


IOWA CITY COMMUNITY school district



one VISION
Facilities Master Planning

April 2013

BLDD ARCHITECTS

Visioning Workshop

IOWA CITY COMMUNITY school district



one VISION
Facilities Master Planning


April 2013

WELCOME

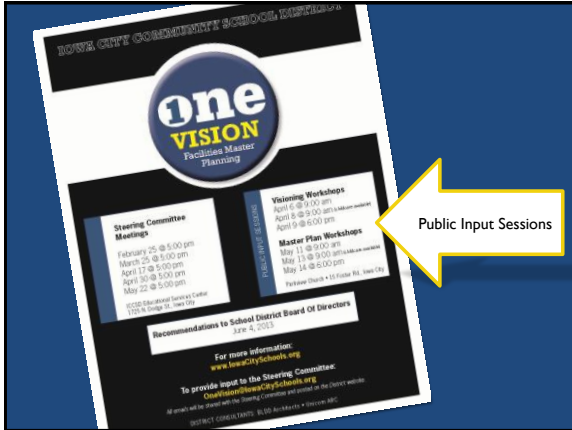
Thank you for your participation!

AGENDA

- **Master Planning Process Overview**
- **21st Century Schools**
 - School Design 101
 - Characteristics of 21st Century Schools
 - Work Activity
- **Assessment Results**
 - Physical Assessment
 - Educational Adequacy
 - Security Review
 - Capacity Analysis
 - Enrollment Projections
 - Work Activity
- **Wrap Up**



BLDD ARCHITECTS



Strategic Goals

- Align facilities with educational programs
- Maximize effectiveness of District resources
- Address major planning considerations for the future
 - Enrollment Growth
 - Aging Infrastructure
 - Equity
 - Educational Program Change

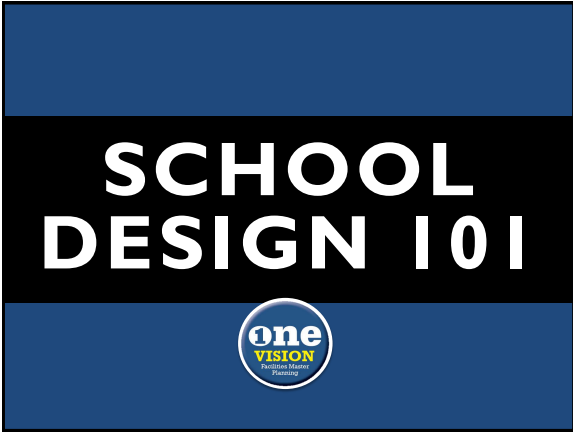
Please answer the question:

In 3 words, how would a visitor to the ICCSD describe our current district facilities?

1 _____

2 _____

3 _____







Typical Day at a One-Room Schoolhouse

- Recite the Pledge of Allegiance
- Sing a song or listen to a moral story from the Bible read by the teacher
- Day normally started with a reading lesson
- Following the reading lesson would be a writing or spelling lesson, depending on the day
- During the writing lesson, the children learned good penmanship, a very important skill
- After this, there was a short break
- After the break the children would begin their arithmetic lesson
- Lunch
- The afternoon lessons generally consisted of history, geography, civics, language
- The day would end around 4 p.m



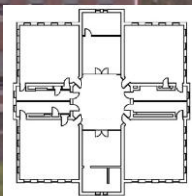
The Industrial Revolution

A new reality....



