

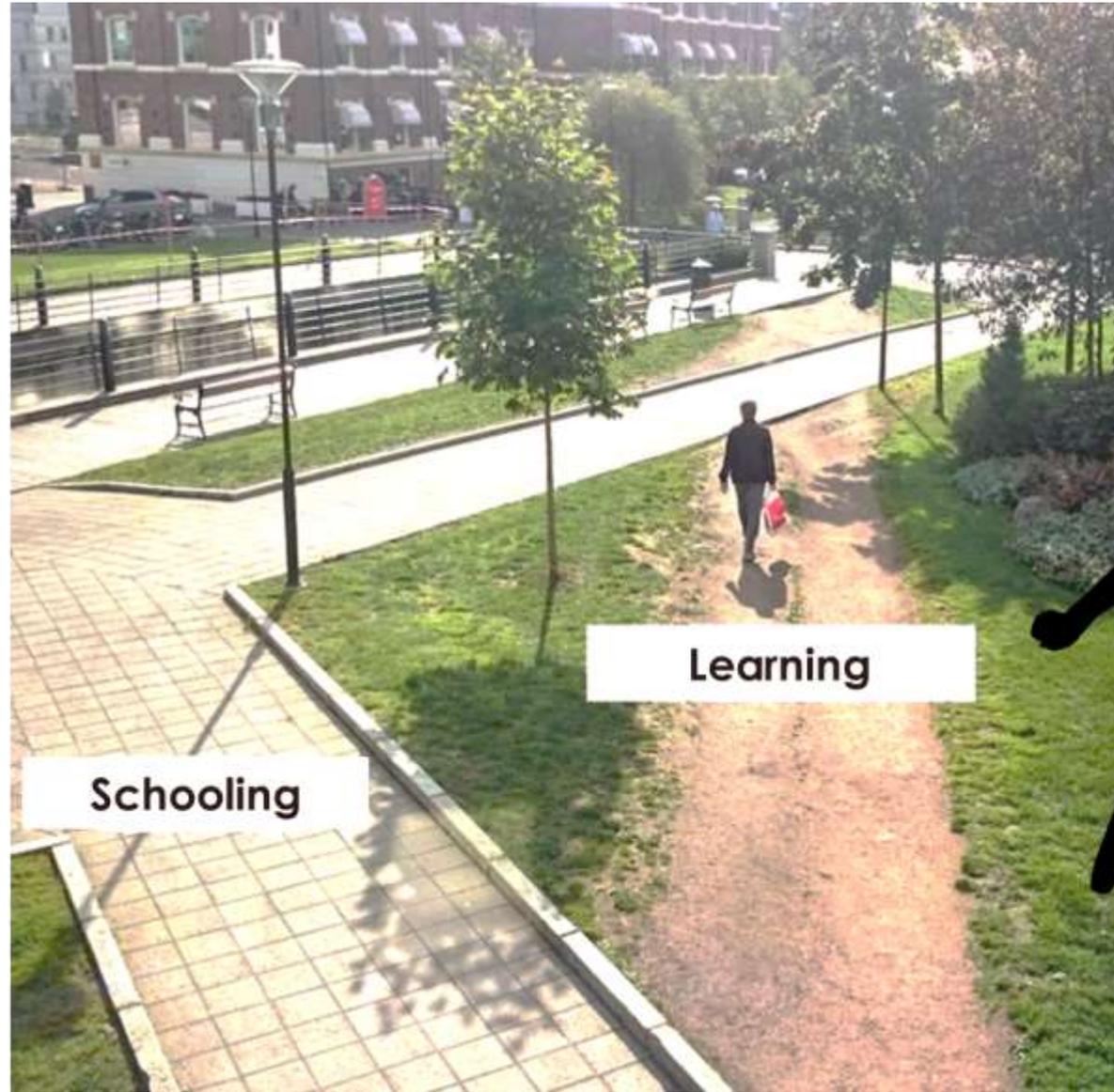


BOULDER VALLEY SCHOOL DISTRICT RE-2

NEW VISTA HIGH SCHOOL

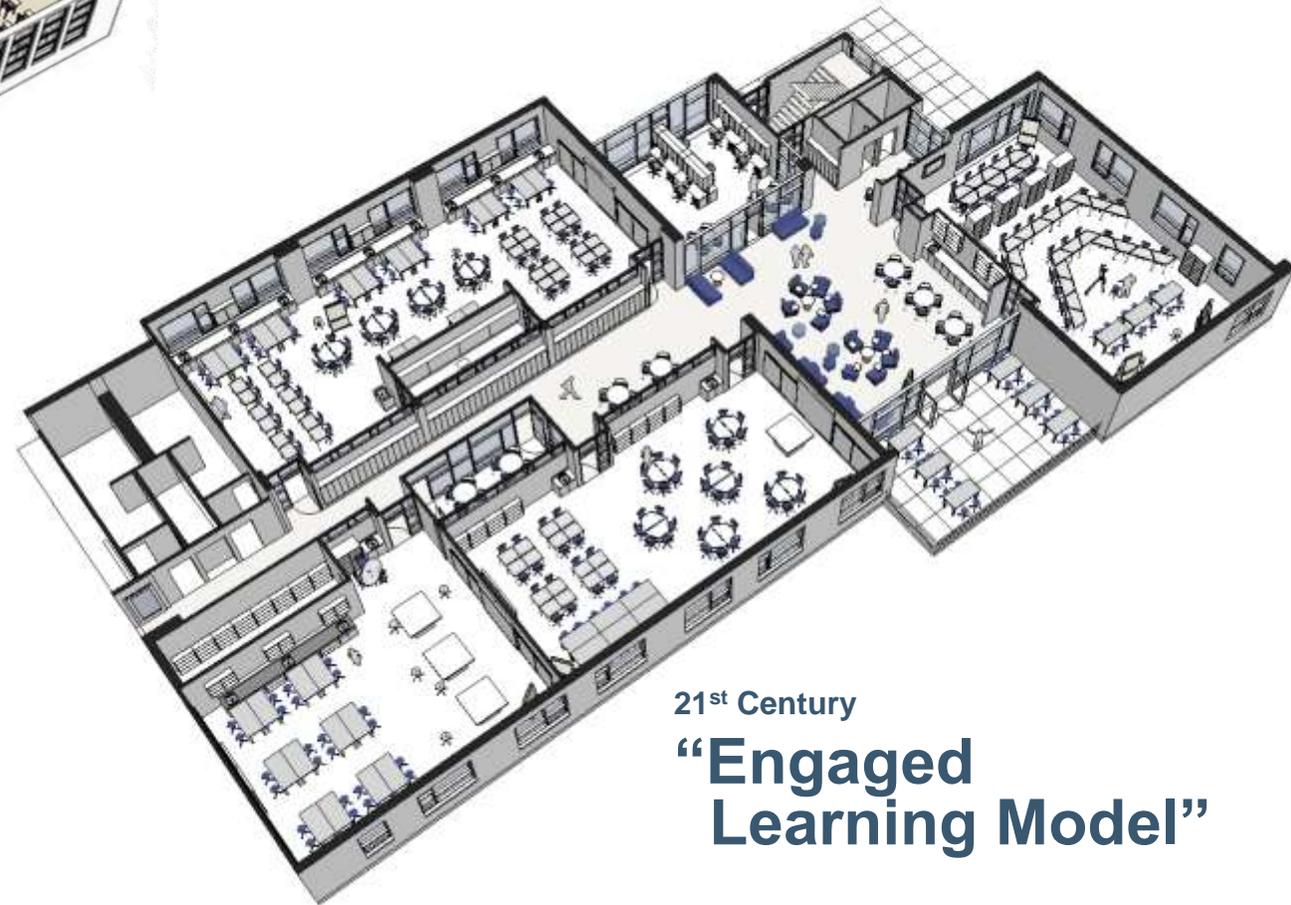
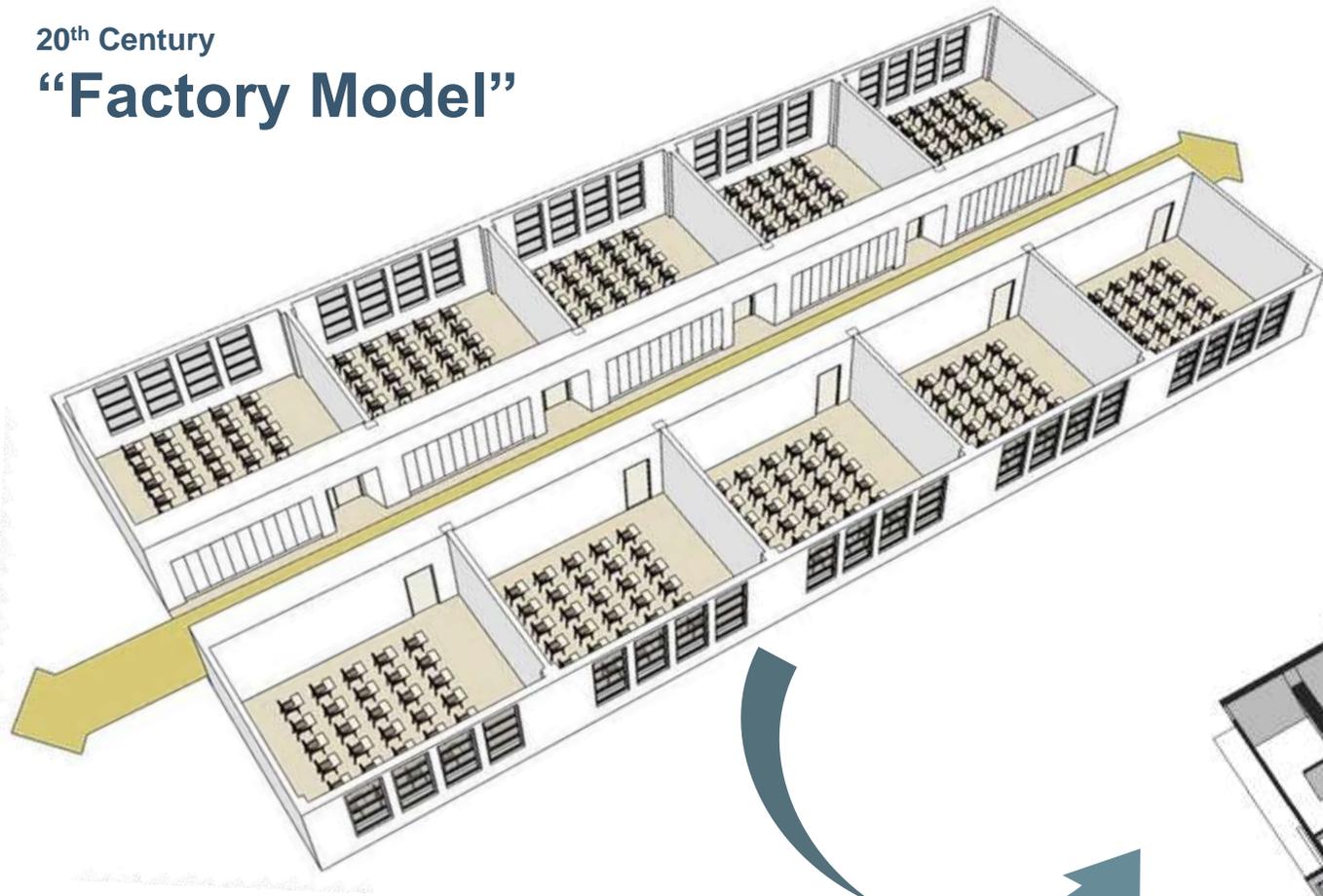


