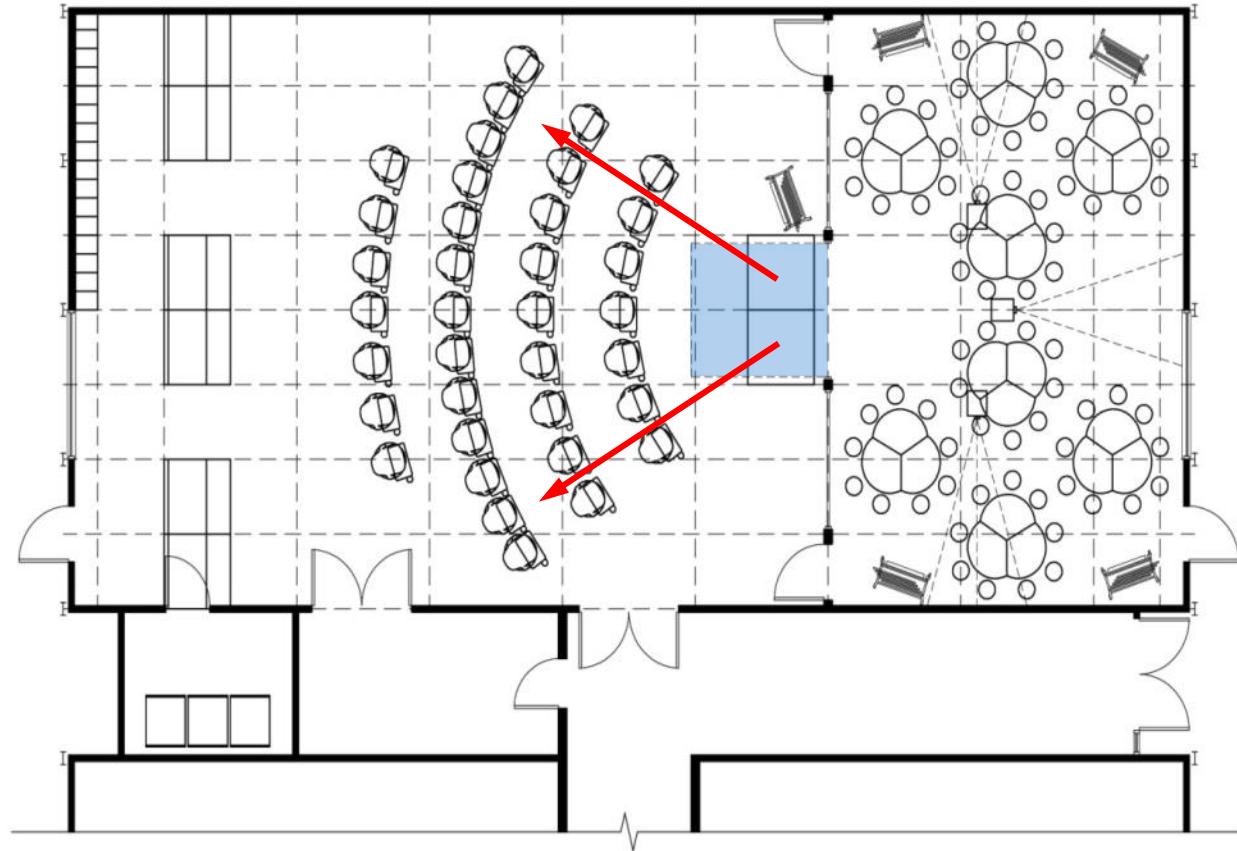
Prototype Learning Centers

Milpitas Unified School District
Milpitas, CA

Prototype Learning Centers

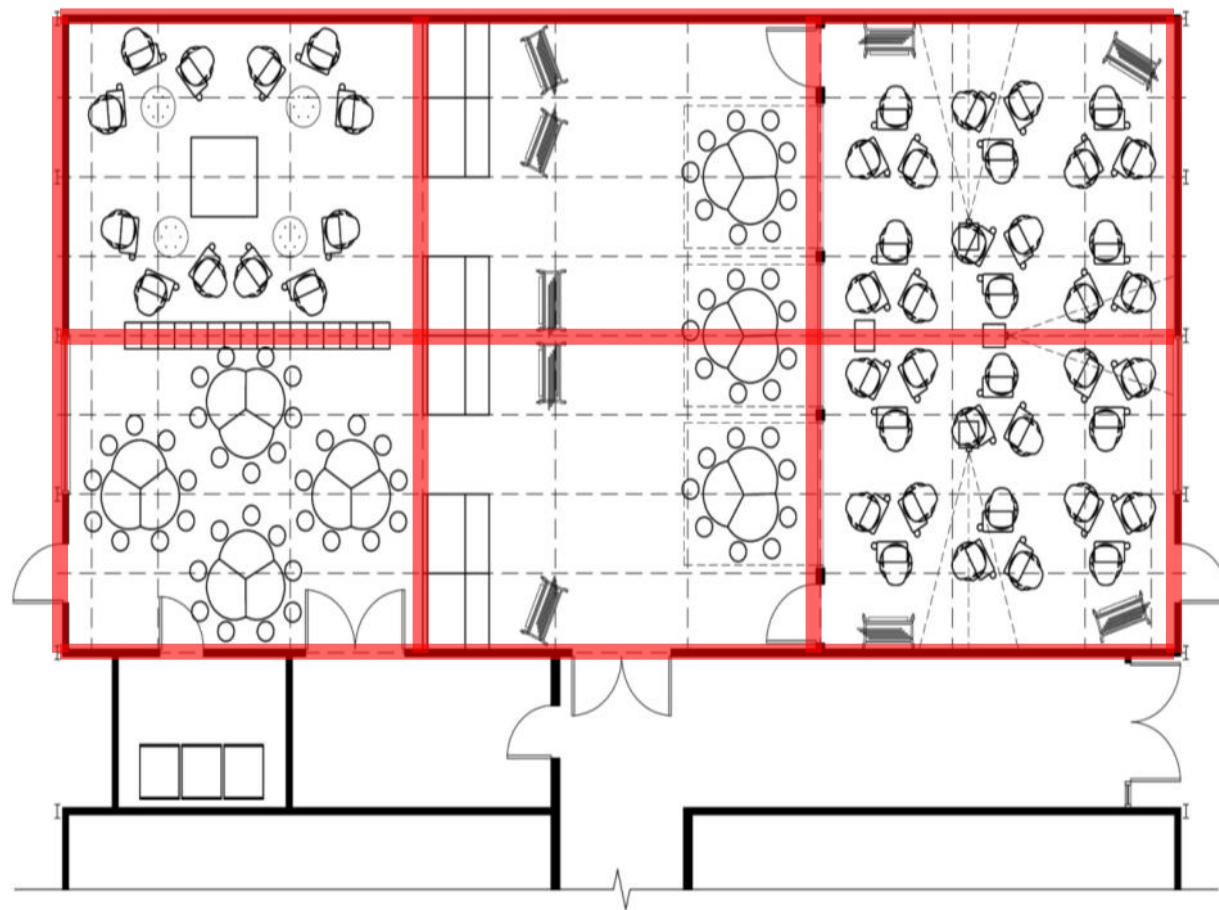


Prototype Planning Concept



PERFORMANCE = 36 SEATS + 24 TIERED BENCHES
LEARNING STUDIO = 72 SEATS

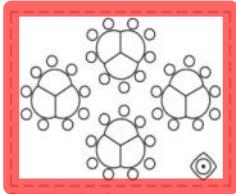
Planning Module: “Kit-of-Parts”



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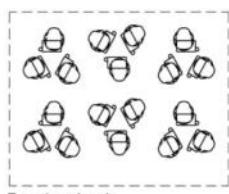
Typical Modules to Fit Within the Overall Plan