...brings a search for new models

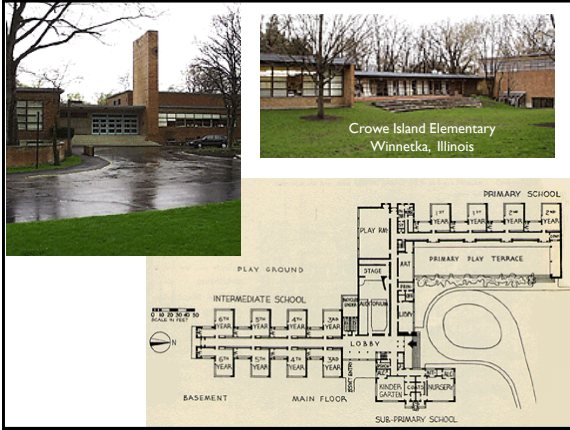
The Graded
Elementary
School



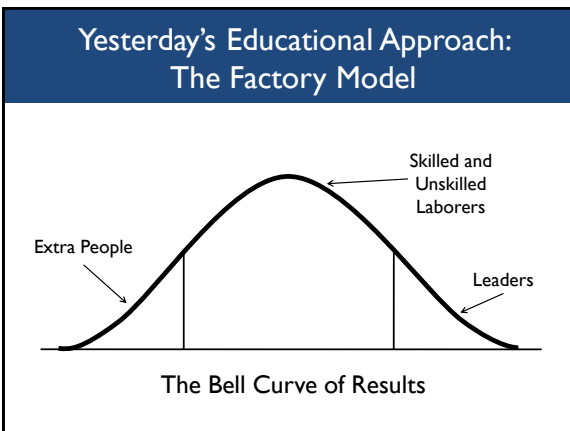




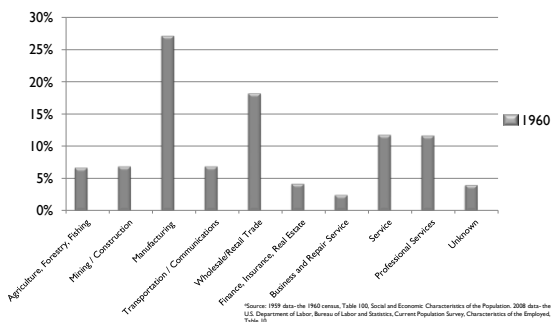




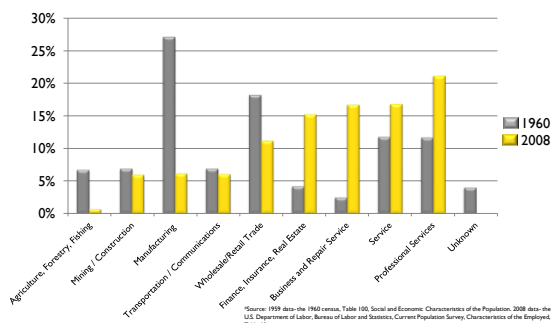




EMPLOYMENT: then and now



EMPLOYMENT: then and now



CURRICULUM: then and now

Social Studies

1960

- American History
- Soc. Prob.
- Social Studies
- Western History

2013

- Adv. World History
- AP European History
- AP Psychology
- AP US Government
- AP US History
- Basic Law
- Economics
- Government
- Psychology
- Sociology
- US History
- World Geography
- World History

CURRICULUM: then and now

Business Education

1960

Basic Business
 Bookkeeping
 Business Law
 Office Practice
 Shorthand
 Transcription
 Typing 1-3

2013

Accounting I
 Business Mrkt. Mgmt.
 Business/Tech Conc.
 Computer Applications
 Consumer Education
 Co-op Occupations 1-2
 Keyboarding
 Multimedia
 Video Production 1-4
 Web Design/Media Dev't
 Yearbook Production 1-2

CURRICULUM: then and now

Special Education

1960

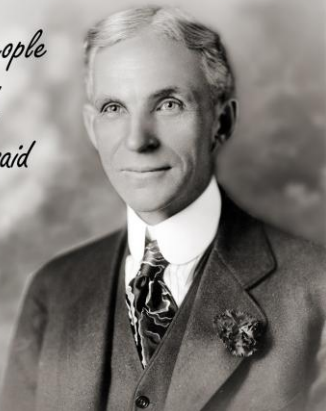
Not required

- Life Skills Business
- Consumer Education
- Life Skills Electives
- Vocational Training
- VCE 1-3
- Job Training
- Computer Skills
- Fine Arts
- Home Arts
- Life Skills
- Social Problems
- Parenting/Childcare
- Recreational/Leisure
- Independent Living
- Adult Living
- Life Skills Language Arts
- Basic Reading
- Practical Language
- Vocational Language
- Consumer Language
- Life Skills Mathematics
- Basic Math
- Math 1
- Math 2

2013

- Life Skills PE
- Health
- Adaptive PE
- Life Skills Science
- Basic Science
- Life Science
- Earth Science
- Life Skills Social Studies
- Geography
- Current Events
- Civil Law
- Social Interactions
- Cross CAT/SED Business
- Consumer Education
- Computer Skills
- Careers
- VCE 1-3
- VCE Job
- Cross CAT/SED Family & Consumer Science
- Home Arts
- Childcare
- Parenting
- Social Problems
- Social Interaction Skills
- Cross CAT/SED Language Arts
- Read 180
- English Foundations 1-4
- Cross CAT/SED Mathematics
- Foundations of Algebra 1
- Foundations of Geometry
- Foundations of Algebra 2
- Cross CAT/SED PE
- Health
- Drivers Education
- Adaptive PE
- Cross CAT/SED Resource
- Learning Strategies
- General Physical Science
- General Biology
- General Earth Science
- US Geography
- World History
- US History
- Government

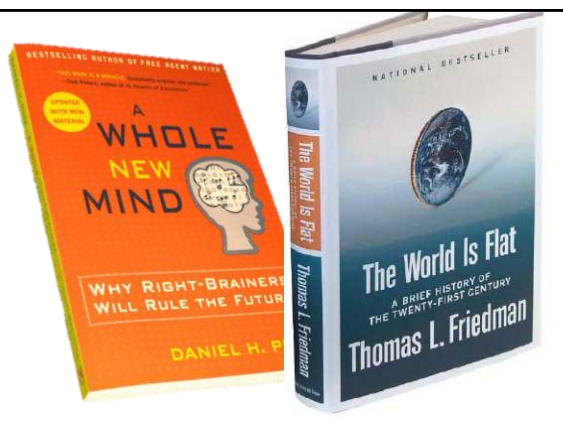
*"If I had asked people what they wanted, they would have said faster horses."
 - Henry Ford*



Iowa did you know video
http://www.youtube.com/watch?v=dMsNct4X_GU

21st CENTURY SCHOOLS





“Trying to Fill 6,000 Jobs, Microsoft Pitches \$10,000 H-1B Visa”

By Patrick Thibodeau
Fri, September 28, 2012

6000 open positions in the US and is creating new jobs faster than it can fill them.

