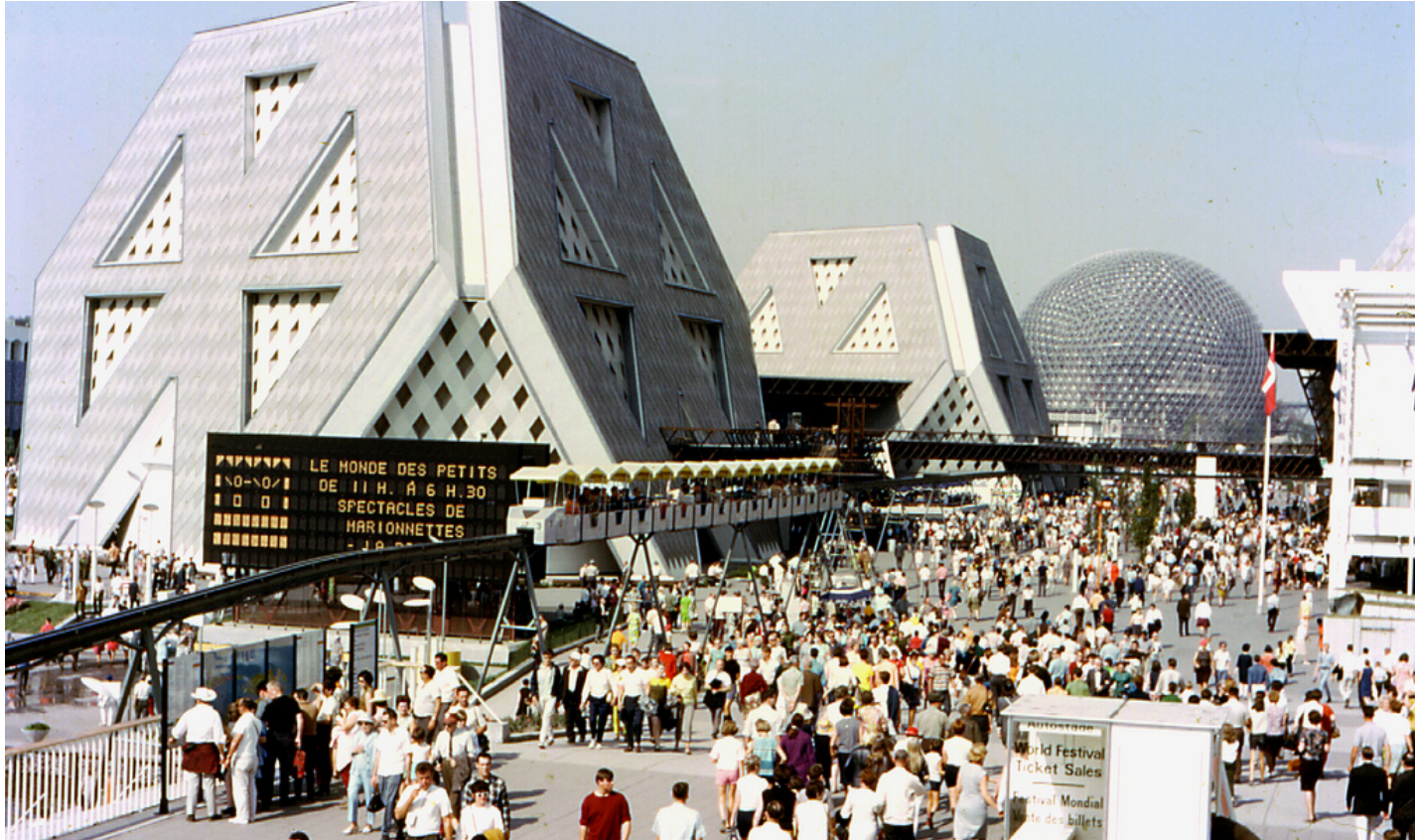


The Final Frontier: Space

Stephen Downes
SALTISE Montreal
June 3, 2016

In 1967 I attended
Expo 67 in
Montreal





