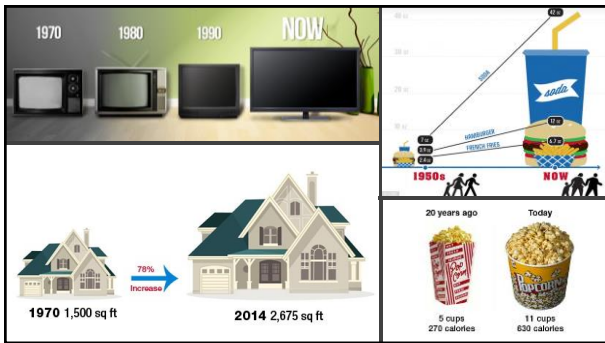


BIGGER ISN'T ALWAYS BETTER


Tips for building smarter schools

BLDD
ARCHITECTS






**WHO
WE ARE**



Todd Cyrulik AIA, LEED AP
Principal, Director KTZ Design
BLDD Architects, Inc.

Jean Underwood AIA
LEED AP O+M, Senior Associate
BLDD Architects, Inc.

Scott Jespersen
Assistant Principal
City High School, Iowa City, Iowa



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Agenda

How did we get here?

Is there a better way?

Smart school case studies

HOW DID WE GET ↓ HERE?



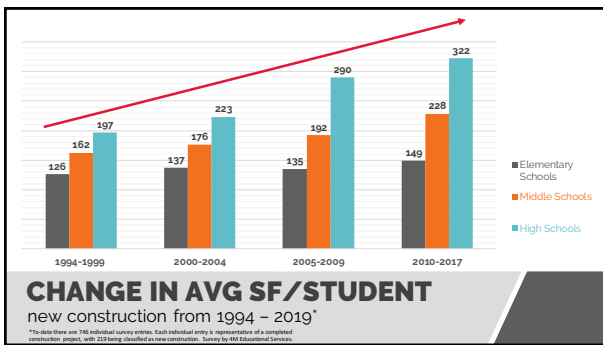
federal requirements

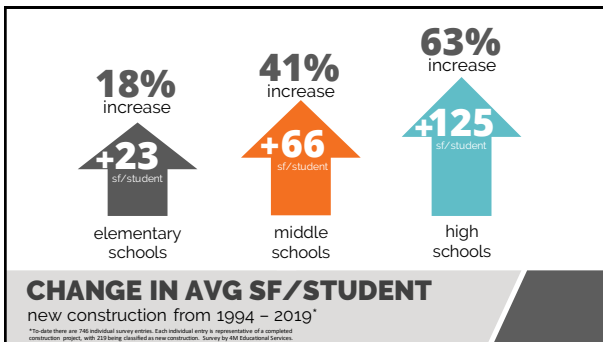
TITLE I dedicated services for low income	TITLE IX equitable programs by gender	
PUBLIC LAW 94-142 free education for each child with disability	MANDATED LUNCH PROGRAMS	AMERICANS WITH DISABILITIES ACT

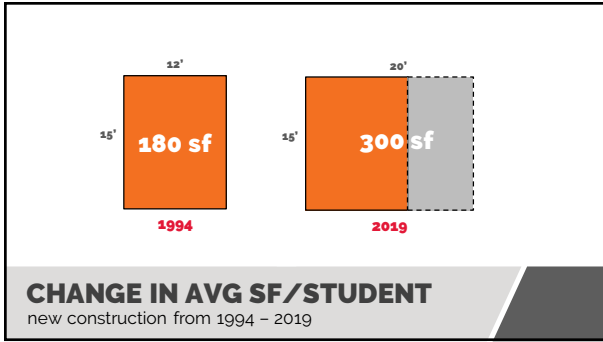
educational practices / methods

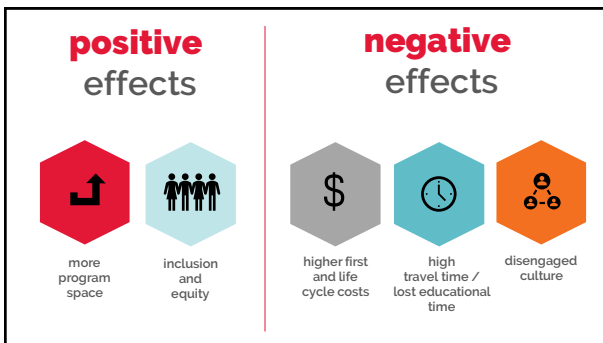
 collaborative teaching / learning	 inclusion programs	 small group instruction
 social learning	 active learning	 advanced technology

