

CEFPI World Conference 2013 Spaces for Student Centered Learning

■ Introductions

Spaces for Student Centered Learning



Facilitators



Frank Locker PhD
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NTD Architecture
Auburn, California

■ Introductions

Spaces for Student Centered Learning



Panelists



Elliot Washor EdD Co-Founder / Co-Director Big Picture Learning
San Diego, CA



Students, New Tech Arsenal
Indianapolis, IN



Students, Emmerich Manual High School
Indianapolis, IN

■ Workshop Agenda

9:00 Welcome + Introductions

9:05 Workshop Purpose

- Process
- Reflections

9:10 Forced Pairings

- What would you rather do?

9:20 Student Centered Learning Modalities

9:30 What does the Research Say?

- Case Studies

10:00 Student Centered Learning Patten Framework for Advocacy Videos

10:15 Break w/ Purpose

10:30 Table Team Video Productions

11:00 Juried Review of Advocacy Videos

11:45 Closing Thoughts



■ Workshop Purpose

“You cannot teach a man anything. You can only help him discover it within himself.”
Galileo Galilei

“It is important that students bring a certain ragamuffin, barefoot irreverence to their studies; they are not here to worship what is known, but to question it.”
Jacob Bronowski
British mathematician, biologist, historian of science, theatre author, poet and inventor

■ Reflections

Think about your most meaningful learning experience ever.



■ Reflections

Think about your most meaningful learning experience ever.

Where did it take place?



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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.

Was there a teacher?



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?



Reflections

Think about your most meaningful learning experience ever.

Describe it on an index card.
Share at your table mates.
Share one with whole workshop group.



Why did we ask this question?

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Reflections

Think about your most meaningful learning experience ever.

Where did it take place?
 Who were you with?
 How old were you?
 Was there a teacher?
 How did it feel?
 Why does it remain memorable to you today?

What did you learn?

Why did we ask this question?

Forced Pairings

Would you rather....

Read book in bean bag chair	or	in a chair in a study carrel?
Read a Shakespeare poem	or	share a poem you wrote with an audience in a local coffee shop?
Memorize the elements of the periodic chart	or	restore an impaired stream?
Read about 7 habits of healthy living	or	make a meal from food you grew in a garden?
Develop a business plan for a fictional business	or	operate a local grocery store?
Paint a painting	or	design/build scenery for a musical?
View presentation about climate change	or	map wildlife activity with local farmers?

Why did we ask these questions?

Student Centered Learning

In table teams, identify as many student centered learning modalities as possible.

Here is a starter list:

Active Learning	Performance
Collaborative Learning	Project based learning
Inquiry-Based Learning	Applied learning
Cooperative Learning	Learners teaching peers
One on one	Lectures
Question-Directed Learning	Teacher as guide
Just-In Time Teaching	Service learning
Internships	Research
Adaptive Learning	Small group
Blended learning	Independent Study
Unbound large blocks of time	Senior Project

Share / Record Learning Modalities.

Student Centered Learning

Time for a New Paradigm in Education: Student-Centered Learning

Which modalities will they be?

What is Student Centered Learning?

Not this

- Teachers are the primary source for knowledge
- The focus of learning is to gain information
- Rote learning or memorization of teacher notes or lectures was the norm a few decades ago
- Students work to achieve curricular objectives
- Students complete activities designed by the teacher to achieve academic success
- Students respond to positive expectations set by the teacher as they progress through activities
- Students are given extrinsic motivators like grades and rewards
- Student work is evaluated by the teacher

"traditional education ignores or suppresses learner responsibility"
 Wikipedia.com

What is Student Centered Learning?

But this

- "Hands-on" activities and "group work", in which a child determines on their own what they want to do in class
- Students actively construct their own learning
- Student-centered learning means inverting the traditional teacher-centered understanding of the learning process and putting students at the center of the learning process.
- Student-centered learning allows students to actively participate in discovery learning processes from an autonomous viewpoint.
- Students construct a new understanding of the material being learned in a proactive way
- Hands-on activities are administered in order to promote successful learning
- Distinctive learning styles are encouraged in a student-centered classroom

Wikipedia.com

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What is Student Centered Learning?

And this

- Teacher acts as a facilitator in a student-centered classroom
- When students are given the opportunity to gauge their learning, learning becomes an incentive
- Being active agents in their learning, students corroborate

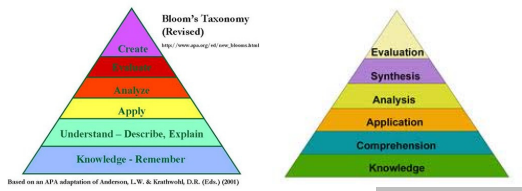
"the only learning which significantly influences behavior (and education) is self discovered" Carl Rogers



Wikipedia.com

What does the Research Say?

