CHELMSFORD PUBLIC SCHOOLS

Comprehensive Facilities Assessment

Visioning Session #1 – February 10th, 2016

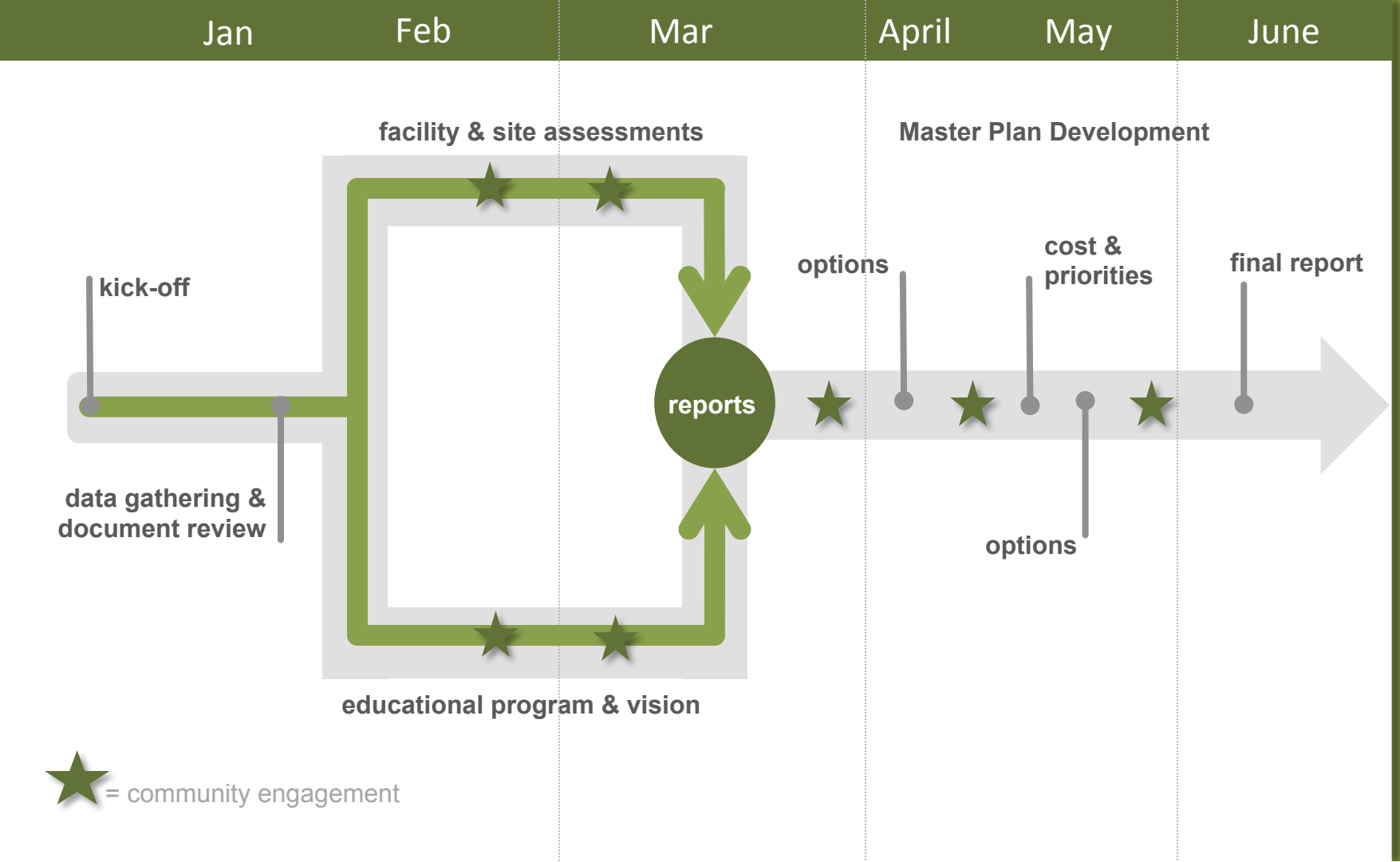
DORE & WHITTIER ARCHITECTS, INC.

- [ ] introductions
- [ ] process overview & outcomes
- [ ] MSBA comparative analysis
- [ ] key issues & considerations
- [ ] dinner break
- [ ] ed21 presentation
- [ ] long range educational goals

agenda

leadership team

- 60+ person architectural firm
- 20+ year history
- specialize in public work
- expertise in educational projects


Jan
Feb
Mar
April
May
June
facility & site assessments
Master Plan Development
kick-off
options
cost &
priorities
final report
reports
data gathering &
document review
options
educational program & vision
= community engagement
approach

1. assess facility condition

2. establish educational goals & identify programmatic deficiencies

3. recommend possible maintenance, organizational & capital investment options

objectives

A How many schools are there and where are they located?

B What's the condition of our facilities?

C What financial commitment is necessary to position our facilities to serve another 50 years?

