Critical Literacies and the Challenge of Online Learning

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to TESL Canada 2015, lake Louise, Alberta

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http://www.downes.ca/presentation/369

Iz be in ur Facebooks

Addin teh strangers.

ICANHASCHEEZBURGER.COM

"An image macro of one or more cats. The image's text is often idiosyncratic and grammatically incorrect."

Why is this funny?

We can, as we understand the prehistoric, understand the future, by reading the artifacts.
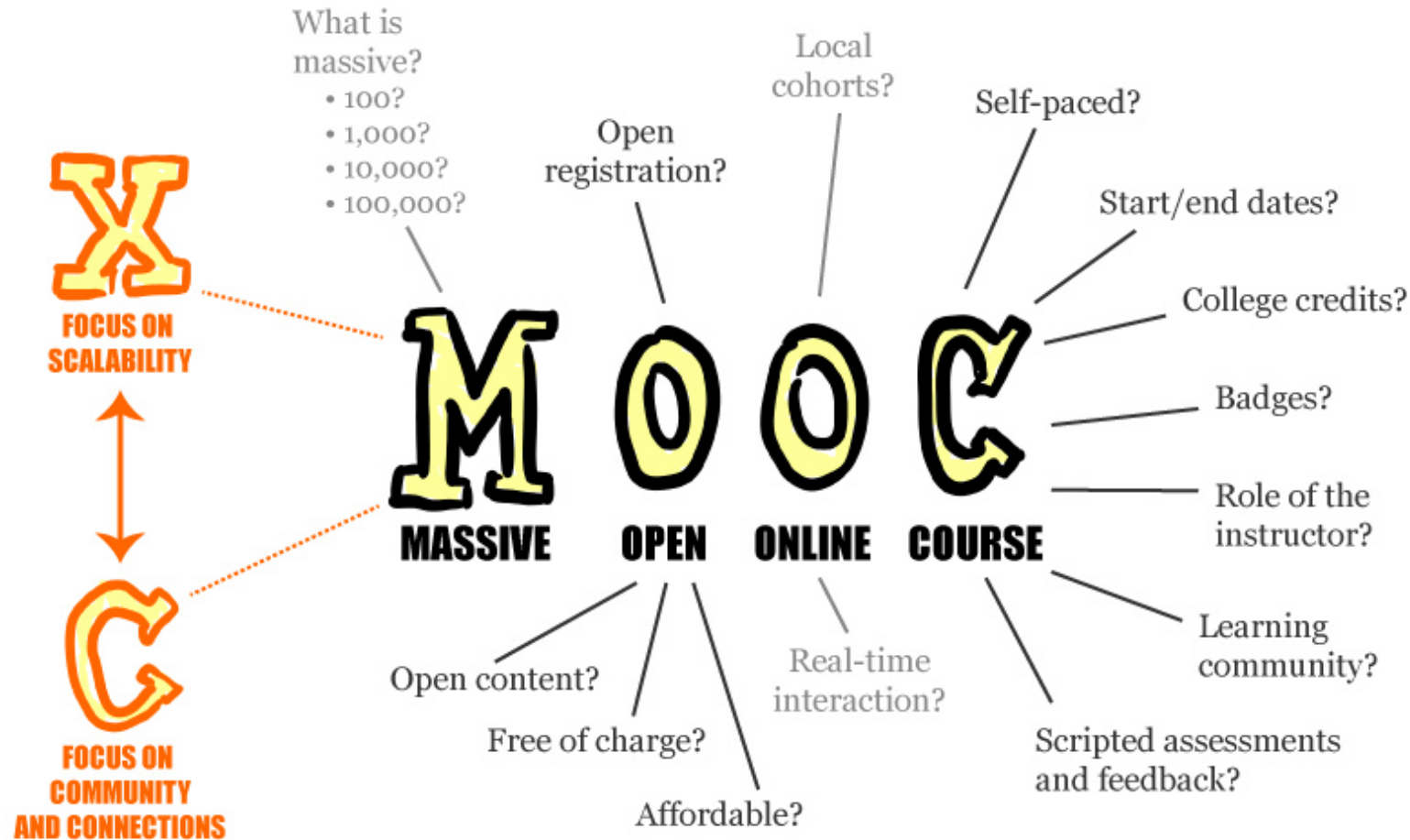
How do we know anything at all?