3-TOP TABLE



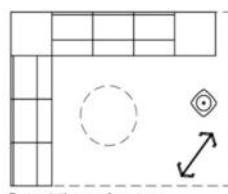
Team-based work

NODE CHAIR



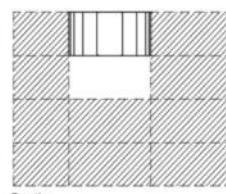
Team-based work

TIER BENCH



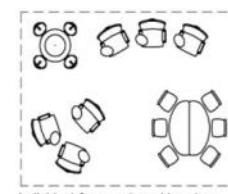
Presentation, performance

"CAVE"

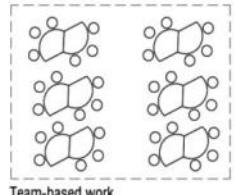


Booth

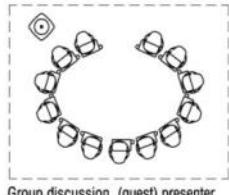
HYBRID



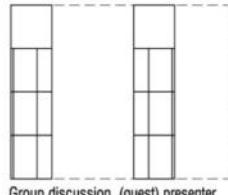
Individual & group-based learning



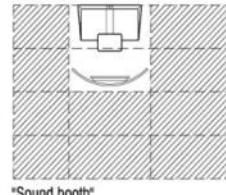
Team-based work



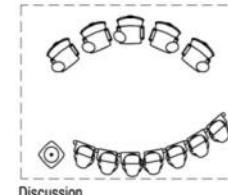
Group discussion, (guest) presenter



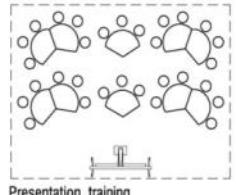
Group discussion, (guest) presenter



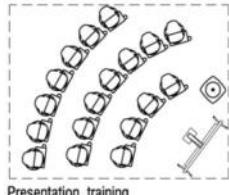
"Sound booth"



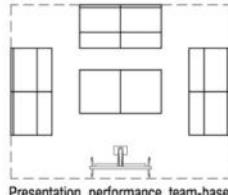
Discussion



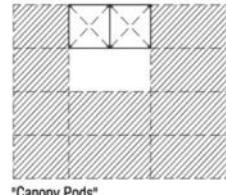
Presentation, training



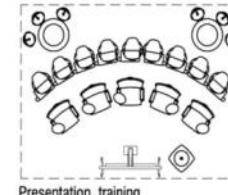
Presentation, training



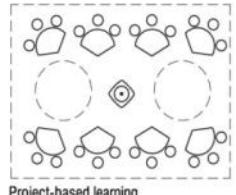
Presentation, performance, team-based work



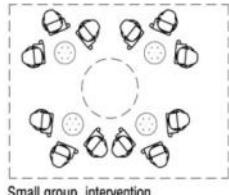
"Canopy Pods"



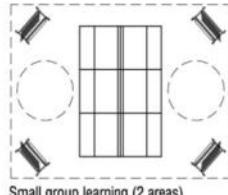
Presentation, training



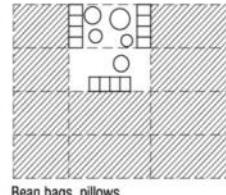
Project-based learning



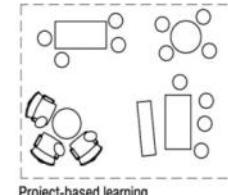
Small group, intervention



Small group learning (2 areas)



Bean bags, pillows



Project-based learning

COMMUNITY ENVIRONMENT:

“The Learning Center is at its best when supporting Kinders and 6th Graders simultaneously.”

*Rich Julian, Principal,
Burnett Elementary*

Analogous to a Black Box Theater, or a “blank canvas”, each Learning Center supports the school community and neighborhood community with highly adaptive multi-purpose functionality; 1:1 self-directed learning, team-based learning, tech-supported and analog learning, PTO meetings, after-school homework sessions, staff meetings, etc.

Operable overhead doors allow the space to be easily subdivided, hosting multiple small groups or a full-class gathering of up to 150 students. Similarly, adults can use the smaller portion of the Learning Center to meet concurrent with student activities in the other section.



