

The Future of Learning

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Reflections

Think about your most meaningful learning experience. Ever.

On the index card provided answer the following questions



*Inspired by Dr. Josh Garcia, Deputy Superintendent, Tacoma, WA

Reflections

Think about your most meaningful learning experience. Ever.

Where did it take place?



Reflections

Think about your most meaningful learning experience. Ever.

Who were you with?



Reflections

Think about your most meaningful learning experience. Ever.

How old were you?



Reflections

Think about your most meaningful learning experience ever.

How did it feel?



Reflections

Think about your most meaningful learning experience. Ever.

Why does it remain memorable to you today?



Share

your most meaningful learning experience with your table team.



Whole Group

Why did we ask this question?



The Future of Learning is....

- Collaborative
- Brain-Based
- Relationship Focused
- Personalized
- Self-Directed, guided by teacher
- Applied to the real world
- Demonstrated through mastery
- Constant, time is a variable
- Failure, recovery & persistence

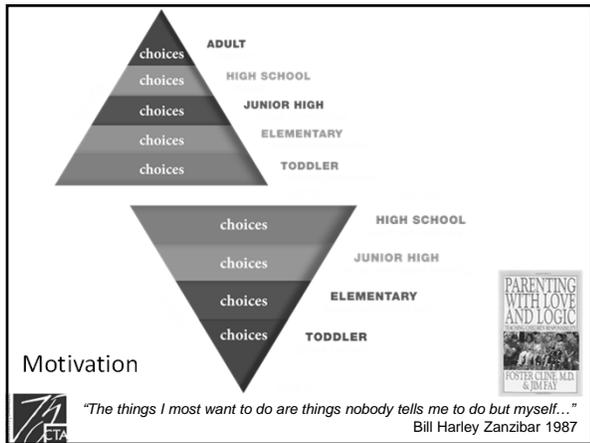
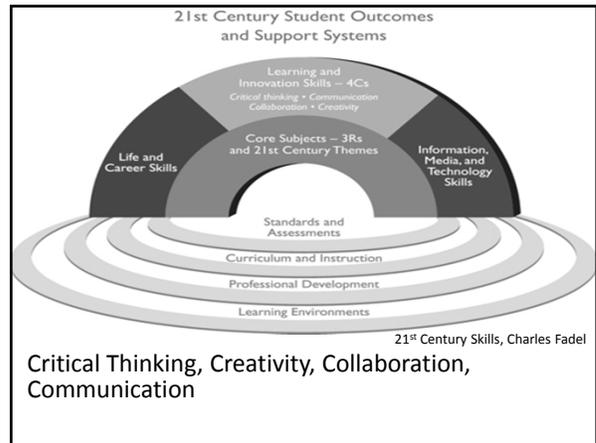
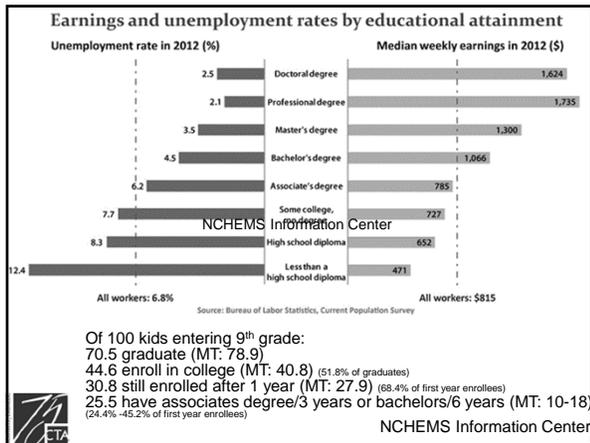


More people in China speak ESL than US
 25% computer based learning by 2014 50% by 2019
 Global Economic Impacts/ Instability
 Local Security/Global Security
 Personal/Social Stress Climate Change
 21st Century Skills Creativity
 High Stakes Testing
 both/and either/or
 Agile Organizations

What impacts you the most?

A Changing World

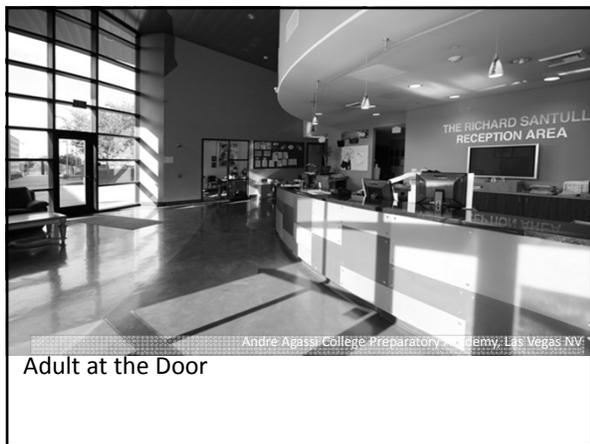




Adult at the door
 Sallyport/Penguin Trap
 Small Learning Communities
 Disbursed Administration
 Multiple physical security barriers
 Transparency for supervision
 Culture of listening
 Technology for incident management
 Practice for Low Risk/ High Frequency