“Our nation faces the paradox of a crisis in unemployment at the same time that many companies cannot fill the jobs they have to offer”

“We risk these jobs migrating from the US, creating even bigger challenges for our long-term competitiveness and economic growth”

21st CENTURY SCHOOLS

Designed to Support Educational Delivery

High Performance Environments: How the building affects teaching and learning



“The need to remain globally competitive. The sheer number of college graduates from other countries will change world dynamics. No longer do students from foreign countries have to come to the US for higher education. **No longer will the US have enough engineers and scientists to fill the needs.** Other countries will have numbers that create new ideas, building companies that launch innovations, and produce goods wanted by the world.”

Source: Iowa Department of Education

UNIVERSAL CONSTRUCTS: Essential for 21st Century Success

- Critical Thinking
- Complex Communication
- Creativity
- Collaboration
- Flexibility and Adaptability
- Productivity and Accountability

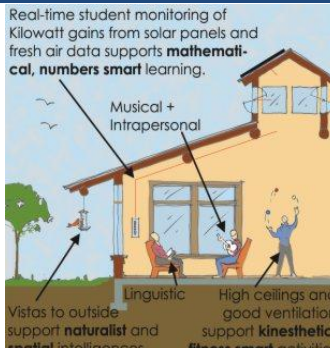


What will
students be doing
in the year **2031**?

What will
teachers be doing
in the year **2031**?

LEARNING STYLES

- Naturalistic
- Bodily-Kinesthetic
- Musical
- Interpersonal
- Intrapersonal
- Visual-Spatial
- Logical-Mathematical
- Verbal-Linguistic



Your personal learning style revealed

- A = Linguistic
- B = Logical-Mathematical
- C = Visual-Spatial
- D = Intrapersonal
- E = Interpersonal
- F = Musical
- G = Bodily-Kinesthetic
- H = Naturalistic

BEGINNING WITH THE END IN MIND

OUTCOMES
What are the skills needed?

↓

CURRICULUM TO DEVELOP OUTCOMES
What are the courses needed to develop these skills?

↓

LEARNING MODALITIES
How are these courses best learned?

↓

LEARNING ENVIRONMENTS
What type of environment is needed to encourage learning?

21st CENTURY SCHOOLS

<p>Designed to Support Educational Delivery</p>	<p>High Performance Environments: How the building affects teaching and learning</p>
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ENVIRONMENTAL FACTORS AFFECTING STUDENT PERFORMANCE

- Indoor air quality
- Temperature and humidity
- Ventilation
- Thermal comfort
- Lighting
- Acoustics
- Building age, quality and aesthetics



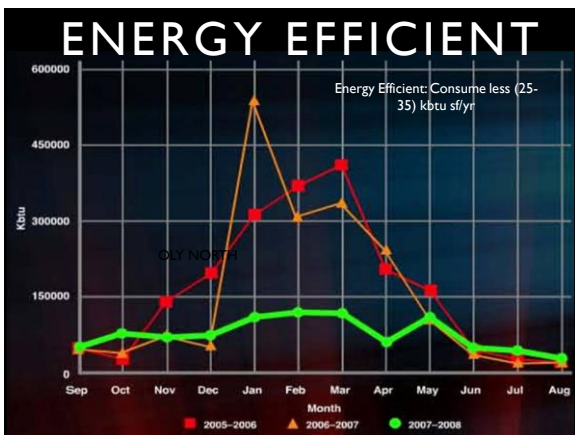
Standardized test scores
3-4%

(Schneider 2002)

The complex block features a photograph of a modern school interior with large windows and a high ceiling. Overlaid on the image is a large yellow arrow pointing upwards, containing the text "3-4%". Above the arrow, the text "Standardized test scores" is written in a bold, blue font. Below the arrow, the citation "(Schneider 2002)" is visible. The background image also includes the text "Greening America's Schools COSTS AND BENEFITS Green Fund" and a list of organizations: "American Federation of Teachers", "American Institute of Architects", "American Lung Association", "Federation of American Scientists", and "U.S. Green Building Council".