They are not an accumulation of facts, they are a system or form of organization, a way of seeing the world.

Science, knowledge are like language

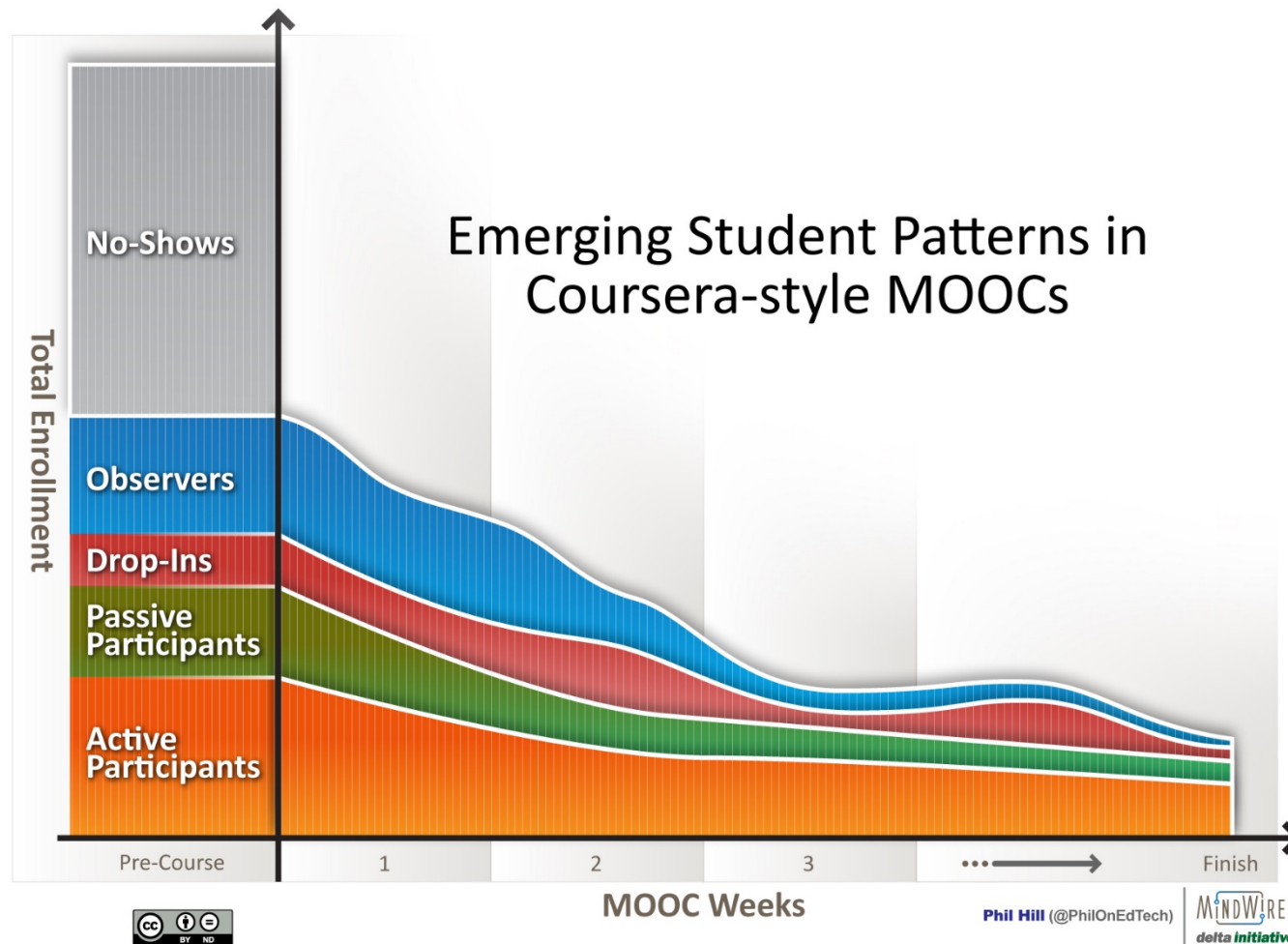Image: http://www.atelier.net/en/trends/articles/wolfram-alpha-plugging-vast-electronic-brain

‘MOOC’ stands for “Massive Open Online Course” and were developed in 2008. Examples include Coursera, FutureLearn.

