

Re-Imagining Dewey for the 21st Century



Learning in/for the Digital Age
where engagement matters even more

A 21st Century Challenge: preparing students
for a world of constant change!



Hmmm, perhaps
we need to rethink
what we need to learn ,
how we actually learn.

leveraging how the net-generation
thinks, works, learns, socializes –
might social media also be our friend?

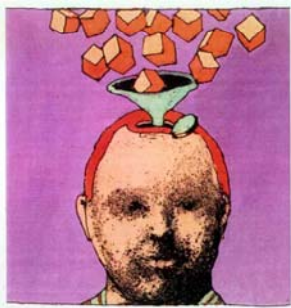
Cartesian View of Learning

Knowledge as substance

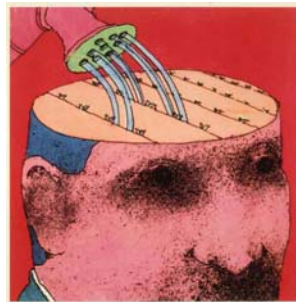


And pedagogy as knowledge transfer

If we think of learning like this...
change will be resisted



"The delivery model:
I teach - you learn"



"Cultivate the neat rows
of disciplinary knowledge"

The Social View of Learning

we participate
therefore we are



understanding is socially constructed

Suggesting we view learning more like this



“We learn in and through our interactions
with others and the world”

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



And this works virtually as well!



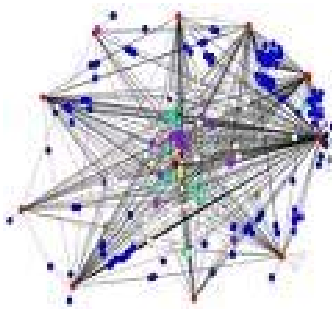
In their rooms but all connected via IM, ichtat, SL,...

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



Nothing clarifies ideas better than explaining them to others.

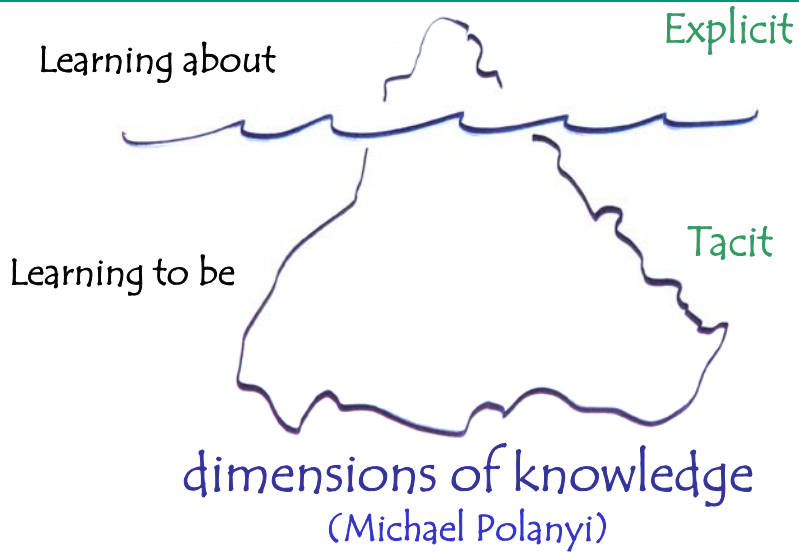
And in social networks across communities/friends