MOA ARCHITECTURE



20th Century

“Factory Model”



21st Century

“Engaged Learning Model”

Where We've Been

Accommodating Needs

- capacity / demographics
- support teaching
- safety / security
- code compliance
- healthy systems
- technology



Where We're Going

Inspiring Futures

- brain-based
- future aware
- connected
- adaptable
- experiential

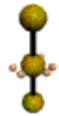


The Apple Watch is just the start.
How wearable tech will change
your life—like it or not

BY LIZ BRUSHMAN
AND MATT VELLA



Increase **motivation** through:



Choices

Provide choices for content, timing, work partners, projects, process, environment, or resources



Relevance

Personal, applicable, relate to family, neighborhood, city, health, etc.



Engagement

Emotional, energetic, physical; use learner-imposed schedules and peer support.



Increase **apathy** through:

Requirements

Fully directed activities, no student input, restricted resources, limited teamwork

Irrelevance

Impersonal, useless, out of context, testing/ standards-based

Passivity

Disconnected from the real world, low interaction, lecture, seatwork, isolation, etc.

source: Teaching with the Brain in Mind, by Eric Jensen

Research: Neuroscience & Education

- **ENJOYABLE ACTIVITIES**
dopamine enhances learning naturally and chemically, reduces the secretion of stress hormones
- **FUN + CHALLENGING**
effective approaches combine FUN with progressively increasing CHALLENGES
- **MOVEMENT IMPROVES LEARNING**
increases pre-frontal cortex activity which builds cognitive ability
- **THE WHOLE CHILD**
SOCIAL & EMOTIONAL development accelerate achievement

source: Sandra Aamodt & Sam Wang "Welcome to Your Child's Brain: How the Mind Grows From Conception to College"

- **INTERNAL MOTIVATION**
is one of the most powerful tools for learning.



- ❑ BELONGING
- ❑ COLLABORATION
- ❑ HEALTH
- ❑ INSPIRATION
- ❑ ADAPTABILITY
- ❑ DIVERSITY
- ❑ COMMUNITY
- ❑ STEWARDSHIP

Purpose, Caring, and Belonging

Connect to a common purpose to build strong, lasting relationships
The overall feel that the whole school building is immersed in the program
Relationships, community experience, small class sizes, advisor program
Showcase student work, visible student demonstrations of learning

Collaboration & Connectedness

Space that implicitly promotes community
Cross-curricular connections, collaboration and inclusiveness

Health, Wellbeing, and Fitness

Promote wellness through programs and activities
Inviting, comfortable environments with daylight, views, and good indoor air quality
Connections to outside activities and fresh air

Innovative Programs, Tools, Spaces, and Resources

Innovative programs that attract and inspire creative students / thinkers
Support teachers and staff with appropriate tools, space, time and resources
Offer specialty / magnet / non-traditional programs (such as bike tech and ski tech)

- ❑ BELONGING
- ❑ COLLABORATION
- ❑ HEALTH
- ❑ INSPIRATION
- ❑ ADAPTABILITY
- ❑ DIVERSITY
- ❑ COMMUNITY
- ❑ STEWARDSHIP

Adaptable and Flexible Environments

Adaptability to support multiple cross-disciplinary programs and activities
Spaces “right-sized” to accommodate various activities, groupings, furniture, etc.
Support concurrent activities/programs (including community events)
Design to accommodate innovation and change over time

Support Diverse Needs & Interests of all Occupants

Celebrate diversity and welcome differences.
Recognize and embrace unique learning styles, interests, and abilities.
Employ universal design principles for wayfinding, navigation, and flow of occupants
Safe, comfortable spaces for teenagers to hang out
Allow students to have choices, take breaks, host clubs, and study

Community Engagement

Create a conduit between BVSD, CU and the surrounding neighborhood
Spaces can function differently throughout the day and into the evening
Visibility from the community, source of pride

Environmental Stewardship

Net Zero Energy – as both teaching tool and energy conservation
Connections to nature