COMMUNITY ENVIRONMENT:

"Today's kindergartners will graduate from high school in 2026. Imagine what the world of work and careers is going to be like in that time."

Cary Matsuoka, Milpitas USD Superintendent



Digital Natives Thrive in Redefined Learning Ecosystems

- The Learning Centers shift quickly from one learning mode to another – virtually all the furniture is on wheels and all technology is mobile
- Taller bench-style seating and mobile white boards can be used to create sub-spaces; the lightweight furniture is easily re-arranged by children allowing them to find solitude through their personal interventions with the mobile environment
- Mobile technology and self-directed learning styles are key to the freedoms and autonomy that the students appreciate

LEARNING ENVIRONMENT:

In today's tight budgetary environment, school districts need to be strategic in how they transform their schools to support 21st Century Learning. Renovations at each of Milpitas' schools forced higher utilization of space across the board; all under-performing space was repurposed as the Learning Centers opened up new opportunities throughout.

Classes have a weekly schedule of rotations into the Learning Center; often only a portion of a class rotates to the Learning Center at a given time, enabling the remaining half to benefit from a much better teacher:student ratio in the home classroom.



During the team's early research and benchmarking, they observed how much project-based learning actually happens on the floor. As a result, the Learning Centers were specifically designed to better enable students to shift back and forth between work surface and floor-based activities.

LEARNING ENVIRONMENT:

During the Post Occupancy Evaluation, we asked:

WHAT DO STUDENTS FIND ATTRACTIVE ABOUT LEARNING CENTER?

- **FREEDOM AND AUTONOMY:** Giving students control of where they learn allows them to focus on their learning. The Learning Center becomes a social learning experience and illustrates how “shared experience” can be more powerful than an individual experience.
- **STIMULATING, MULTI-SENSORY ENVIRONMENT:** It is a respectful space in which the customizable environment gives students a greater sense of dignity and autonomy in the learning process.
- **FUN LEARNING TOOLS:** Learning Centers are equipped with tools that students embrace, relate to, and gravitate toward.



The students thrive in “making space”; “command centers” and “forts” are popular configurations

PHYSICAL ENVIRONMENT:

The flexible environment of the Learning Centers has almost *forced* the pedagogical shift; “It’s hard NOT to change your teaching style in a cool space like this!”, reported one teacher. To an extent, function has followed form; the physical environment has inspired new teaching practices.

The design of the centers gives teachers the open space, furniture, wall space and infrastructure (high-density wi-fi and abundant outlets) to experiment with various teaching methodologies.