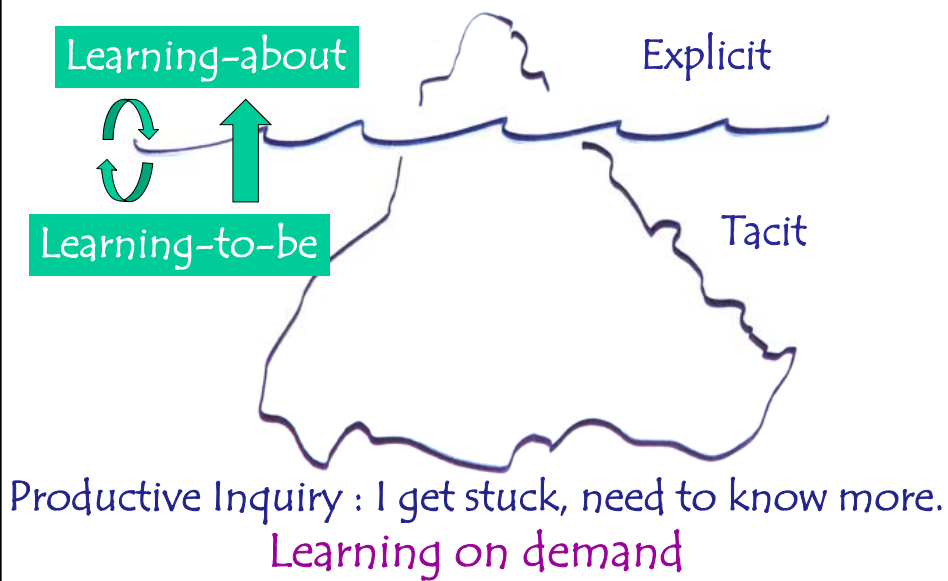
Blogs – Facebook – MySpace – SecondLife, ...

Now study groups or just plain bull sessions can naturally extend to peer groups galore inside and outside of school

Beyond textbook learning:
learning-about \implies learning-to-be



Reversing the Flow



So what kind of learning
is in tune with the
net-gen and Dewey?



Visual



Musical

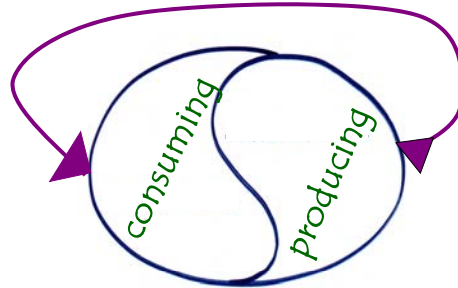


Procedural



Cinematic

Life in the Digital Age – A culture of participation: Building, Tinkering, Remixing & Sharing



Creating meaning by what I produce
and others build on – a remix, open
source culture.

Mix, Remix & Mashup creative tinkering & the play of imagination

But it can also be 'creative reading' like in
fandom – fans filling in the back story in
highly imaginative ways.



Ah, creating meaning by integrating
their imagination with that of the
'author' in remix.

Tinkering as a learning platform and its death and rebirth as remix, mashups, etc

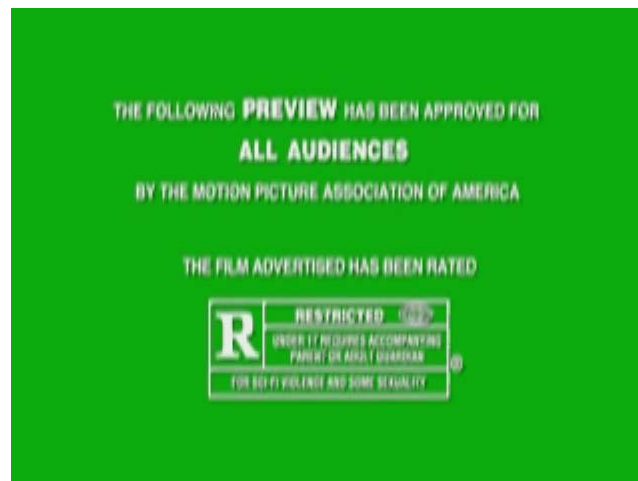


Noun 1. tinker – a person who enjoys fixing and experimenting with machines and their parts.