There were 60 Nations and 90 Pavilions

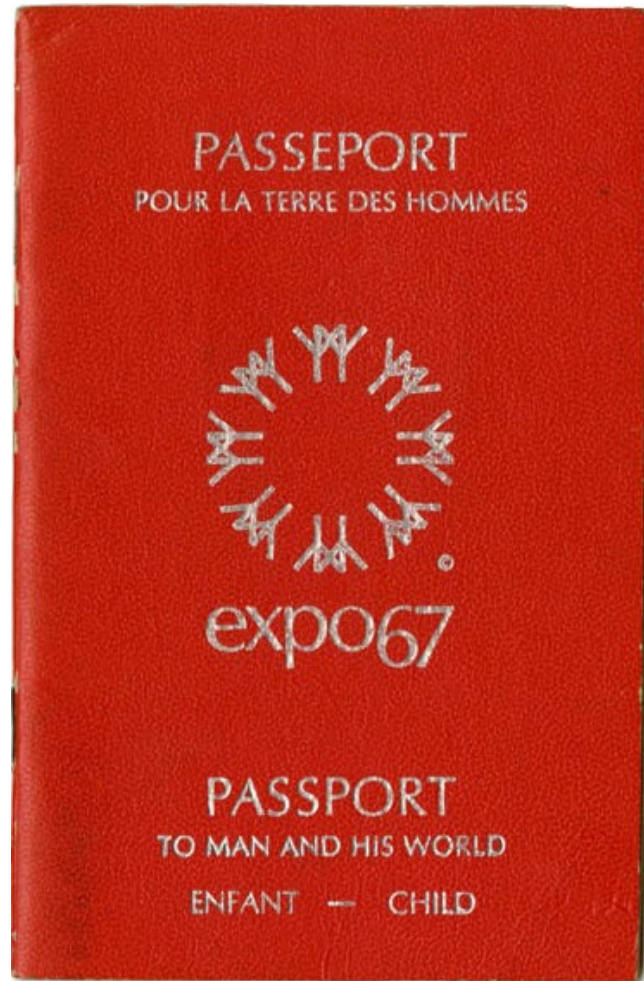


I remember the
Ceylon Pavilion
most of all

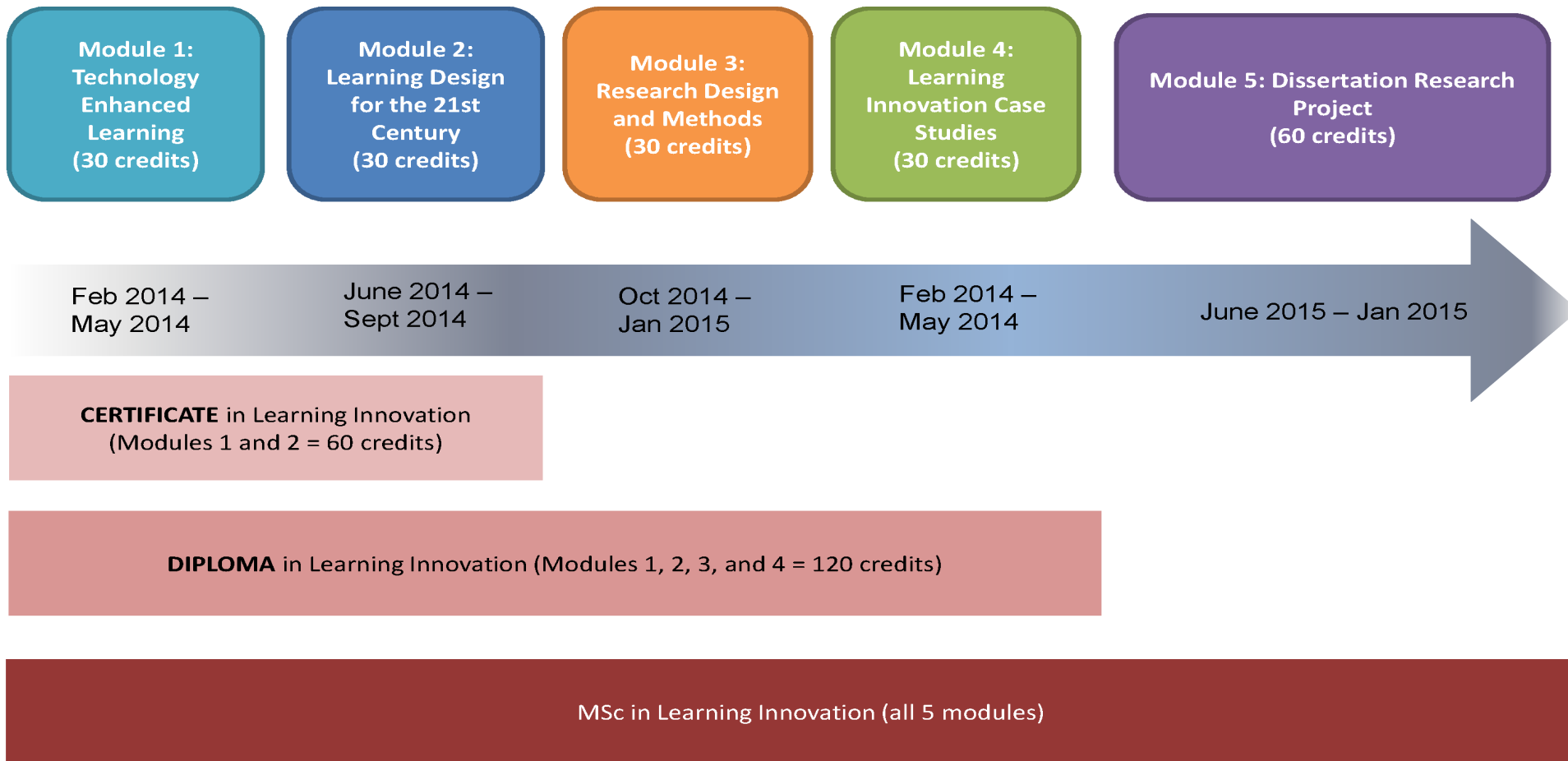
Could be me!