Their MOOCs, our MOOCs

Image: https://en.wikipedia.org/wiki/Massive_open_online_course

Emerging Student Patterns in Coursera-style MOOCs

No-Shows

Observers

Drop-Ins

Passive Participants

Active Participants

Total Enrollment

Pre-Course | 1 | 2 | 3 | ...→ | Finish

MOOC Weeks

Phil Hill (@PhilOnEdTech)

MindWires delta initiative

MOOCs have face a storm of criticism – unprepared students, bad pedagogy, lack of educational standards, a failure to engage, and ultimately, dropouts.

Criticisms of the MOOCs

Image: http://mfeldstein.com/emerging-student-patterns-in-moocs-a-revised-graphical-view/

What does it mean to 'complete' a newspaper? What is the proper foundation for a buffet?

A Wider Conception of Learning

What does it mean to be literate?

風 Air/Wind · 志 Ambition · 有 Be · 美 Beauty · 生 Birth/Life · セ Chaos · 子 Child · 英 Courage

娘 Daughter · 縁 Destiny · 火 Fire · 怒 Forgiveness · 友 Friends · 先 Future · 順 Gentleness

福 Good Fortune · 恩 Grace · 楽 Happy · 和 Harmony · 医 Healing · 天 Heaven · 信 Devotion

方 Direction · 夢 Dream · 早 Early · 氣 Energy · 父 Father · 心 Heart · 貴 Honor

This brings us back to language – what is the 'core' of a language? What are the foundations?
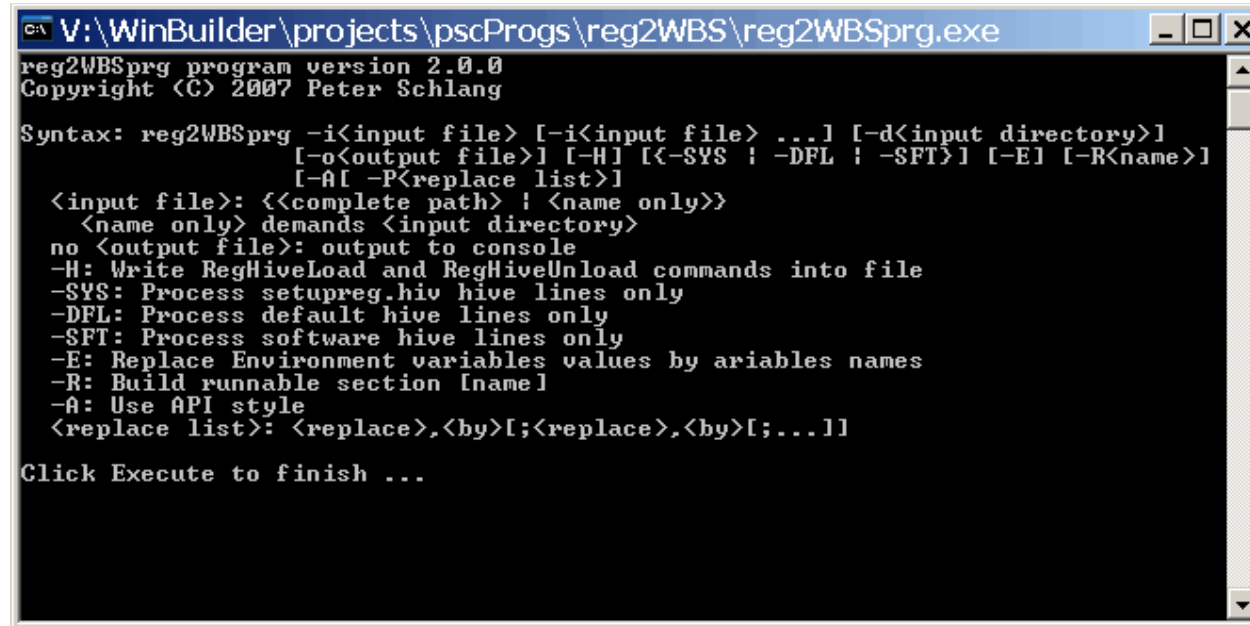
Meaning – it's not just semantics any more

Image: http://www.alegoo.com/pictures7/art-tattoos-2/tattoos-with-meaning-029/

Syntax	Cognition
Semantics	Context
Pragmatics	Change

This is a frame for understanding new media – and for understanding what it is to know, learn, and understand

