

## **FACILITIES MATTER:**

21st Century Learning is Supported by 21st Century Buildings

Administrators' Presentation of the Educational Rationale for Facilities Upgrades

September 18, 2013



### **Facilities Matter**

Educational program should drive the facility design and infrastructure...

**NOT** buildings dictating the educational programs



### No "Frills" About It

## Adequate school facilities are essential to maximizing teaching and learning

- Healthy, accessible, and secure buildings
- Facilities that welcome and engage our students and community
- Buildings that are sensitive to our environment
- Physical design to foster 21<sup>st</sup> Century skills and lead to college and career readiness



### **Obligation for Sustainability**

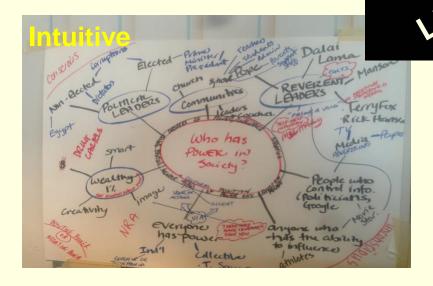
### Green buildings...

- offer healthy environments.
- decrease our environmental footprint.
- reduce long-term operational costs.
- help students learn to be environmental stewards by "living what we teach."

### 21<sup>st</sup> Century Learning is...











## Fostering 21<sup>st</sup> Century Skills

- Collaboration
- Creativity/Innovation
- Critical Thinking & Problem Solving
- Personal Growth: Social/Emotional/Physical/Academic
- Integrates Technology
- Builds a Sense of Community
- Encourages Life-Long Learning



## Serving the Full Spectrum of Learners

- Meeting varied educational and related services needs
- Providing academic intervention and support
- Educating the whole child foreign language (Grades 1-12), music, art, physical education, information & study skills
- Addressing multiple learning styles
- Providing fully ADA accessible buildings



### Flexible Space is Needed for:

- Small group instruction & collaboration
- Large group instruction & collaboration
- Mini-labs
- Presentation space
- Research space
- Multi-purpose common area space
- Technology use
- Storage and display of student work
- Teacher collaboration



## Flexible Space May Look Like:

- Demountable, movable wall systems
- Modular/movable furnishings
- In-floor wiring & wireless internet access
- Agile space that can be quickly and easily adapted to specialized uses
- Room layout designed to support individual learning, small group learning, collaboration, tutoring, or hands-on work
- Sufficient storage space



# Aligning Education & Facilities at the High School

- Provide temperature and humidity control
- Increase number of classrooms to house the available courses
- Increase size of classrooms and provide flexible space to integrate meaningful Project Based Learning experiences
  - Publication Media Center
  - Project Lead the Way
  - PIGLETS (Participation in Gov't)



## Aligning Education & Facilities at the High School, cont.

- Change the size and location of the Guidance Suite
- Increase space for Music instruction and storage
- Increase the size and provide additional technology in Library Media Center
- Increase Physical Education storage
- Upgrade locker rooms and increase number of gym lockers



## Aligning Education & Facilities at the High School, cont.

- Provide space for meeting with parents and CSE
- Increase field space for increased number of sports



#### Inefficiently Sized High School Guidance Suite

Guidance Counselor Offices do not allow space for a student and his or her parents to meet together or for counselors to collaborate with each other. The location does not encourage students to take advantage of the tools available to them.





## **Insufficient Learning Space**

Several High School classrooms are overcrowded and the space itself does not support any hands-on learning. There is no space for students to work together or to construct and store projects.





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Students in the Project Lead the Way course at the High School are trying to work in small teams to explore a scientific principle. There is no workspace for the students to work together, nor is there space to allow an experiment to stay set up for observation or further experimentation.





### **High School Band Room Too Small**

Due to space constraints, the Auditorium is being used as a Band Room. When the Auditorium is in use, Band students are dislocated and have Study Hall.





#### Instrument Storage is Too Small and Lacks Temperature & Humidity Control

Congestion at the instrument storage location reduces students' lesson time. Lack of temperature & humidity control is damaging to expensive instruments.