I learned about
tea plantations!

Did we do it wrong?



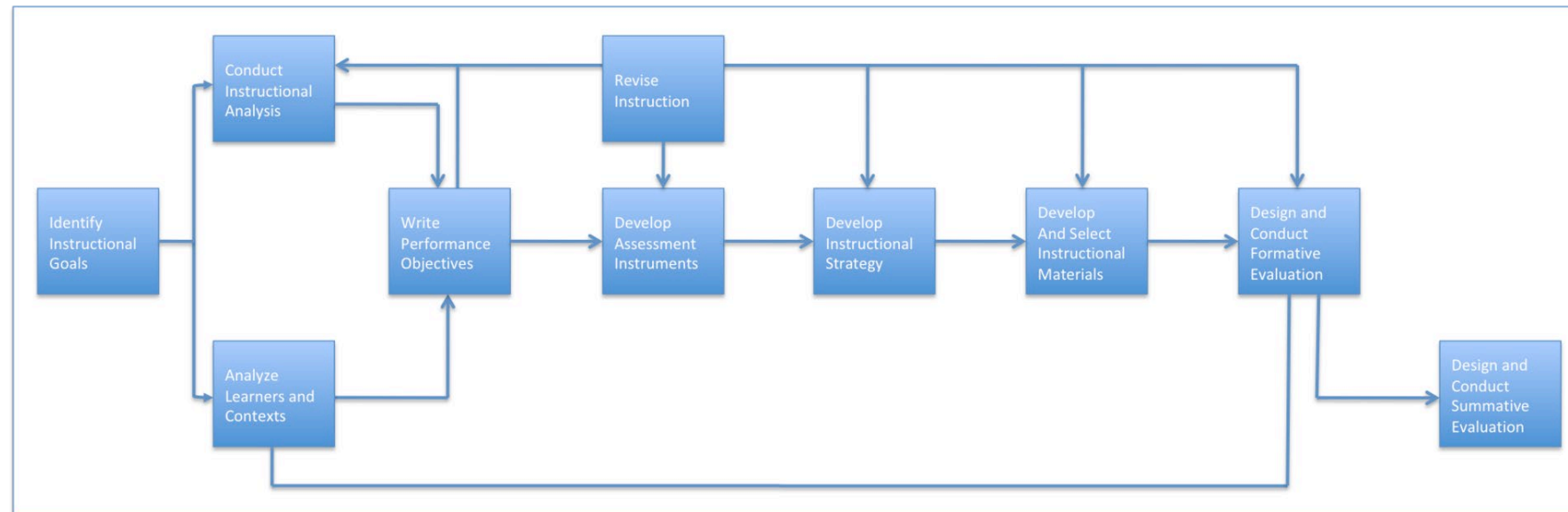
Would this have been better?



MSC Module Structure https://www2.le.ac.uk/departments/education/distance-learning/mscli/images/copy_of_MScLIDL_structure1.png/view

Would this?

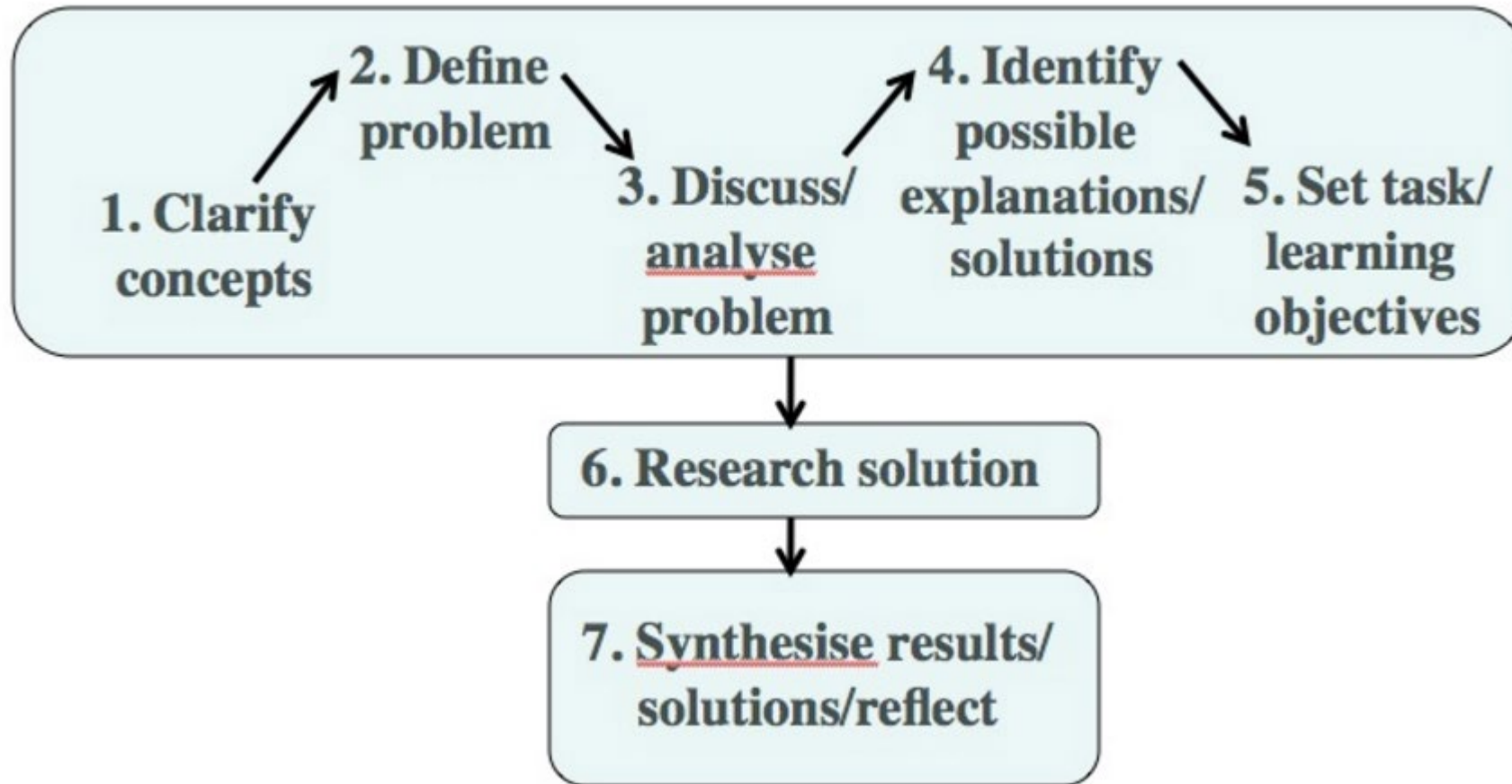
- The ‘process’ of learning – learning step-by-step
 - For example, Gagne’s nine events
 - Pre-requisites – “ learners acquire prerequisite skills before attempting superordinate’s ones”