The Critical Literacies

Syntax

Not just rules and grammar


```
V:\WinBuilder\projects\pscProgs\reg2WBS\reg2WBSprg.exe

reg2WBSprg program version 2.0.0
Copyright (C) 2007 Peter Schlang

Syntax: reg2WBSprg -i<input file> [-i<input file> ...] [-d<input directory>]
                   [-o<output file>] [-H] [<-SYS | -DFL | -SFT>] [-E] [-R<name>]
                   [-A[ -P<replace list>]
     <input file>: <<complete path> | <name only>>
        <name only> demands <input directory>
no <output file>: output to console
-H: Write RegHiveLoad and RegHiveUnload commands into file
-SYS: Process setupreg.hiv hive lines only
-DFL: Process default hive lines only
-SFT: Process software hive lines only
-E: Replace Environment variables values by ariables names
-R: Build runnable section [name]
-A: Use API style
<replace list>: <replace>,<by>[;<replace>,<by>[;...]]

Click Execute to finish ...
```

Forms: archetypes? Platonic ideals?
Rules: grammar = logical syntax
Operations: procedures, motor skills
Patterns: regularities, substitutivity (eggcorns, tropes)
Similarities: Tversky - properties, etc

Semantics

theories of truth / meaning / purpose / goal

⟦SeMANTiCS⟧
of a structure

By Tom 7

$$⟦ \text{🥕} ⟧ = \text{carrot}$$

$$⟦ \text{🎳} ⟧ = \text{bowling pin}$$

http://www.cs.cmu.edu/~tom7/csnotes/fall02/semantics.gif

- Sense and reference (connotation and denotation)
- Interpretation (Eg. In probability, Carnap - logical space; Reichenbach - frequency; Ramsey - wagering / strength of belief)
- Forms of association: Hebbian, contiguity, back-prop, Boltzmann
- Decisions and decision theory: voting / consensus / emergence
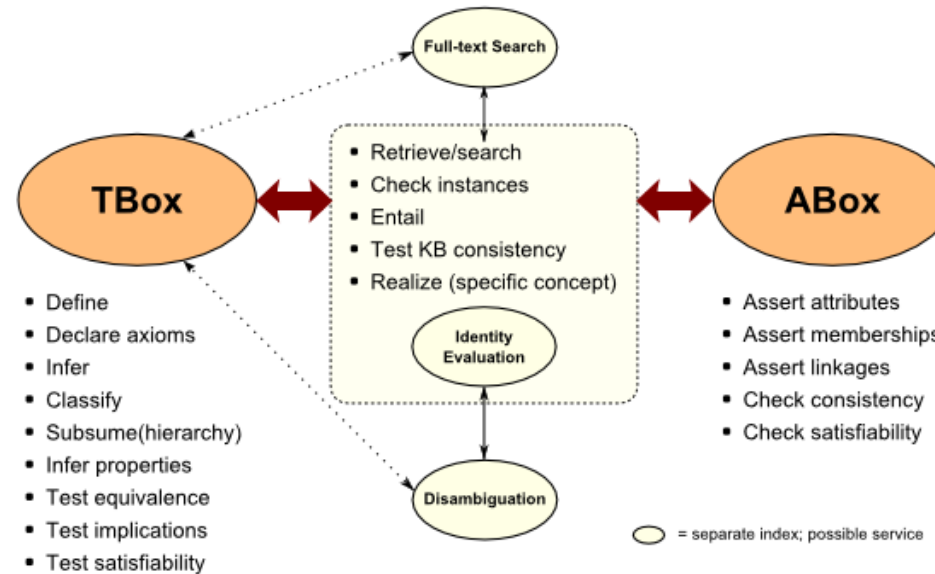
Pragmatics
use, actions, impact

- Speech acts (J.L. Austin, Searle) assertives, directives, commissives, expressives, declarations (but also - harmful acts, harassment, etc)
- Interrogation (Heidegger) and presupposition
- Meaning (Wittgenstein - meaning is use)

Cognition
reasoning, inference and explanation

Full-text Search

TBox
- Retrieve/search
- Check instances
- Entail
- Test KB consistency
- Realize (specific concept)