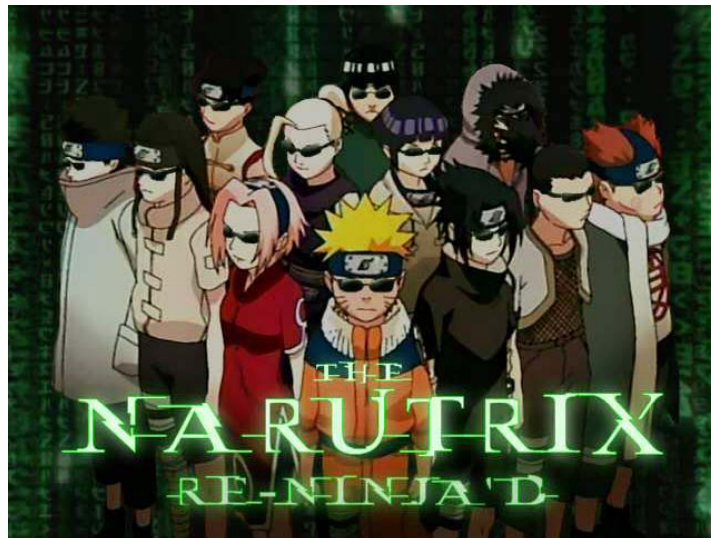
tinkerer as experimenter: a person who enjoys testing innovative ideas;

“she was an experimenter in new forms of poetry”

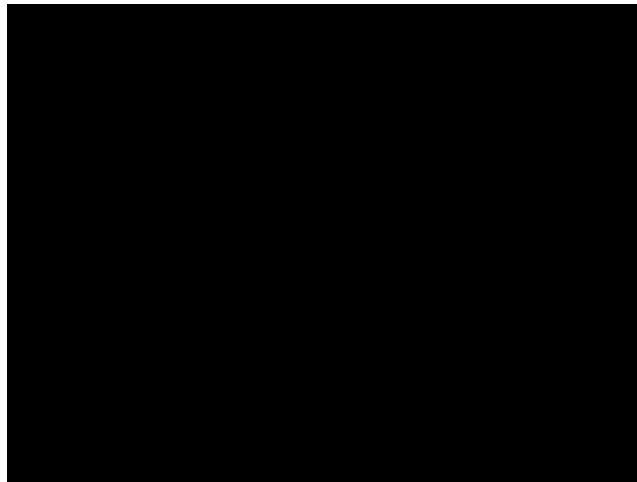
The Art and Expressiveness of Remix



Matrix Reloaded Trailer



Remix of Matrix using Naruto anime series



Genres of Participation Afforded by New Media

DML: Mimi Ito, Connie Yowell,

Friendship
Driven
(hanging out)