characteristics of
21st CENTURY SCHOOLS

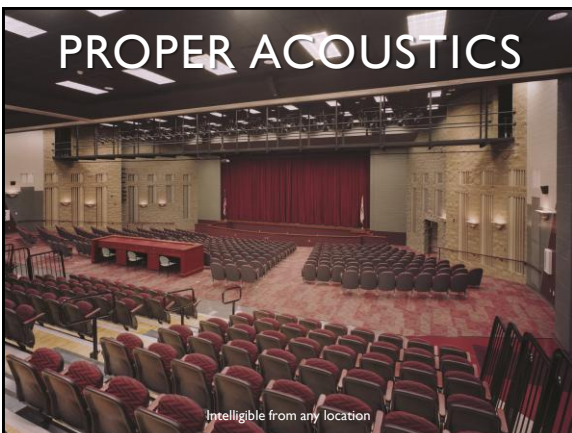


















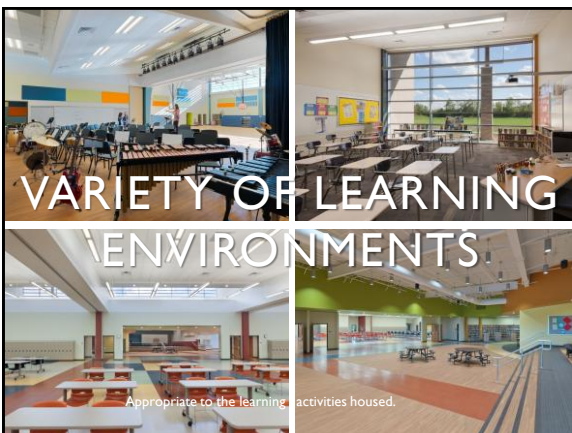








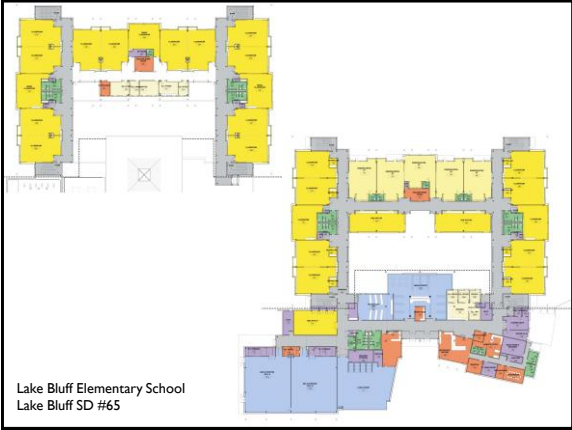




21st Century Elementary Schools



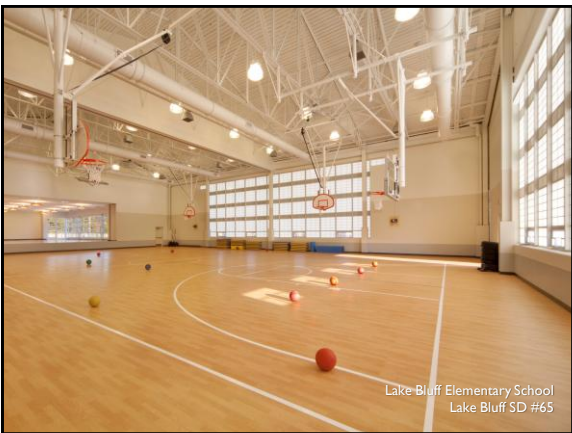




Lake Bluff Elementary School
Lake Bluff SD #65



Lake Bluff Elementary School
Lake Bluff SD #65



Lake Bluff Elementary School
Lake Bluff SD #65





**21st Century
Middle Schools**

Silvis video

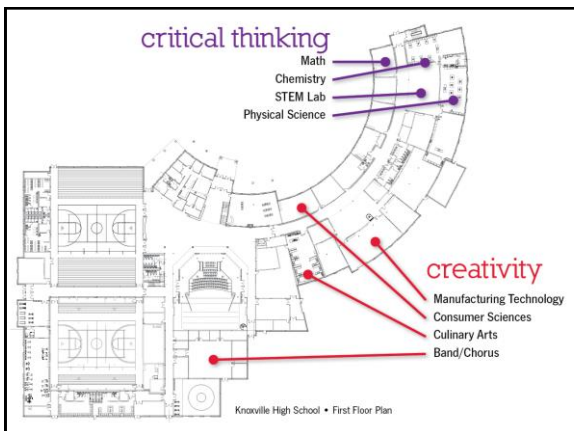
<http://www.youtube.com/watch?v=NFyU99qtGHw>