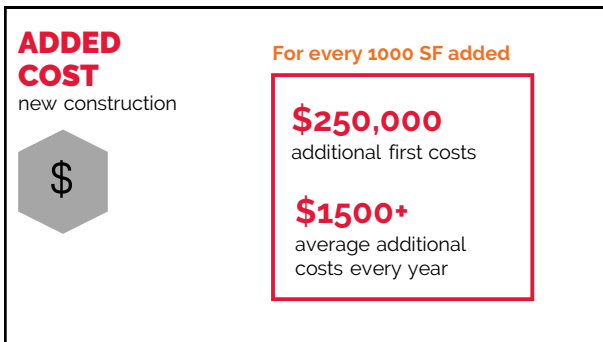


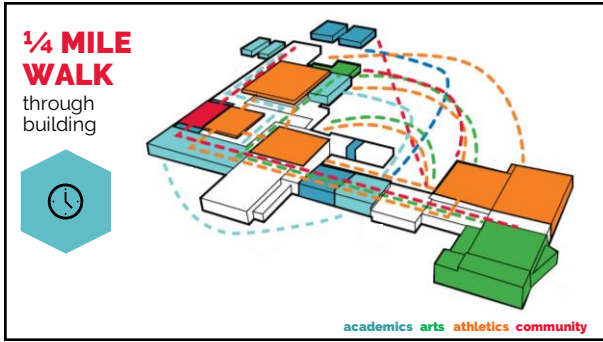






















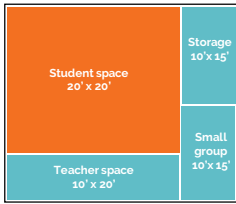


SMARTER PLANNING

- 1** Assign space by kid not by adult
- 2** Make sure EVERY space has a function between 8-3, M-F
- 3** Find programs that are underserved individually but compatible
- 4** Avoid uniformity disguised as equity



the problem:
crowded classrooms



WHAT? → Design bigger classrooms

WHY? → There is so much stuff in the room

↓

- Desks for the biggest class
- Teacher storage
- Area for small group work

WHY?? ←

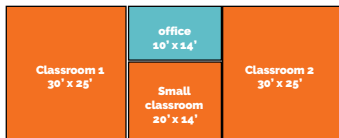
↓

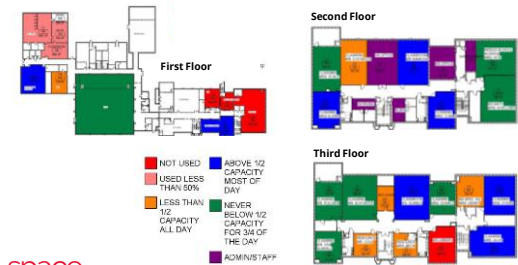
WHY??? → Understand what is taking up space and make space for it

WHAT
should we BUILD?

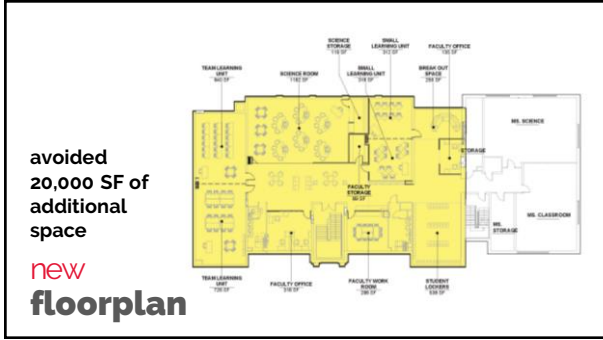


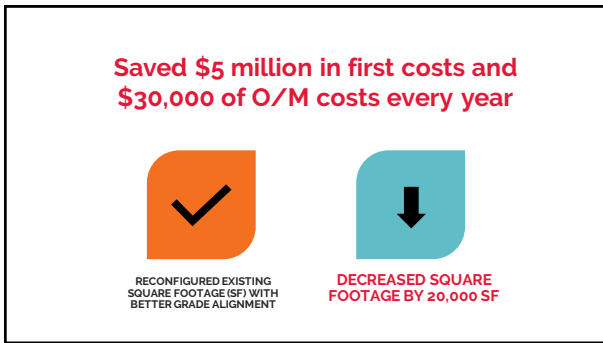
WHY
should we BUILD?





space
utilization study





smart schools

**CASE
STUDIES**

CITY HIGH SCHOOL



the challenge

- **Historic building**
- Has grown by accretion over years
- Existing school **not equitable** to other 2 high schools in district (athletics, kitchen)
- Circulation bottleneck to cafeteria
- Students do not have a designated location for their free period.
- 35 acre site
- **CTE programs are housed off-site**

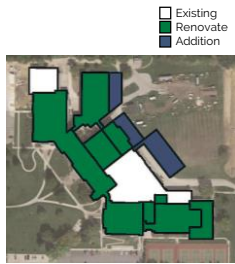
multiple additions over time

City High School,
Iowa City, IA

WHAT

should we BUILD?