MySpace
Facebook
Twitter
SMS
Second life
Neo-pets
Pokémon

Interest
driven

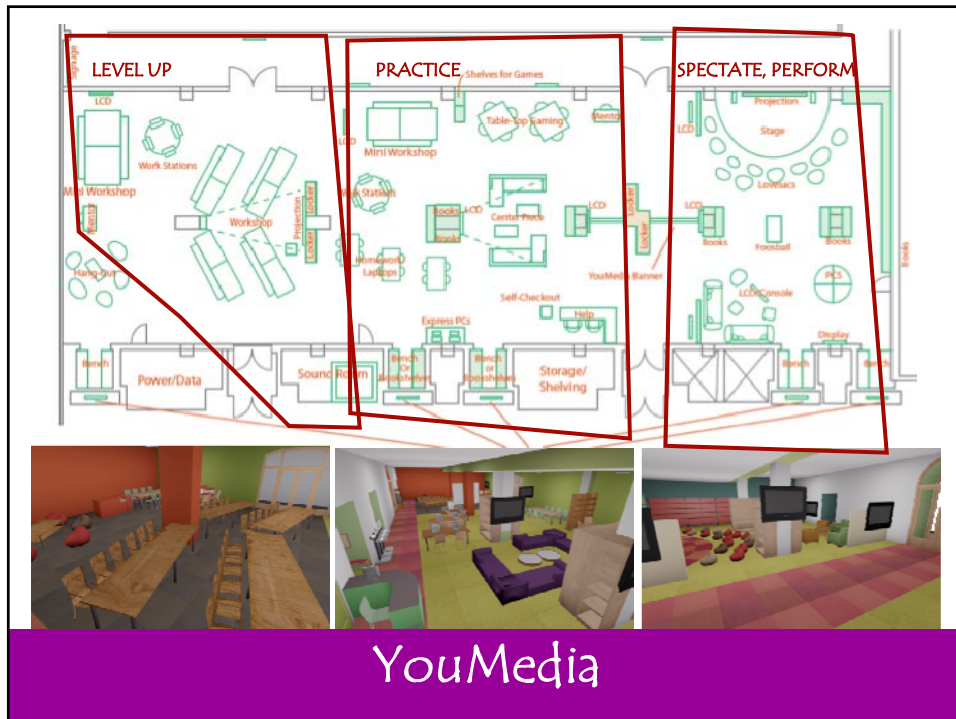
{messing around
↓
geeking out}

Robotics
Anime
Astronomy
Chess
Music
History
Bugs

→ Competencies

Math
Literacy
Science
Social Studies
Sciences

Critical inquiry
Collaboration
Problem solving
Peer-learning
Creativity
Imagination





The Long Tail in Learning: leveraging the vast resources on the net

Moving beyond limited
"shelf space" and local
communities of practice

Supporting the rise of an ecology of
learning/doing niches



Ah, I am passionate about this niche topic.
I want to learn/do more!

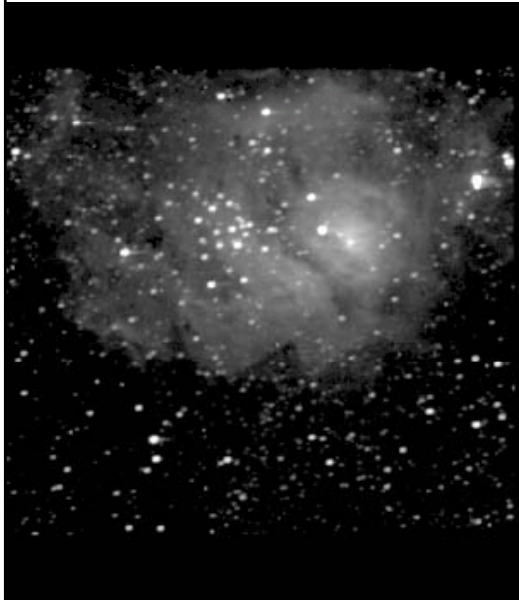
MicroObservatory Network

(Harvard-Smithsonian Center for Astrophysics)

5 self-contained, weatherized reflecting telescopes with CCDs deployed around the world.



Lagoon Nebula.



Dimock Community Center



dimension, for example, is 110 light-years in
that if you were traveling at the speed of light
some 110 years to travel from one side of the

Along with the Orion nebula, the Lagoon is
nebula faintly visible to the naked eye in the

The Rise of the Pro - Amateur Class

amateur _____ professional
from Latin - amator : lover

Dobsonian 10" f/4.9



+



PC164C
ccd camera

+

Internet
Blogs
BBSs
Yahoo groups
Data bases

Niche communities of co-creation, learning and sharing:
passion-based learning

WorldWide Telescope

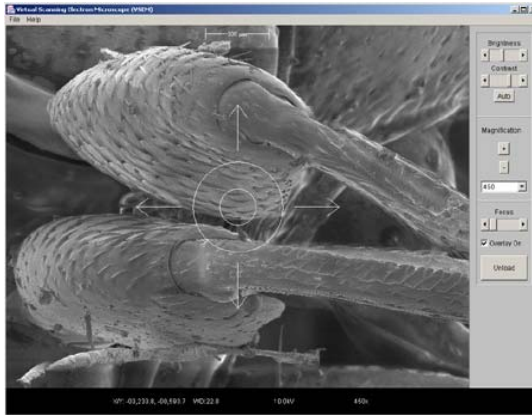
WorldWide Telescope Explore Guided Tours Search Community Telescope View Settings

Learning as Curation/Narration story telling & play lists hits the galaxies

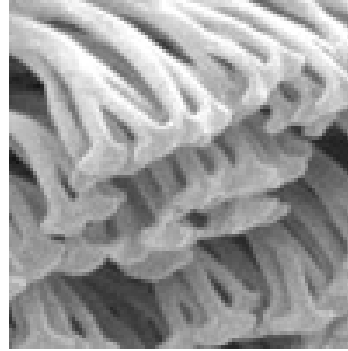


Bugscope

virtual laboratory accessed via the net by kids
educating future scientists by providing
access to virtual instrumentation



Tokay Geckos



Virtual Scanning Electron Microscope



Tokay Gecko

Uncle Tom's Cabin & American Culture

WELCOME! You can use this site in three different modes.