objectives

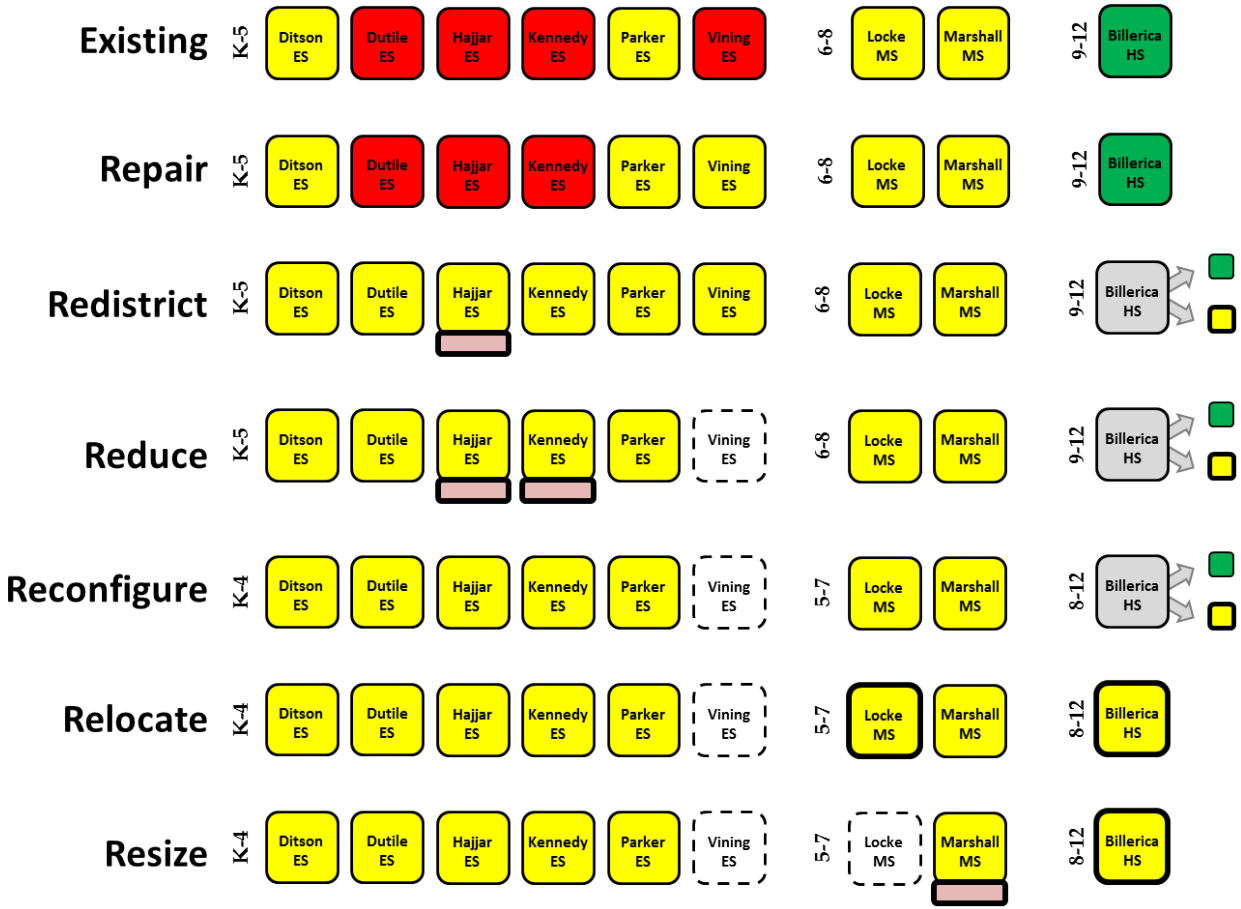
options by school

Existing Parking Spaces: 50
Proposed Parking Spaces: 75

Existing/Renovation

Addition

district-wide options



master plan timeline

major projects

CIP repairs & maintenance

2017

SUBMIT SOI FOR SCHOOL PROJECT #1 TO MSBA

DEFERRED MAINTENANCE PROJECT #1

DEFERRED MAINTENANCE PROJECT #2

2018

MSBA MODULES 1-2 FOR SCHOOL PROJECT #1

DEFERRED MAINTENANCE PROJECT #3

DEFERRED MAINTENANCE PROJECT #4

MSBA MODULES 3-4 FOR SCHOOL PROJECT #1

DEFERRED MAINTENANCE PROJECT #5

2019

major projects

CIP repairs & maintenance

2019

MSBA MODULES 4- 8 FOR SCHOOL PROJECT #1

DEFERRED MAINTENANCE PROJECT #6

DEFERRED MAINTENANCE PROJECT #7

OCCUPY SCHOOL PROJECT #1

REVIEW MASTER PLAN

2023

SUBMIT SOI FOR SCHOOL PROJECT #2 TO MSBA

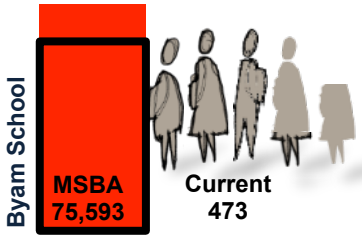
DEFERRED MAINTENANCE PROJECT #8

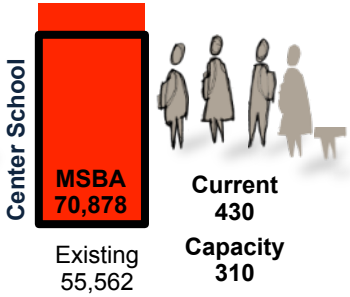
DEFERRED MAINTENANCE PROJECT #9

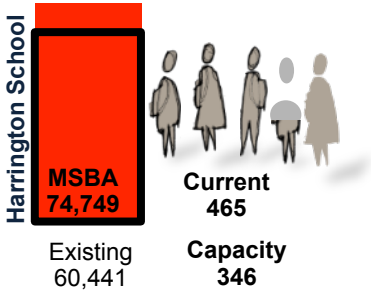
2026

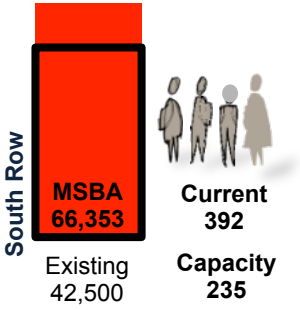
approach

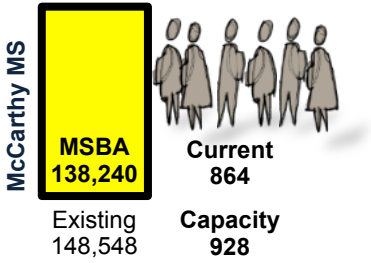
comparative analysis

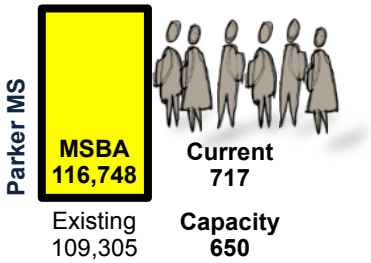


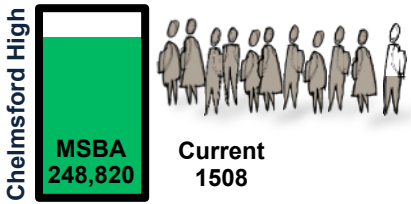


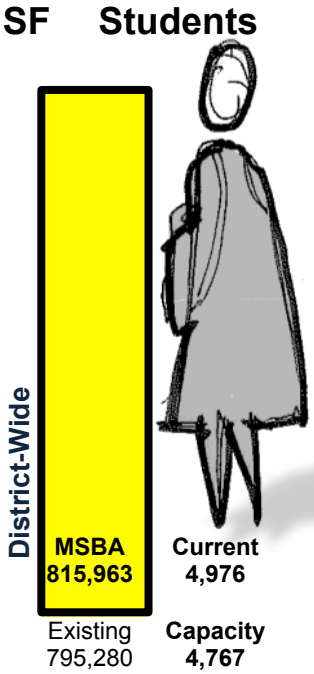












capacity analysis

msba comparative analysis

level 1

level 2

Undersized (<90%)

Aligned (90%-110%)

Oversized (>110%)

Byam School

msba comparative analysis

level 1

Level 2

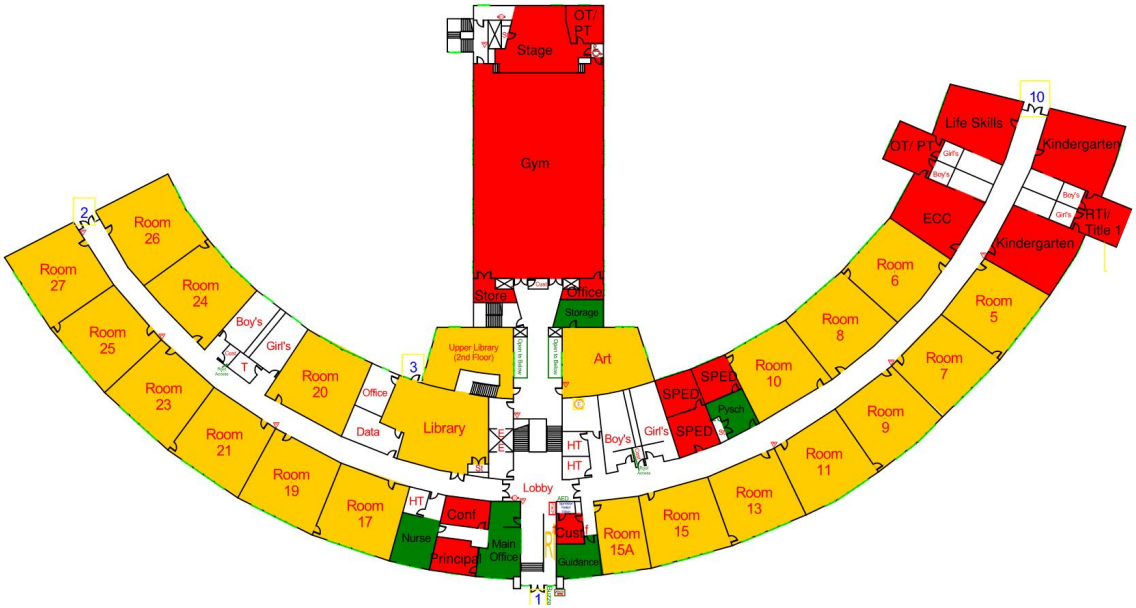
Undersized (<90%)

Aligned (90%-110%)

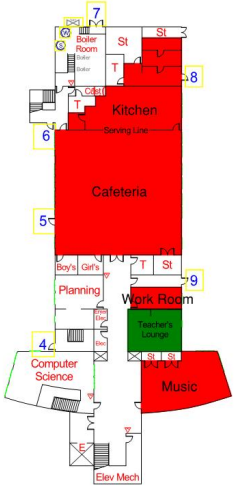
Oversized (>110%)

Harrington School

msba comparative analysis



level 1



Level 2

Undersized (<90%)

Aligned (90%-110%)

Oversized (>110%)

Center School

msba comparative analysis

Undersized (<90%) **Aligned (90%-110%)** **Oversized (>110%)**

South Row School

msba comparative analysis

level 1

level 2

level 3

Undersized (<90%)

Aligned (90%-110%)

Oversized (>110%)

Chelmsford High School

key issues & considerations

large group

1) What key educational or facility-related issues should be explored?
2) What considerations should the Town, District and Design Team be aware of? Cost? Grade Configuration? School Size? Neighborhood Schools? School Count?
3) How would you define a successful study?

dinner

break

why

trajectory

translation

examples

ed21

why?