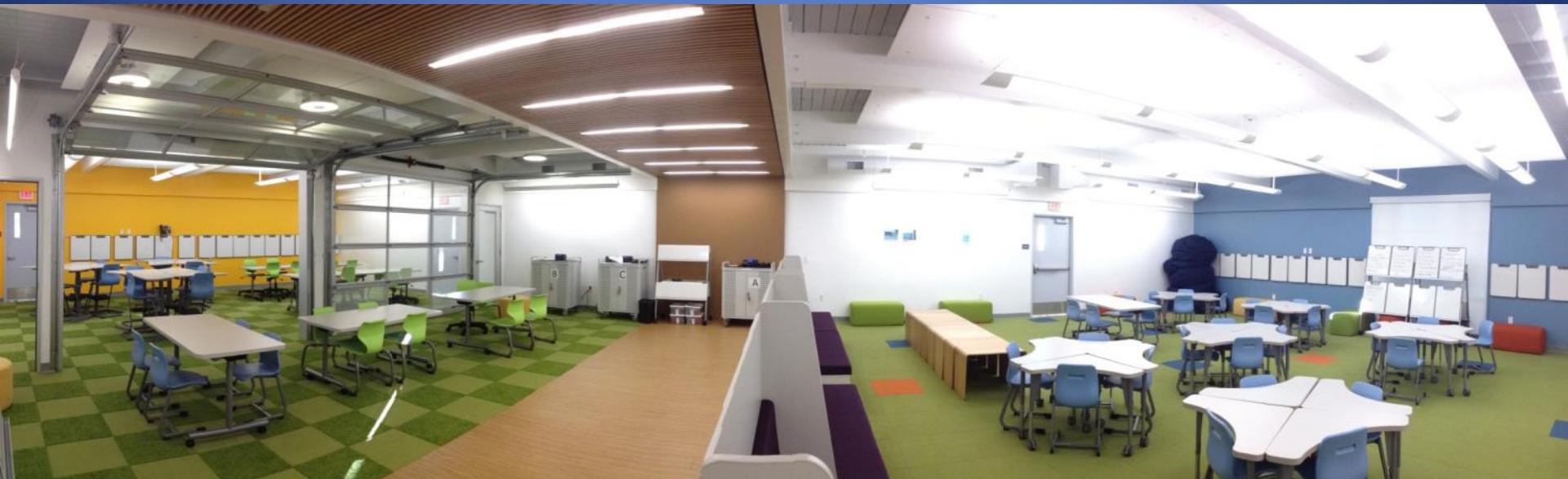


A “palette of posture” appeals to the different learning styles of different students

PHYSICAL ENVIRONMENT:

WHAT MOVES A LEARNING CENTER FORM BEING MERELY SUFFICIENT TO ONE THAT IS TRANSFORMATIVE?

- **A “BLANK CANVAS”**: no prescribed rules for use; like a canister of Tinker Toys supporting creative pedagogies
- **MOBILITY**: adapts to a wide variety of learning modes
- **FLOW**: a central location in the school with the ability to rotate students in and out easily
- **DIVISIBLE SPACE**: support different groups using the Learning Center concurrently and the ability to host 8 to 150 students comfortably
- **LOW MAINTENANCE + SIMPLE**: teachers and staff can spend time on teaching, not cleaning or setting up



Two former classrooms were renovated to create the Learning Center at Burnett Elementary

PLANNING PROCESS:

The District is a strong advocate for Blended Learning, helping train its teachers toward ever increasing student engagement. The planning process started with a discussion among principals, district leadership, and visionary teachers about desired outcomes and the incremental path to get there. The space would have to “grow” as the capabilities and pedagogical training of the teachers grew. The discovery process included benchmarking of other progressive charter schools in California and engaging leading furniture manufacturers and their respective research teams for additional insights.



PLANNING PROCESS:

The construction of the first generation Learning Centers was followed by an extensive **Post Occupancy Evaluation** process. Students, Teachers, and Staff were engaged in follow-up surveys, furniture polling, photo surveys, and round table discussions to explore ways to further enhance the next generation of Learning Centers. We talked openly about what worked and what didn't.

The process was not only informative to improve the next generation designs, but also gave the school community a voice in how their own Learning Center could be fine-tuned, and more generally, helped further educate them about the design process.

POST OCCUPANCY EVALUATION PROCESS		RANDALL ELEMENTARY	
TIMELINE	OCTOBER	NOVEMBER	DECEMBER
ACTIVITY			
	 LAUNCH OCTOBER 30 Launch teacher/staff survey (principals to introduce to teachers & staff). (Send them student survey at same time, but this will be administered by LC coordinators following November 15th testing) OCTOBER 30 Launch teacher/staff photo survey (this can push back if necessary – want to capture non-testing activities in LC)	 NOVEMBER 18-20 Teachers to administer student survey  OCT 31-NOV 4 Teachers & staff take on-line survey and photo survey (before testing begins Nov 4th – 15th)	 ONSITE ACTIVITIES NOV 21-DEC 4: gather, analyze, and organize survey results  DECEMBER 11 Poster dot-polling  DECEMBER 11 Round table conversations with teacher & staff participants  DECEMBER 11 On-site ethnography (1/2 – 1 day per school)
NOTES	Randall Elementary Teacher & Staff Survey: https://www.surveymonkey.com/s/JM6XTHT Photo survey directions below.	Randall Elementary Student Survey: https://www.surveymonkey.com/s/JN7VX7Q	Posters will brought to the site on the same day.

