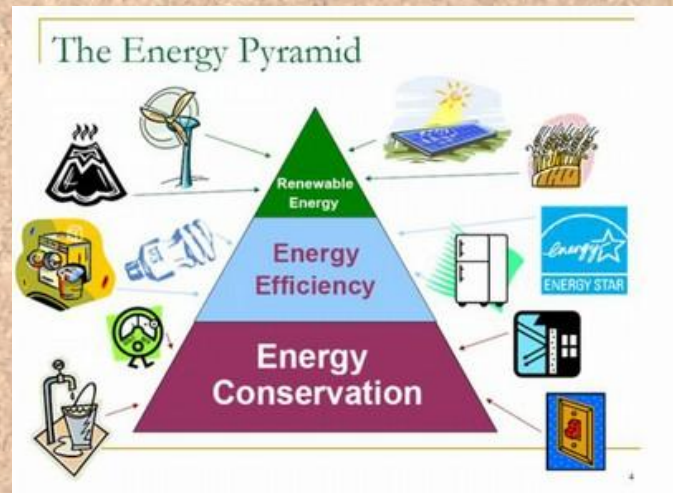
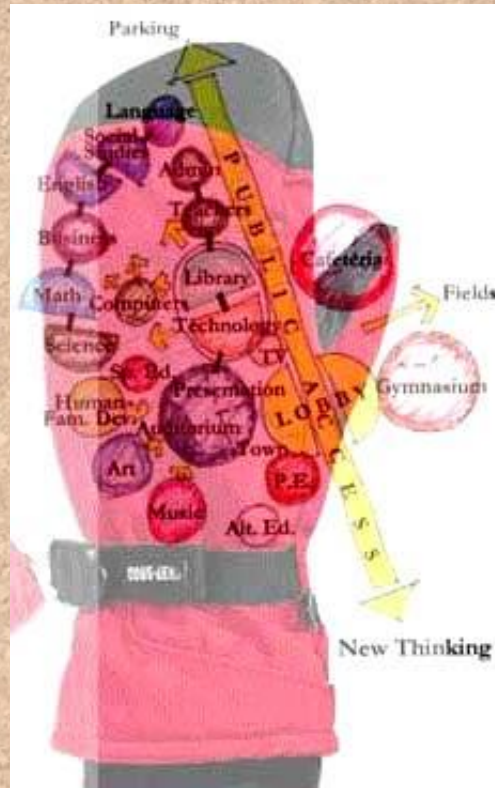