ABox

Identity
Evaluation

- Define
- Declare axioms
- Infer
- Classify
- Subsume(hierarchy)
- Infer properties
- Test equivalence
- Test implications
- Test satisfiability

- Assert attributes
- Assert memberships
- Assert linkages
- Check consistency
- Check satisfiability

Disambiguation

= separate index; possible service

http://www.mkbergman.com/category/description-logics/

- description - X (definite description, allegory, metaphor)
- definition - X is Y (ostensive, lexical, logical (necess. & suff conds), family resemblance - but also, identity, personal identity, etc
- argument - X therefore Y - inductive, deductive, abductive (but also: modal, probability (Bayesian), deontic (obligations), doxastic (belief), etc.)
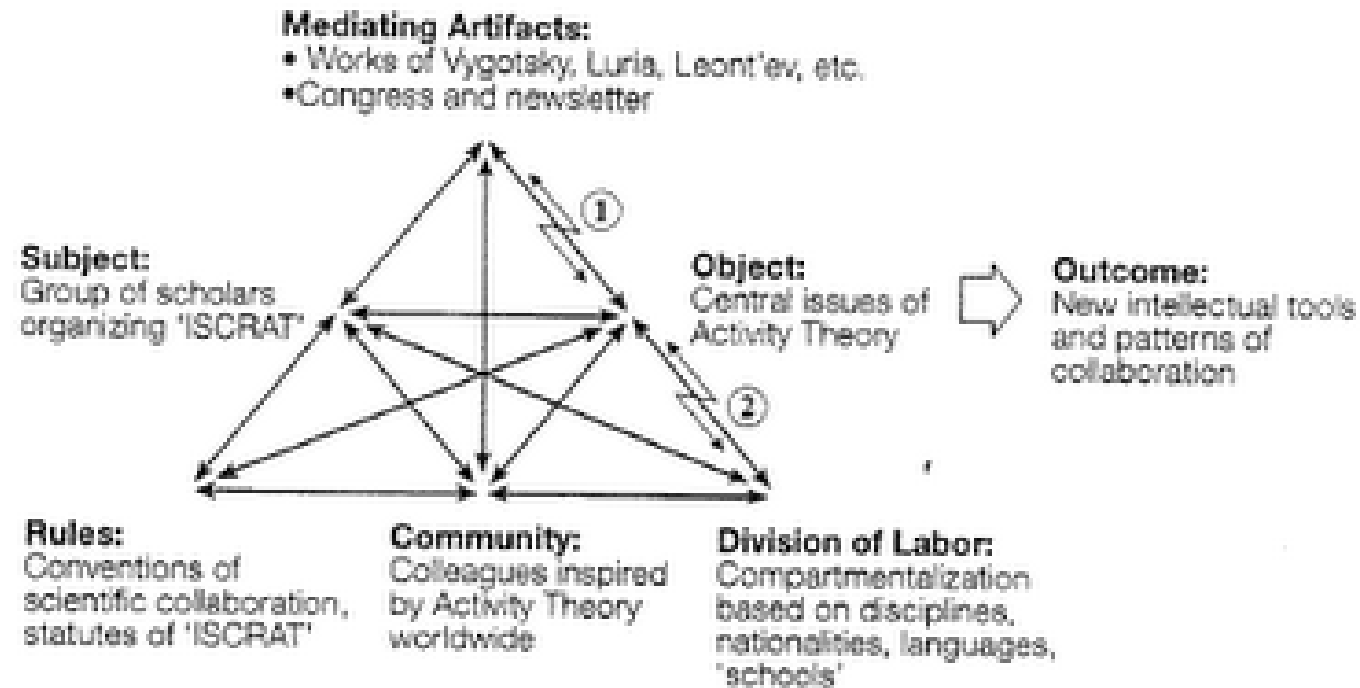- explanation - X because of Y (causal, statistical, chaotic/emergent)

Context
placement, environment

Instrumental	Savoring	Inspirational
Eating to **get things done**	Engaging in food for the sake of pleasure or entertainment	Epicenter of trends; incubator of things to savor in the future

INCREASING SOPHISTICATION →

• Price sensitivity	• Freshness	• Small craft production
• Iconic experience	• Flavor distinction	• Heirloom / heritage
• Quick and easy	• Narrative	• Knowledge
• Moderation	• Local	• Passion
• Positive nutrition	• Seasonal	• Technoemotional
• Absence of negatives	• Street	• Slow
• Functional benefits	• Culinary tradition	
	• Culinary assistance	