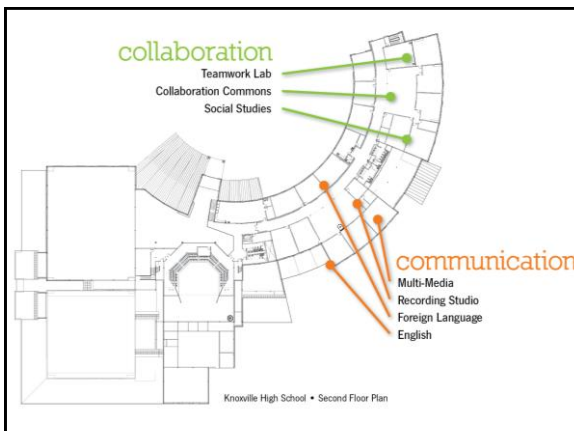
**21st Century
High Schools**

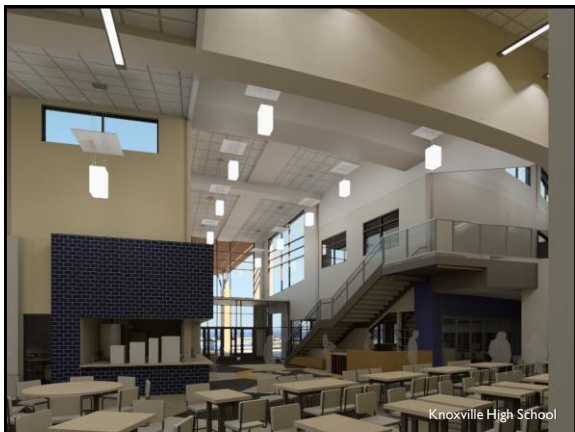
Video – macconnell award winner

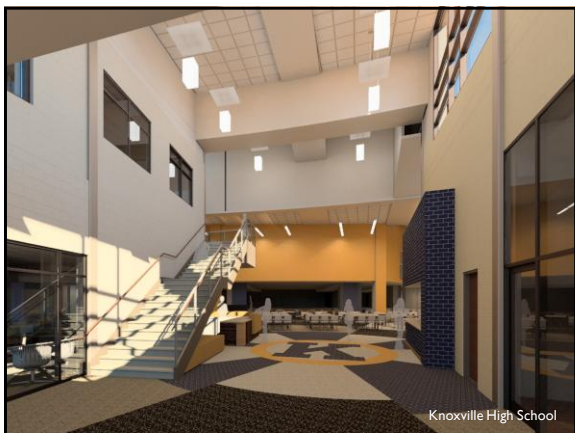
<http://www.youtube.com/watch?v=WXriAhgizIc>












**WORK
ACTIVITY**

1



INSTRUCTIONS

- Elect a recorder and spokesperson
- Quickly complete 3 word answer individually.
- Review the list of 21st Century School Characteristics
- As a group, come to consensus on how you will divide your \$100 donation
- Report to group

Please answer the question:

In 3 words, how would you like a visitor to the ICCSD to describe our district facilities?

- 1 _____
- 2 _____
- 3 _____

21st Century School Priorities

- Healthy
- Sustainable & Energy efficient
- Superior Lighting
- Proper acoustics
- Engaging
- Safe & secure
- Technology infused
- Fluid/flexible
- Student-centered
- Connected to nature

PHYSICAL ASSESSMENT



BUILDING EVALUATION TEAMS

Professional "Team of Experts"

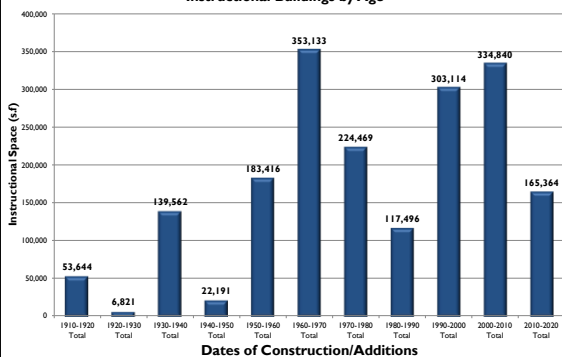
Physical Assessments

- Architects & Engineers
- Building Principal
- Building Custodian
- Special Representatives
 - Physical Plant (electrical, HVAC)
- Sam Johnson – team lead, consistent quality assurance

Educational Adequacy & Security Review

- Architects
- Building Principal
- Special Representatives
 - Assistant Superintendent
- Barbara Meek – team lead, consistent quality assurance

Instructional Buildings by Age



BUILDING COMPONENTS

- Electrical
- Exterior Walls
- Fire Detection
- HVAC
- Interior
- Lighting
- Plumbing
- Roof
- Site
- Building Envelope
- School Security