BAD KITTY
Gets a
BATH
Nick Bruel

- kindergarten in 2019
- high school in 2032
- college in 2036

55,000

55,000

5,760

55,000

2½ full time

5,760

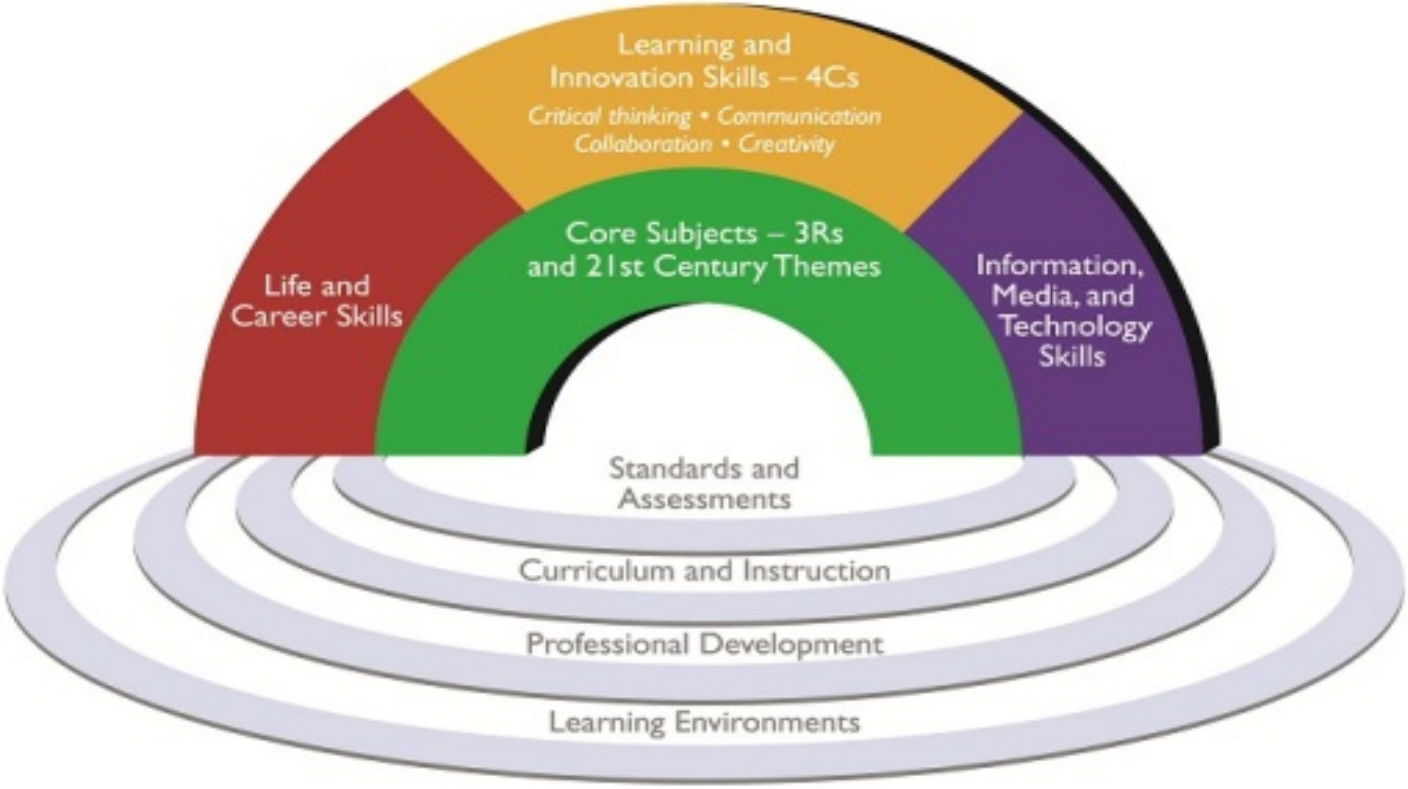
trajectory

curricula
what?
educational experience of young people
pedagogy
how?
where?

“We are currently preparing students for jobs that don’t yet exist, using technologies that haven’t yet been invented, in order to solve problems that we don’t even know are problems yet.

- Karl Fisch, Educator

21st Century Student Outcomes and Support Systems



Partnership for 21st Century Skills: Framework for 21st Century Learning

20th century

- teaching efficiency
- teacher centered
- teacher dispenses information
- knowledge is discrete
- content is paramount
- emphasis on math/linguistic skills
- project learning for those not suited for academic instruction
- one instructional strategy for all
- student sharing is cheating
- talk teaching
- anonymous groupings

21st century

- effective/Authentic learning
- learner centered
- learners construct knowledge
- knowledge is integrated
- process is critical to learning
- multiple intelligences
- project learning for all
- personal learning plans
- scaffolded cooperative learning
- student discovery
- intentional groupings of 150+/-