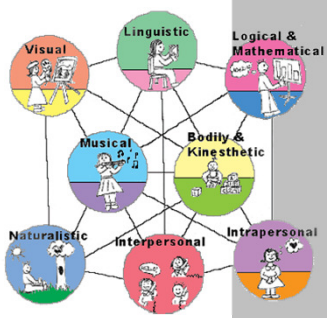
Bloom's Taxonomy



Based on an APA adaptation of Anderson, L.W. & Krathwohl, D.R. (Eds.) (2001)

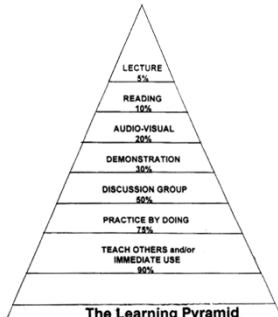
What does the Research Say?

Multiple Intelligences



What does the Research Say?

Learning Pyramid



The Learning Pyramid

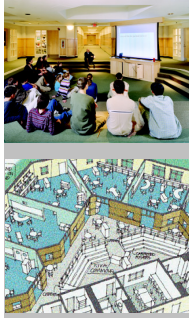
What does the Research Say?

Student Centered Learning

- Strengthens student motivation
- Promotes peer communication
- Reduces disruptive behavior
- Builds student-teacher relationships
- Promotes discovery/active learning
- Responsibility for one's own learning

"Student learning processes are greatly enhanced when they participate in deciding how they may demonstrate their competence in a body of knowledge or the performance of skills."

"Significant learning is acquired through doing" Carl Rogers



Wikipedia.com

What does the Research Say?

Various forms of Student Centered Learning

- Project-based learning
- Interest based learning (Ohio Dept Education)
- Personalised learning (United Kingdom)
- Individual education plans
- Montessori/ Reggio Emilia
- Social-emotional learning
- Collaborative learning
- Expeditionary learning
- Senior Project
- Adaptive learning



FIGURE D. Lauren's personalized learning pathway

FIGURE E. William's personalized learning pathway

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What does Student Centered Learning Look Like?

Characteristics of Student Centered Learning

- Student's social needs are met: collaboration, communication, peer approval
- Students collaborate in hands-on problems and draw their own conclusions, or develop their own learning based on self-direction
- Open, dynamic, trusting, respectful, and promote children's subjective as well as objective learning styles
- Focus is on individual students rather than whole class structures,
- Teachers often offer choices and adaptations within lessons,
- Students participate in the evaluation of their learning. Students are involved in deciding how to demonstrate their learning
- Developing assessment that supports learning and motivation is essential to the success of student-centered approaches.

Wikipedia.org



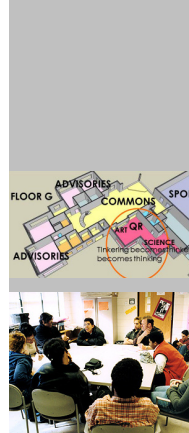
Exemplar Schools

Big Picture Company Schools

Met School, Providence and Newport Campuses

60 schools in USA, 125 worldwide

- Lower socio-economic students who otherwise might have dropped out
- 92% attendance rate (local average 81%)
- 98% graduation rate (local average 87%)
- 98% college attendance rate;
- 75% college graduation rate
 - 50% national average
 - 6% national average for lower socio-economic students
- 75% are first ones in their families to go to college
- #1 in state for School Climate
- #1 in state for Parent Involvement
- #1 in state for Teacher Availability (Academic Issues)
- #1 in state for Teacher Availability (Personal Issues)



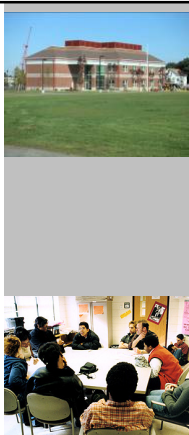
Exemplar Schools

Big Picture Company Schools

Met School, Providence and Newport Campuses

60 schools in USA, 125 worldwide

- Small school: 120 students
- Internships in business + institutions 2 days/week, 4 years
- Personalized learning: curriculum wrapped around student interests
- Project-based learning/direct teaching
- Teachers are advisors



Exemplar Schools

Expeditionary Learning Schools

A network of more than 165 schools in 30 states

- Instructional practices emphasize
 - Student inquiry
 - Critical thinking
 - Craftsmanship
- Students engage in original research
- Students create high-quality academic products to share with outside audiences
- Learning expeditions
 - Deep, interdisciplinary investigations of rich academic topics
 - Bring together teachers from different disciplines or enrich the work of individual teachers in discipline-specific classrooms



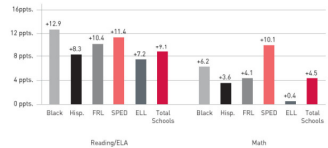
Exemplar Schools

Expeditionary Learning Schools

A network of more than 165 schools in 30 states

SCHOOLS IMPLEMENTING THE EL MODEL OUTPERFORM DISTRICT AVERAGES IN READING/ENGLISH LANGUAGE ARTS AND MATH

EL schools compared to district averages (2 year average 2008 and 2009)