- » Remodeling plus cafeteria addition
- » Library expansion
- » Build new gym, leave current gym unchanged
- » Large, empty all-day lobby
- » New wrestling room



WHY?

fix what's broken

- » Historic building needing updates (HVAC, lighting, accessibility)
- » Equitable needs (athletics, kitchen)
- » Bigger cafeteria

City High School, Iowa City, IA

WHY??

we need more space

- » Need bigger kitchen (cooking food for other schools)
- » Athletics space for equitability
- » Need lobby space for events
- » Students need space to go for free period
- » Need cafeteria to solve bottleneck

City High School, Iowa City, IA

WHY???. . .

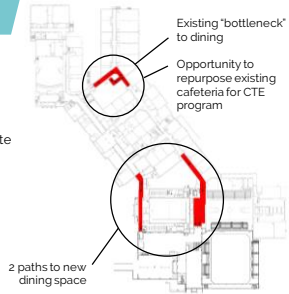
innovation / smarter design

- » Provide multi-functional spaces to solve several problems within same space
- » Equitable spaces
- » Utilization of space throughout the day

City High School,
Iowa City, IA

the solution

- **Multi-functional space**
 - ✓ dining
 - ✓ social areas
 - ✓ gathering space for events
 - ✓ lobby space for performances in gym
 - ✓ outdoor dining
- Two clear paths to dining space to eliminate bottleneck.
- Equitable athletic upgrades
- Equitable kitchen space
- Opportunity to **develop existing cafeteria into CTE learning environment in future**

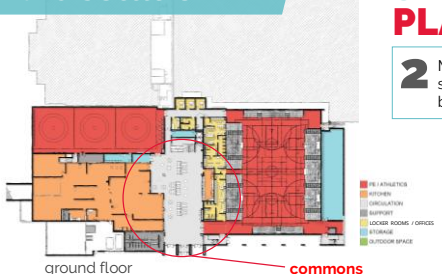


Solution **creates equity** and creatively solves multiple problems within the space

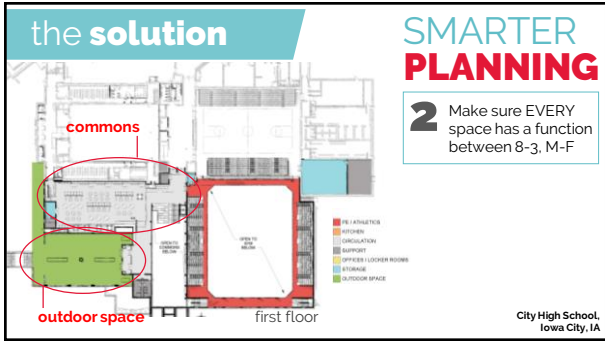
the solution

SMARTER PLANNING

2 Make sure EVERY space has a function between 8-3, M-F



City High School,
Iowa City, IA













the challenge

- Two separate schools serving a small (less than 250), rural student population
- Both campuses needed extensive HLS updates
- Lacked future-focused spaces
- Shared faculty had to travel between schools



existing two campuses
37,228 SF | **165 SF/STUDENT**

WHAT should we BUILD?

- » Full size classrooms for K-8 based on adults
- » Kitchen
- » Cafeteria
- » Media center
- » Gymnasium
- » Art and music classrooms
- » Science classrooms
- » "Extra" classrooms

Department	Space	Area (SF)	Capacity
Administration			
Reception	100		
Office	300		
Office	115		
Office	115		
Teacher work room	100		
Conference	115		
Rest	175		
Auxiliary			
Restroom	500		
Storage	500		
Storage	1000		
Locker Room	100		
Cafeteria	1000		
Classroom			
Elementary	100	15	
Art	600	15	
Band	600	15	
Health	750	15	
Lab	750	15	
Language	750	15	
Language	750	15	
Math	750	15	
Reading	750	15	
Science	750	15	
Special Education	100	15	
Art	500	15	
Music	500	15	
Storage	500	15	
Unknown	1000	15	

Department	Area (SF)	Capacity
Classroom	32400	324
Classroom	11000	110
TOTAL: 43400 SF		
200 per		

