The Goal:
Next Gen Cohort 5

Justin Bathon
University of Kentucky
STEAM Academy
2 New
2 Old
1 Borrowed
1 Blue
New #1
Digital is Different
Information ≠ Physical Space
Are your classrooms ...
more like this
or this?
Me?
What are we going to ask on our tests when our students are walking with Google in their pocket [eyes]. Are they going to be better questions than we ask today?

David Warlick
New #2
Global Economic Shifts
What comes to mind?
Can someone overseas do it cheaper?

Can a computer do it faster?
Exhibit A: Labour Force by Occupational Class (%), 1800-2009

Source: Martin Prosperity Institute
Jobs?

Kindergarten: 2015
Careers: 2030
Retiring: 2075 (best case)
“We are currently preparing students for jobs that don't yet exist . . . using technologies that haven't yet been invented . . . in order to solve problems we don't even know are problems yet.”

RICHARD RILEY
happens
Old #1
the mind is not a vessel that needs filling, but wood that needs igniting — no more — and then it motivates one towards originality and instills the desire for truth.

Plutarch
I believe that the active side precedes the passive in the development of the child nature; that expression comes before conscious impression; that the muscular development precedes the sensory; that movements come before conscious sensations; I believe that consciousness is essentially motor or impulsive; that conscious states tend to project themselves in action.

I believe that the neglect of this principle is the cause of a large part of the waste of time and strength in school work. The child is thrown into a passive, receptive, or absorbing attitude. The conditions are such that he is not permitted to follow the law of his nature; the result is friction and waste.

Pedagogic Creed, 1897
1956

Blooms Taxonomy

Knowledge:
- Recall of information
- Discovery; Observation
- Listing; Locating; Naming

Comprehension:
- Understanding; Translating
- Summarising; Demonstrating
- Discussing

Application:
- Using and applying knowledge
- Using problem solving methods
- Manipulating; Designing; Experimenting

Analysis:
- Identifying and analyzing patterns
- Organising of ideas
- Recognising trends

Synthesis:
- Using old concepts to create new ideas
- Design and Invention; Composing; Imagining
- Inferring; Modifying; Predicting; Combining

Evaluation:
- Assessing theories; Comparison of ideas
- Evaluating outcomes; Solving; Judging
- Recommending; Rating

Date: 1956
Great teaching & learning is not new.
Old #2
reform
education reform
Section 183

General Assembly to provide for school system.

The General Assembly shall, by appropriate legislation, provide for an efficient system of common schools throughout the State.

Text as Ratified on: August 3, 1891, and revised September 28, 1891. History: Not yet amended.

previous section | next section
158.6451 Legislative declaration on goals for Commonwealth's schools -- Model curriculum framework.

(1) The General Assembly finds, declares, and establishes that:
   (a) Schools shall expect a high level of achievement of all students.
   (b) Schools shall develop their students' ability to:
       1. Use basic communication and mathematics skills for purposes and situations they will encounter throughout their lives;
       2. Apply core concepts and principles from mathematics, the sciences, the arts, the humanities, social studies, and practical living studies to situations they will encounter throughout their lives;
       3. Become self-sufficient individuals of good character exhibiting the qualities of altruism, citizenship, courtesy, hard work, honesty, human worth, justice, knowledge, patriotism, respect, responsibility, and self-discipline;
       4. Become responsible members of a family, work group, or community, including demonstrating effectiveness in community service;
       5. Think and solve problems in school situations and in a variety of situations they will encounter in life;
       6. Connect and integrate experiences and new knowledge from all subject matter fields with what they have previously learned and build on past learning experiences to acquire new information through various media sources; and
       7. Express their creative talents and interests in visual arts, music, dance, and dramatic arts.

   (c) Schools shall increase their students' rate of school attendance.
   (d) Schools shall increase their students' graduation rates and reduce their students' dropout and retention rates.
   (e) Schools shall reduce physical and mental health barriers to learning.
   (f) Schools shall be measured on the proportion of students who make a successful transition to work, post-secondary education, and the military.
1821
First Public High School, Boston

1850
Kentucky Provides for “A System of Common Schools”

1865
Kentucky A&M (Becomes UK)

1880's
Schools spread to every community in KY

1903
First Kindergartens in KY

1911
First Adult Evening Courses in Rowan County

1950
Brown v. Board of Education

KERA

1989

Today

1800

1900

1950

time, is a tricky thing
What will be our impact?
No generation in history has ever been so thoroughly prepared for the industrial age.

David Warlick
it is my question too
Borrowed

(Concern)
4Q: The quadruple win

JULY 21, 2015 BY SCOTT MCLEOD  2 COMMENTS

Four big questions to ask about a lesson, unit, or activity...

A. Deeper learning. Did it allow students to go beyond factual recall and procedural regurgitation and be creative.
global world

local schools
digital world
analog schools
How might we know?
Ask the kids
How Engaged ARE Students?

In January 2013, **FOUR** out of every ten high school students surveyed reported being engaged in school.

19% of kids identified as ADHD during their time in KY schools
Ask the kids
HS Data

<table>
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<tr>
<th></th>
<th>HS Graduation</th>
<th>College Ready</th>
<th>College Enroll</th>
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<tr>
<td><strong>No</strong></td>
<td>13.9</td>
<td>37.5</td>
<td>36.9</td>
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<tr>
<td><strong>Yes</strong></td>
<td>86.1</td>
<td>62.5</td>
<td>63.1</td>
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Of the 63 % of KY Kids Going to College …

<table>
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<th></th>
<th>4 Year Graduation Rate</th>
<th>6 Year Graduation Rate</th>
<th>Comm. Coll. 3 Year Ass'c Degree</th>
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<tbody>
<tr>
<td>No</td>
<td>75.6</td>
<td>51.1</td>
<td>87.2</td>
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<tr>
<td>Yes</td>
<td>24.2</td>
<td>48.9</td>
<td>12.8</td>
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“If you’re comfortable with education today, you’re not paying attention”

Will Richardson
http://weblogg-ed.com
so
Can We Do Better?
We have some sense of how.
Blue
Theory of Change

1. Networked Teacher Leaders
2. Focused on Transformation
3. starting with Cultural Change toward Innovation
4. with a Deep Background in Next Gen Learning
5. seeing Lots of Examples
6. Identifying an Entry Point
7. Designing a Specific Project
8. which is Implemented with Fidelity
9. as a Gateway to Broad Implementation of Classroom Reform.
The Goal

Embrace and initiate a change effort to transform the learning experience.

that is all.
that is enough.