

Transforming Education

The secret sauce - having to learn versus wanting to learn



Excite

Relevant

Adaptive

Engaging

Empower



Transforming Education

Old Delivery – Teacher Centric

Having To Learn!

4 Corners of Classroom

Student Rigor

Students Bored

Teachers Teaching

Teachers is Sage on Stage

Teachers Lecture

Step by Step

Linear Processing

Book Based Curriculum

Static / Stand Alone / Manual Assessment

Books

Text First

Knowing Answer – Memorization

1 Dimensional - Text

Digital Age Skills Not Required For Teachers



Conventional
Speed

New Delivery - Student Centric

Wanting To Learn!

4 Corners of the World

Student Engagement

Students Excited

Students Learning

Teacher is Guide on Side

Teachers Listen

Random Access

Parallel Processing

Web Based Curriculum

Connected / Real Time / Automated Assessment

Personal Learning Devices (1 to 1)

Graphics First

Knowing Question - Critical Thinking

4 Dimensional - Audio, Video, Interactive, Linked

Digital Age Skills Required For Teachers / Admin.

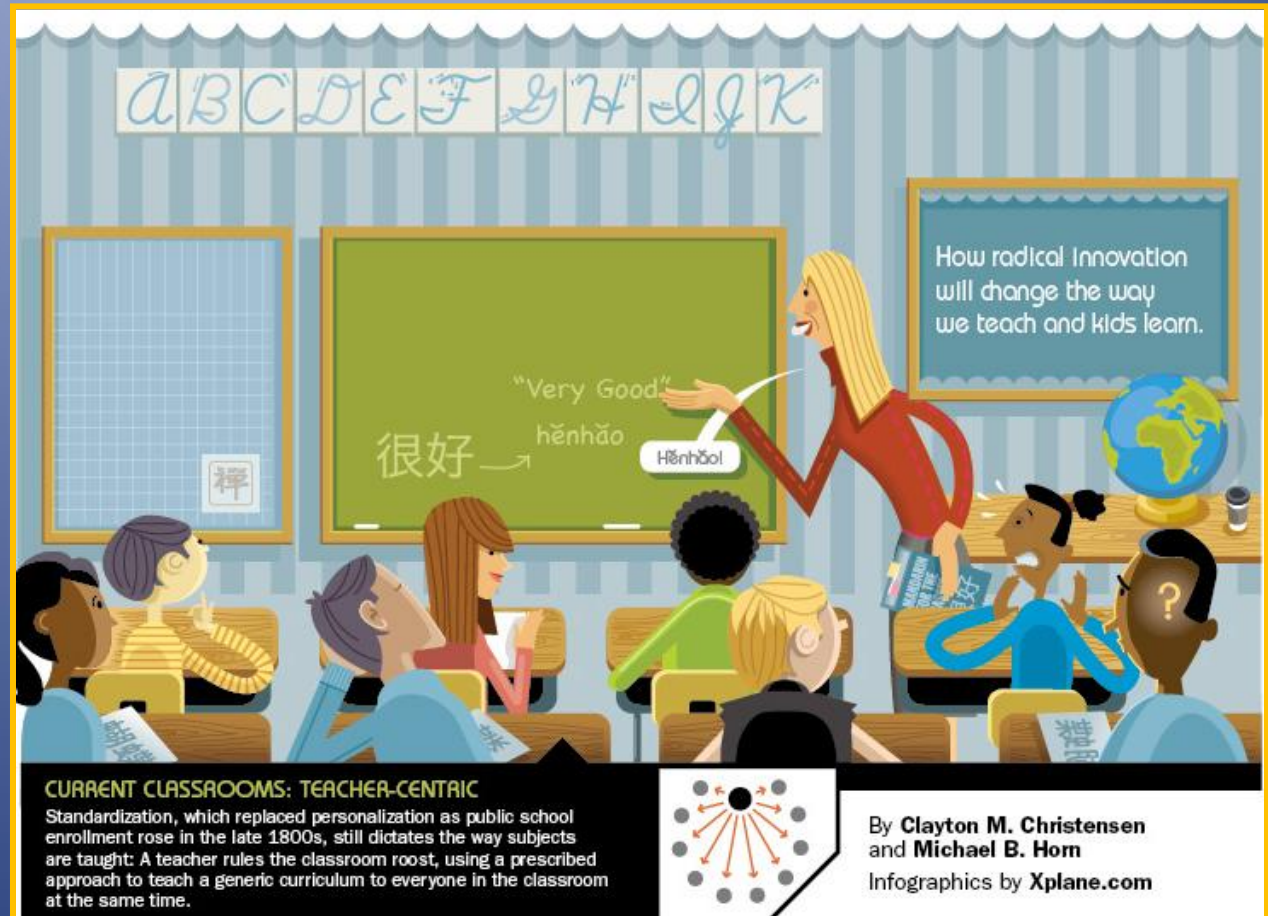


TWITCH
SPEED

Learning Environments

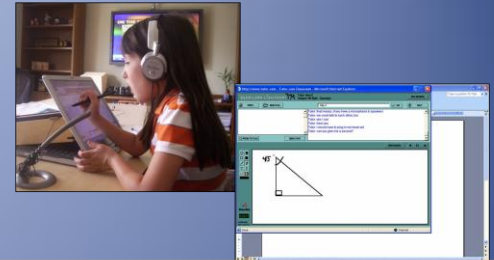
Old Delivery – “Teacher Centric”

- Teacher delivers content – “sage on stage”
- Students required to learn at same pace
- 1 to 30 learning

