

A New Culture of Learning for a world of constant change

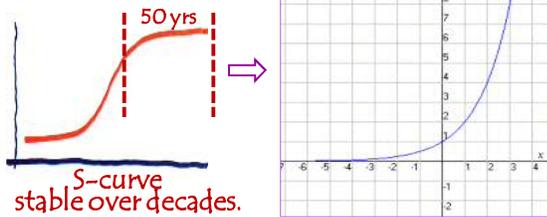


The Entrepreneurial Learner
in the Network Age

preamble

21st C infrastructure: no stability in sight
driven by continual exponential
advances in computation

20th C infrastructure



In a world of increasingly rapid change,
the half life of a given stock/skill is
constantly shrinking.

Stocks =====> Flows

delivering
authoritative
knowledge

Transferring
old knowledge

Push-based teaching

participating
in knowledge flows

creating new knowledge
(strong tacit component)

Pull-based inquiry/learning

In a world of constant flux
learning has as much to do with
creating the new as learning the old
and hence
the tacit starts to take on a
increasing importance

As does affording curiosity
in a constantly changing world.



Ages: 2 & 5

from: Christian Science Monitor
21st century
Kayaking as learning: Navigating life's
knowledge whitewater

Kayaking as learning: learning should be more like kayaking, explains one knowledge expert, and the experience of picking information should be treated like an action sport, a whitewater rafting trip navigating the waters of knowledge and interaction.

By Anne Collier, Guest blogger / May 9, 2012



Kayaking as learning: learning should be more like kayaking, explains one knowledge expert, and the experience of picking information should be treated like an action sport, a whitewater rafting trip navigating through the waters of knowledge and interaction.

Ben Goff/The Gaston Gazette/AP

quiz

What do these guys have in common besides being ^{a bit} creative & out of the box thinkers, doers and tinkers??



and not just guys

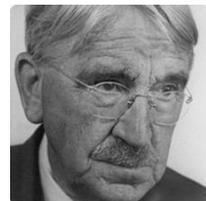
Julia Child
Ann Frank
Katharine Graham
Jacqueline Kennedy
Beyoncé

They all went to
Montessori schools

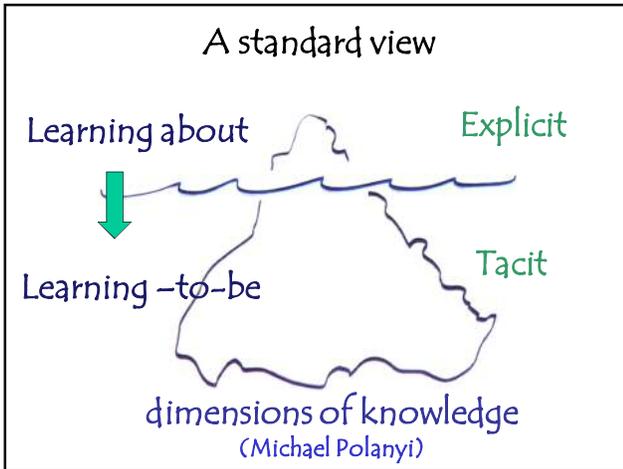
Our heroes
who really understood learning environments



Maria Montessori



John Dewey



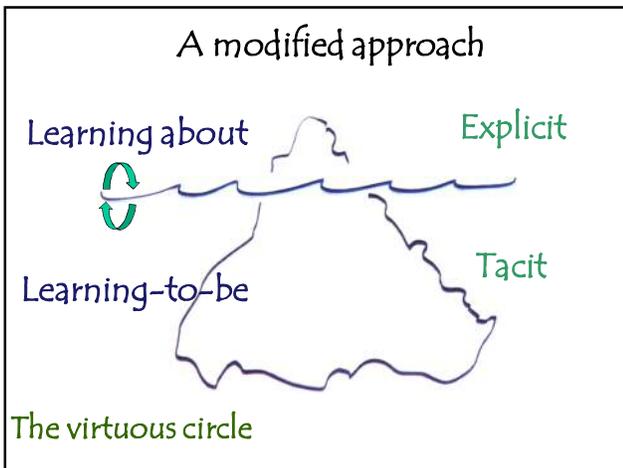
Learning-to-be

Enculturating into the practices of a field often via legitimate peripheral participation - apprenticeship

- a way of seeing
- being able to engage in productive inquiry
- a way of knowing
- sensing what constitutes an interesting problem
- knowing what constitutes an elegant solution



Identity via belonging to a CoP or epistemic community.