COMPETITION PROGRAM

1.00 Core Instruction & Supports

1.01 Core Learning			
1.02 Learning Support			

Net S.F.	# T.S.	Capacity
15,600	13	260
1,650	0	0
17,250	13	260

2.00 Activity Programs

2.01 Physical Education			
2.02 Design/Innovation Center			
2.03 Music			

Net S.F.	# T.S.	Capacity
4,420	1	20
4,550	2	40
1,840	1	20
10,810	4	80

3.00 Community Commons

3.01 Performance Commons			
3.02 Learning Commons			
3.03 Dining Commons			
3.04 Faculty Commons			

Net S.F.	# T.S.		
6,450	0	0	
3,500	0	0	
3,900	0	0	
400	0	0	
14,250	0	0	

4.00 Admin. & Student Services

4.01 School Administration			
4.02 Student Services			
4.03 Health Office			

Net S.F.	# T.S.		
1,960	0	0	
780	0	0	
240	0	0	
2,980	0	0	

5.00 Building Support

5.01 Maintenance/Custodial			
5.02 Mechanical/Electrical			
5.03 Building Support			

Net S.F.	# T.S.		
1,300			
0			
0			
1,300	0	0	

ADJUSTED PROGRAM: DRAFT

Net S.F.	# T.S.	Capacity
16,050	16	320
800	0	0
16,850	16	320

Net S.F.	# T.S.	Capacity
4,400	1	20
5,050	3	60
1,800	1	20
11,250	5	100

Net S.F.	# T.S.		
6,525	0	0	
3,800	0	0	
3,975	0	0	
600	0	0	
14,900	0	0	

Net S.F.	# T.S.		
1,980	0	0	
780	0	0	
240	0	0	
3,000	0	0	

Net S.F.	# T.S.		
1,300			
0			
200			
1,500	0	0	

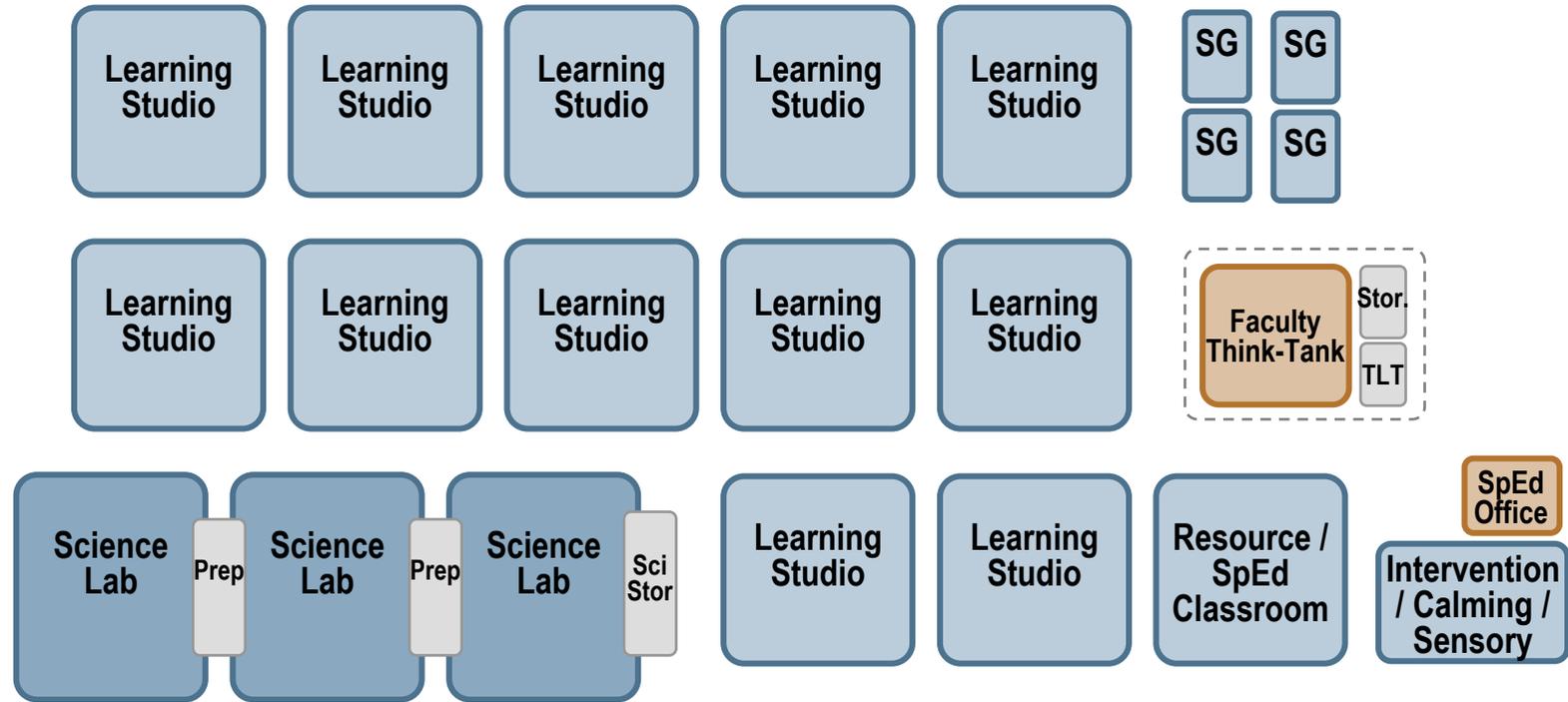
	Net S.F.	# T.S.	capacity @ 100%
NET AREA TOTAL	46,590	17	340

	Net S.F.	# T.S.	capacity @ 100%
NET AREA TOTAL	47,500	21	420

1.0 Core Instruction & Supports

		COMPETITION PROGRAM					ADJUSTED PROGRAM: DRAFT						
1.01 Core Learning		Qty.	Net S.F.	Total Net S.F.	# T.S.	Capacity	Qty.	Net S.F.	Total Net S.F.	# T.S.	Capacity	NOTES	
	.01 Core Learning Studios	12	850	10,200	10	200	10	850	8,500	10	200	Comp: 2 Crs not included in TS total	
shift	.02 Seminar Studios			-	0	-	6	425	2,550	3	60	2 may be combined as needed into one larger room	
	.03 Small Group / Think Tanks	4	300	1,200		-	4	200	800		-		
	.04 Science Learning Labs	3	1,100	3,300	3	60	3	1,100	3,300	3	60		
	.05 Science Storage	1	200	200		-	1	200	200		-		
	.06 Science Prep	2	150	300		-	2	150	300		-		
	.07 Teacher Planning / Work Room	1	400	400		-	1	500	500		-	Include restroom(s)? storage?	
	.08			-		-			-		-		
	.09			-		-			-		-		
	.10			-		-			-		-		
		15,600				13	260	16,150				16	320
1.02 Learning Support		Qty.	Net S.F.	Total Net S.F.	# T.S.	Capacity	Qty.	Net S.F.	Total Net S.F.	# T.S.	Capacity	NOTES	
	.01 Resource/SpEd Classroom	1	850	850		-	0	850	-		-	Inclusion strategy - no need for SpEd Classroom	
	.02 Intervention / Calming / Sensory	1	600	600		-	1	600	600		-		
	.03 Itinerant Office (shared, for 3 people)	1	200	200		-	1	200	200		-	3 workstations	
	.04			-		-			-		-		
	.05			-		-			-		-		
		1,650				0	0	800				0	0
		(square feet)						(square feet)					
Total NET Core Instruction		17,250				13	260	16,950				16	320