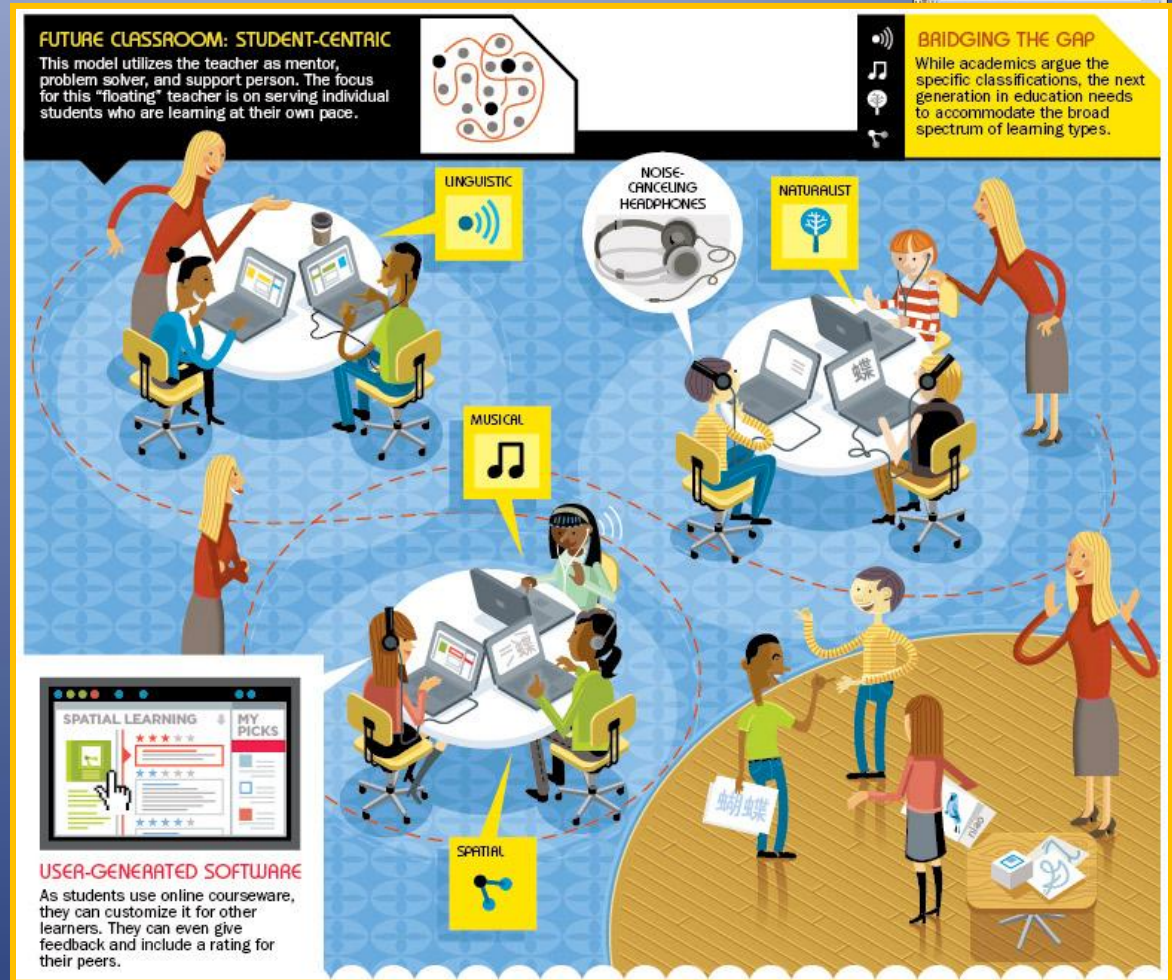


Learning Environments

New Delivery – “Student Centric”



- Utilizes the teacher as mentor, problem solver & support person
- Floating teacher(s) serves students learning at their own pace
- Personalized, Paced, Student Centric, Real time, Always On
- Web enabled curriculum & assessment free up teacher
- New ratio – time per student not teacher per student
- Online tutor 24/7



Learning Environments



Ministry of Education
SINGAPORE



	More.....	Less.....
Remember <i>Why</i> We Teach	For the Learner	To Rush through the Syllabus
	To Excite Passion	Out of Fear of Failure
	For Understanding	To Dispense Information Only
	For the Test of Life	For a Life of Tests
	The Whole Child	The Subject
Reflect on <i>What</i> We Teach	Values-centric	Grades-centric
	Process	Product
	Searching Questions	Textbook Answers
Reconsider <i>How</i> We Teach	Engaged Learning	Drill and Practice
	Differentiated Teaching	'One-size-fits-all' Instruction
	Guiding, Facilitating, Modeling	Telling
	Formative and Qualitative Assessing	Summative and Quantitative Testing
	Spirit of innovation and enterprise	Set Formulae, Standard Answers

Learning Environments

Student Centric Learning



5th Grade Math Class - Dana Middle School

- Web enabled curriculum & assessment
- No text books / Teacher Facilitator
- Every student has a laptop
- Real time results for students / teachers
- Paced and Personalized
- Interactive, bilingual



Credit Recovery – Point Loma High School

Learning Environments

San Diego Unified School District (SDUSD) Most ambitious K-12 tech rollout in US

- i21 initiative will provide every student a laptop
- Broadband (Cell & Wi-Fi) built into each laptop.