Steamboat Montessori Flexible School Design



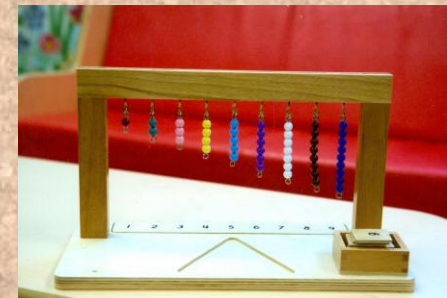
Senior Design Studio- RMCAD

By: Katie London

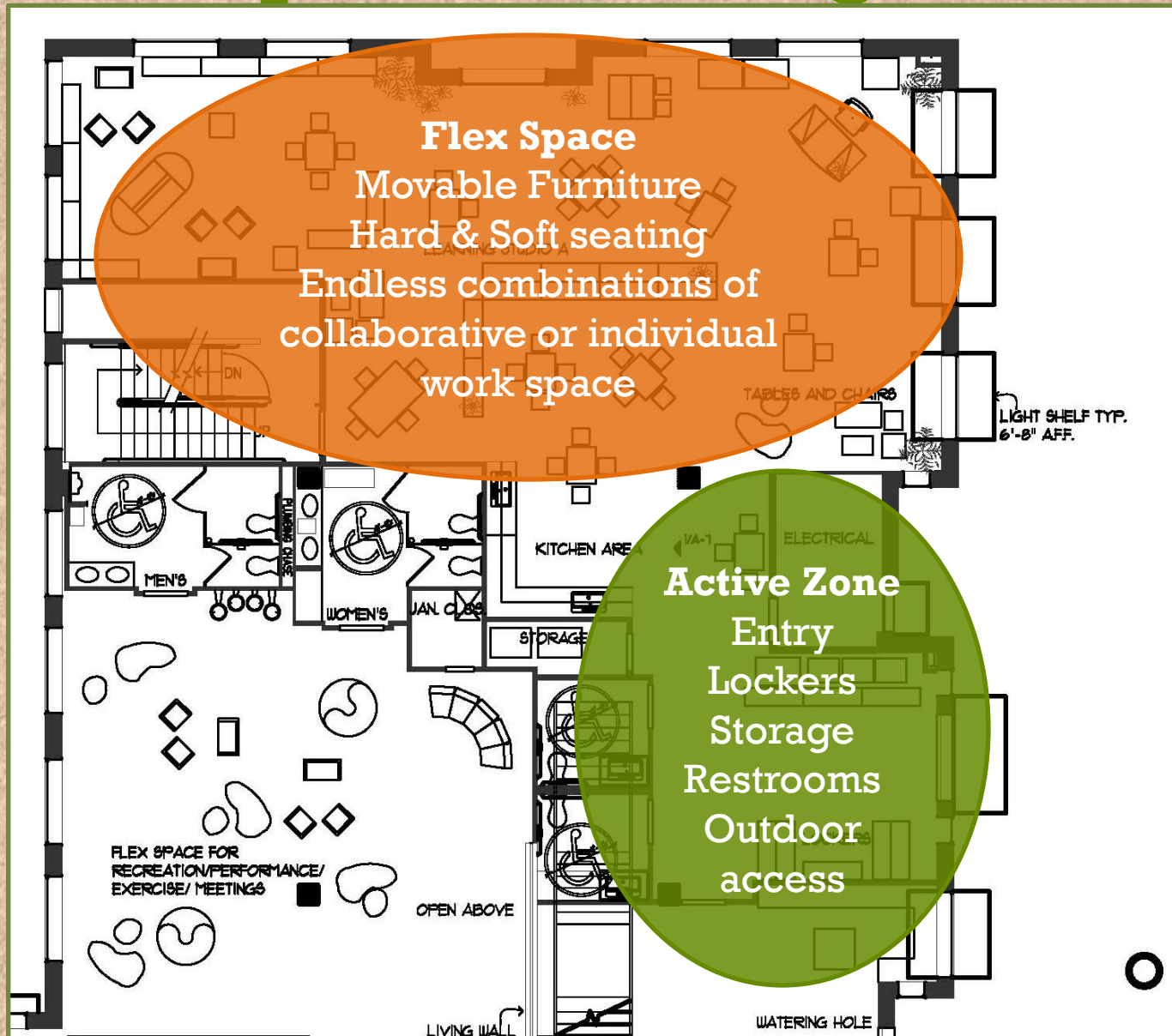
The Montessori Approach

Designing the environment to facilitate independent learning & exploration

- Inviting learning materials that are self-correcting
- Low, open shelving
- Active, self-directed learning



L-Shaped Learning Studio



Flexibility



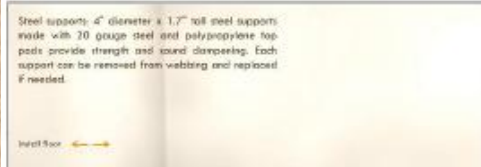
Flexibility, like that of a bird moving through the wind, allows us to easily adapt to changing needs, desires, learning styles, and opportunities that a school is meant to provide. This flexibility will give it strength.

- Flexibility & engaging functionality will best serve students and teachers
- Incorporated at the space planning level through the use of space-saving techniques, multi-purpose areas & L-shaped classrooms
- Stimulating spaces & outdoor learning environments will add to the Montessori learning style

Flexible Building Features



Wall & flooring systems



Installing modular power & data in the floor is faster and provides better results than a traditional ceiling homerun method.