Floor Plan



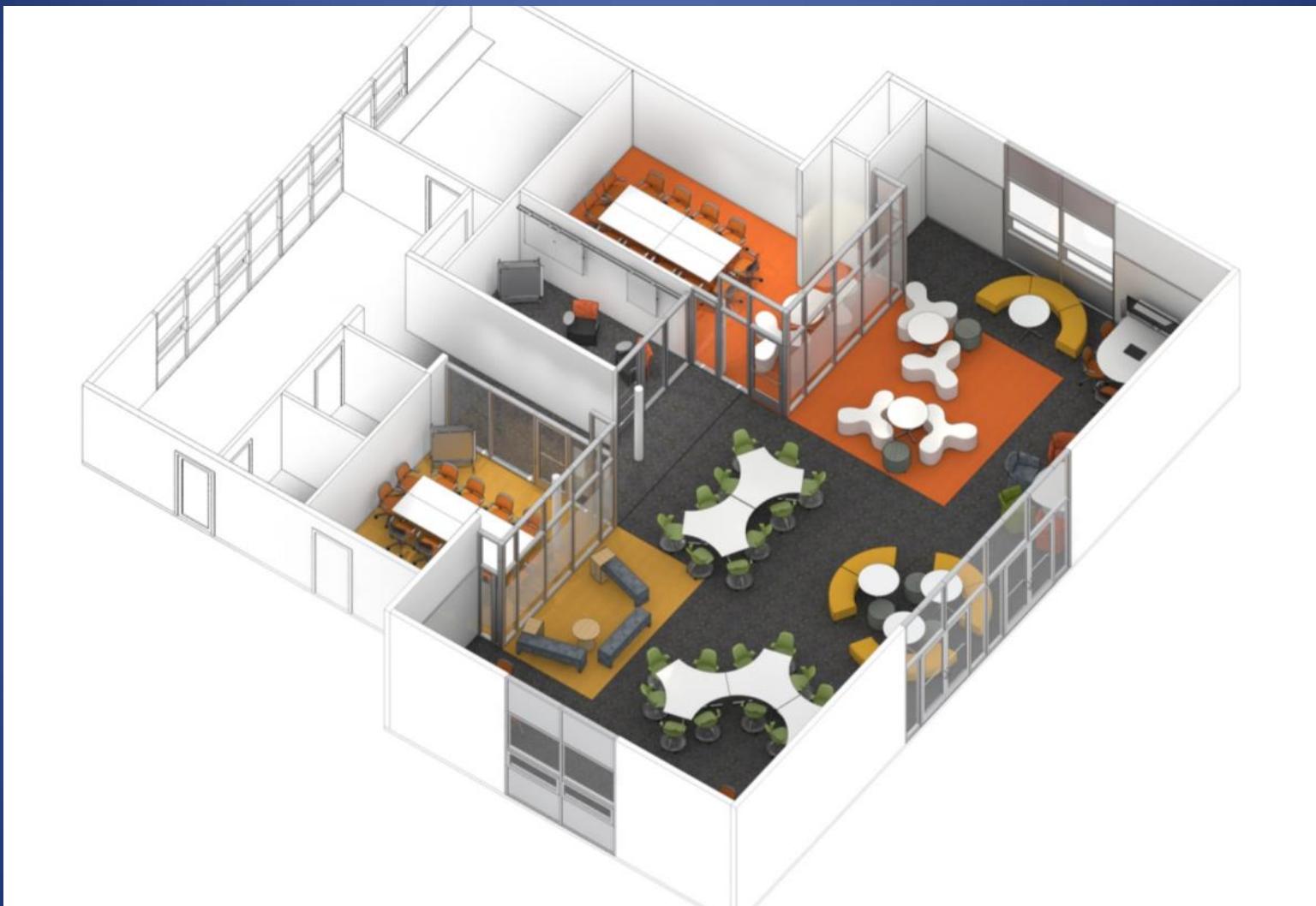
Learning Center at Burnett Elementary School (renovated two classrooms)

Floor Plan



Learning Center at Randall Elementary School (renovated library and resource space)