REPLACE



ADD

- Seminar
- Seminar
- Seminar
- Seminar
- Seminar
- Seminar

Space Program Ideas: Core learning

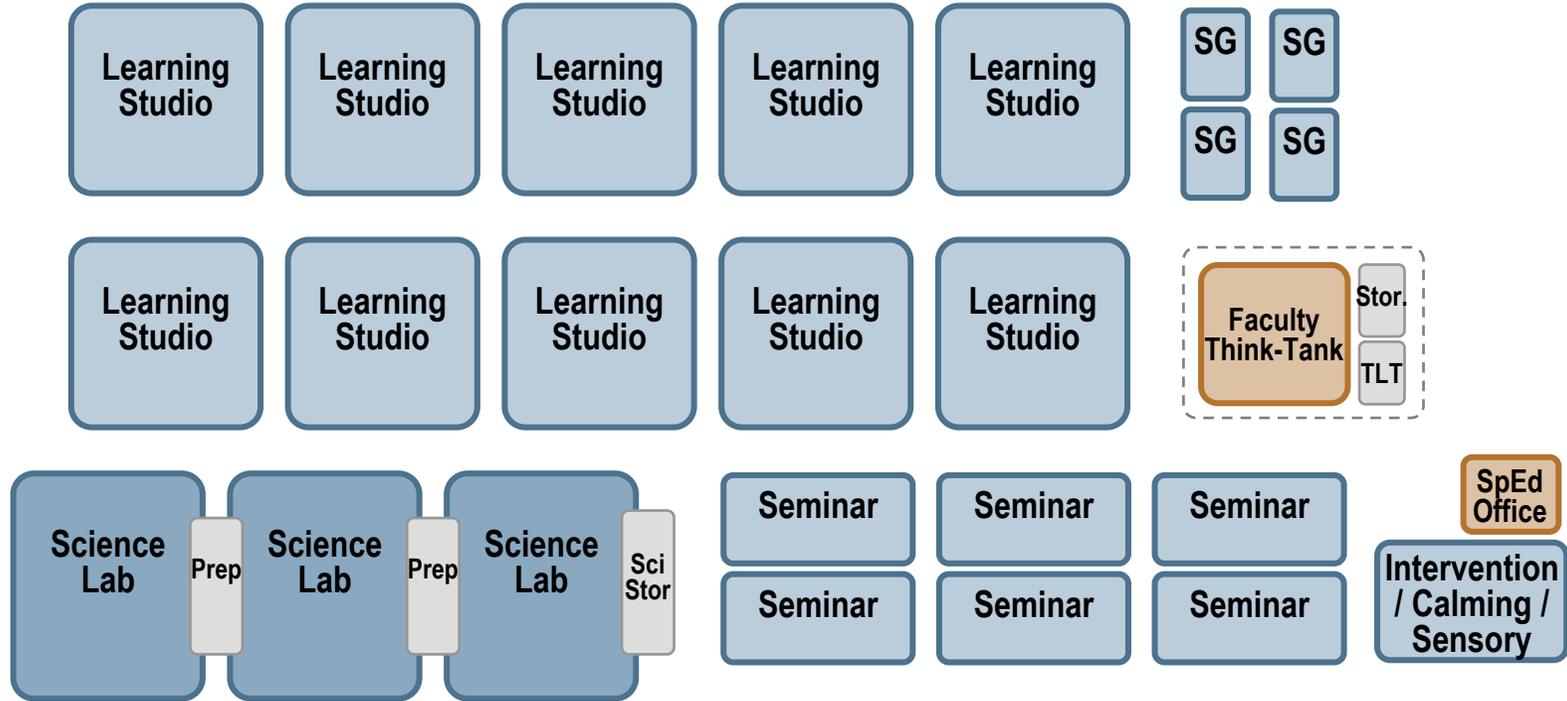
REPLACE

ADD

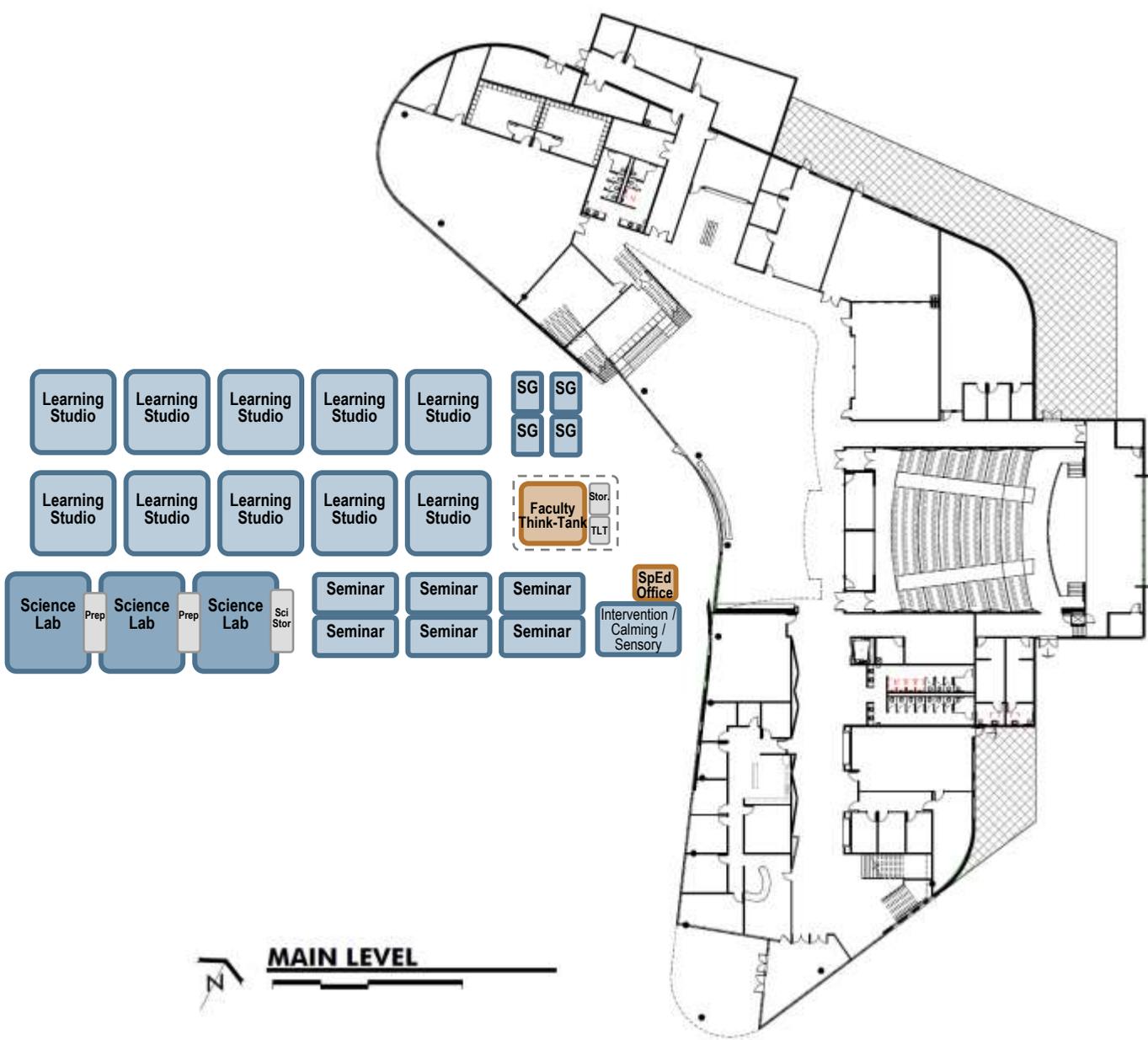
Learning Studio

Learning Studio

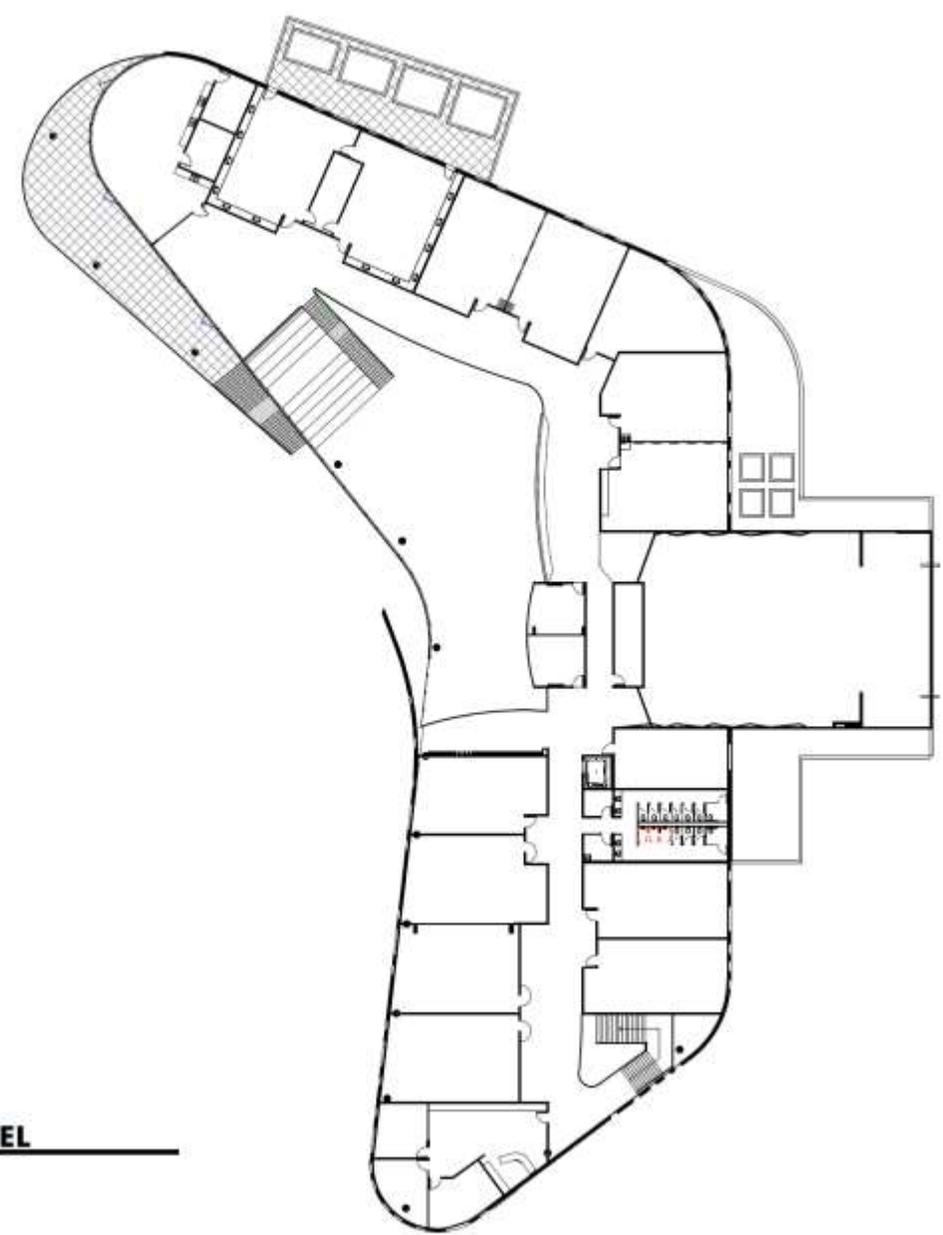
Resource / SpEd Classroom



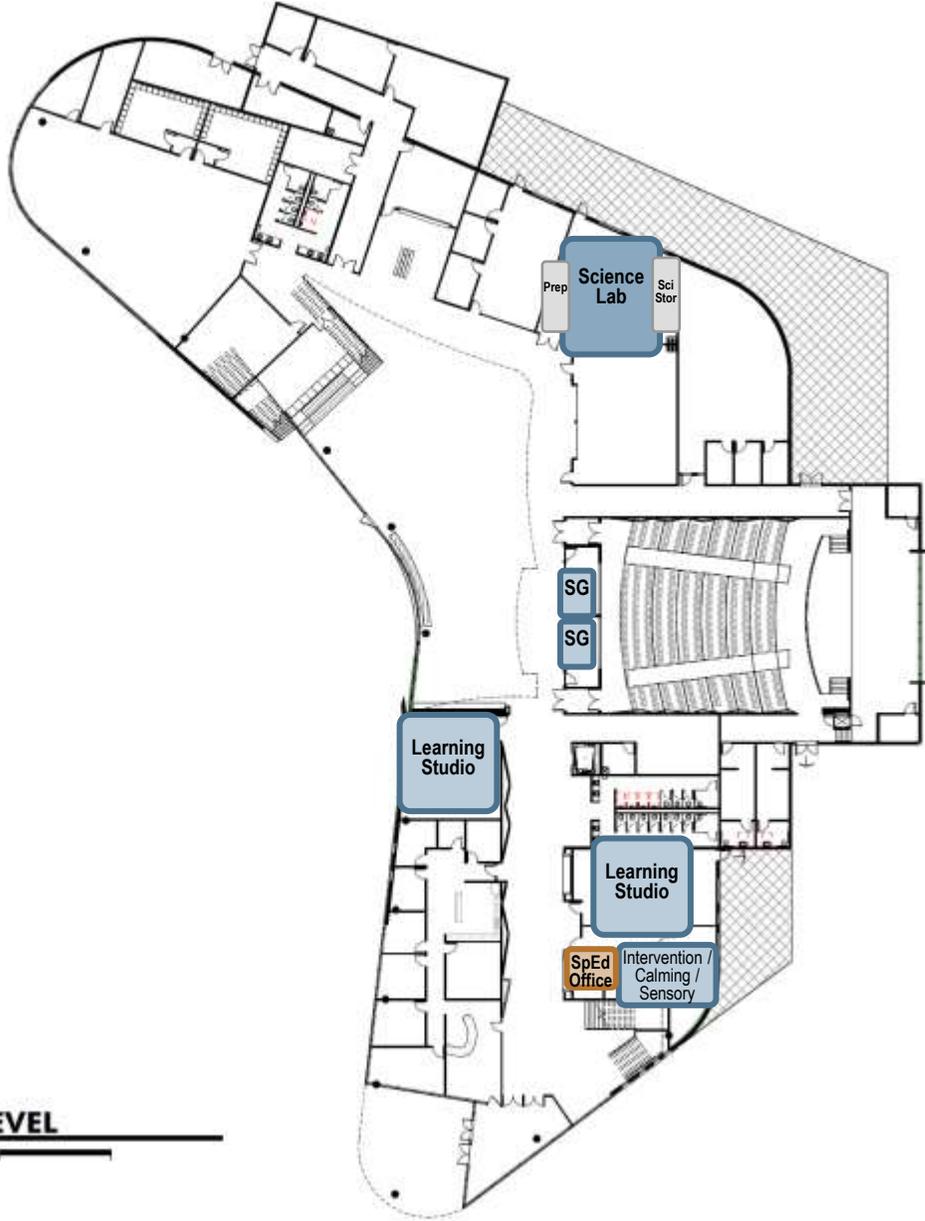
Space Program Ideas: Core Learning



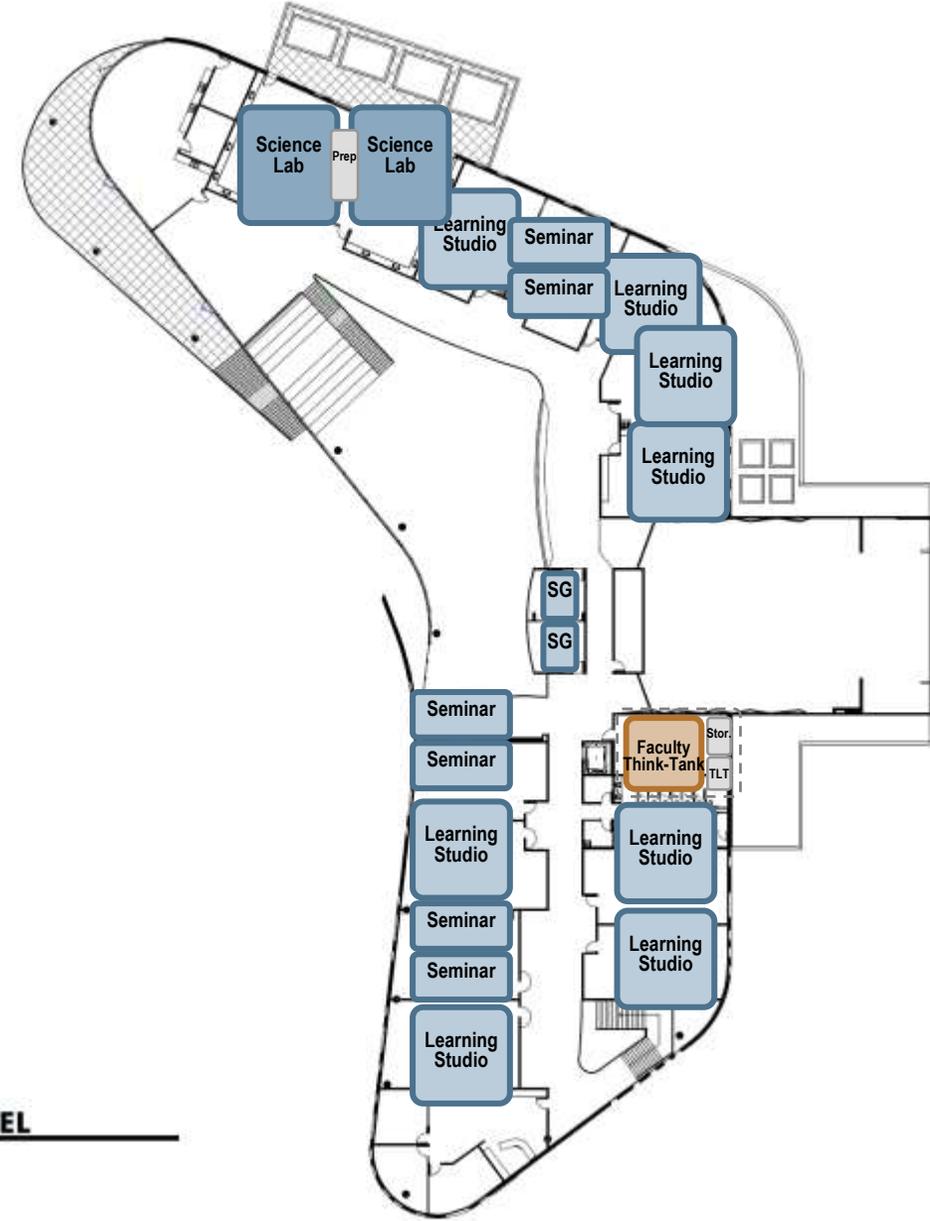