1. Tiles: Elevator floor access built
2. Steel: Supports: Elevator access floor system installed in ceiling
3. Wiring: (vertical floor access)
4. Post: Mark line per room layout/lines transferred to ceiling
5. Beam: & Washer: Assembly: Line per floor access built
6. Fastener: Washers: Custom floor mesh/lines and create column
7. Fastener: Washers: Plug per the column
8. Grid: Ring: Installation: using every 2,000 sq ft, cut down by 1/2 inch (1/4")
9. Edging: installed to ensure a smooth, level floor

Do It Right This Time

- Easily accessible
- Endless configurations



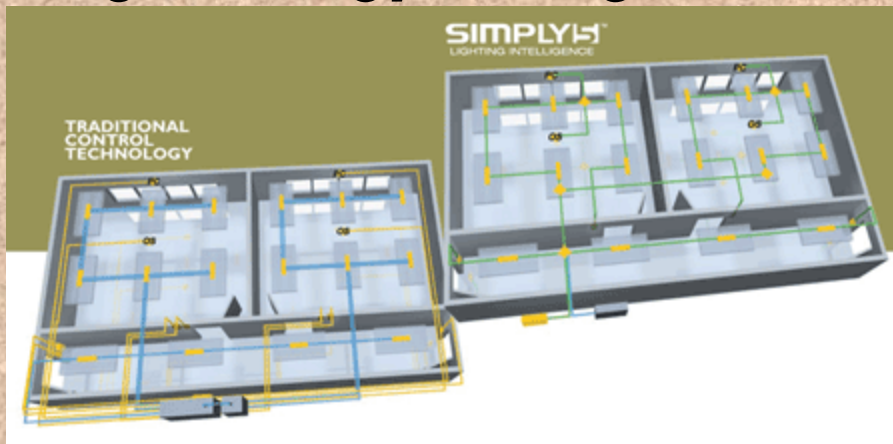
Flexible Building Features



- Intelligent fixtures
- Intelligent junction boxes
- User friendly wall control
- Sensors
- Cost effective wiring
- Light energy manager



- Ample daylight
- Successful lighting strategy for the learning environment



Flexible Building Features



• KYDZTuff® finish is as tough as the coating used on gym floors! It resists stains, won't yellow, and is easy to clean. KYDZTuff® finish is environmentally friendly (99% solids) and we recycle all of our finish by-products.



• All mobile storage units with kickplates feature our heavy-duty caster brackets and are equipped with 2" hard rubber wheels.



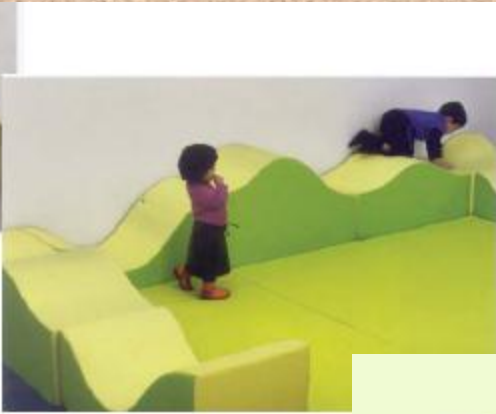
• Sproutz® thermo-fused edgebanding is stronger than t-molding, especially around corners. It is also moisture-resistant thus eliminating cracks where germs and grime typically get trapped.