Yes, I'm citing Wikipedia:

https://en.wikipedia.org/wiki/Instructional_design

Would this?



The Maastricht seven-jump method for PBL tutorials (derived from Gijeselaers, 1995). Via <http://www.tonybates.ca/2014/12/01/can-you-do-experiential-learning-online-assessing-design-models-for-experiential-learning/>

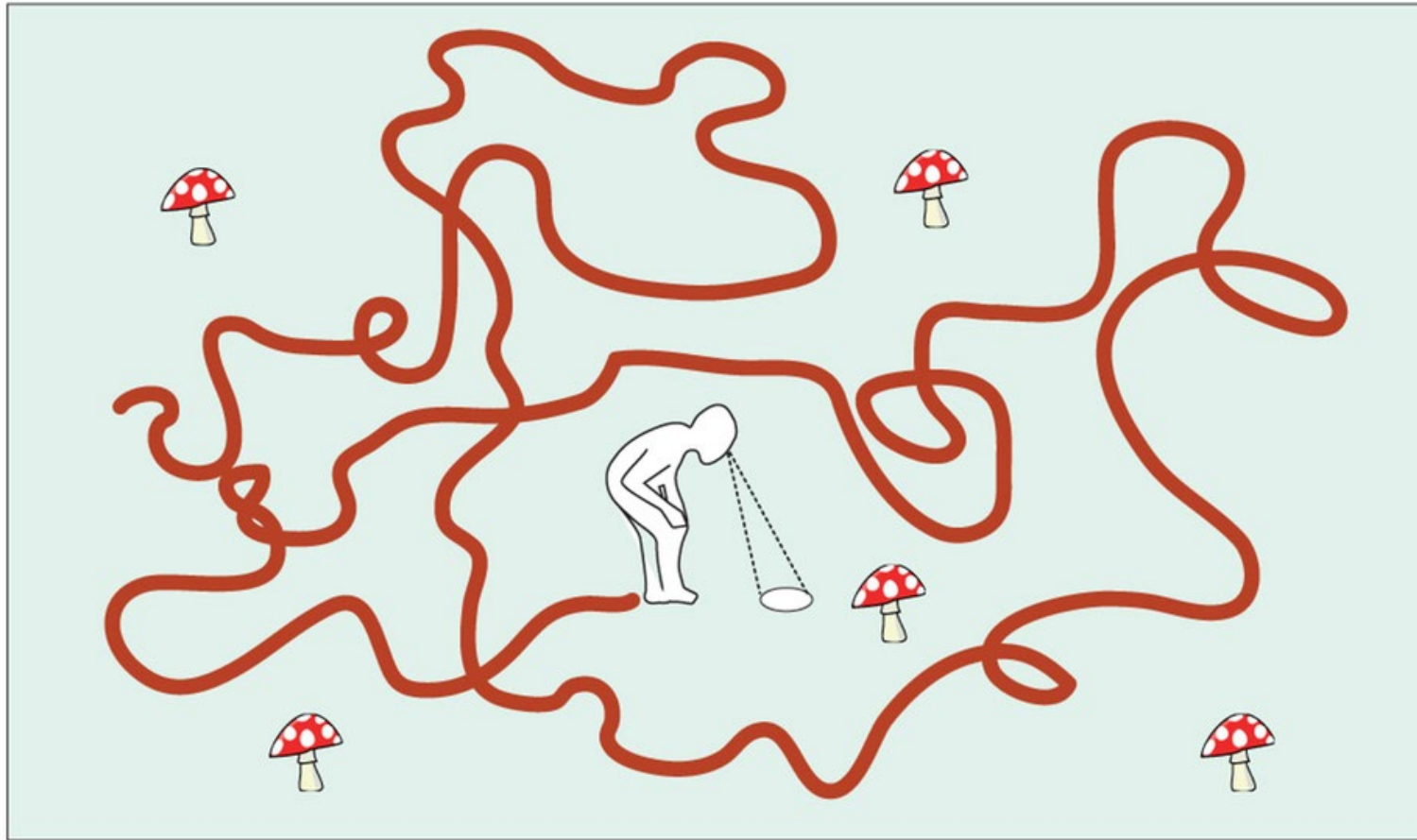
The dominant paradigm for learning today is time