MAIN LEVEL



UPPER LEVEL



MAIN LEVEL



UPPER LEVEL

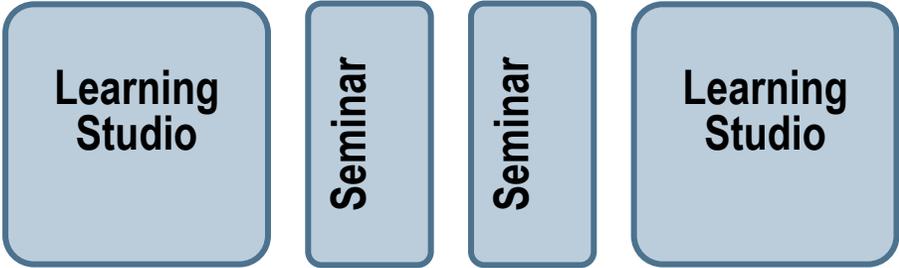
FLEXIBILITY

Learning Studio

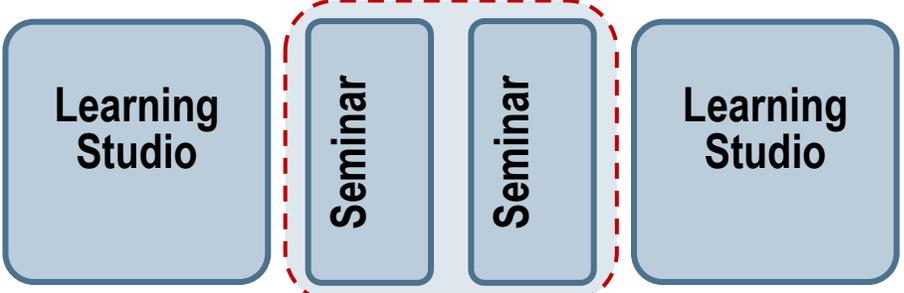
Learning Studio

Seminar

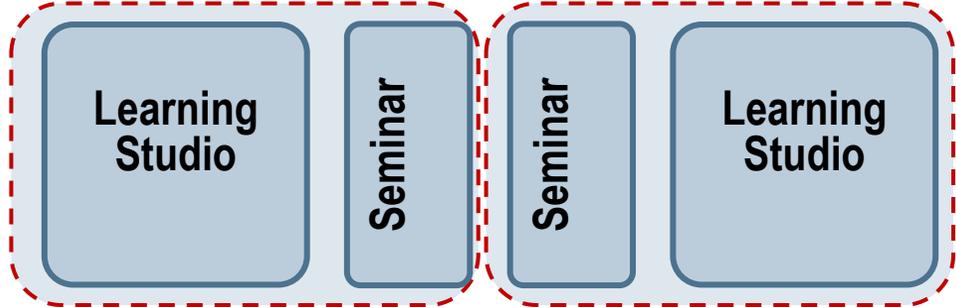
Seminar



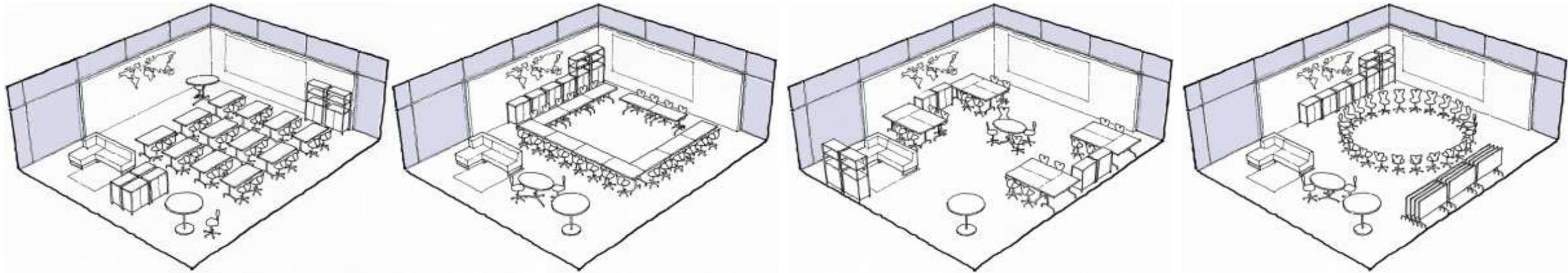
A: 2 regular + 2 smaller classrooms



B: 3 regular classrooms

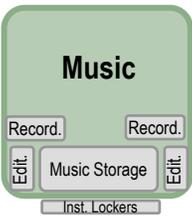
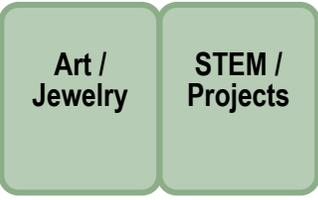


