Creating Agile Learning Spaces
+ Changed Practice + Changed Approach

Not what it used to be:
American Schools Are Falling Behind in World Education

A Broken System: Education
Not what it used to be.

CEFPI 2013
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BRUISED NOT BROKEN

Education is not broken

VIDEO

Recognizing the problem

Better questions?

- How do we learn?
- What's the purpose of education?
- What do we teach?
- How do we teach?
- What tools do we use?
- Where do we learn?
- What needs to change?

Students today don’t truly learn any differently....
Learning is Multi-modal

Independent (intrapersonal)

Interactive (social)
Capitalizing on Complexity

Creativity

LIFE-WIDE CURRICULUM

New pedagogy

How do we teach?

Teaching is inherently agile

Being agile as a teacher means staying true to your purpose, fixed in your intent to provide excellence in education but always adapting and adopting new methods of achieving that goal where prompted to by changes in the world around you.
<table>
<thead>
<tr>
<th>New Technologies</th>
<th>New Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal</td>
<td>Personalized</td>
</tr>
<tr>
<td>User centered</td>
<td>Learner centered</td>
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<tr>
<td>Mobile</td>
<td>Situated</td>
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<tr>
<td>Networked</td>
<td>Interactive</td>
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<tr>
<td>Ubiquitous</td>
<td>Information</td>
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<tr>
<td>Persistent</td>
<td>Continuous</td>
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</tbody>
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If I asked you....

What was the date of the Gettysburg Address?

Where's the best place to see the next total solar eclipse?
what would you do?

Google

Columbia University
In the City of New York

Memory in the age of Google

Different world
Some challenges:

Infrastructure

Latest vs. legacy

It's not about the "Box"
"just in time, just enough and just for me"

bring your own device

Teaching with technology is a wicked problem
Wicked Problems + Design Thinking

- are never solved definitively
- have no stopping rule, or criteria upon which to determine "solving"
- are always unique
- are frequently addressed by a "one-shot" design effort
- change the design space enough to minimize the ability for trial and error
- are symptoms of other problems

A network of nodes

The Irreplaceable Element
Robert Smith, Stanford University’s Wasserman Hall

Learning Space
Where do we learn?
This year's college freshmen started school in the 21st Century...

The ARE 21st Century Learners
it’s time for learning spaces to catch up.

Changing Contexts

Old School:
- Place = time specific
- Technology-driven
- Teacher-led
- Content intensive
- Mostly independent
- Standardized
- Life-long

New School:
- Place = time/dependant
- User-driven
- Un老师-led
- Communication intensive
- Mostly interactive
- Customized
- Life-long

Learning needs context

Context shapes experience
Learning is experience
Everything else is just information

Same content - different contexts
• Reading Shakespeare
• Watching Shakespeare
• Performing Shakespeare

Learning contexts are defined by
• Where: physical setting and layout of the learning space
• Who: social setting
• What & Why: learning content, objectives and outcomes
• How: learning methods, activities & tools
• When: learning progress and history

If you could learn anywhere
would you choose here?

same people - different context

What’s the difference? The "secret ingredient"?
Action!

Sir Ken Robinson

“As students age we start to educate them progressively from the waist up and then we focus on their heads and slightly to one side. This is fundamentally wrong.”

Support the complete learner

Body
- Physical
- Muscles
- Movement
- "Social location" organization

Mind
- Sensory
- Perception
- Imagination
- Higher-order processing

Passion

Carla Hannaford, Ph.D.

Real learning - the kind of learning that establishes meaningful connections for the learner - starts with movement in response to a stimulus, then creates a context or experience to understand the sensory input.”
Implications

There is substantial evidence that physical activity can help improve academic achievement, including grades and standardized test scores.

Physical activity can have an impact on cognitive skills and attitudes and academic behavior, all of which are important components of improved academic performance. These include enhanced concentration and attention as well as improved classroom behavior.
What's next?

Imagination becomes reality.

VIDEO

To get fundamental change, you have to change the fundamentals.
Change is hard!

Driving forces for change
- Increased Competition
- Decreased Public Funding
- Technological Progress

Doing the same thing over and over again and expecting different results is one definition of insanity.

Does learning environment affect outcomes?
- Teachers (e.g., 45)
- Students (e.g., 20)
- Principals (e.g., 5)
Learning Ecosystem

- Multidimensional, multifunctional
  - Design, value, services, culture, image, curriculum, setbacks and developing an emotional connection
  - Requires attention to future needs, internal and external integration to progress
- Agile & adaptive
  - Emphasize a simple "set of multifunctional tools" allowing a resistant, unfixed configuration
  - Rapidly adapts to changes quickly and a variety of velocities
  - "One size does not fit all"

Adaptable Places

Designing agility

1. No factories anymore
2. Space should encourage transition
3. Focus on learning spaces – not schools
4. Support multiple modes
5. Use evidence to inform imagination
6. Try, evaluate, repeat - think big, do small, learn fast

Agile Learning Spaces

- Adaptive to different styles of both teaching and learning, now and in the future
- Easy to change to meet different minds at different times
- Ample communication technology: voice and visual
- Engaging - off-site spaces for knowledge and media exploration – both content and context, knowledge & space
- Different - non-traditional, one size does not fit all
And in the end....

- Learning is situated - context is key.
- Space is one part of a learning ecosystem.
- Let’s use what we know.
- One size does not fit all.
- Design for events and exchanges.
- Involve all stakeholders.
- Start small and prototype.
- Measure what works and what doesn’t.
- Be agile: adaptive, smart, easy, engaging & different.

Making Agile Learning Spaces

http://hero-inc.com/AgilityPaper/

Questions?

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