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
1st Week				module 1 materials & instructions available (@ website & ANGEL)			
2nd Week			Submission due for module 1 assignment (@ blog)	module 2 materials & instructions available (@ website & ANGEL)			
3rd Week	module 1 grade and feedback available (@ANGEL)		Submission due for module 2 assignment (@ blog)	module 3 materials & instructions available (@ website & ANGEL)			

Even these people had a five year mission



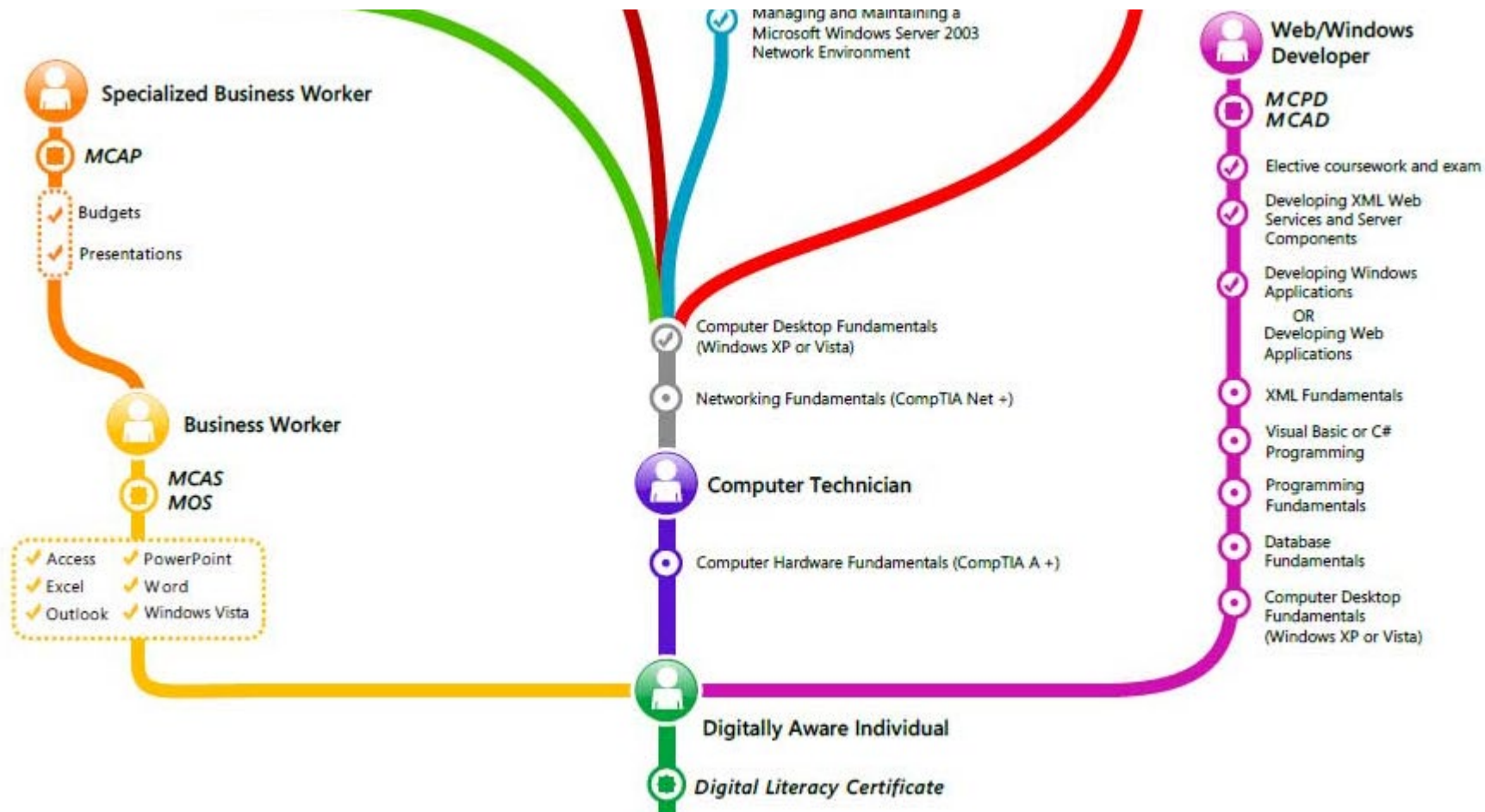
Let's explore what it means to have time as our dominant metaphor....