C: 2 larger classrooms





2.0 Activity Programs



COMPETITION PROGRAM ADJUSTED PROGRAM: DRAFT

2.01 Physical Education	Qty.	Net S.F.	Total Net S.F.	# T.S.	Capacity	Qty.	Net S.F.	Total Net S.F.	# T.S.	Capacity	NOTES
.01 Fitness Room	1	1,500	1,500	1	20	1	1,500	1,500	1	20	
.02 Weight Room	1	1,500	1,500	-	-	1	1,500	1,500	-	-	combine Fitness & Weight Room?
.03 PE Office	1	120	120	-	-	1	120	120	-	-	
.04 Equipment Storage	1	300	300	-	-	1	300	300	-	-	
.05 Changing/Toilet Rooms	2	500	1,000	-	-	2	440	880	-	-	
Add? .06 Individual Changing Rooms						2	50	100	-	-	suggest gender-neutral options
.07											
			4,420	1	20			4,400	1	20	

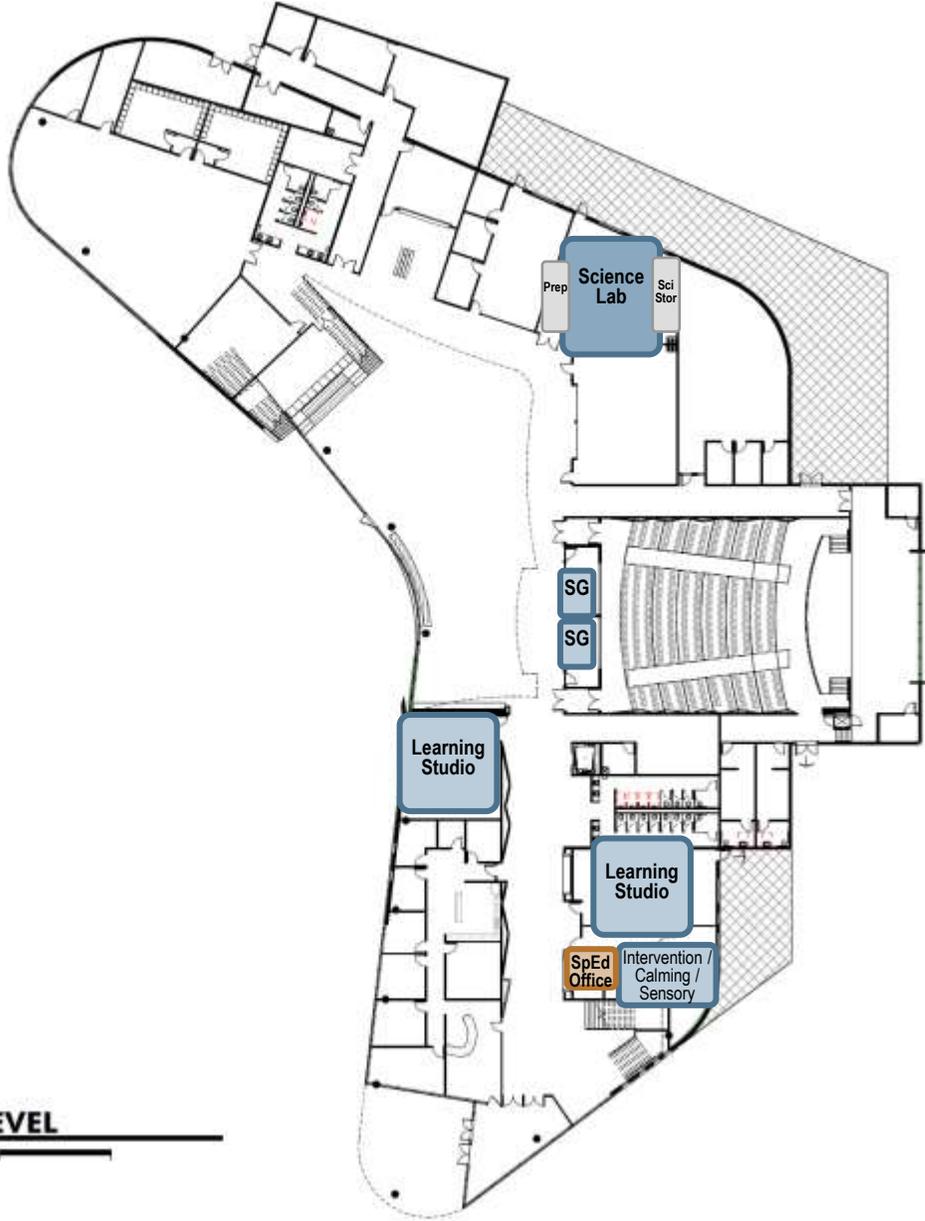
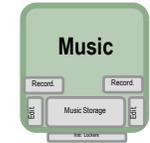
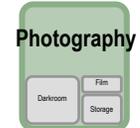
2.02 Design/Innovation Center	Qty.	Net S.F.	Total Net S.F.	# T.S.	Capacity	Qty.	Net S.F.	Total Net S.F.	# T.S.	Capacity	NOTES
.01 Art / Jewelry Classroom	1	1,500	1,500	1	20	1	1,500	1,500	1	20	
.02 Art Storage	1	200	200	-	-	1	200	200	-	-	
.03 Kiln Room	1	150	150	-	-	1	150	150	-	-	
.04 Photography	1	1,000	1,000	1	20	1	950	950	1	20	photography instruction & digital media?
Add? .05 Darkroom						1	250	250	-	-	suggest 2-4 enlargers
Add? .06 Film Changing Booth						1	50	50	-	-	black-out room for film reel rolling
.07 STEM Lab	1	1,500	1,500	-	-	1	1,500	1,500	1	20	Comp: STEM lab not counted as TS
.08 STEM Storage	1	200	200	-	-	1	200	200	-	-	
Add? .09 Photography Storage						1	100	100	-	-	chemicals and/or equipment
Add? .10 Showcase/Gallery								gross area	-	-	gross area, part of commons
Add? .11 Student Project Lockers						50	2	100	-	-	in-progress projects, materials, etc.
Add? .12 Display Cases						5	10	50	-	-	near project rooms, may count as GSF
.13											
			4,550	2	40			5,050	3	60	

2.03 Music	Qty.	Net S.F.	Total Net S.F.	# T.S.	Capacity	Qty.	Net S.F.	Total Net S.F.	# T.S.	Capacity	NOTES
.01 Music Room	1	1,000	1,000	1	20	1	1,000	1,000	1	20	
.02 Music Storage	1	200	200	-	-	1	200	200	-	-	include music library (lockable high density storage?)
.03 Recording Rooms	2	200	400	-	-	2	150	300	-	-	may be a bit large, suggest slight reduction
.04 Editing / Sound / Mixing	2	120	240	-	-	2	120	240	-	-	
Add? .05 Student Instrument Lockers						20	2	40	-	-	in hallway to music room, may count as GSF
Add? .06 Display Cases						2	10	20	-	-	in hallway to music room, may count as GSF
.07											
			1,840	1	20			1,800	1	20	