20th century

21st century

20th century

21st century

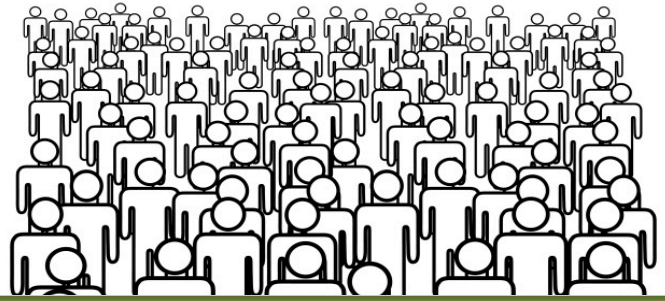
20th century

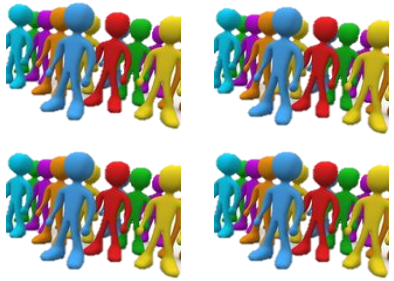
21st century

20th century

21st century

20th century

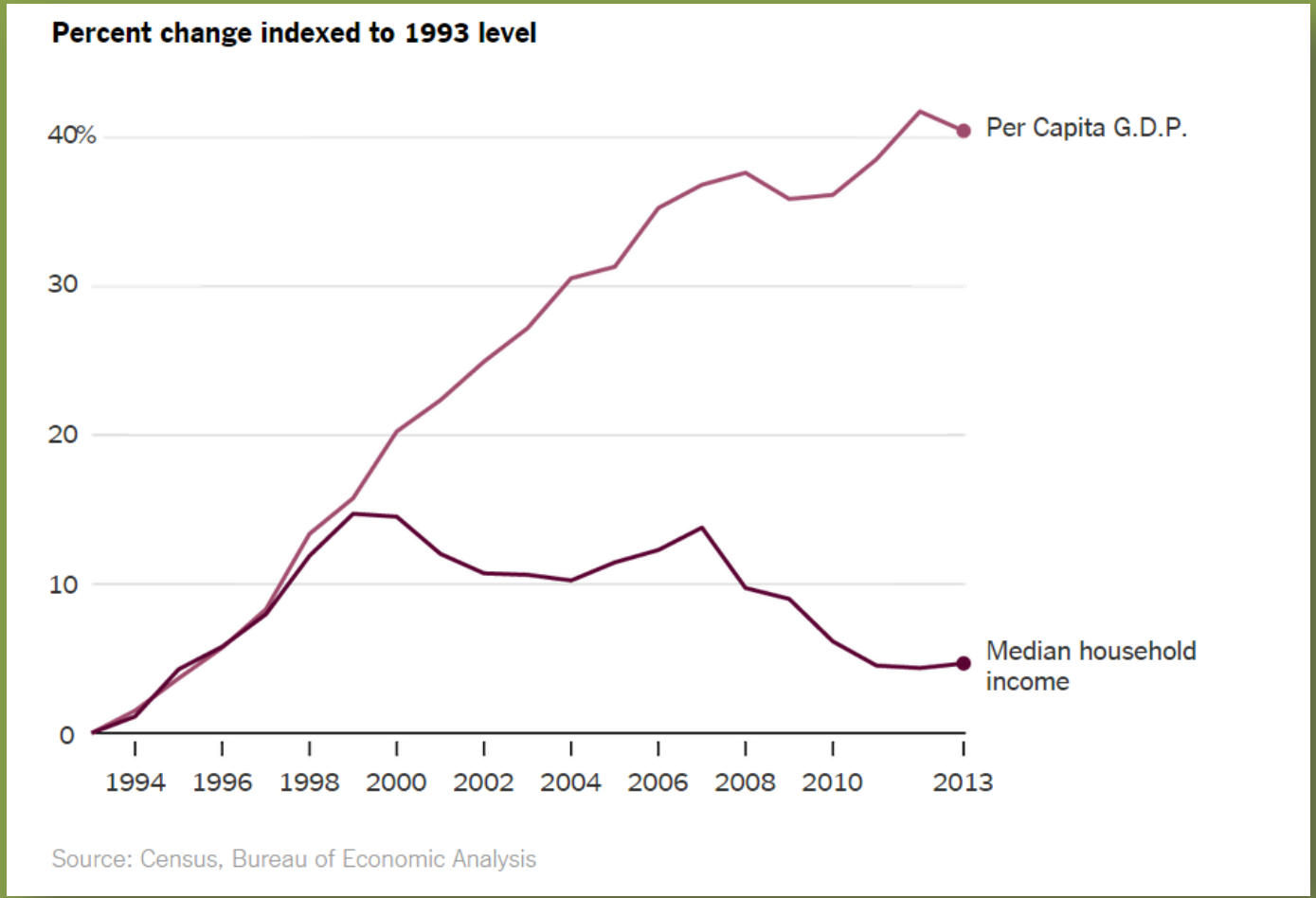




21st century

20th century

21st century



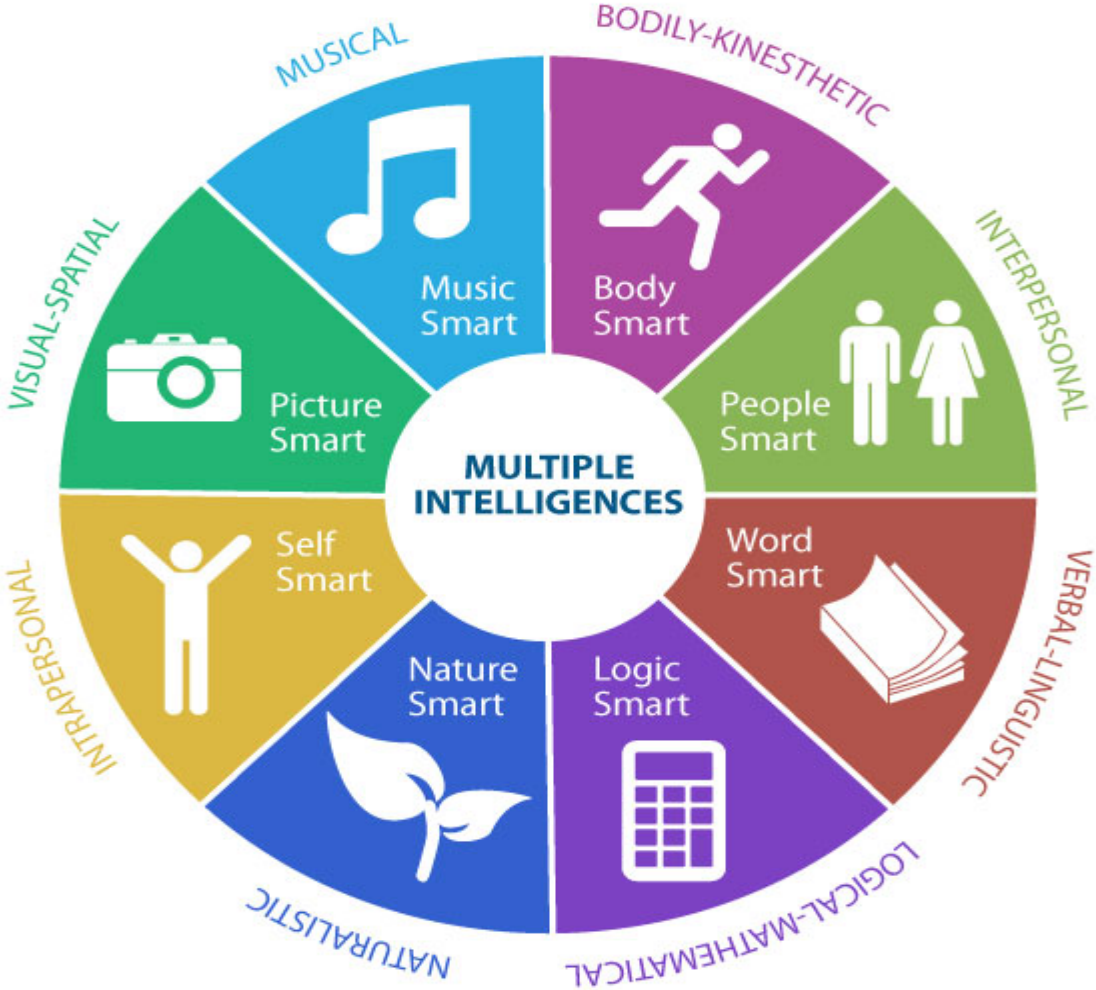
- New York Times, September 16th, 2014

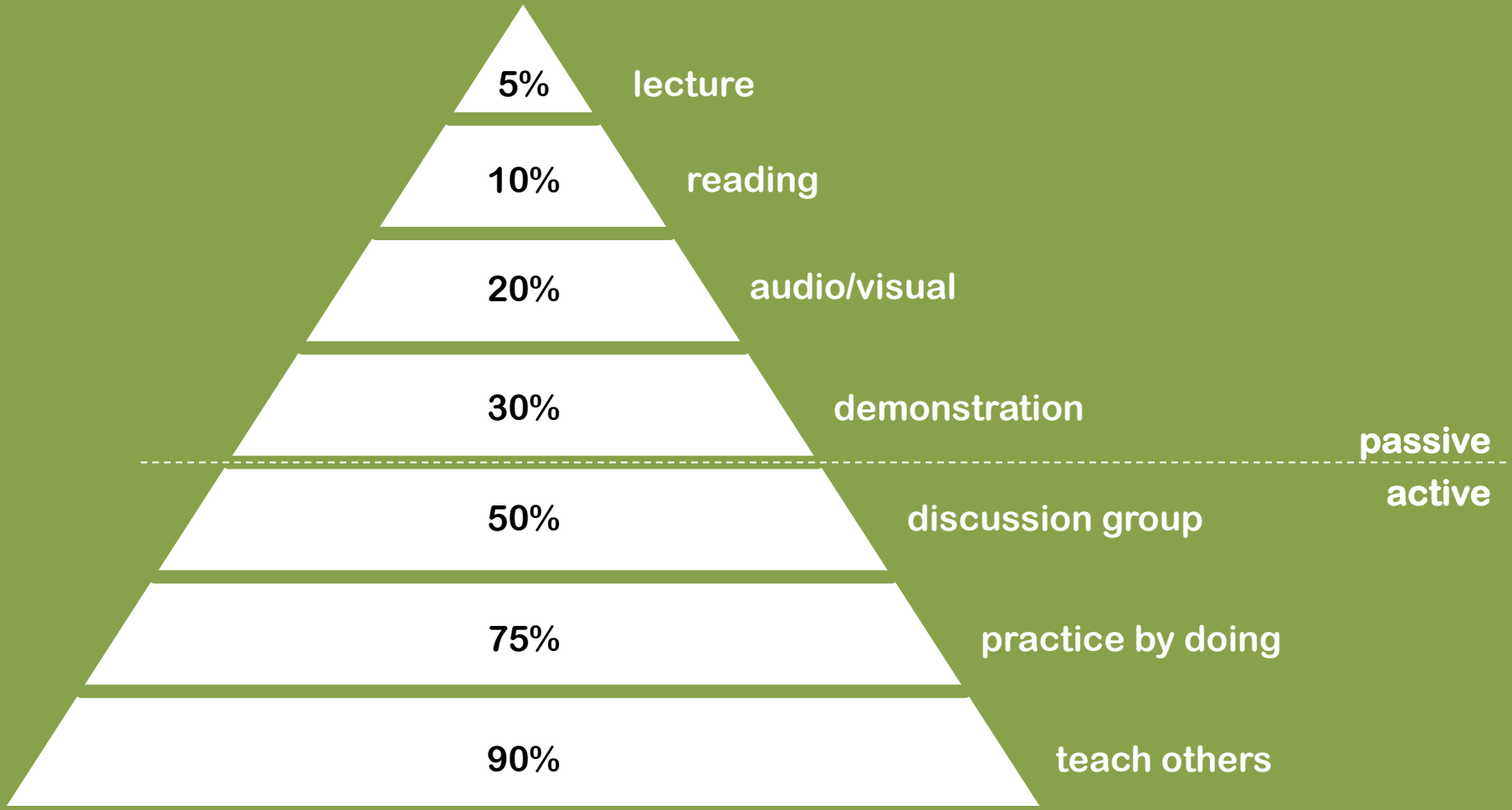
critical thinking

collaboration

communication

creAtiviTy


MUSICAL
BODILY-KINESTHETIC
INTERPERSONAL
VERBAL-LINGUISTIC
LOGICAL-MATHEMATICAL
NATURALISTIC
INTRAPERSONAL
VISUAL-SPATIAL
Music Smart
Body Smart
People Smart
Word Smart
Logic Smart
Nature Smart
Self Smart
Picture Smart
MULTIPLE INTELLIGENCES