Floor Plan



Learning Center at Russell Middle School (renovated library, resource, and lounge)

Exhibition of School Planning and Architecture Project Data

Submitting Firm :	Gould Evans
Project Role	Architect
Project Contact	David Reid, AIA
Title	Principal
Address	4041 Mill St.
City, State or Province, Country	Kansas City, MO 64111
Phone	816.701.5335

Joint Partner Firm:	N/A
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Other Firm:	One Workplace
Project Role	Furniture Dealer / Advisor
Project Contact	Trevor Croghan
Title	Education Director
Address	2500 La Cruz Blvd.
City, State or Province, Country	Santa Clara, CA 95050
Phone	669.800.2500

Construction Firm:	Kitchell
Project Role	Construction Manager
Project Contact	James Wilson
Title	Senior Project Manager
Address	255 W. Julian St.; Suite 400
City, State or Province, Country	San Jose, CA 95110
Phone	408.280.7889

Exhibition of School Planning and Architecture

Project Details

Project Name	District-Wide Learning Centers
City	Milpitas
State	California
District Name	Milpitas Unified School District
Supt/President	Cary Matsuoka
Occupancy Date	September 2013
Grades Housed	K-6 for elementary schools; 7-8 for middle schools
Capacity(Students)	8 – 120 students at a time
Site Size (acres)	N/A
	Burnett Elementary School – 2,185 SF (built) Randall Elementary School – 3,200 SF (built) Rose Elementary School – 3,480 SF (unbuilt) Russell Middle School – 3,440 SF (unbuilt)
Gross Area (sq. ft.)	
Per Occupant(pupil)	18 SF - 435 SF depending on size and student load
gross/net please indicate	N/A
Design and Build?	Built: CM@risk: Burnett ES and Randall ES
If yes, Total Cost:	Burnett - \$1,942,367 Randall - \$1,658,406
Includes:	construction cost
If no,	
Site Development:	N/A
Building Construction:	see above
Fixed Equipment:	Burnett ES: \$66,350; Randall ES: \$65,270
Other:	
Total:	Burnett: \$2,008,717; Randall: \$ 1,723,676

Supporting Information



As a reward for good behavior, students are given their preference on where to sit; most importantly, they're able to sit with their friends.

The range of furniture styles works well to accommodate the vast range of ergonomic needs of Kindergarten through 6th grade students.

Supporting Information



Students are allowed to learn in a position they find comfortable.
The bean bag chairs (corner) are used as rewards when students meet their learning goals.

Supporting Information



SURVEY RESPONSES:

MY FAVORITE
THING ABOUT
THE LEARNING
CENTER IS...

CALMING NICE FURNITURE
FRIENDS SIT ANYWHERE
SMELLS LIKE WOOD GOOGLE SEARCH
SUMDOG MATH
GMAIL READING
WRITING
COMFORTABLE COLORFUL
COOL PEACEFUL
CONCENTRATE
SPACIOUS
QUIET I-READY RELAXING
BIG BEAN BAGS CLEAN FUN
PROJECTS
CHROMEBOOKS EXPLORING NEW TECHNOLOGY
LEARNING

Supporting Information



SURVEY RESPONSES:

IF YOU WERE THE
TEACHER, HOW
WOULD YOU MAKE
THE LEARNING
CENTER MORE FUN?

SCIENCE USE WHITEBOARDS
POSTERS

MORE BEANBAGS

ART PROJECTS

MAKE ROBOTS

HANDS-ON PROJECTS

GIVE PRIZES

A READING PLACE

ATTEND EVERY DAY

DECORATIONS

TALK QUIETLY

CHOOSE ACTIVITIES

"I would let kids do whatever they wanted except for bad stuff and inappropriate things."

Supporting Information



The Next Generation Learning Centers at the Middle School level will be designed more specifically for Project-Based Learning, including floor-to-ceiling dry-erase walls, shared display monitors at huddle tables, large AV display for full-class demo/instruction, larger tables to support team projects, and small break-out rooms that support messier and noisier team-based activities.