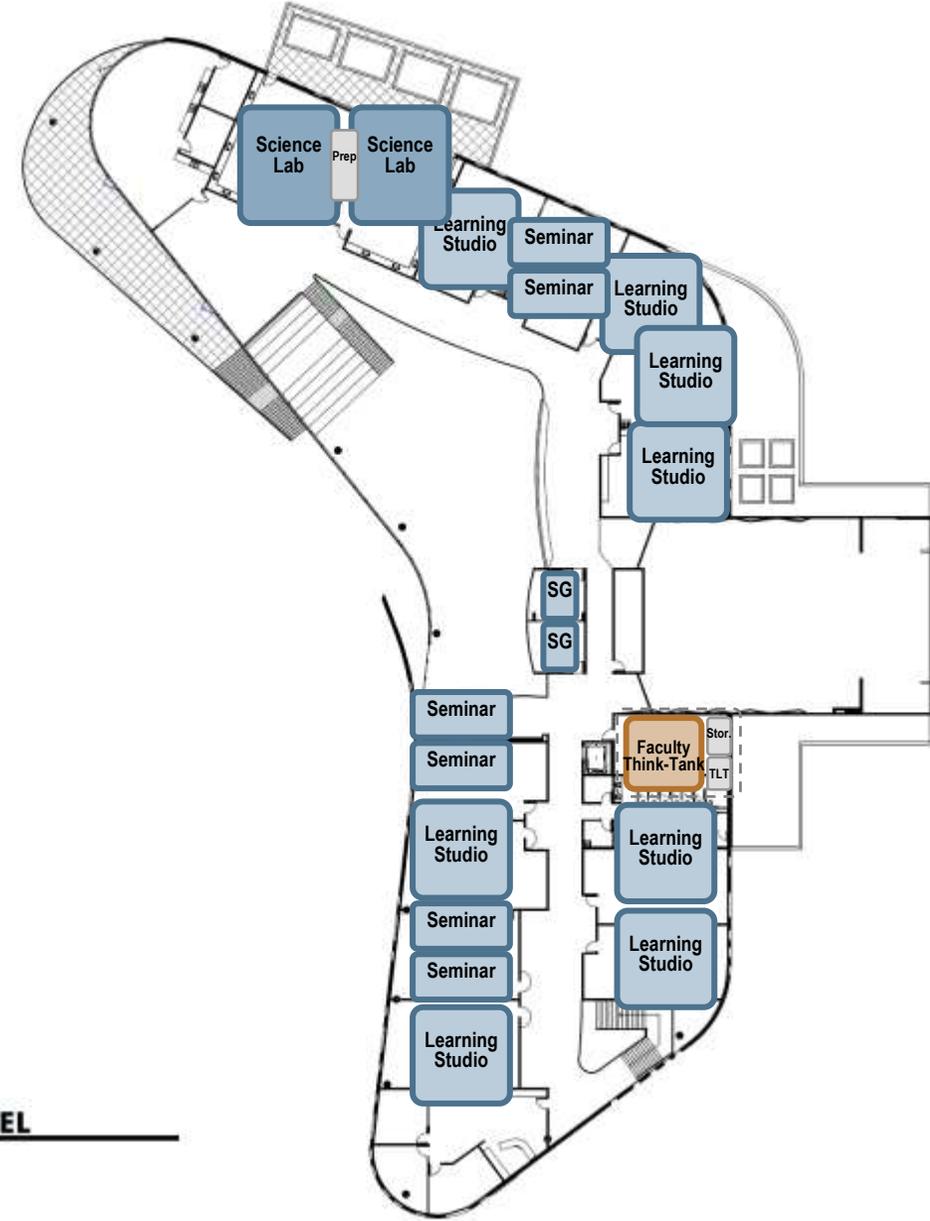
	(square feet)	# T.S.	Capacity	(square feet)	# T.S.	Capacity	NOTES
Total NET Activity Programs	10,810	4	80	11,250	5	100	



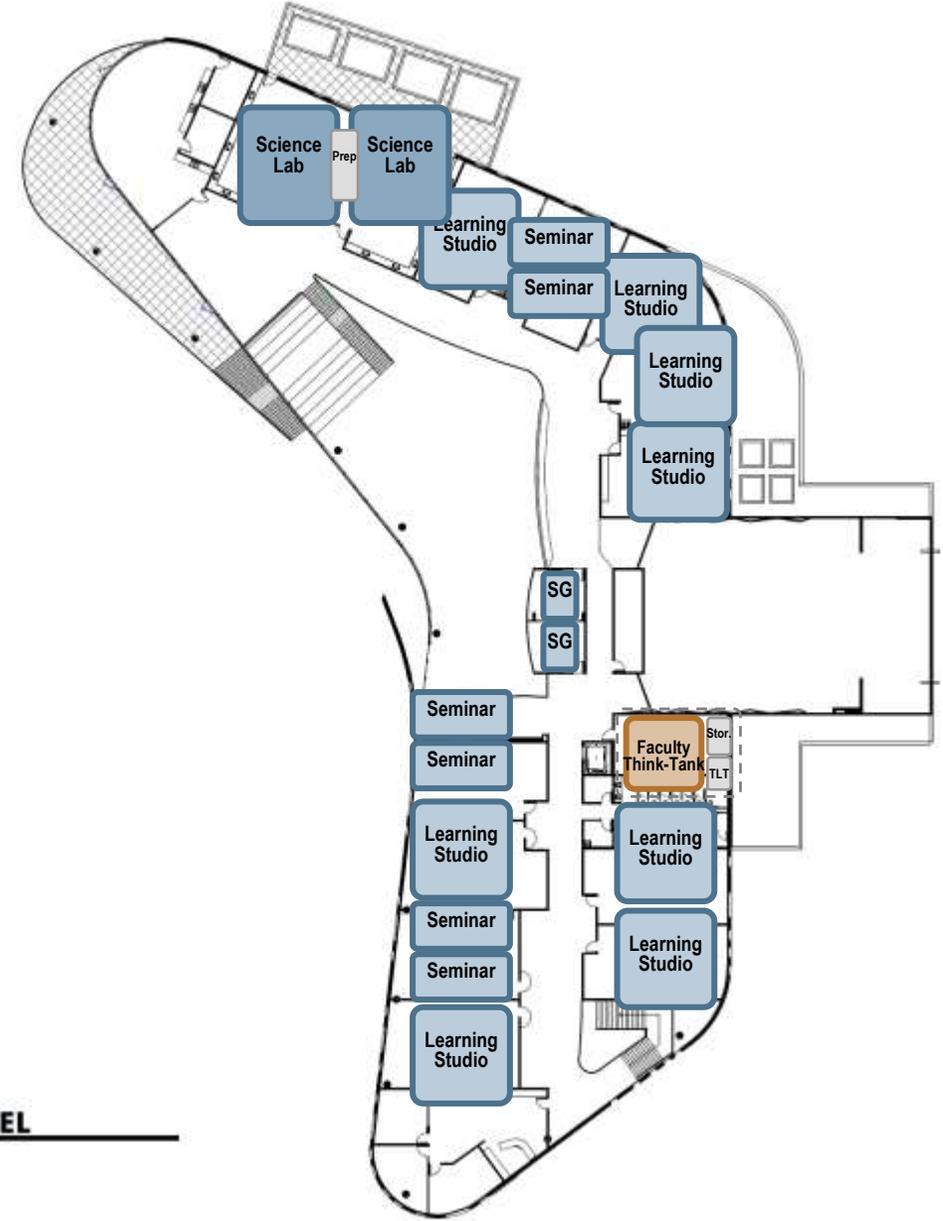
Space Program Ideas



MAIN LEVEL



UPPER LEVEL









Geffen Academy at UCLA
KonigEizenberg Architecture































Movement Lab







3.0 Community Commons

		COMPETITION PROGRAM			ADJUSTED PROGRAM: DRAFT			NOTES
		Qty.	Net S.F.	Total Net S.F.	Qty.	Net S.F.	Total Net S.F.	
3.01 Performance Commons								
	.01 Fixed Seating for 350	1	4,000	4,000	1	4,000	4,000	
	.02 Stage	1	1,200	1,200	1	1,200	1,200	
	.03 Changing Rooms	2	400	800	2	400	800	
	.04 Storage	1	300	300	1	300	300	able to be split into 2 rooms?
	.05 Control Booth	1	150	150	1	150	150	
	.06 "Public" Restrooms	TBD		gross area	TBD		gross area	
Add?	.07 Family / Gender Neutral Restroom				1	75	75	
				6,450				6,525
3.02 Learning Commons								
	.01 Learning Commons Open Area	1	2,500	2,500	1	2,000	2,000	
Add	.02 Learning Stair / Pitch Pit			-	1	500	500	part of Learning Commons
	.03 Small Group / Meeting Rooms	2	500	1,000	2	400	800	
Add?	.04 School Store / Café / Bistro			-	1	200	200	part of / open to Commons
Add?	.05 Student Day-Lockers			-	50	2	100	
Add?	.06 Club Hub / Storage			-	1	100	100	
Add?	.07 Technology Help Desk / IT Workroom			-	1	100	100	
				3,500				3,800
3.03 Dining Commons								
	.01 Dining Commons	1	2,800	2,800	1	2,800	2,800	
	.02 Kitchen / Food Services	1	900	900	1	900	900	
	.03 Commons Storage	1	200	200	1	200	200	table/chair storage
	.04 Student Restrooms			gross area			gross area	
	.05 Gender Neutral Restroom			gross area	1	75	75	Add single-stall, gender neutral
				3,900				3,975
3.04 Faculty Commons								
	.01 Faculty/Staff Break Room	1	400	400	1	300	300	reduce size to make room for amenities?
Add?	.02 Storage Room			-	1	100	100	
Add?	.03 Mother's Room			-	1	50	50	
	.04 Staff Restrooms			gross area	2	75	150	
				400				600
				(square feet)				(square feet)
Total NET Community Commons				14,250				14,900