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#### **Insufficient Athletic Storage at the High School**

Physical Education equipment is difficult to access because storage facilities are overcrowded.



### VIDEO:

Inadequate Phys Ed Storage







#### **Insufficient Gym Lockers at the High School**

There are not enough lockers available for student athletes and physical education classes. During Home Football games, the visiting team uses the Weight Room as a locker room.



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#### **Offices Used for Storage**

Lack of Music Department storage has resulted in materials overflowing into offices.







#### **Outside Garden Serves as a Classroom**

The garden at the High School is a living science classroom. A sprinkler system is needed to care for the garden on weekends and vacations.



# Aligning Education & Facilities at Middle School

- Provide ADA-compliant (handicapped) access to all areas of the building
- Increase size of classrooms and provide flexible space
- Design space to eliminate noise disruptions created from proximity of Band Room to academic classrooms
- Address severe infrastructure deficiencies that create a poor physical environment



## Aligning Education & Facilities at Middle School, cont.

- Design space to support small learning communities and teaming
- Provide temperature and humidity control
- Increase number of student lockers
- Provide space for meeting with parents and CSE
- Relocate physical education locker room in proximity to the gymnasium



## Aligning Education & Facilities at Middle School, cont.

- Improve layout and size of Nurse's
   Office to provide privacy for discussing confidential issues
- Provide storage for:
  - Physical Education equipment
  - Text books
  - Musical instruments
  - Guidance materials
  - Nurse's Office
  - Student projects & hands-on work



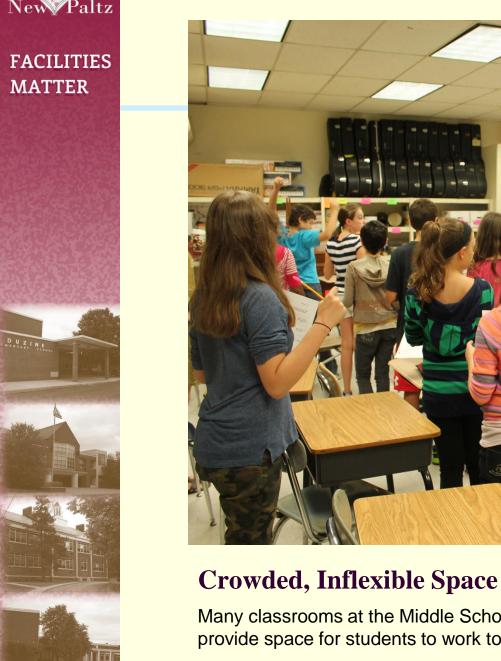




#### **Insufficient Space for Home & Careers**

The Home & Careers lab was originally designed for 12-15 students. Today, upwards of 30 students use this space. The class is a mandated course offering.





Many classrooms at the Middle School are too small and do not provide space for students to work together.



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DUZINE

### VIDEO: Band Room Noise





## **Insufficient Music Instructional Space**

Music class is held in the gymnasium on the stage. The room has poor acoustics for musical instruction. The gym is also needed in poor weather for indoor recess, so students are displaced and can end up with Study Hall instead of their instruction.





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The gymnasium serves as the auditorium and also as a classroom for Music. Scheduling conflicts are common when poor weather dictates indoor recess or when an assembly is being held. Students scheduled for instruction instead have Study Hall.

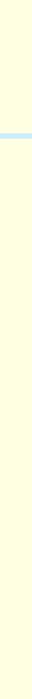




#### **Physical Therapy Provided in Storage Closet**

Physical Therapy sessions are offered in the storage closet at the Middle School due to a lack of space.