Marie Chupeau, Olivier Bénichou & Raphaël Voituriez, Cover times of random searches.

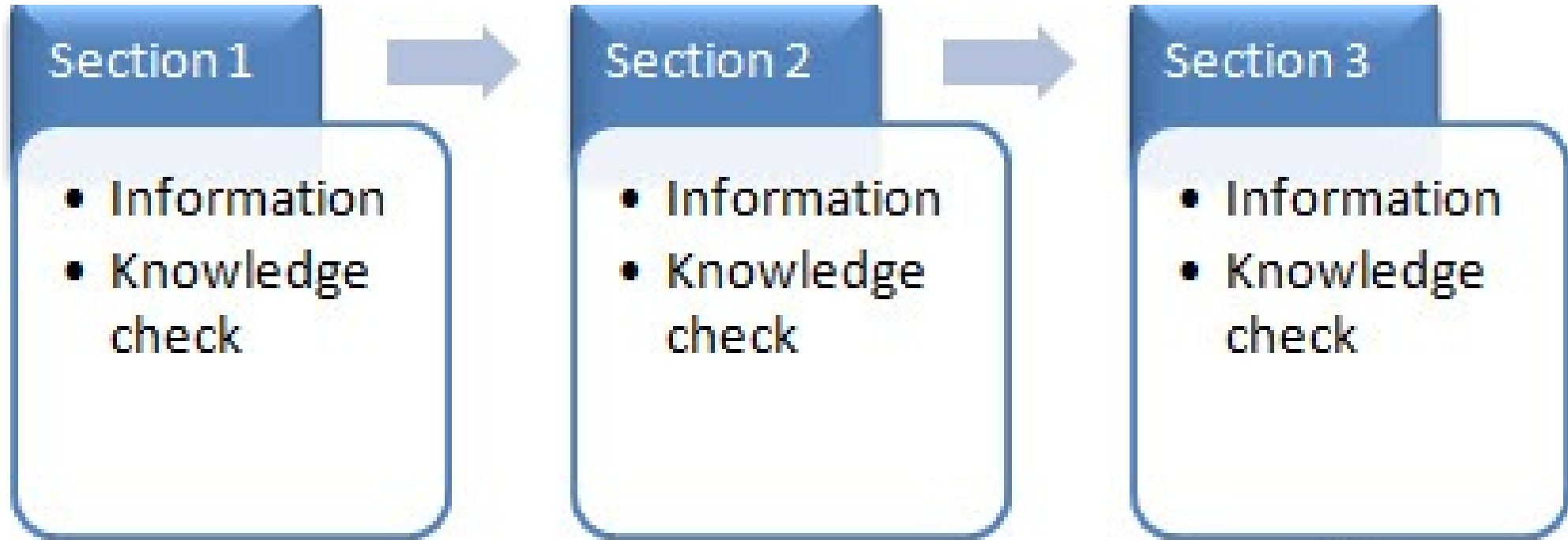
http://www.nature.com/nphys/journal/v11/n10/fig_tab/nphys3413_F1.html