Instrumental	Savoring	Inspirational
ENERGY DRINK: RED BULL	COFFEE: STARBUCKS	WINE: TINY FRENCH VINTNER

http://www.occasionbasedmarketing.com/what-it-is

- explanation (Hanson, van Fraassen, Heidegger)

- meaning (Quine); tense - range of possibilities

- vocabulary (Derrida); ontologies, logical space

- Frames (Lakoff) and worldviews

Change

Mediating Artifacts:
• Works of Vygotsky, Luria, Leont'ev, etc.
• Congress and newsletter

Subject:
Group of scholars
organizing 'ISCRAT'

Object:
Central issues of
Activity Theory

Outcome:
New intellectual tools
and patterns of
collaboration

Rules:
Conventions of
scientific collaboration,
statutes of 'ISCRAT'

Community:
Colleagues inspired
by Activity Theory
worldwide

Division of Labor:
Compartmentalization
based on disciplines,
nationalities, languages,
'schools'

- relation and connection: I Ching, logical relation
- flow: Hegel - historicity, directionality; McLuhan - 4 things
- progression / logic -- games, for example: quiz&points, branch-and-tree, database
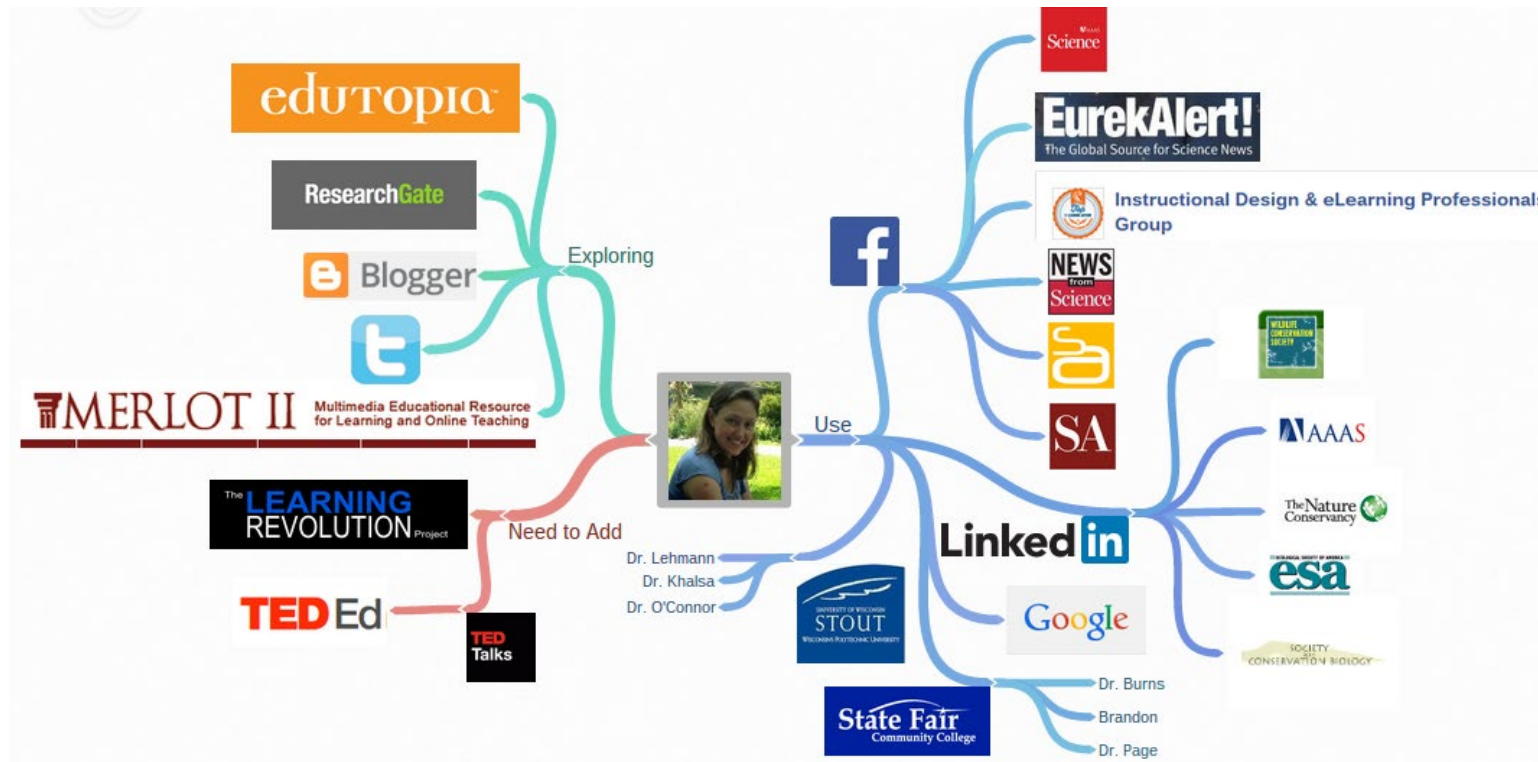- scheduling - timetabling - events; activity theory / LaaN