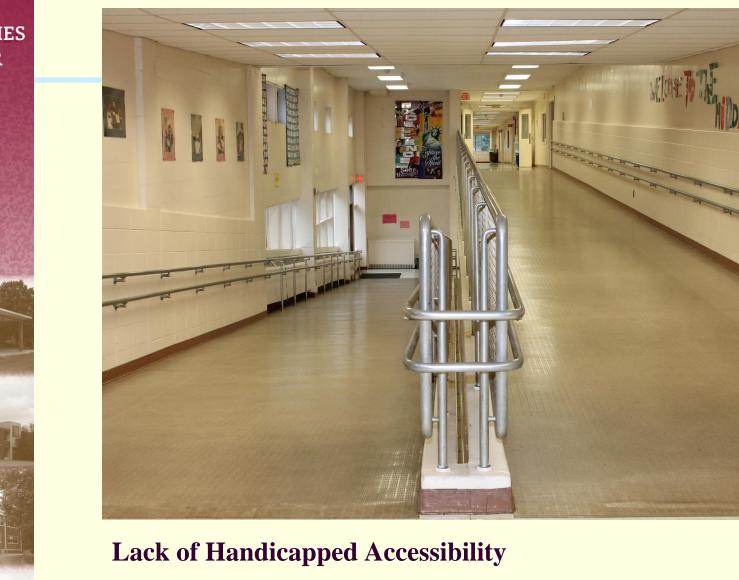


## No Interior Wheelchair Access to Lower Level at the Middle School

Disabled individuals have no interior access to the lower level of the Middle School (Technology, Music, Health classrooms) and must go outside the building to a side entrance. In poor weather, the student would need to miss class and attend Study Hall.



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Ramps at the Middle School do not meet current code for the degree of the slope.



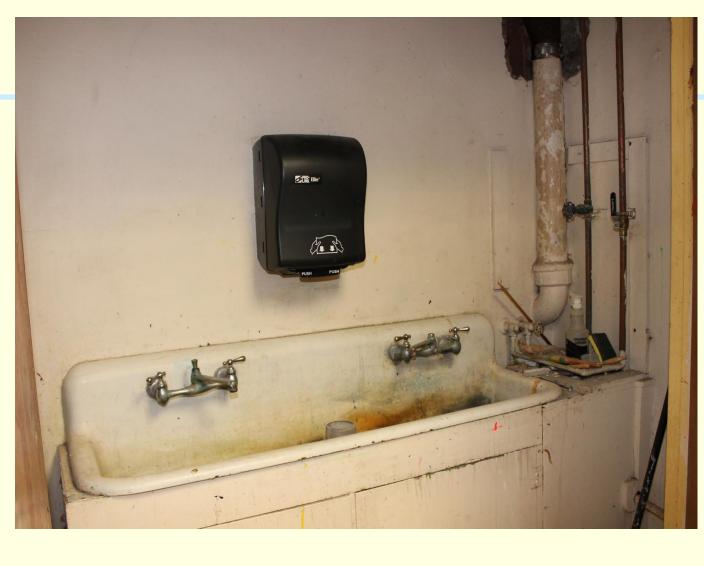




#### **Cracked Classroom Walls**

Severe infrastructure deficiencies contribute to a leaky, deteriorated, unwelcoming environment that is not conducive to learning.





#### **Deteriorated Art Room**

Creating art can get messy! But cleanup isn't a simple task because sink areas are deteriorated and leaky.



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# VIDEO: Buckled Classroom Floors







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#### **Classroom Floors are Buckled**

Uneven floors are not only trippy hazards, but they also dictate the room layouts as furniture cannot be placed at will.