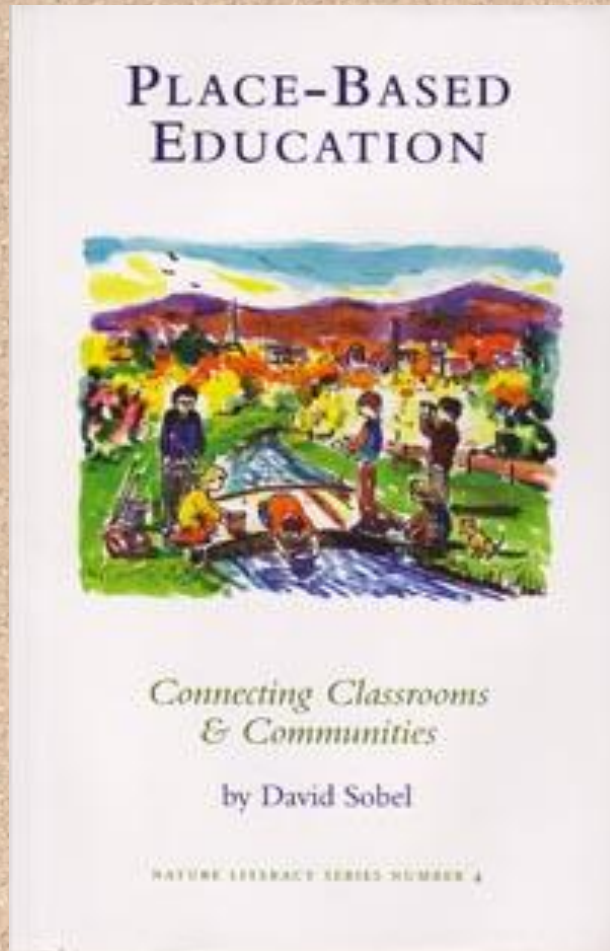
• Sproutz® products are made from a medium density fiberboard panel manufactured from recycled wood fiber. Sproutz® products may contribute to LEED® credits.