BROWSE MODE provides
-- texts, images, songs

SEARCH MODE allows you to
either use our

INTERPRET MODE provides
descriptive
materials.

Usually the best way to
access to the site, the best way
a quick overview of the
Throughout the

A key thrust here:
is a sense of doing history
as an act of uncovering...
"ask what got uncovered
rather than
what got covered"


... You can

... al exhibits
... primary
... cts.

... the most direct
... If you're new to the
... **MODE**, which provides
... the archive contains.


IATH
site





Ok, jsb – remix, user generated content, blogs and co-creation but where is there any guarantee of quality and a seat of authority?!


Authority vs. Timeliness (in a rapidly evolving world)



WIKIPEDIA

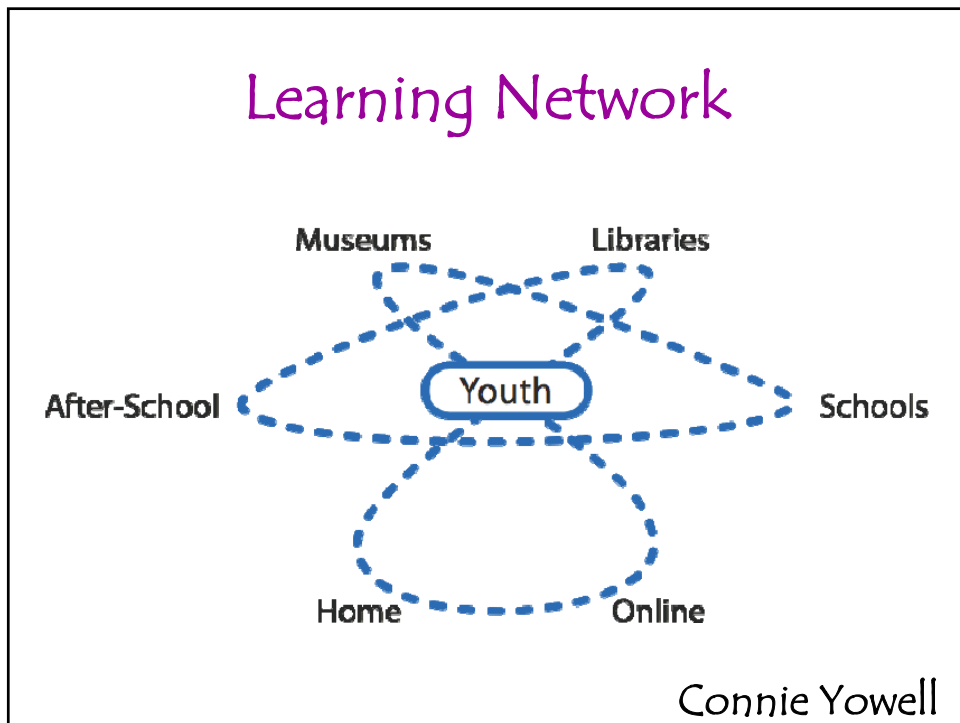
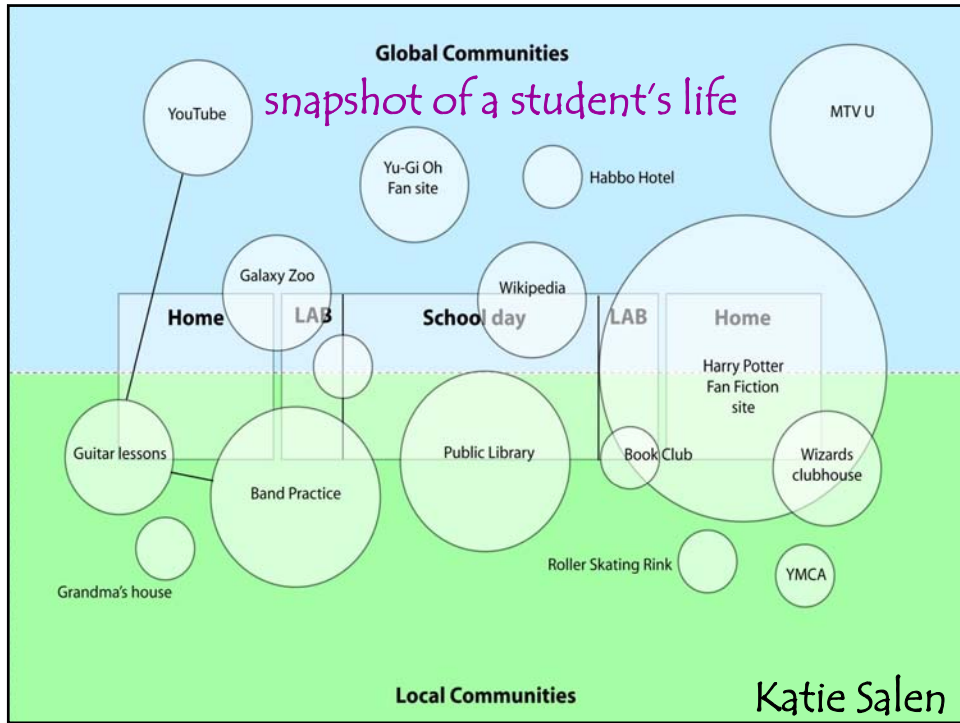
<p>English The Free Encyclopedia 718 000+ articles</p>	<p>Deutsch Die freie Enzyklopädie 285 000+ Artikel</p>
<p>Français L'encyclopédie libre 167 000+ articles</p>	<p>Folski Wolna Encyklopedia 93 000+ hasel</p>
<p>Svenska Den fria encyklopedin 102 000+ artiklar</p>	<p>Italiano L'enciclopedia libera 82 000+ articoli</p>
<p>Nederlands De vrije encyclopedie 89 000+ artikelen</p>	<p>Español La enciclopedia libre 84 000+ artículos</p>
<p>Português A enciclopédia livre 74 000+ artigos</p>	