## FACILITIES MATTER

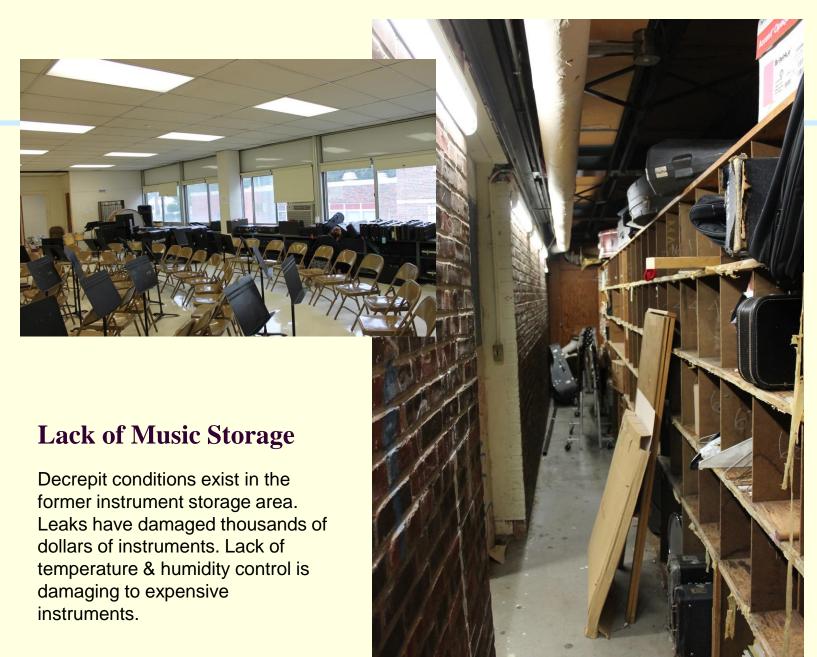
D U Z I N E



#### **Lack of Storage**

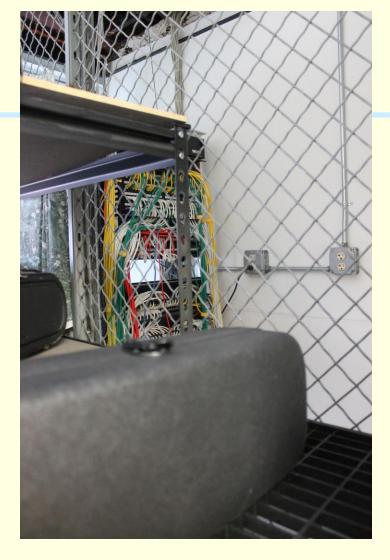
The Middle School's only book and storage room is now a technology/server room.







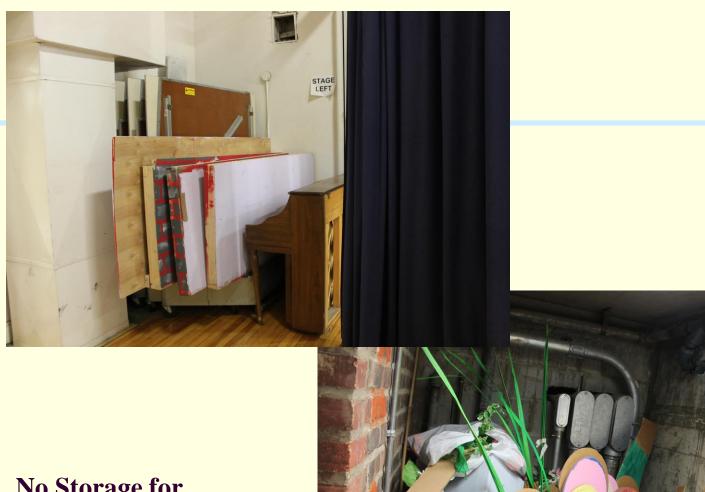




#### **No Music Practice Rooms Available for Students**

The three Music practice rooms have been converted to instrument storage and a server room. There are no longer any practice rooms available for students.





#### No Storage for Theater Arts Program

The stage, along with a narrow, decrepit cubby, is used to store production materials and equipment.



# **Insufficient Space** in Nurse's Offices

Inadequately designed space in the Nurse's Office does not allow privacy to meet students' health or confidentiality needs. A treatment room at the Middle School Nurse's Office also must serve as a storage room for supplies.







#### **Lack of Physical Education Storage**

Wrestling mats are stored in the cafeteria and need to be moved for student use.