The Social View of Learning

we participate
therefore we are



understanding is socially constructed.
making knowledge personal

Why can't we turn everyone into being both a learner & a teacher?



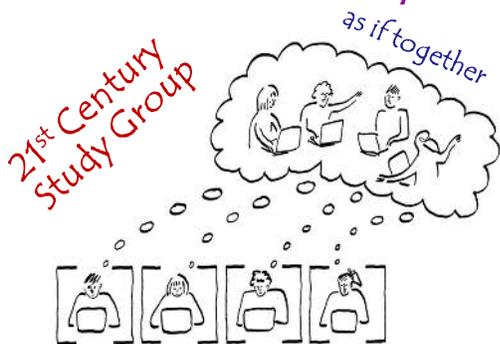
Nothing clarifies ideas better than explaining them to others.

Nothing Beats Collaborative Study Groups – especially around homework
The social construction of understanding is real.



And developing a form of leadership – getting the whole to be more than the sum of the parts.

And this works virtually as well!



Distributed but connected via IM, ichtat, FB, SL...

social life & social networks of learning
Ryerson College



Chris Avenir organized a 146 member study group on Facebook called: "Dungeons/Mastering Chemistry Solutions"

But be aware:
implementing new tools sets
can be problematic

Chris was thrown out of Ryerson for
inventing/using this new tool for learning

3 "reasons" for the case against him

- . Learning should be hard.
- . There is no structure of regulation for online behavior and that makes it incompatible with academic work.
- . It is our job to protect academic integrity from any threat.
i.e., unless learning is hard and is directed by others, it fails to meet the standard for academic rigor.

But (and thank heavens):
In March of 2008 Avenir was cleared of all charges.

"In a seven-page ruling, the engineering faculty appeals committee found no proof the Facebook group led to cheating." Students had not been using the Facebook to cheat, instead they had used it as a collaborative problem solving tool.

The Architecture Studio—
focusing more on learning-to-be



And the social basis of learning

The Architecture Studio—
focusing more on learning-to-be



all work-in-progress is public & social



The Architecture Studio—
focusing more on learning-to-be



Interweaving
thinking and doing

Thinking with both head and hand

The Architecture Studio—
focusing more on learning-to-be



In an environment of permission – to try,
to fail – over and over again in the
company of others

The Architecture Studio—
as a collective learning experience



With both master & peer critiquing.

developing a disposition for receiving/giving critiques

Some small steps

MIT's studio for 8.02 electricity and magnetism --
technology enabled active learning (TEAL)



moving seamlessly between
lecture, experiment & discussion

And, of course, the
sage on the stage
model won't work here!



Nor, marking on a curve!



Open Source as a Participatory Learning Platform

The Open Source Movements:

- ◊ writing code to be read
- ◊ engagement thru useful additions
- ◊ social capital matters

A form of distributed situated learning
(cognitive 'apprenticeship')
enculturating to a virtual
community of practice



Peer critique, open discussion - over a million folks

Mom - pls let me stay up.



Harry Potter Worldwide Movement

Fanfiction.com

65,000
stories &
podcasts



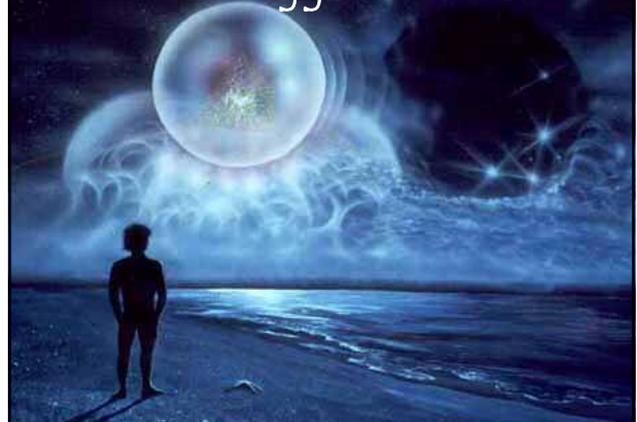
forums
wikis
videos
podcasts
contests

Fanfiction.net

6,314 communities of interest
1,774 discussion forums
386,000 stories archived

Are we prepared for students used to creating their own
global collective, intertwined with a networked imagination?

The Bigger Picture



Dispositions of an Entrepreneurial Learner

questing – seeking, uncovering, probing ...

connecting – listening to others, engaging ...



Ah, sounds also like pull-based learning

Entrepreneurial Learners are makers and tinkers



Yes – critical thinking is important but can be augmented by ground truth –

Does it work??