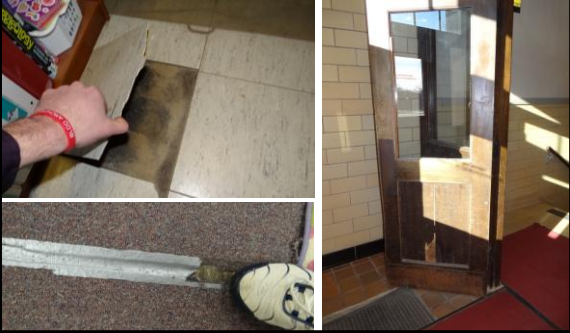
Priority A: IMMEDIATE



Priority B: NECESSARY

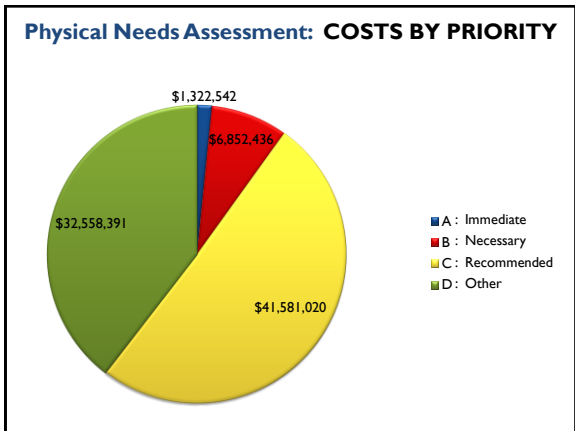


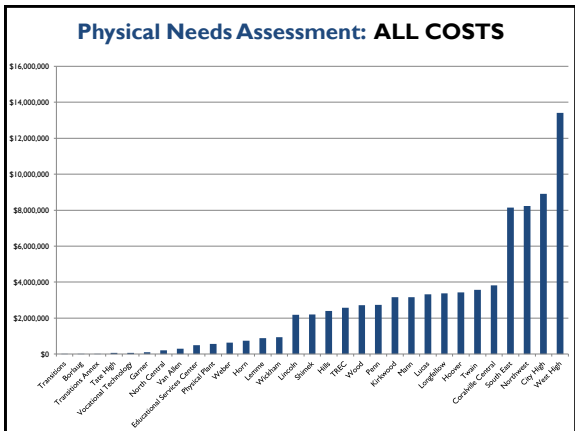
Priority C: RECOMMENDED



Priority D: OTHER







Educational Adequacy Categories

- The School Site
- Structural and Mechanical Features
- Plant Maintainability
- Building Safety and Security
- Educational Adequacy
- Environment for Education



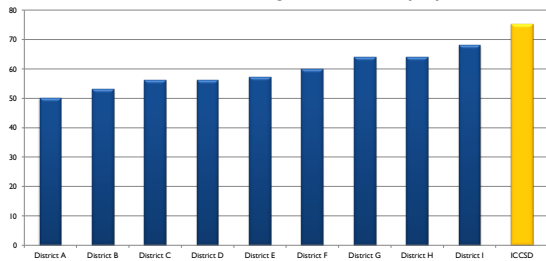
GRADING CRITERIA

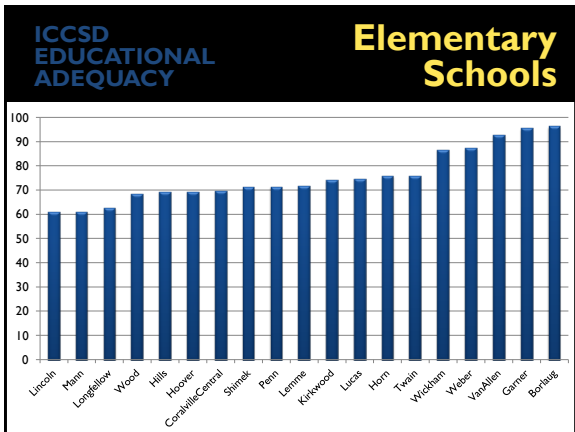
- A = Excellent
- B = Satisfactory
- C = Borderline
- D = Poor
- F = Failing
- X = Non-existent

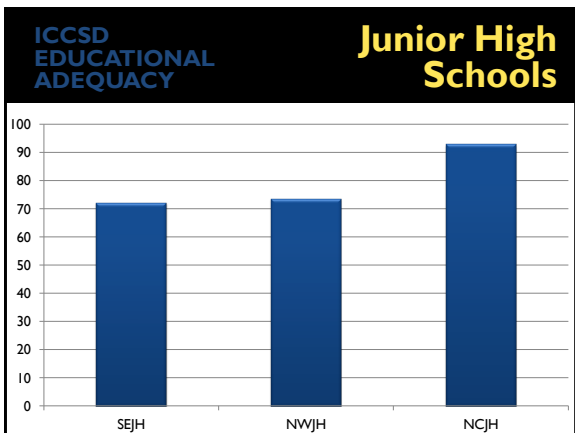


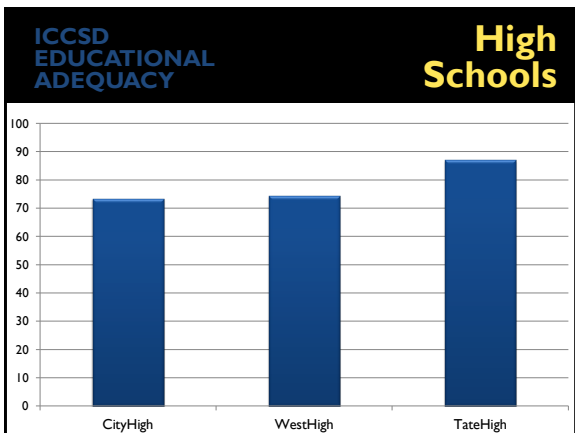
BUILDING ON EXCELLENCE

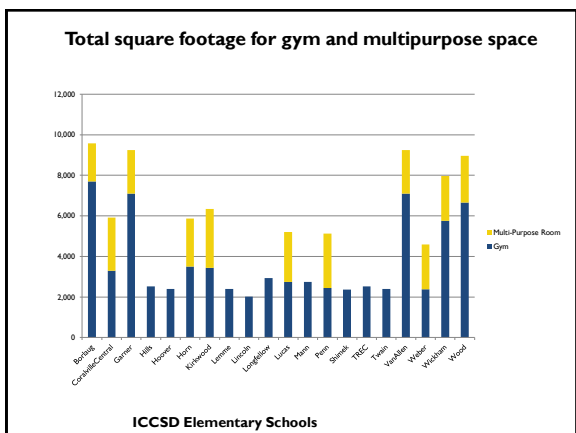
Ten Recent Status Quo - Average Educational Adequacy Scores











SECURITY REVIEW



Security Review Summary


Of the 19 Elementary Schools:

- Only 6 have a secured entry
 - and of those, only 3 can see people walking up to the building
- Only 5 have electronic locks
 - and of those, only 2 can lock down the building from one location
- Only 3 can lock their classrooms from the inside of the room
- Only 8 DON'T have portables
- Only 8 have air-conditioning

CAPACITY ANALYSIS



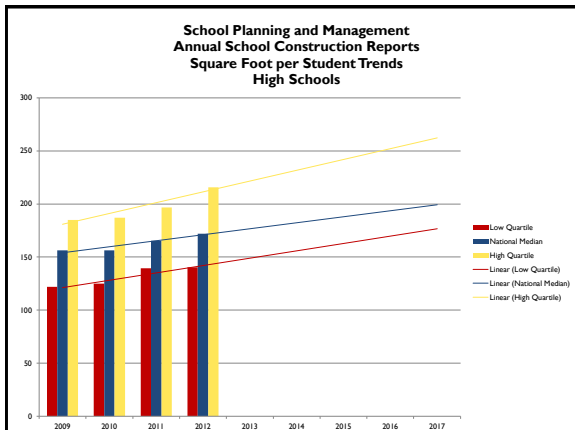
STUDENT CAPACITY



FIRE CAPACITY

EXAMPLE:
Garner Elementary

Kindergarten Classroom
Fire Capacity: 50
Student Capacity: 24



Function: *space needed varies depending on activities housed*

Chemistry Lab

Capacity: 24

Study Hall

Capacity: 48

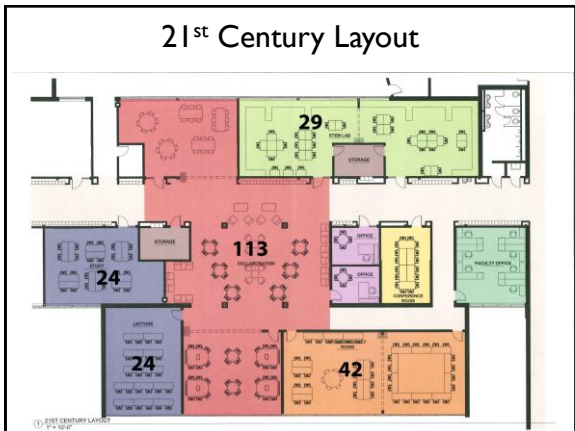
Utilization:
Percentage of the day the classroom will be occupied

UTILIZATION FORMULA

$1250 \text{ students} = 17.85 \text{ students per class}$ $25 \text{ students per class}$
 $70 \text{ class hrs} \times 10 \text{ classrooms}$ $\times 10 \text{ classrooms}$
178.5 students $250 \text{ students @ } .714\% = \text{students}$

CLASSROOMS

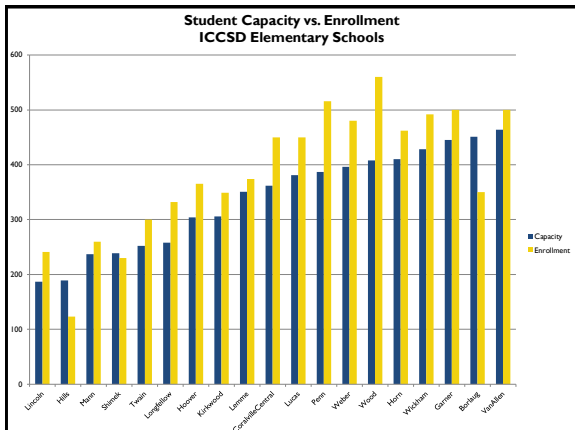
	1	2	3	4	5	6	7	8	9	10
1			25	25			25	25	25	25
2	25	25			25	25			25	25
3	25	25	25	25			25	25		
4	25	25	25	25	25	25			25	25
5	25	25	25	25	25	25	25	25		
6			25	25	25	25	25	25	25	25
7	25	25			25	25	25	25	25	25