Proposed One Campus
38,000 SF | **169 SF/STUDENT**

WALTHAM SCHOOL
Grades: K-8 SF: 38,000 Enrollment: 225

- More sf than both schools combined
- No break out space
- No dividable gym
- No stage space
- No space for shared and collaborative teaching methods

WHY?

fix what's broken

- » Dated learning environments
- » Two separate school to maintain
- » Failing buildings

Waltham School
North Utica, IL



WHY??

we need more space

- » Reduce travel time for teachers
- » Create future-focused and individualized instruction
- » Prove that small, rural education can be high quality
- » Provide a cafeteria / kitchen

Waltham School
North Utica, IL

WHY???. . .

innovation / smarter design

- » Create a warm and welcoming culture
- » Provide radically collaborative spaces to solve multiple problems
- » Use ALL space by nearly eliminating non-instructional spaces (hallways, cafeteria, kitchen)

Waltham School
North Utica, IL

the solution

1 Assign space by kid not by adult

- New, smaller single K-8 school
- **Nearly eliminate non-instructional space** (hallways, cafeteria, kitchen)
- Tighter footprint with increased future-focused program space
- highly collaborative and flexible learning studios



5000 sf smaller than the 'what' solution | **13% less space** | **138 sf/student**

2 Make sure EVERY space has a function between 8-3, M-F

FOREST

- FIELD
- CAMPUS/ROOF
- EXTENSION

RIVER

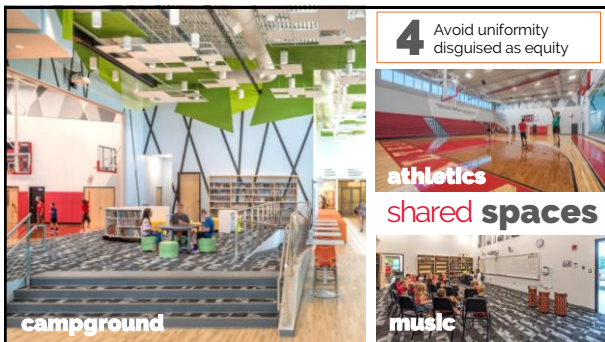
- 6-8 CLASSROOM
- 6-8 CLASSROOM

MEADOW

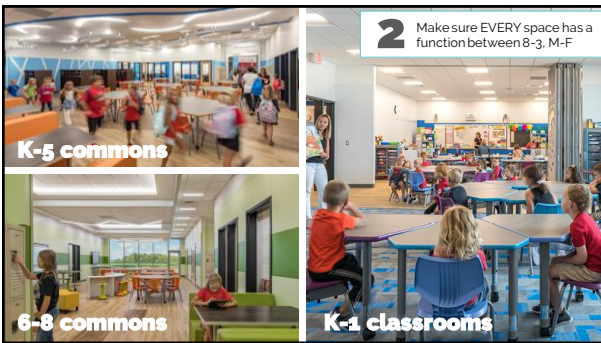
- 6-8 CLASSROOM
- 6-8 CLASSROOM
- RECREATION CENTER

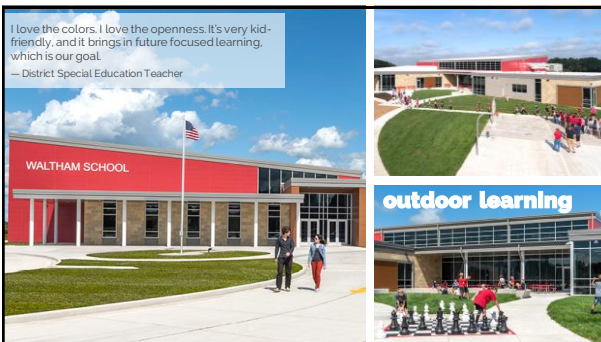


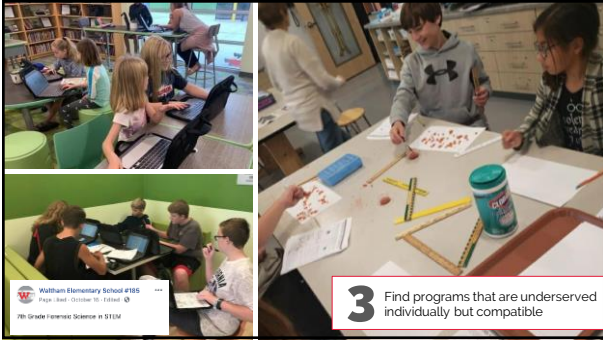
















Conclusion

How did we get here?

Is there a better way?

Smart school case studies

BIGGER
ISN'T ALWAYS
BETTER

thank you!

Tips for building
smarter schools

BLDD
ARCHITECTS