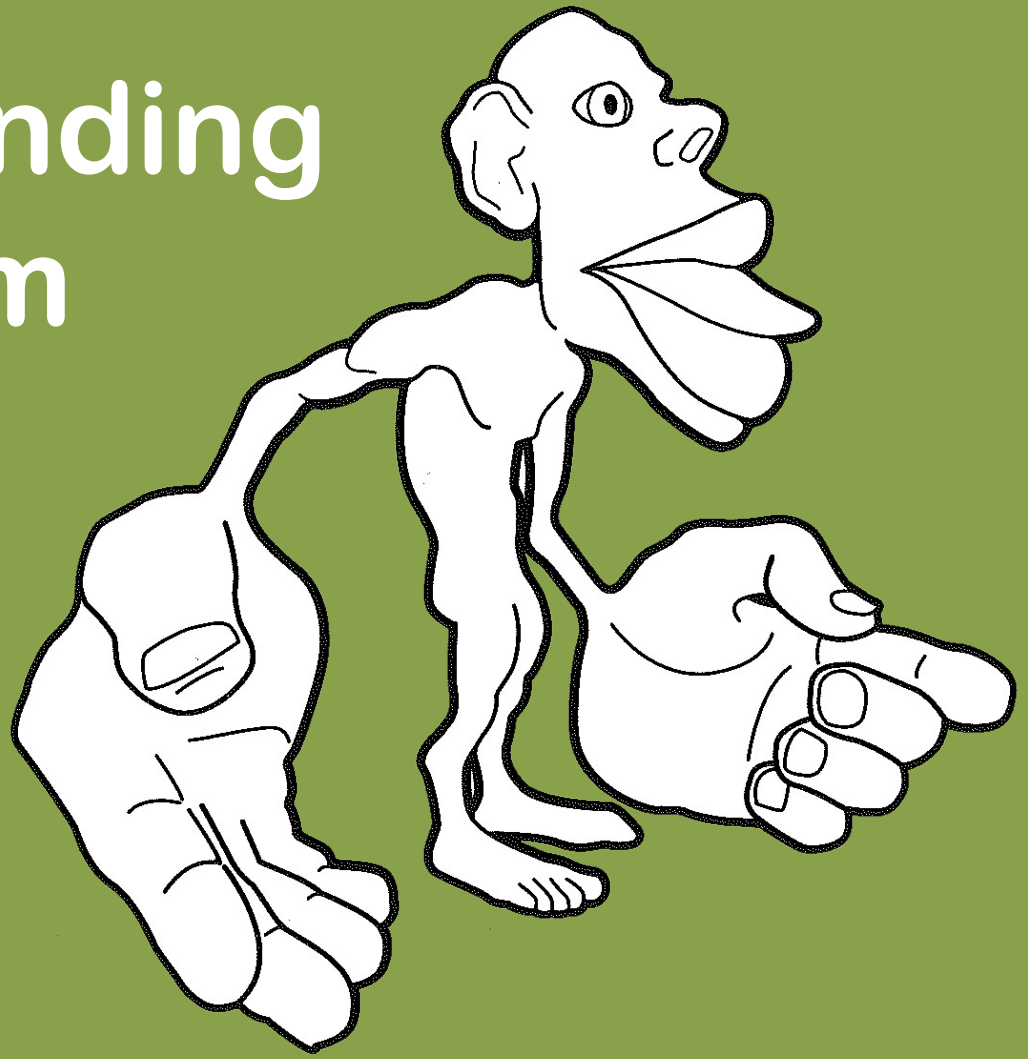

5%
lecture
10%
reading
20%
audio/visual
30%
demonstration
passive
active
50%
discussion group
75%
practice by doing
90%
teach others

“Watching a child makes it obvious that the development of his mind comes through his movements.”

- Maria Montesori, Educator

…understanding derives from activity…

-John Dewey



trans-ley-sh*un*

noun:
change or conversion to another form, appearance, etc.