search • ouïho • reshercher • 𐀀𐀁 • oâk • szukaj • zoeken • ricerca • busca • buscar

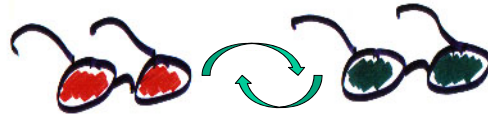


But that finesses the question of quality.

Key: new reading practices are called for!



A Blended Epistemology



Homo Sapiens

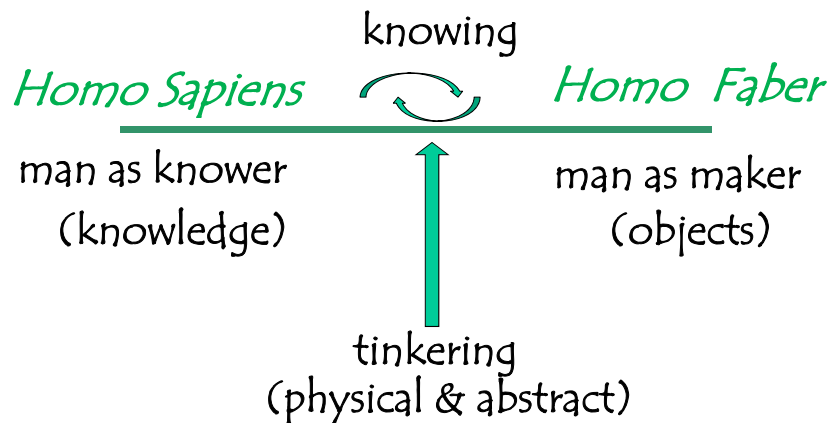
(hu)man as knower

Tools as instrumental

Homo Faber

(hu)man as maker

Tools as productive inquiry



Casual vs. Deep Tinkering

Casual Tinkering – a form of messing around

Deep Tinkering

know how/what can be pushed around,
rearranged, repurposed, modified
intimate familiarity with material at hand
embodied immersion
instinctual, not accidental
deeply situated

deep tinkering ==> indwelling ==> constructing the
tacit dimension

Deep Tinkering

developing a gut 'feeling' for systems
know how/what can be pushed around,
rearranged, repurposed, modified
developing an intimate familiarity with
material at hand
embodied immersion
developing an instinct
deeply situated