20 MPH 95% Pedestrians Survive
 40 MPH 15% Pedestrians Survive

Security & Safety



importance of first 12 months
 stimulating environments
 motivating kids/overuse/misuse of praise
 link between sleep, **activity** & brain development
 continued development of judgment from 16-25
 Emotional Intelligence **Multiple Re-wiring**

Brain Research

Multiple Intelligences

- Linguistic intelligence
- Logical-mathematical intelligence
- Musical intelligence
- Bodily-kinesesthetic intelligence
- Spatial intelligence
- Interpersonal intelligence
- Intrapersonal intelligence
- Naturalist
- Spiritual/existential
- Moral

Best Learning Practices:
 Student oriented, collaborative, experiential, holistic, reflective, challenging, emotional intelligence, multiple intelligences, personalized learning plans, block schedules, super blocks, uberblocks

Bloom's Taxonomy (Revised)

Learning Pyramid

Understand - Describe, Explain
 Knowledge - Remember
 Produce By Doing
 Meaningful Context 80%

Teaching & Learning

Chugach Optional School, Anchorage, AK

Multi-Grade Classrooms/ 2 Year Looping

MECOOL CARLSON GREEN

Chgoose, Woodbury, MN

3 Year Middle School Looping

Hands-on learning
 6 home base groups of 100 with "park" of shared resources & project learning

9 Year Looping

Traditional Waldorf Schools & One Room Schools

Examples:	K n o w l e d g e	6	Evaluation	create	Quadrant C - Assimilation Students extend and refine their acquired knowledge to be able to use that knowledge autonomously and routinely to analyze and solve problems and create solutions.	Quadrant D - Adaptation Students have the competence to think in complex ways and to apply their knowledge and skills. Even when confronted with perplexing unknowns, students are able to use extensive knowledge and skill to create solutions and take action that further develops their skills and knowledge.			
		5	Synthesis	evaluate					
		4	Analysis	analyze					
		3	Application	apply					
		2	Comprehension	understand	Quadrant A - Acquisition Students gather and store bits of knowledge and information. Students are primarily expected to remember or understand this knowledge.	Quadrant B - Application Students utilize learned knowledge to solve problems, design solutions, and complete work. The highest level of application is to apply knowledge in new and unpredictable situations.			
		1	Knowledge/Awareness	remember					
					1 Knowledge in one discipline	2 Apply in discipline	3 Apply across disciplines	4 Apply to real-world predictable situations	5 Apply to real-world unpredictable situations

Bloom, Anderson & Krathwohl

Teaching & Learning

Move beyond acquisition of information, focus on application, assimilation & adaptation.

Increases critical thinking skills & relevance
 20 minutes, 2 days or 2 months duration

Knowledge in Action (KNAC)
 PBL learners scored higher 4's & 5's than conventional course
 moderate achieving, less advantaged school out performed traditional course at more advantaged school

BELLEVUE SCHOOLS FOUNDATION
 THE GEORGE LUCAS EDUCATIONAL FOUNDATION

Project Based Learning



Columbus Signature Academy, Columbus, Indiana

Project Based Learning & Spaces to Make Things

	Fall Semester	Spring Semester
A Day		
Block 1	Computer Apps 8105 Miller, Will	Sociology A102 Byrne, A.
Block 2	English 12-01 8302 Conrad, J.	English 12-01 8302 Conrad, J.
Block 3	Am History-11 A345 Lincoln, Abe.	Am History-11 A345 Lincoln, Abe.
Block 4	Latin V AP H390 Smith, G.	Latin V AP H390 Smith, G.
B Day		
Block 5	Chemistry H909 Bohr, A.	Chemistry H908 Bohr, A.
Block 6	Religion IV-12 A305 Jones, E.	Religion IV-12 A305 Jones, E.
Block 7	Study Hall	Anthropology Q302 Thorpe, Edgar
Block 8	Calculus BC M322 Newton, I.	Calculus BC M322 Newton, I.



magic fix: J. Gugerty & B. Bottge (2004)

Block Schedules: Time for teams, projects, deep dives



Academy for Global Leadership-Chicago

Length of Day & Year

11 month school year 8.5 hour school day
2008: 11% entered at grade level,
2010: 98% enter at grade level, 20% are ahead of grade level



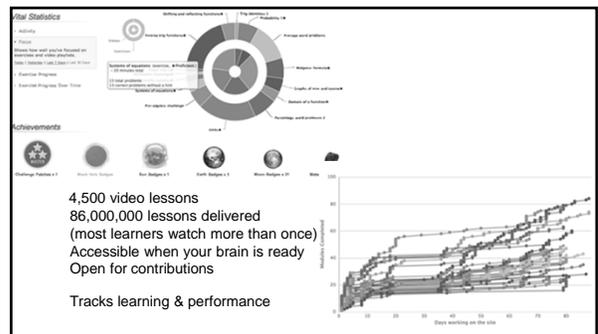
Re-Inventing Schools Coalition (RISC)