Path or Road



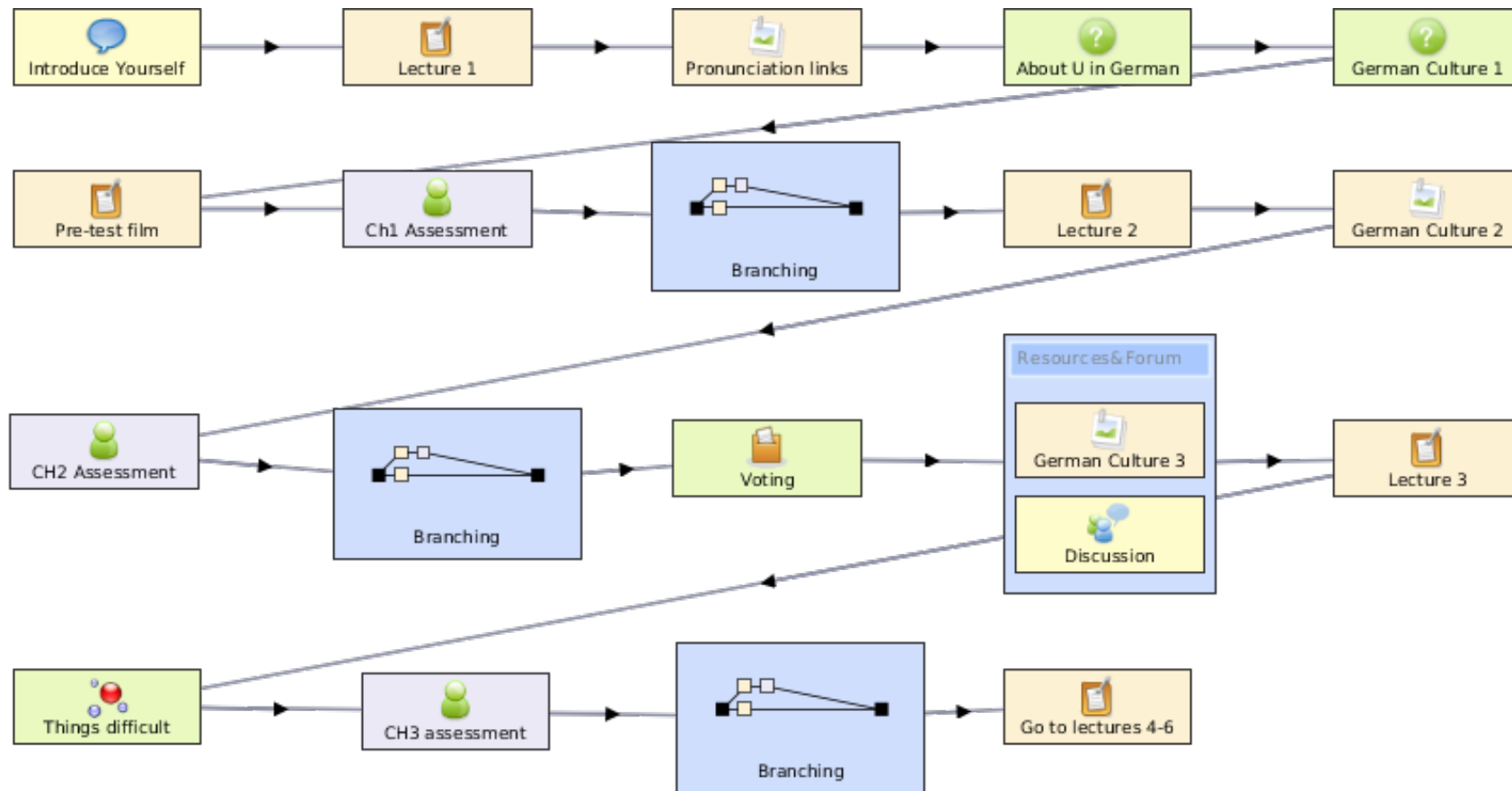
vs Field or Environment

Course



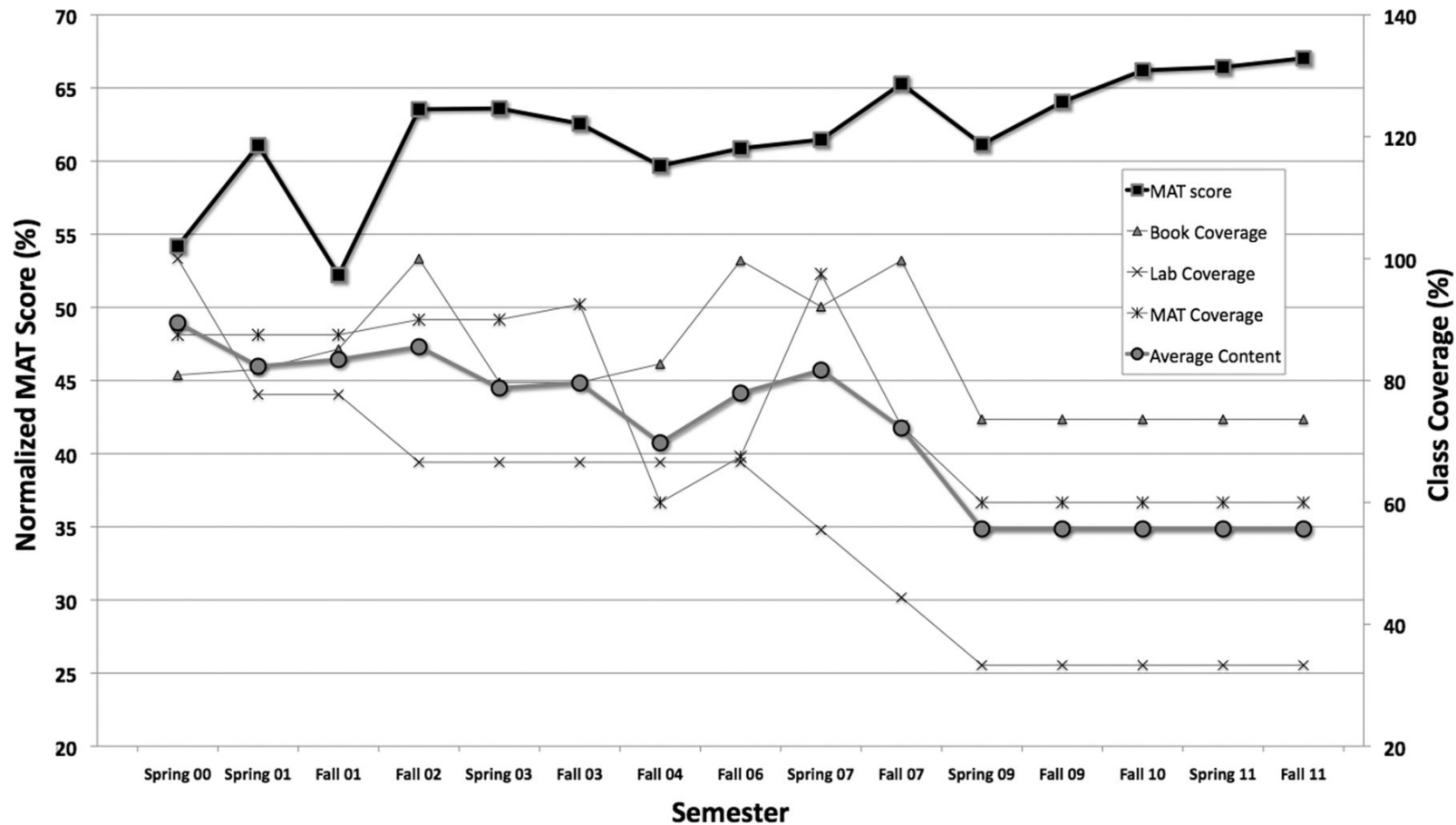
vs Mapping

Sequence / Pre-requisites



vs Core / Periphery