4.0 Admin. & Student Services

COMPETITION PROGRAM

ADJUSTED PROGRAM: DRAFT

4.01 School Administration		Qty.	Net S.F.	Total Net S.F.	Qty.	Net S.F.	Total Net S.F.	NOTES	
	.01 Security Vestibule	1		0	1		0	air-lock & security functions	
	.02 Welcome Center/Waiting Area	1		0	1		0		
	.03 Student Waiting Area	2		0	2		0	separate from "public" waiting area	
	.04 Receptionst / "Front Desk"	1	400	400	1	400	400	sized for 3 workstations	
	.05 Principal's Office	1	180	180	1	180	180		
	.06 Asst Princ Office	1	160	160	1	160	160		
	.07 Dean of Students	1	140	140	1	140	140		
	.08 Conference Room (8-10 people)	1	240	240	1	240	240		
	.09 Workroom / Copy / Mailroom / Storage	1	200	200	1	200	200		
	.10 Records Room	1	100	100	1	100	100		
	.11 Registrar Office	1	130	130	1	130	130		
	.12 Intervention Office	2	130	260	2	130	260		
Add?	.13 Kitchenette / Coffee Alcove			-	1	20	20	alcove with +/- 7-10' counter with fridge, microwave, sink	
	.14 Admin Restrooms	2	75	150	2	75	150		
				1,960					1,980
4.02 Student Services		Qty.	Net S.F.	Total Net S.F.	Qty.	Net S.F.	Total Net S.F.	NOTES	
	.01 Counselor Offices	3	160	480	3	160	480		
	.02 Career Center	1	300	300	1	300	300		
Add?	.03 Conference / Testing / Quiet			-			-		
Add?	.04 Welcome Center / Waiting			-			-		
				780					780
4.03 Health Office		Qty.	Net S.F.	Total Net S.F.	Qty.	Net S.F.	Total Net S.F.	NOTES	
this is very tight =>	.01 Health Office / Clinic	1	240	240	1	80	80		
	.02 Cot Room			-	1	80	80		
	.03 Restroom			-	1	60	60		
	.04 Storage Closet			-	1	20	20		
				240					240
				(square feet)					(square feet)
Total NET Admin & Student Services				2,980					3,000

5.0 Building Support

		COMPETITION PROGRAM			ADJUSTED PROGRAM: DRAFT				
5.01	Maintenance/Custodial	Qty.	Net S.F.	Total Net S.F.	Qty.	Net S.F.	Total Net S.F.	NOTES	
	.01 Facility Manager Office / Storage	1	300	300	1	300	300		
	.02 Custodial Closets	4	100	400	4	100	400	located throughout building	
	.03 Building Storage	1	300	300	1	300	300		
	.04 Exterior Storage	1	300	300	1	300	300	Custodial, Maint., Grounds, Bus drivers, etc.	
	.05			-			-		
				1,300				1,300	
5.02	Mechanical/Electrical	Qty.	Net S.F.	Total Net S.F.	Qty.	Net S.F.	Total Net S.F.	NOTES	
	.01 Main Mechanical Room			Gross area			Gross area		
	.02 Main Electrical/Telecom			Gross area			Gross area		
	.03 Data/Telecom Distribution			Gross area			Gross area		
	.04 Centralized Control Room			Gross area			Gross area		
	.05			-			-		
				0				0	
5.03	Building Support	Qty.	Net S.F.	Total Net S.F.	Qty.	Net S.F.	Total Net S.F.	NOTES	
	Add? .01 Deliveries/Receiving			-	1	100	100	can be combined with Storage	
	Add? .02 Building Supply Storage			-	1	100	100	can be combined with Receiving	
	Add? .03 Dumpster Yard			-			outdoor area	Open-air with security gate and visual screen	
	.04			-			-		
	.05			-			-		
				0				200	
				(square feet)				(square feet)	NOTES
Sub-Total NET Building Support				1,300				1,500	

REPLACE

ADD

Space Program Ideas: Activity Programs

WHAT SHOULD WE BRING?

- all the different art spaces (dark room, computer labs, metal shop, ceramics space, studio spaces),
- mural spaces, natural materials
- Staff room, outside staff eating area,
- large sized science classroom with large lab closet, lots of sinks and counter space in room
- new furniture, AC units
- opportunities for flexibly sized groups to meet that include multiple grade levels;
- a large gathering space for all that could re-think the traditional auditorium seating;
- easy egress and ingress to outdoor spaces all over the building;
- multiple rooms that are not classrooms for small and large meetings;
- spaces that promote cross-curricular teaching and learning;
- classrooms where "there's not a bad seat in the house"
- sense of community, community experience, small class size, advisor program
- The Center space, the staff (planning) room, lots of green around us
- relationships- spaces for advisory to meet, small, medium, large spaces, art, video and music production, connections to CU, Chautauqua, and Boulder.
- The overall feel that the whole school building is immersed in the program (e.g. artwork displayed, etc.)

WHAT SHOULD WE LEAVE BEHIND?

- gendered bathrooms,
- florescent lighting,
- ugly old carpet,
- uncomfortable climate settings,
- lockers,
- narrow hallways
- All things related to the physical structure.
- AC, HEAT
- Almost everything, really, but especially that there are one-off, lonely classrooms way down halls;
- exposed pipes, poor use of negative space
- old building, bad heat, no A/C,
- Pretty much everything
- Hallways,
- one size fits all spaces,
- lack of light,
- silos - admin, counseling, teachers being separated from each other
- Inadequate ventilation and daylight

WHAT DO WE HOPE TO FIND WHEN WE ARRIVE?

- re imagined storage space (instead of lockers),
- natural light, big windows, flat iron views,
- a more modern design, an art gallery, more open classrooms and work spaces
- abundant natural light, maker space, cozy places to sit and talk.
- Bike parking. Beautiful outdoor spaces
- vending machines, soda machines,
- a way to shade windows that is effective at keeping out the sun and heat/cold as needed,
- a balcony area for students to work/study outside of my classroom or the counselors "center"
- places that are quiet,
- there are places where lots of interaction is happening;
- places to isolate are minimal yet monitor-able;
- it is easy for everyone to move through and around spaces
- hmm...good question. classroom connections to outdoors, flexible learning spaces
- More meeting/conference rooms for admin, staff, students.
- More parking, garden work area, bike racks, a beautiful auditorium, separate from a classroom for theater classes, well ventilated spaces for ALL, trees and more trees, outdoor classrooms.
- more stem opportunities, collaborative spaces with CU, state of the art video/music/digital art studios
- Highly insulated envelope, mechanical crawlspace (room on roof for PV), geo field, outdoor learning spaces, a focus on IEQ

EMERGING THEMES

- ❑ SPED is inclusion. what spaces are needed?
- ❑ Clarify Photography program, and connections to science/STEM.
- ❑ Health & fitness: clarify program needs.

Safe, Healthy, and Nurturing Environments

Allow all occupants to BE and FEEL safe, both inside and out.
Be accessible and welcoming while providing control and security.
Foster a culture of wellness including air, water, nutrition, daylighting, and environmental comfort.

Active Connection with the Community

Serve as a hub of activity and place of life-long learning.
Acknowledge and respect racial, social, and cultural diversity.
Include ample space for exhibition and display of student work.

Promote Collaboration & Strong Relationships

Provide physical connections between programs and activities.
Create multi-modal, project-based workspaces for teams and groups.
Connect to a common purpose to build strong, lasting relationships.

Innovative Physical Characteristics

Design to be physically and aesthetically pleasing, inspire learning.
Create spaces and features that are responsive and engaging.
Include elements that can be used as teaching tools for authentic learning.

Outdoor Connections

Connect learners with the environment around them.
Include a range of indoor-outdoor connections, views, and transitions.
Utilize outdoor spaces for exploring, learning, play, and environmental stewardship.

Effective Tools and Resources

Promote technical literacy through ubiquitous, robust, and updatable systems.
Equip all learning spaces with enhanced connectivity and devices.
Support teachers with appropriate tools, space, time and resources.

Adaptable and Flexible Environments

Adaptability to support future/unknown programs and activities.
Improve building performance and reduce operating costs.
Design to accommodate innovation and change over time.

Diverse Needs & Interests of all Occupants

Celebrate diversity and welcome differences.
Recognize and embrace unique learning styles, interests, and abilities.
Employ universal design principles for wayfinding, navigation, and flow of occupants.

- SPED is inclusion. what spaces are needed?
- Clarify Photography program, and connections to science/STEM.
- Health & fitness: clarify program needs.

- SPED had said they wanted to be inclusive with their program not a pull-out. Does this mean relocate the classroom and program, make it a regular teaching space and SPED can occur anywhere, or other?
- Does photography/digital lab want a connection with art, science, STEM or other program?
- Does the health program layout shown work for their program? Seems they said they really don't have a fitness program, maybe this helps build one?
- We need to add restrooms to the locker rooms in health.
- We show a café style food service area, is this appropriate? Would like to get away from the cafeteria style serving window please.....!
- Confirm auditorium seating at 300.
- Confirm career center and counseling is okay separated on the second level from the rest of administration.
- Counseling had requested a yoga space in their suite, dig more into this.