student-centered

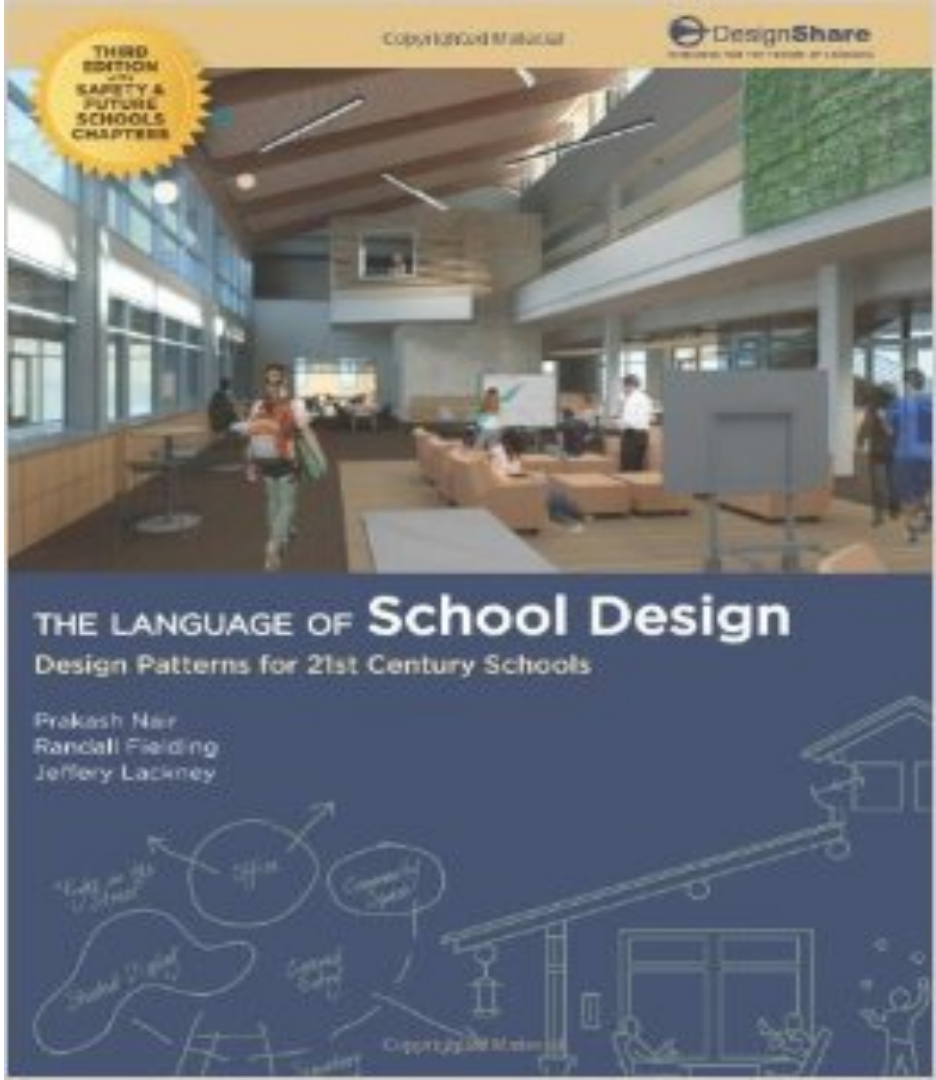
agility
variety
visibility

movement
utech

The Third Teacher

79 Ways You Can Use Design to Transform Teaching & Learning

A Collaborative Project:
OWP/P Architects + VS Furniture + Bruce Mau Design



other resources

Ken Robinson - Changing Paradigms
https://youtu.be/zDZFcDGpL4U

Karl Fisch - Did You Know?
https://youtu.be/XrJjfDUzD7M

Ken Robinson - Creativity
https://youtu.be/iG9CE55wbtY

Larry Rosenstock - High Tech High
https://youtu.be/6rv_rmJYorE

Five Keys to Project-based Learning
https://youtu.be/hnzCGNnU_WM

Project-based Learning Start to Finish
https://youtu.be/-OWX6KZQDoE

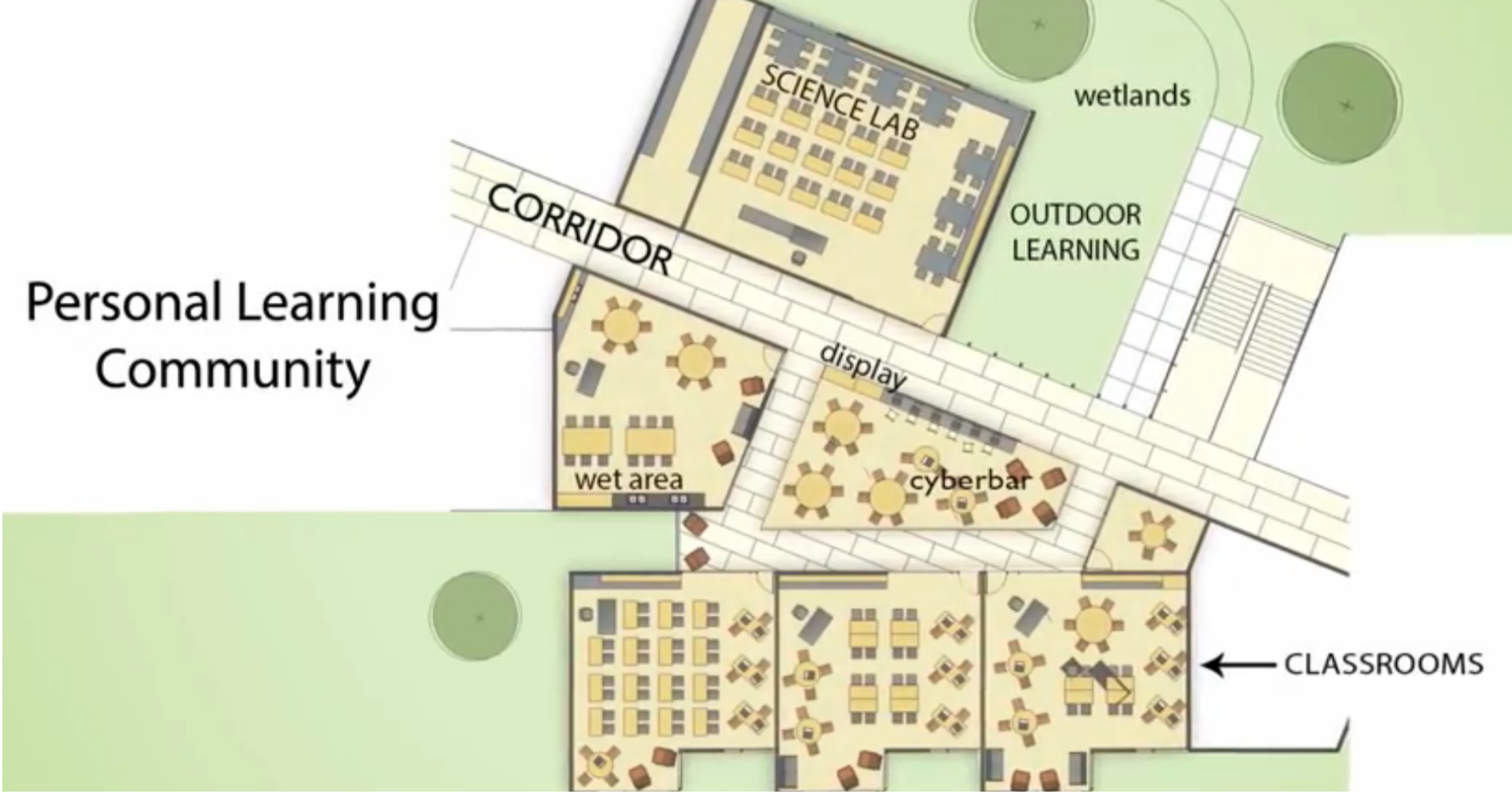
CEFPI MacConnel Award Submissions
http://macconnell.cefpi.org/