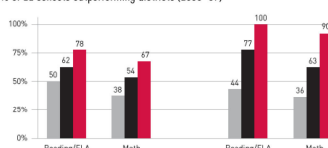

Exemplar Schools

Expeditionary Learning Schools

A network of more than 165 schools in 30 states

LONGER PARTNERSHIPS WITH EL AND DEEPER IMPLEMENTATION OF THE MODEL YIELD HIGHER ACHIEVEMENT SCORES

% of EL schools outperforming districts (2008-09)



Based on length of partnership

- Partner 4+ years, N=48
- Partner 4+ years, N=61
- Partner 10+ years, N=9

Based on length of implementation*

- Early implementing, N=66
- Implementing, N=43
- Highly implementing, N=10

*EL conducts an annual implementation review to determine each school's fidelity to the EL model.

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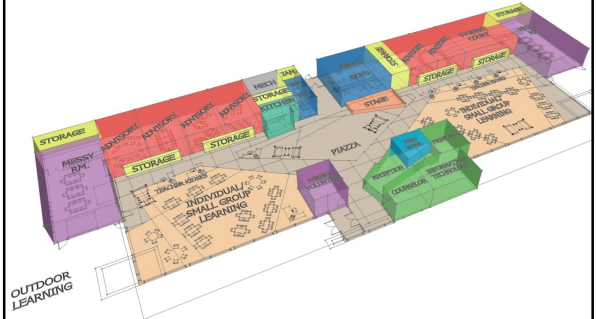
■ Student Centered Educational Deliveries

- Collaborative learning
- Adaptive learning
- Internships
- Project-based learning
- Individual IEPs for all
- Montessori
- Interest-based learning
- Constructivist learning



Forrest Bird Charter School, Sandpoint, ID

MAKING LEARNING VISIBLE ON-DEMAND ADVISORIES GROUP/RE-GROUP TEACHER KIOSKS MESSY ROOMS



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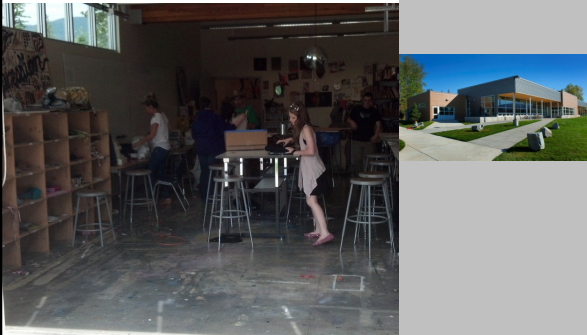
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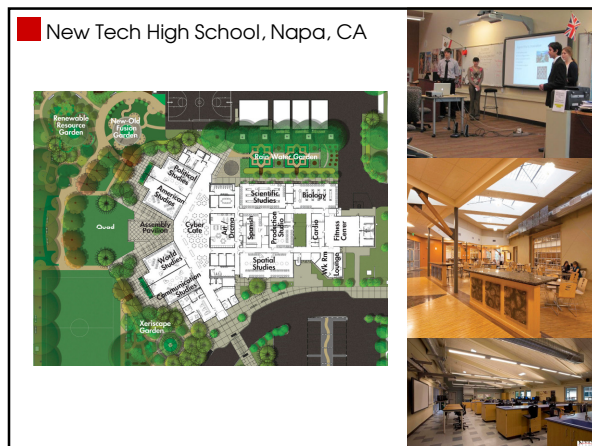


■ New Tech High School, Napa, CA

- Year levels 9-12
- 400 students per school maximum
- Integrated, interdisciplinary teaching
- 100% project-based learning
- Teacher teams (2 or 3 teachers, synchronous)
- Collaborative learning (2 to 4 student teams)
- Double block periods: 180 minutes
- 12 credits (1/2 year) university courses before graduation
- Internships
- Student generated senior project
- 1:1 computers since 1996



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Break with Purpose

What are the patterns of spaces for student centered learning?

Table Team Video Productions

Story Board: Create Quick Story Board as a group, built with the following:

- Essence Statement
- Evidence/Examples
- Brief Description of Pattern
- Advocacy Statement
- Connection to Other Patterns

Make it fun, make it memorable, make it go viral!

POST VIDEO TO YouTube by 11:00 am (1 minute video takes 8 minutes to upload)

Student Centered Learning Pattern Framework

Memorable Name: Maker Spaces

Memorable Image: Edison's Tinkering Lab

Essence Diagram: Lab in heart of school

Brief Description of Pattern: Tinkering labs provide places to apply what is learned through other means, to experiment, push limits, learn from failure, etc.

Connection to Other Patterns: Tinkering spaces should have access to the outdoors, to water, highly visible to all, etc.

Advocacy Statement: Create tinkering spaces in all core learning areas, make them visible expressions of the nature of learning.

Juried Review Advocacy Videos

Closing Thoughts

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