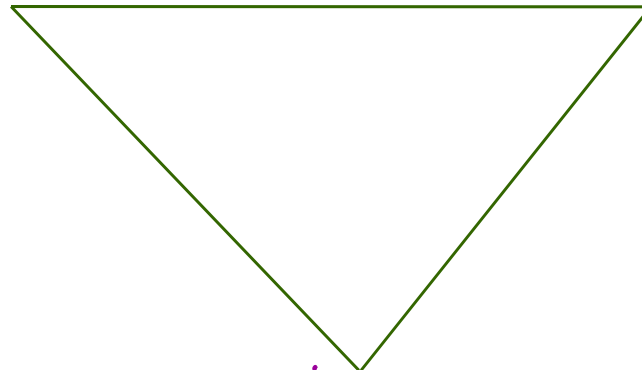
(attending from vs. attending to)

deep tinkering ==> indwelling ==> constructing the
tacit dimension

Extending the Blended Epistemology

homo sapiens
knowing

homo faber
making



playing
homo ludens

homo ludens

a highly nuanced concept of play

- as in freedom 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 registering the world

A Simple Reframing

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

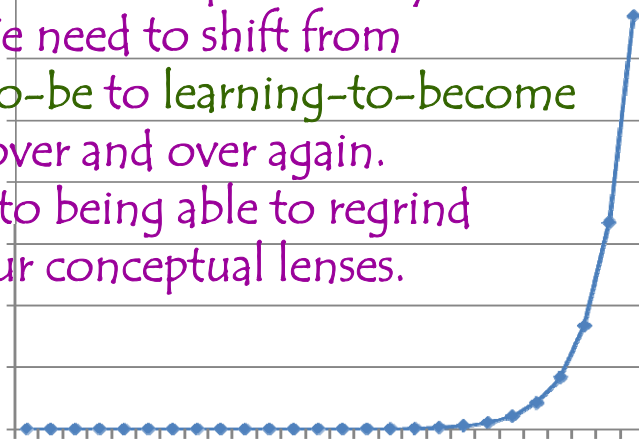
A car coming down the road with its lights off steers around the dog.
How did the driver know the dog was there?

The Learning Challenge for 21st Century

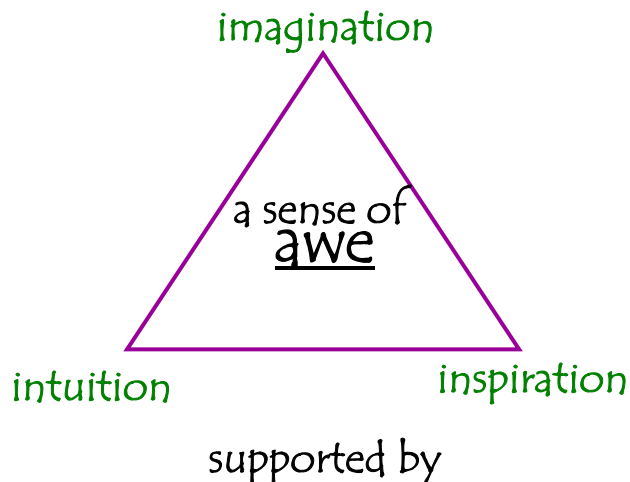
In a world where the infrastructure continues to advance exponentially

We need to shift from learning-to-be to learning-to-become over and over again.

And to being able to regrind our conceptual lenses.



The New Golden Triangle



homo sapiens + homo faber + homo ludens

When recreation becomes
an act of
re-creation/remix & productive inquiry



Culture of Learning
a culture that thrives on
participatory life long learning
and perhaps
the ultimate sustainability model .

Thank You

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