Learning Space Toolkit
http://learningspacetoolkit.org/space-browser/

Edutopia
www.edutopia.org

Buck Institute for Education
www.BIE.org

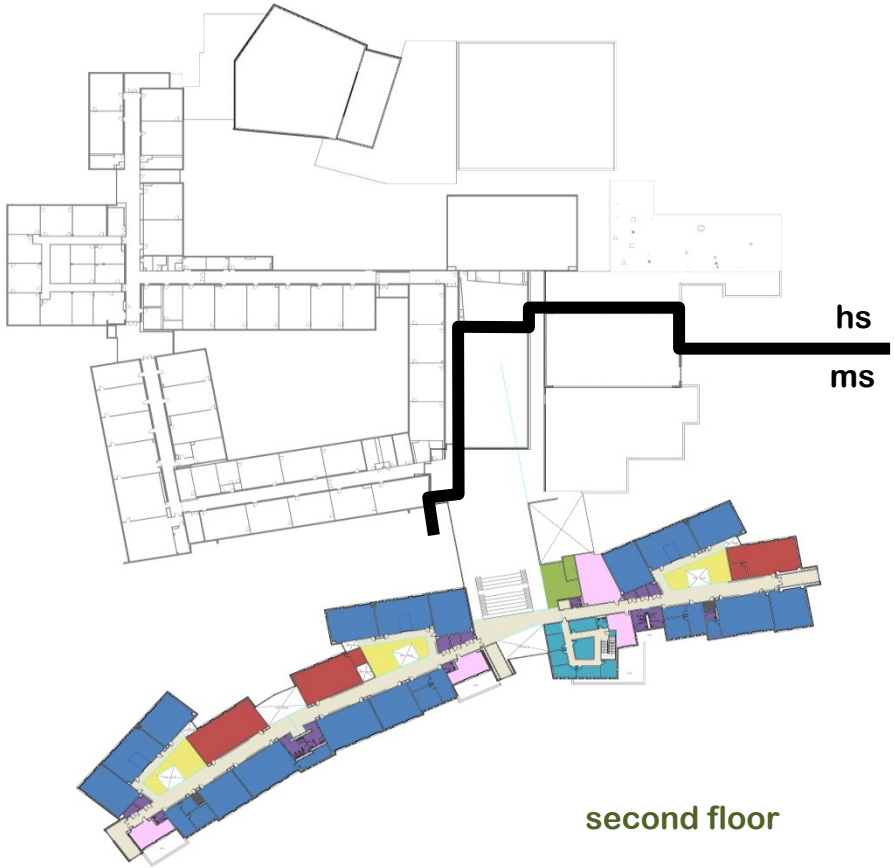
Meadowdale Middle School | Lynnwood, WA



Meadowdale Middle School | Lynnwood, WA

our work

first floor



second floor

scituate middle school | scituate, ma

1

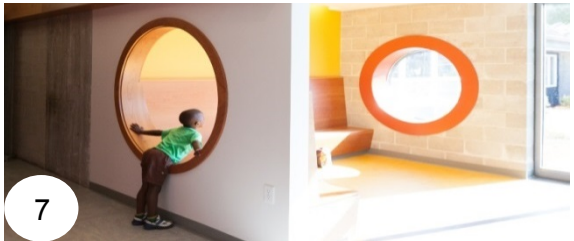
2

3

4

5

6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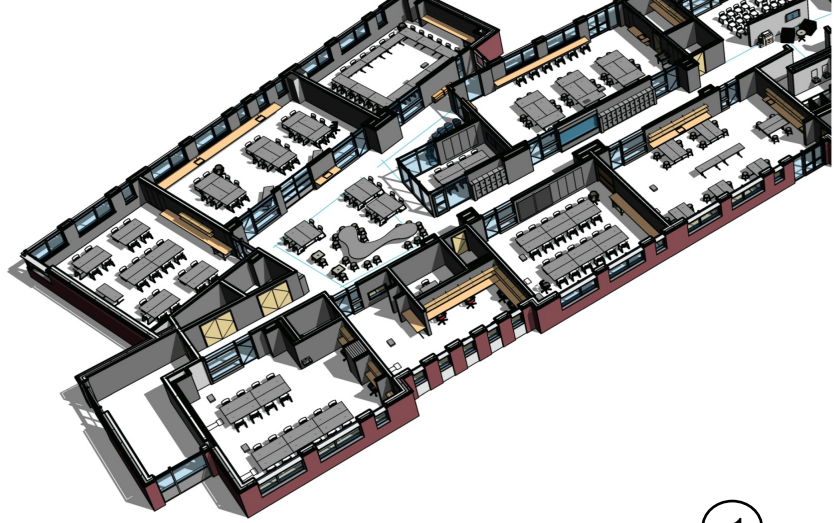
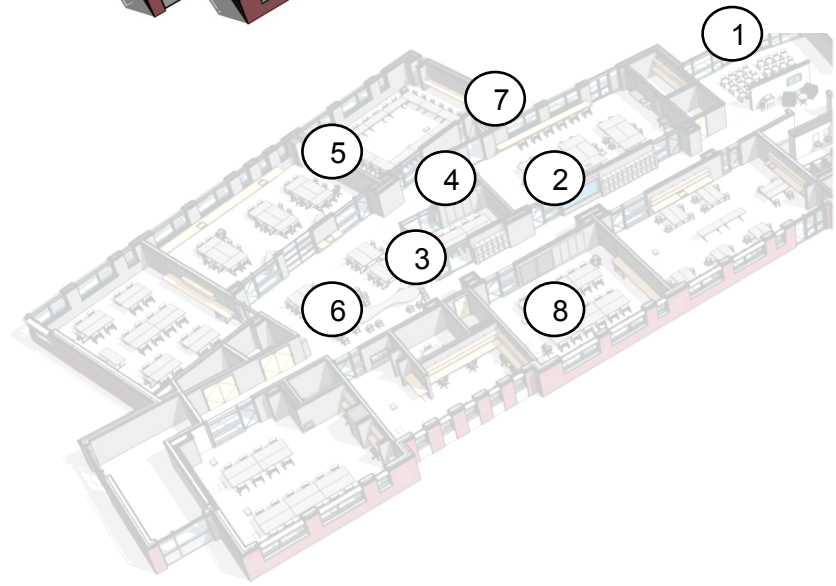
8




1
7
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6
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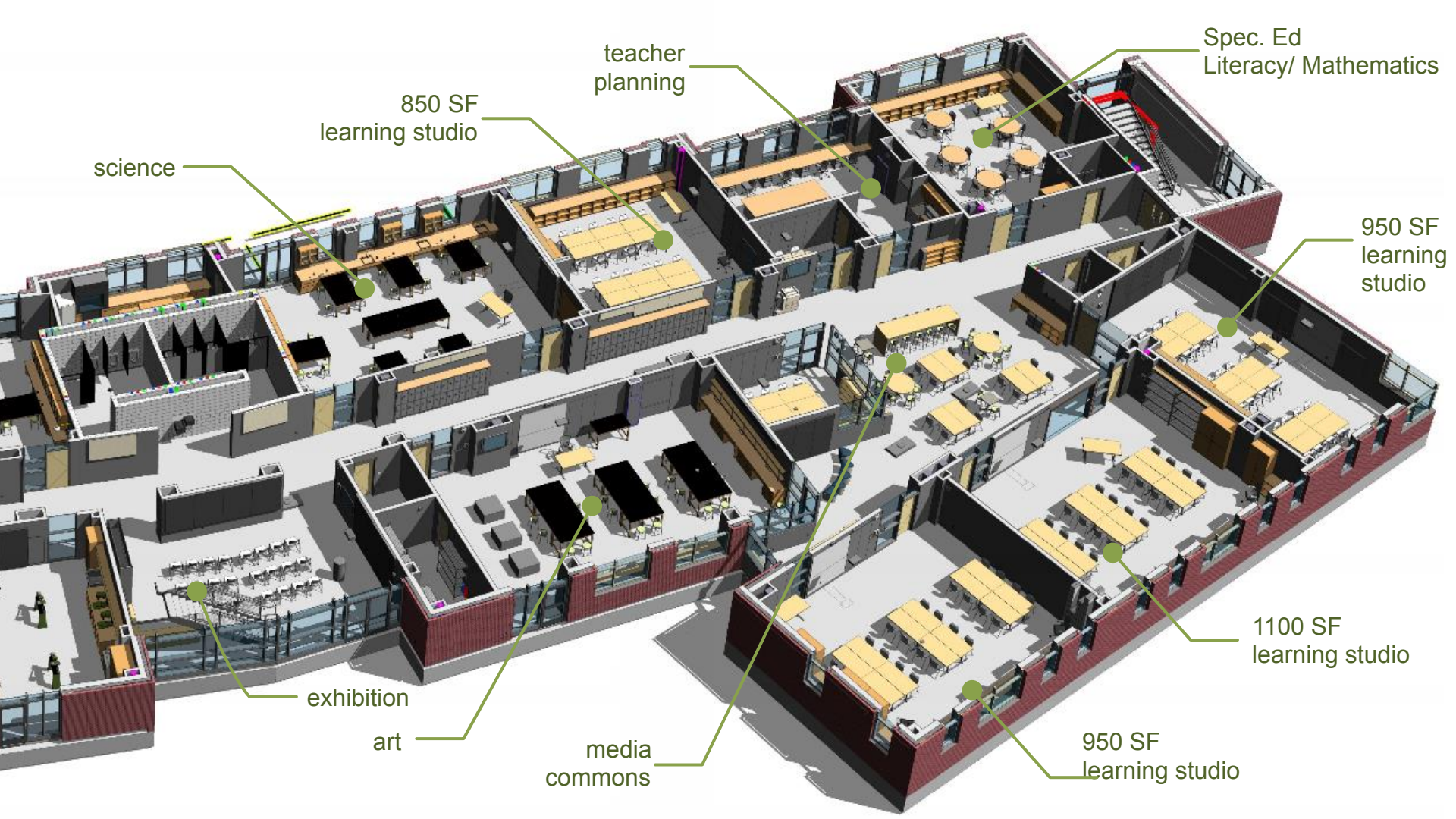
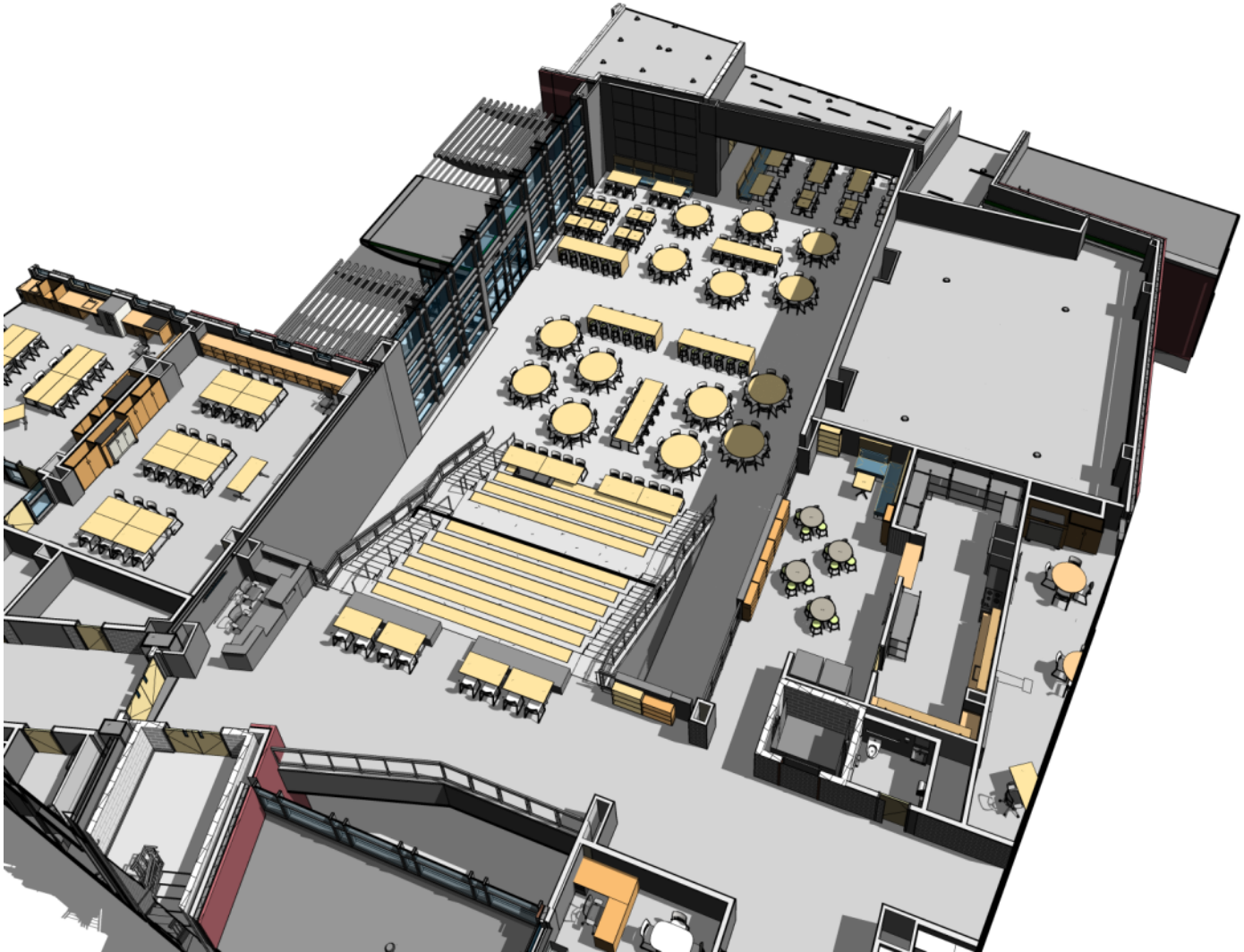