Knowledge as Recognition

Image: https://en.wikipedia.org/wiki/How_to_Create_a_Mind
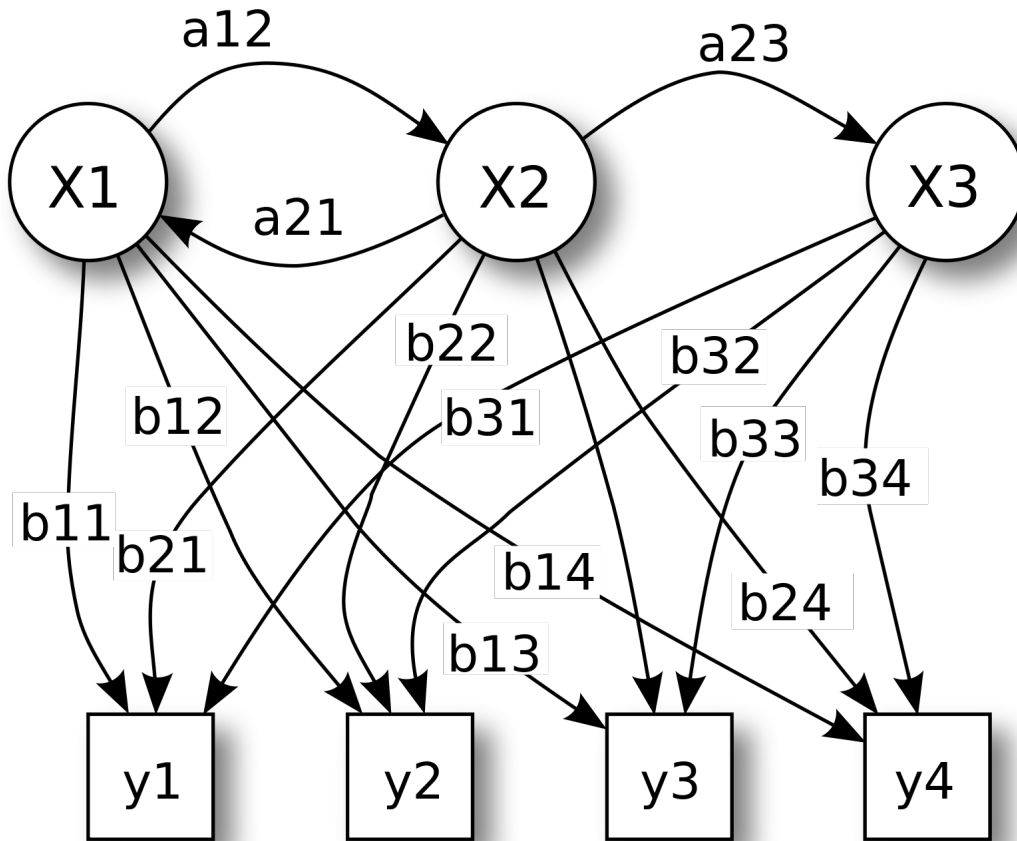
Our conception o
knowledge itself
is insufficient to
account for these
various
dimensions of
literacy.

Our work at NRC is devoted to creating a linked interconnected *environment* where people can experience and grow.

Learning Environment as a Place to Grow

Image: http://taftportfolio.blogspot.ca/p/personal-learning-environment-ple.html

Stephen Downes

http://www.downes.ca