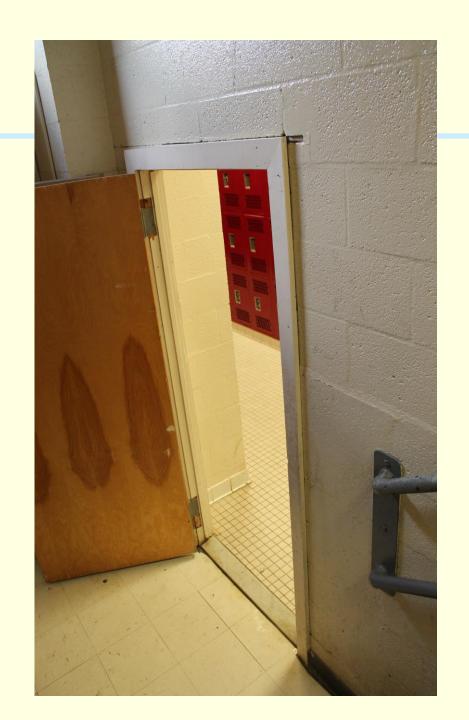
#### **Lack of Student Lockers**

There are not enough lockers available for students.



#### Locker Room is Located on a Different Level than the Gymnasium

The students lose instructional time with a locker room that is located on a different floor than the gymnasium. This also creates challenges for supervision.





# Aligning Education & Facilities at Lenape

- Increase access to multipurpose spaces and improve physical design to support programming
  - Full Band Rehearsals
  - Arts Programming
  - Grade Level Assemblies
- Provide temperature and humidity control throughout the building, especially in the Library Media Center to protect books & create an environment conducive to learning



# Aligning Education & Facilities at Lenape, cont.

- Improve layout and size of Nurse's
   Office to provide privacy for discussing confidential issues
- Increase capacity for storage



#### FACILITIES MATTER



#### **Nurses' Offices Lack Storage and Privacy**

Nurses' offices do not offer any privacy for phone calls or even face-to-face discussions about sensitive matters. This problem exists in all buildings except the High School.





#### **Lenape Cafetorium**

The stage's location between the gymnasium and the cafeteria prevents its use for classroom arts programs. The stage is also the only place the full Band can rehearse. Noise from the competing areas is an issue. The stage also serves as storage for the community gymnastics program, further limiting access.





#### **Insufficient Storage**

The cafetorium walls are lined with equipment that there is no room to safely and securely store. Folded tables are used as a barrier to keep students away from equipment. This is not the most secure solution.







#### **Storage for Community Partnerships**

The YMCA program is a valuable addition to our school community but there is no storage available for their materials and supplies. Supplies are not able to be secured.





#### **Insufficient Space for Physical Education Storage**

Gymnastic mats and equipment for the physical education and the community afterschool gymnastics program are currently stored on the stage, which interferes with its use for performing arts education.



# Aligning Education & Facilities at Duzine

- Enhancements to the layout and functionality of the Library Media Center
- Increase access to multipurpose spaces and improve physical design to support programming
- Improve layout and size of Nurse's Office to provide privacy



# Aligning Education & Facilities at Duzine

- Provide adequate field space for outdoor physical education
- Provide temperature & humidity control
- Add a bathroom near cafeteria
- Add a sink for hand-washing near cafeteria





# **Insufficient Technology and Limited Space for the Computer Lab**

Additional computers are needed to serve Duzine children. The computers are integrated into the main section of the room and limit access to materials in the Professional Library section. There is insufficient space available for teachers to plan and collaborate when using the professional resources in Library Media Center.







#### **Inflexible Design of Library Media Center**

At any given time, the Library Media Center is serving multiple purposes. This photo illustrates a class in the room for Library instruction, while another class is visiting to use computers for a research project. In addition, a staff member is trying to access resources from the teacher materials section during a prep period.





#### **Library Media Center Serves as Hub for Printing**

Valuable library space is used for hosting the building's printing center. This creates additional traffic into the Library Media Center. A separate area to serve this function would eliminate this issue.



# Vision for Duzine's Library Media Center

- Warm & welcoming design that encourages students to develop a passion for reading and researching
  - Comfortable seating
  - Sufficient technology
  - Natural lighting
  - Acoustics



# Vision for Duzine's Library Media Center

- Flexible space with areas for:
  - Student collaboration for projects
  - Student exploration & research
  - Arts programs
  - Display & presentation of student work
  - Professional development
  - Teacher collaboration & research





#### **Inadequate Field Space for Physical Education**

A leach field at Duzine Elementary School is the only available field space for Physical Education classes when outdoor recess is offered.