Where knowledge & practice meet.

A Blended Epistemology

Homo Sapiens ↔ *Homo Faber*
man as knower man as maker

↓
content/things



A bit like Montessori

A Blended Epistemology

Homo Sapiens ↔ *Homo Faber*
man as knower man as maker

↓
content/things &
context



Ah, let me change the music of a film and I can alter not only its meaning but also what you actually "see".

Ah, in a fluid world judgment and critical thinking is more important than ever... and librarians as mentors become even more important.



Given that meaning emerges as much from context as content new dimensions to the creation of meaning are opened.



Ah, the essence of remix..

We used to focus on content, assuming context was relatively stable. But in the world of social media & networked knowledge context is more fluid.



Consider blogging.

Blogging as joint context creation

"The blogger is—more than any writer of the past—a node among other nodes, connected but unfinished without the links and the comments and the track-backs that make the blogosphere, at its best, a conversation, rather than a production."

Jazz and blogging are intimate, improvisational, and individual—but also inherently collective. And the audience talks over both.

Andrew Sullivan – Atlantic Monthly/ The Daily Dish

Too Big to Know:

By david Weinberger (Jan, 2012)

"We used to know how to know. We got our answers from books or experts. We'd nail down the facts and move on. We even had canons."

"But in the Internet age, knowledge has moved onto networks. There's more knowledge than ever, but it's different. Topics have no boundaries, and nobody agrees on anything."

We, as learners, need new strategies and tools

A Belief

In a world of constant change entrepreneurial learners must also be willing to regrind their conceptual lenses.



And for this an essential thing is:
play

Homo Ludens

a highly nuanced concept of play

- as in permission to fail, fail and fail again and then get it right: think of extreme sports...
- as play of imagination – poetry
- as in an epiphany – suddenly falling in place as in solving a riddle.



Learning as riddles,
leading to a reframing or
re-registering of the world.

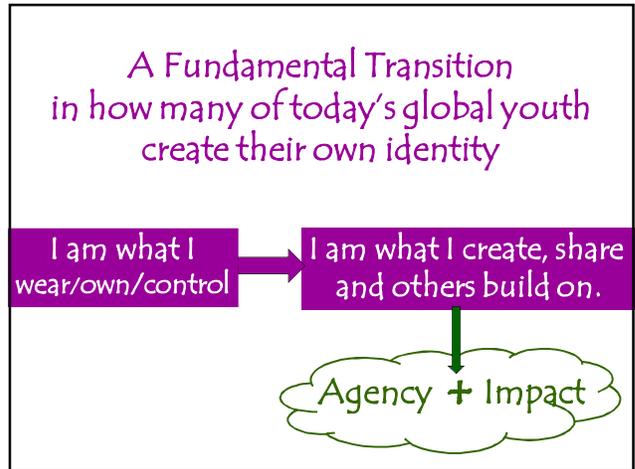
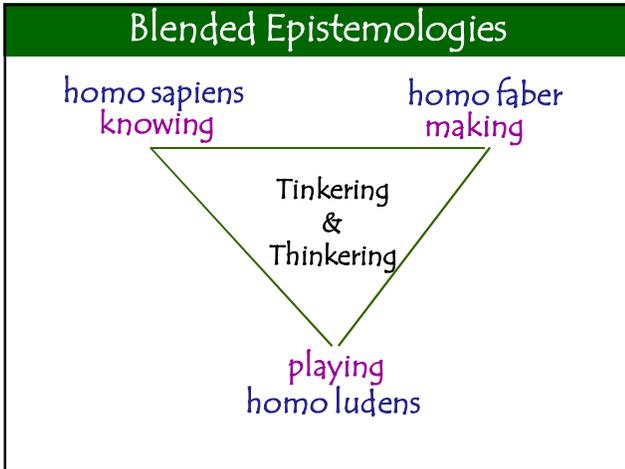
Play is the progenitor of culture & innovation.

Johan Huizinga

A Simple Reframing

A black dog is sleeping in the middle of a black road that has no streetlights and there is no moon.

A car coming down the road with its lights off steers around the dog.
How did the driver know the dog was there?





Thank You

A New Culture of Learning
– cultivating the imagination
for a world of constant change.
Douglas Thomas & JSB
See: www.newcultureoflearning.com

Sketches by Susan Haviland

Special thanks to
Ann Pendleton-Jullian
for many of ideas on
studios, critiques,
hand-head, *homo ludens*