- 5 year rollout - 1/3 of students have received laptops to date
- \$400MM - funded with Prop S (\$2.1 BB bond measure)
- Enables web based curriculum & assessment
- Enables personalized, paced, student centric learning & real time diagnostics



Transforming Education



The image shows a screenshot of the UC Berkeley YouTube channel page. At the top, the YouTube logo is visible on the left, and navigation links for Search, Browse, Upload, Create Account, and Sign In are on the right. Below this is a dark blue banner with the UC Berkeley logo and the word "Courses" in large yellow text. Other links for "Campus Life", "Events", and "Cal Athletics" are also present. A "Donate" button is visible with the text "Donate now to support UC Berkeley on YouTube".

The main content area features a video player showing a lecture by a man in a white shirt. Below the video player are controls for play/pause, volume, and a progress bar showing 00:11 / 45:20. Below the video player are buttons for Info, Favorite, Share, Playlists, and Flag. The video title is "Biology 1B - Lecture 14: Darwin and the Origin of Species I" and it includes the text "From: UC Berkeley | September 29, 2010 | 87 views" and "General Biology".

To the right of the video player is a search bar and a list of recommended videos. The list includes:

- 61A - Lecture 15: 32 views - 3 hours ago
- Computer Science 10 - Lecture 8: 38 views - 5 hours ago
- Chemistry 1A - Lecture 14: 21 views - 8 hours ago
- Biology 1B - Lecture 14: Darwin and the: 87 views - 9 hours ago
- Statistics 20 - Lecture 14: 23 views - 9 hours ago
- Development Studies C10 - Lecture 10: No: 20 views - 10 hours ago

University of California Berkley created its own You Tube channel