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#### **Poorly Functioning Nurse's Office Area**

Nurse's Offices do not have adequate storage or offer privacy.





#### **Inadequate Storage for YMCA Program**

The YMCA Afterschool Program is an asset to our students and families, but there is no secure storage for their supplies. The walls of the Duzine cafeteria are lined with materials for the program.



## **Healthy Learning Environment**

### A healthy physical environment minimizes learning distractions, as well as decreases illness and absenteeism.

- Acceptable air quality through sufficient air exchange
- Controlled temperature extremes
- Maximized acoustics
- Sufficient natural lighting
- Adequate field space for physical education
  - Increased number of sports but fewer fields available as space has been reduced





#### **Poor Air Quality**

When available, large, noisy fans attempt to circulate air on hot days. Instructors then compete with the noise. Heat contributes to unhealthy and unproductive learning environments.



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# VIDEO:

## Poor Acoustics While Fans Run







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#### **Temperature Extremes Impact Learning**

The above represents the temperature inside the High School gymnasium on September 11 at 2 p.m. The actual temperate was 85 degrees with a "feels-like" index of almost 96 degrees. Heat was not the only problem, condensation saturated the floors and walls. Similar conditions exist throughout the district. The Middle School also experiences these extremes in the winter due to an antiquated heating system.



### **Sound Nutrition**

# Hungry students are not productive students. Good nutrition is key to learning.

- Kitchen space that supports the timely delivery, preparation and service of appetizing and nutritious meals
- Cafeteria space to adequately serve all students in a limited amount of time, allowing children sufficient time to eat their meals
- Storage space that ensures food safety





#### **Insufficient Cafeteria Space**

Cafeteria size and functionality is poor. Students at the Middle School have a limited amount of time to be served and then also eat their meals.



### **Accessible and Secure**

New Paltz CSD encourages community use of our school buildings, however access should not compromise safety or security.

Buildings need a single, secure point of entrance directly into the main office of each school.

- Voting
- Community Events
  - Athletic Events
    - Assemblies
- •Arts/Theater Events
  - •YMCA Program
- •Gymnastics Program



# **Schools That Engage**

# Facilities set the stage for what happens inside.

- Welcoming and inviting environment for students
- Clearly identified access for visitors
- Sufficient parking and sidewalks
- Waiting areas and meeting space that offer privacy for families to discuss special education, discipline, health conditions, or other confidential topics
  - CSE Meeting Room/Waiting Area
  - Nurses' Offices



### **Staff Areas Are Needed for:**

- Bringing teachers from across and within grade levels and departments together for articulation and coordination
- Developing interdisciplinary curriculum
- Delivering rich staff development experiences
- Collaboration/sharing to address needs of specific students



### **Workable Staff Areas Look Like:**

- Small teacher work rooms surrounding a larger multi-purpose room
- Comfortable seating and work space
- Ample and accessible technology
- Ability to control temperature and humidity



## Ample Technology is Needed for:

- Research and inquiry
- Virtual instruction
- Making connections to students' global counterparts
  - Videoconferencing & Skype across the country or globe
- Building technological skills
- Meeting new State testing mandates for electronically administering assessments



## **Ample Technology Looks Like:**

- Sufficient volume of computers, tablets, and/or laptops
- Sufficient data ports, electricity, outlets, etc. for workstations and technological devices
- Wireless access
- Audio and volume controls
- Support for devices including compatibility and integration
- Interactive projection systems



## Challenges Districtwide

- Throughout the district, facility design drives instructional decisions and limits teachers from engaging students in hands-on, interactive learning.
  - Rooms large enough for students to engage in learning is a necessity, not a luxury
- Infrastructure deficiencies contribute to a poor physical environment that interferes with learning.
  - Temperature and humidity control is a necessity not a frill



## What is Our Future?

- Every year action is not taken is another grade level of students who will not benefit from a modern, healthy learning environment
- Common Core Learning Standards require a new educational delivery system
- Imagine what our teachers could teach with facilities that provided adequate and flexible space to engage students with various learning experiences?