Self Directed Study

Not seat time, Students acquire critical thinking, creativity, innovation, teamwork & leaderships skills while mastering content



Teacher as a Guide: Media Arts Mentors



Virtual/Blended Learning/Flipped Classroom



Push Technology to Learning: not scheduled box



Learn at Your Own Pace

School Of One, New York, NY

- 5 modalities
- Whole group
 - On-line tutor
 - Small group
 - Independent practice
 - Peer/peer

Reflections

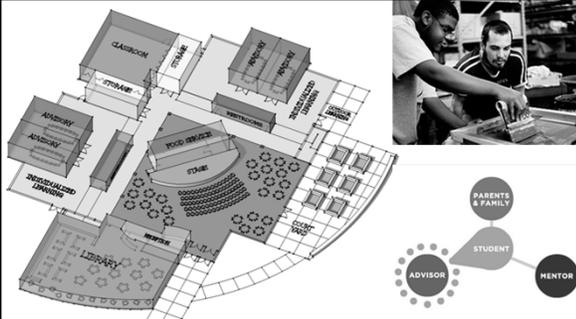
Review the territory covered so far

Is it relevant, unsure, not relevant, scary? WHY?




Northern Australia Academy

Community Use During School Day



Four Year Looping/ Twice a Week Internships




Project Based Learning
Real-world Research
Located on Zoo Campus

Permeable boundaries between school & community

HGA/Bruce Jilk



Our School At Blair Grocery, New Orleans, LA

Learning with the Community

Organized around Essential Questions
 5 alternative school learners
 700 service learning participants



Schools of the future
 by Stephen Heppell

- 98% re-engagement rate (up from zero).
- Brand new computer-first class investment in child.
- Same price as mainstream education.
- Engagement with adults/mentor.
- Have to respond rapidly to requests, days not months.
- Social setting of school has failed them.
- Kids are researchers, not pupils, students, etc.
- Start with what interests them.
- Build curriculum around their interests, meet national standards.

under served consumers
 census ranges from 300-1200

Virtual/Community Learning as disruptive innovation

School is a social contract between those who seek to explore and understand the world around them with those who are prepared to guide the process.

This contract includes the ability to invert the roles of explorer and guide at any time and without assumptions about the age of either.

- (1) Student centered/relationship based
- (2) Core content is integrated and applied
- (3) Teachers work in groups of two or more with "our kids"
- (4) Students work together
- (5) Students learn through projects and eventually internships
- (6) Learning is reviewed individually, in small groups and in whole group presentations/demonstrations/celebrations
- (7) Learning demonstrates mastery of 21st century skills of critical thinking, collaboration, communication & creativity
- (8) Technology transforms teaching & learning
- (9) Spaces, schedules and furnishings are agile & adaptable
- (10) Community volunteers & entrepreneurs are our partners in success

10 Common Guiding Principles



Vittra Telefonplan School Stockholm, Sweden

(1) Student Centered/Relationship Based



Columbus Signature Academy (New Tech High Network) Columbus, IN

(2) Core Content is Integrated & Applied



(3) Teachers work in teams of 2 or more



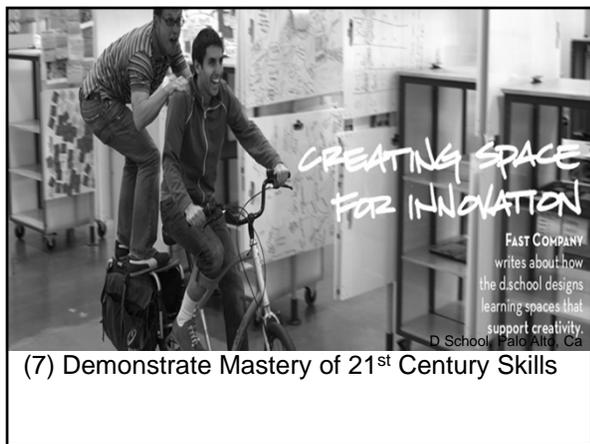
(4) Students Work Together



(5) Students Learn Through Projects/Internships



(6) Work is Reviewed in Groups/Celebrations



(7) Demonstrate Mastery of 21st Century Skills



(8) Technology Transforms Teaching & Learning



Cristo Rey High School, Minneapolis

(9) Spaces, Schedules & Furnishings Are Flexible



(10) Community Volunteers are Partners in Success

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10 Common Guiding Principles

Reflections

Think about your most meaningful learning experience.

How does your experience compare to the 10 common guiding principles?



Share

most relevant/ not relevant/scary issues with your table team.

Each table shares 1 item with two adjacent tables



The Future of Learning is....

Here

Are you ready?