teacher planning
Spec. Ed Literacy/ Mathematics
850 SF learning studio
science
950 SF learning studio
exhibition
art
media commons
1100 SF learning studio
950 SF learning studio

Our Approach
Ready to Learn?
We Have an App for That!



comments

questions

education

goals

es ms hs

1) What questions do you have about the educational trends?
2) What, if anything, from the presentation sparked excitement?
3) Describe advantages/disadvantages of…
   A. Student Collaboration
   B. Experiential/Hands-on Learning
4) How might these student experiences manifest themselves in Chelmsford?

reporting out

homework

SCHOOL TRANSFORMATION + DEVELOPMENT MAP 3.1.8 Abbreviated

Names_____ District_____ School_____

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Col 1 = 1 point Col 2 = 2 points Col 3 = 3 points Col 4 = 4 points Col 5 = 5 points Average point value for multi-column issues

		MAINTAINING TRADITION 1	N	F	INITIATING CHANGE 2	N	F	PROGRESSIVE 3	N	F	TRANSFORMING 4	N	F	TRANSFORMED 5	N	F	TOTALS NOW	TOTALS FUTURE
		INCLUDES PRACTICES BELOW			INCLUDES PRACTICES BELOW			INCLUDES PRACTICES BELOW			INCLUDES PRACTICES BELOW			INCLUDES PRACTICES BELOW				
		EDUCATIONAL DELIVERY ALL GRADES INSTRUCTION			EDUCATIONAL DELIVERY ALL GRADES INSTRUCTION			EDUCATIONAL DELIVERY ALL GRADES INSTRUCTION			EDUCATIONAL DELIVERY ALL GRADES INSTRUCTION			EDUCATIONAL DELIVERY ALL GRADES INSTRUCTION				
1	LEARNING THEME	No focused learning theme/expression			Themes to designate internal sub-schools w/ little impact on instruction						Thematic curricular component w/i school			Choice thematic, magnet school			0.00	0.00
2	EXHIBIT-IONS	Student work is rarely actively expressed outside Classroom			Student work occasionally expressed in Corridors etc			Students present work in regular exhibitions			Exhibitions feature outside "experts"			Exhibitions recorded for portfolios + resource			0.0	0.0
3	DIFFEREN-CES	Little or no recognition of learning differences among students except "tracking"			As Column 1, but multiple intelligences/learning styles recognized			Multiple intelligences + learning styles honored thru differentiated instruction; no tracking						Mult int+ learning styles used as a basis of student social learning			0.0	0.0
4	PERSONAL LEARNING	"Broadcast" teaching: same to all students in the classroom			Occasional differentiated instruction in assignments, assessments			Differentiated instruction as basic approach						Personalized learning plans; student initiated projects			0.0	0.0
5	COLLAB-ORATION	Students learn alone			Occasional 2 person teams			Occasional larger teams			Students regularly work in larger teams			Students learn 75% in teams			0.0	0.0
6	TEACHER TEAMS	Self contained classroom teaching exclusively			Common planning to coordinate curriculum/know students			Teachers swap classes for sharing instruction but do not teach together			Teachers occasionally integrate curriculum by teaching together in same place + same time			Teachers regularly teach synchronously in coordinated teams			0.0	0.0
7	OWNER- SHIP	Most teachers have "own" classrooms; others on carts			Teachers share "own" Classrooms with specialist teachers			Small groups of teachers share small # of Classrooms based on schedule						Teachers control suite of spaces with corollary teachers			0.0	0.0
8	AWARE-NESS	Students know very little about activities in neighboring classrooms			Students aware of other Classrooms through occasional sharing			Learning spans several classrooms and related spaces						Learning takes place in coordinated manner in variety of shared spaces			0.0	0.0
9	TECH-NOLOGY	Virtually no computer use			Computers seen as sophisticated writing/math tools			Computers also used for PowerPoints and Prezis			Computers also occasionally used for learning programs +/or web research			Adaptive learning programs, gaming, web, virtual access are ubiquitous			0.0	0.0
10	DISPLAY	Best student work is displayed on bulletin boards			All student work on bulletin boards, but trumped by sports in Lobbies						Each student's work is presented + critiqued			Building is rich with 2D + 3D display of student projects			0.0	0.0
11	DELIVERY	Almost exclusive direct instruction			Predominantly direct instruction w/ some discussion			Direct instruction with regular group discussion			Direct instruction, group discussion, + some problem solving			Project-based learning, discussions, + "just-in-time" direct instruction			0.0	0.0

Name:_____

		MAINTAINING TRADITION 1			INITIATING CHANGE 2			PROGRESSIVE 3
		INCLUDES PRACTICES BELOW			INCLUDES PRACTICES BELOW			INCLUDES PRACTICES BELOW
		EDUCATIONAL DELIVERY	N	F	EDUCATIONAL DELIVERY	N	F	EDUCATIONAL DELIVERY
		ALL GRADES			ALL GRADES			ALL GRADES
		INSTRUCTION			INSTRUCTION			INSTRUCTION
1	LEARNING THEME	No focused learning theme/expression			Themes to designate internal sub-schools w/ little impact on instruction			
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4	PERSONAL LEARNING	"Broadcast" teaching: same to all students in the classroom			Occasional differentiated instruction in assignments, assessments			Differentiated instruction as basic appr
5	COLLAB-ORATION	Students learn alone			Occasional 2 person teams			Occasional larger teams
6	TEACHER TEAMS	Self contained classroom teaching exclusively			Common planning to coordinate curriculum/know students			Teachers swap classes for sharing instruction but do not teach together

educational effectiveness

Scale

◯ 0 = Inadequate: Scale and height of space, furnishings, and equipment are inappropriate for the age group or user needs, or focues solely on the ergonomic needs of the teacher. There is no perceivable change of height within the space.	◯ 1 = Adequate: Most aspects of the space, furninture, and equipment are at the appropriate scale; and there is one change in height of physical structure (can be temporary or permanent).	◯ 2 = Excellent: All space, furniture, and equipment are at age-appropriate scale and heights accommodating both students' and teachers' ergonomic needs; more than one structure, which a child can easily perceive (e.g., change in ceiling height, change in floor level, lofted space, ceiling-hung banners).

next steps

1) Additional Analysis
2) Facility Assessments
3) Visioning Session #2 – March 9th

A. Discussion of Homework
B. District Issues Impacting Master Plan Exercise
C. Implications for Facilities Exercise

thank you