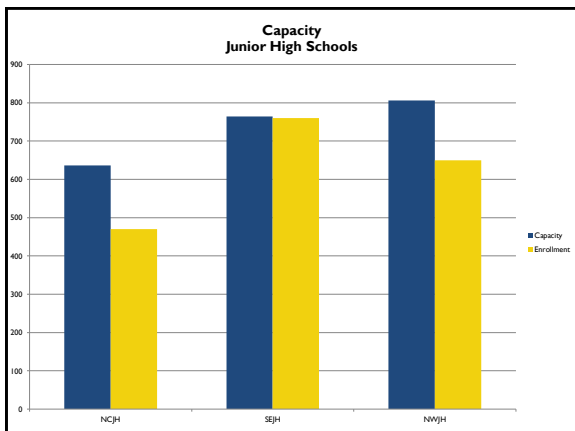
Calculating STUDENT CAPACITY

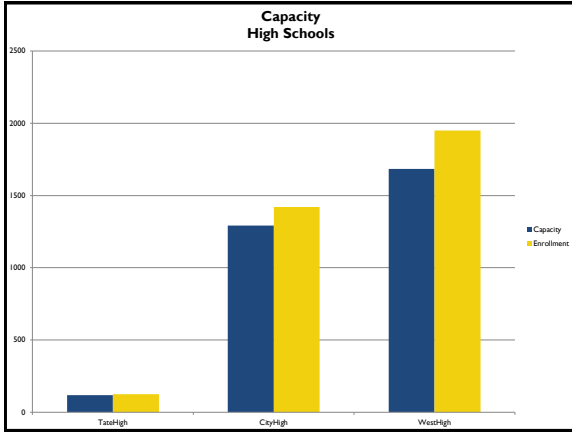
21st Century Layout					
Room Number	Room Purpose	Area	Loading Factor	Capacity	
101	Study	720	30	24	
102	Lecture	720	30	24	
103	Collaboration	3600	32	113	
104	Studio/Project Room	1512	36	42	
105	Faculty Office	616	-	-	
106	Conference Room	695	-	-	
107	Office	1400	-	-	
108	Office	3622	-	-	
109	STEM Lab	1450	50	29	
				Total	232
				Utilization Factor	80%
				Capacity	185

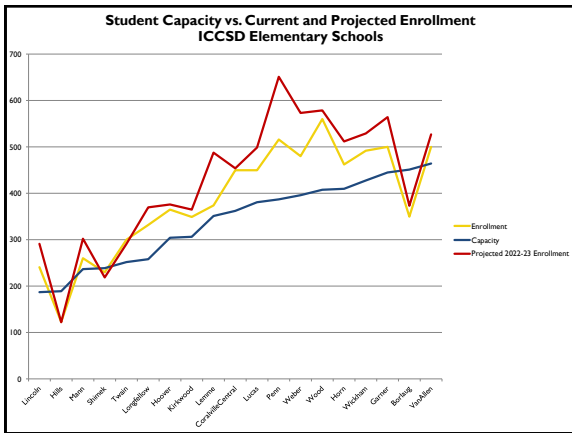
*Loading Factor = SF/Student

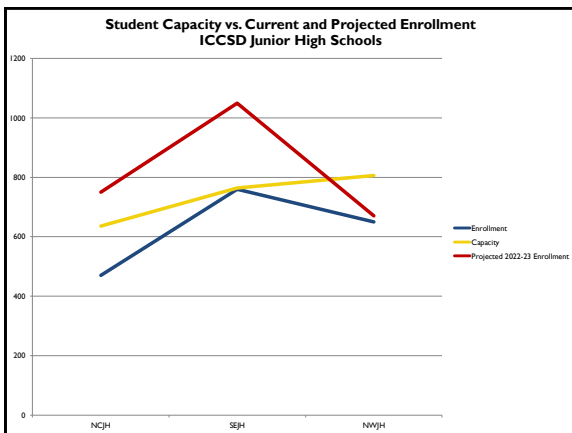


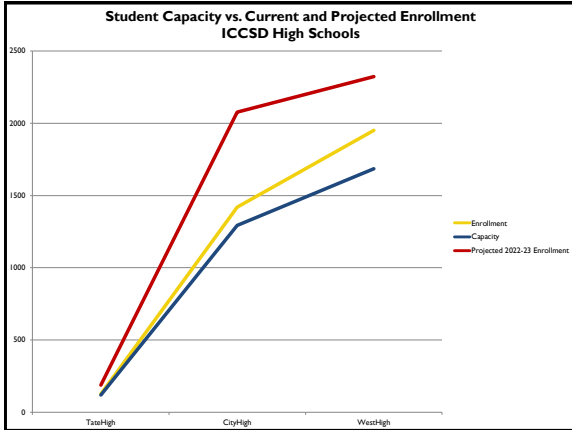













**WORK
ACTIVITY**

2

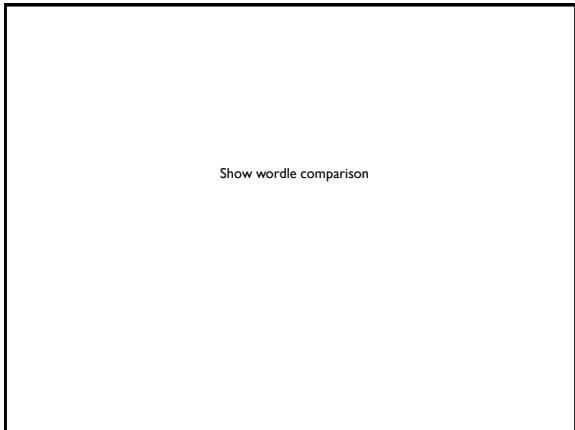


INSTRUCTIONS

- Elect a recorder and spokesperson
- Quickly complete 3 word answer individually.
- Review the list of District priority items
- As a group, come to consensus on how you will divide your \$100 earmark
- Report to group

Iowa City Community School District Priorities

• Neighborhood schools	• Adequate site size
• Safe schools	• Construct facilities
• Air conditioning	• Accessibility
• Infrastructure upgrades	• Modular/temporary classrooms
• Improve energy efficiency	• Class size
• Multi-purpose spaces	• Operational efficiencies
• Athletic facilities	• Classroom upgrades
	• Other



Show wordle comparison