Flexible Building Features

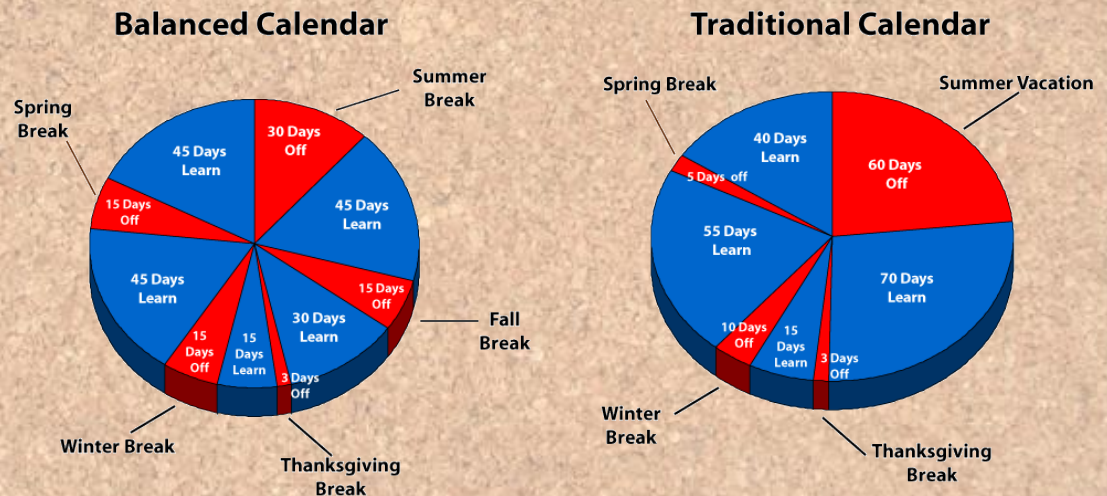


Place-Based Learning

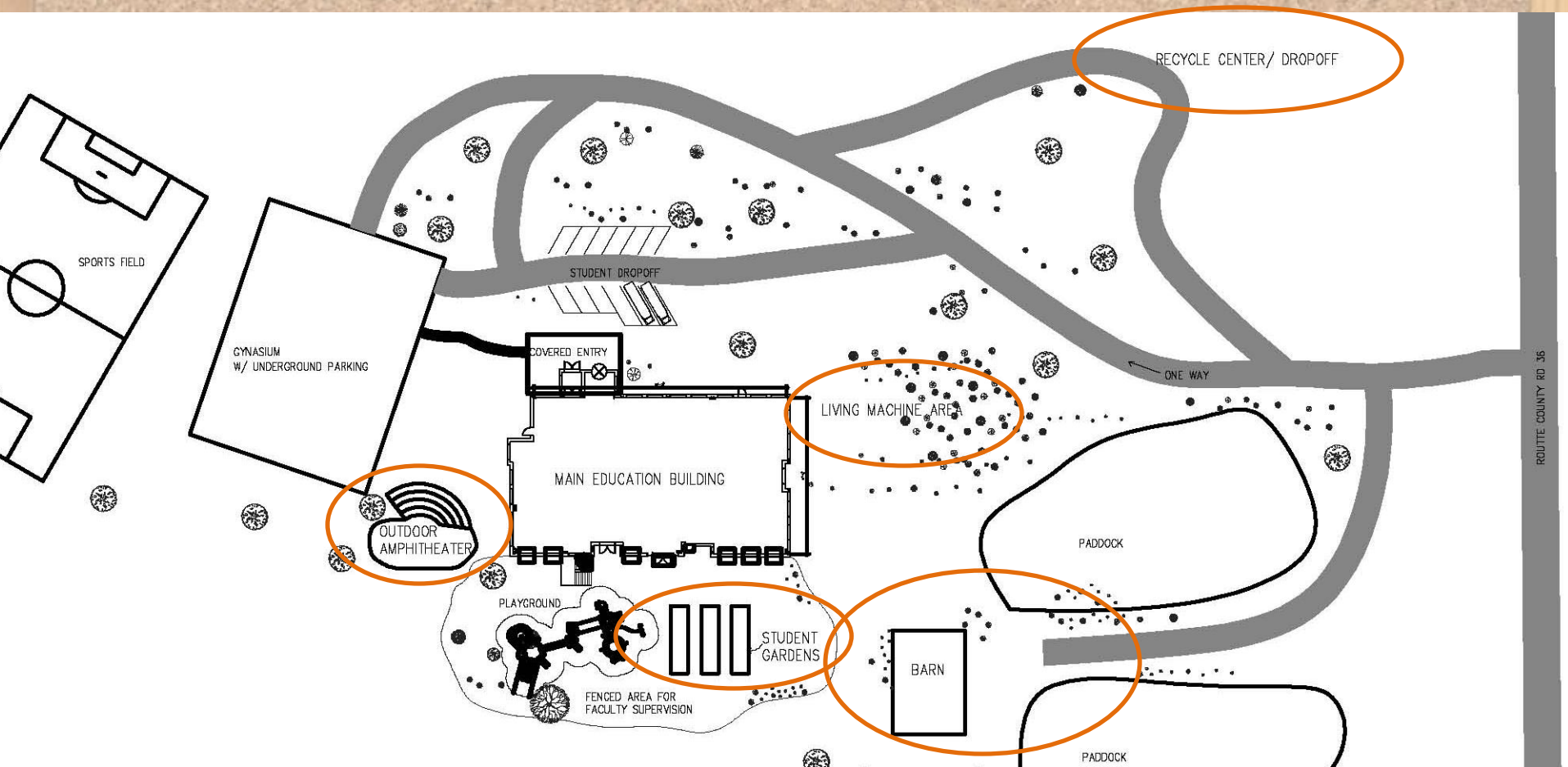


- Local communities & environments provide opportunities across the curriculum
- Hands-on, real world learning
- Developing ties & stewardship

Balanced school year allows for more outdoor connection



Site Plan/ Learning Opportunities



Building Features that Teach

Architectural Wind

- Chimney effect



Revit model of Steamboat Montessori

Building Features that Teach

Living Wall

- Works in conjunction with ventilation to purify air



Building Features that Teach

SOLAR IVY

- Custom by building
- More cost effective
- Accessible



Developing solar & wind harnessing capabilities

Steamboat Montessori

Flexible School Design