Movement / Coverage

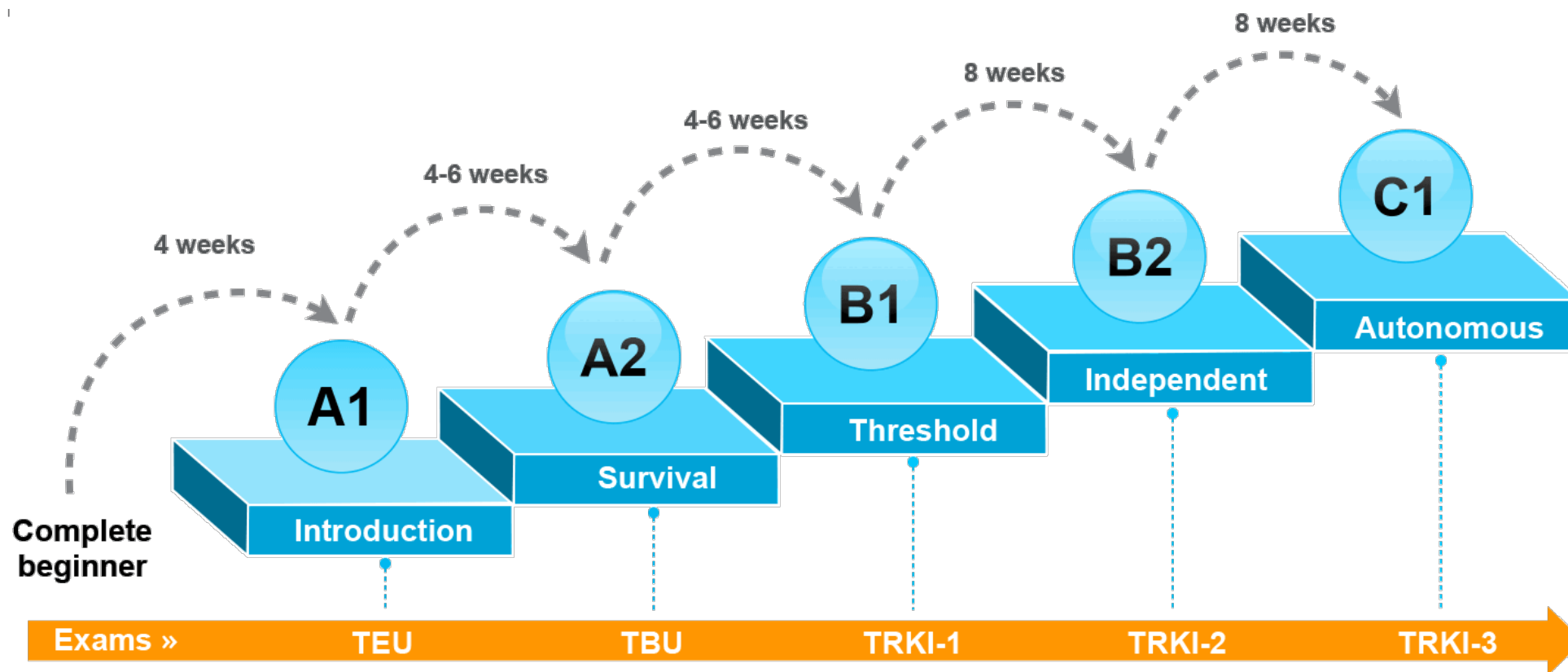


Douglas B. Luckie, et. al. Less teaching, more learning: 10-yr study supports increasing student learning through less coverage and more inquiry.

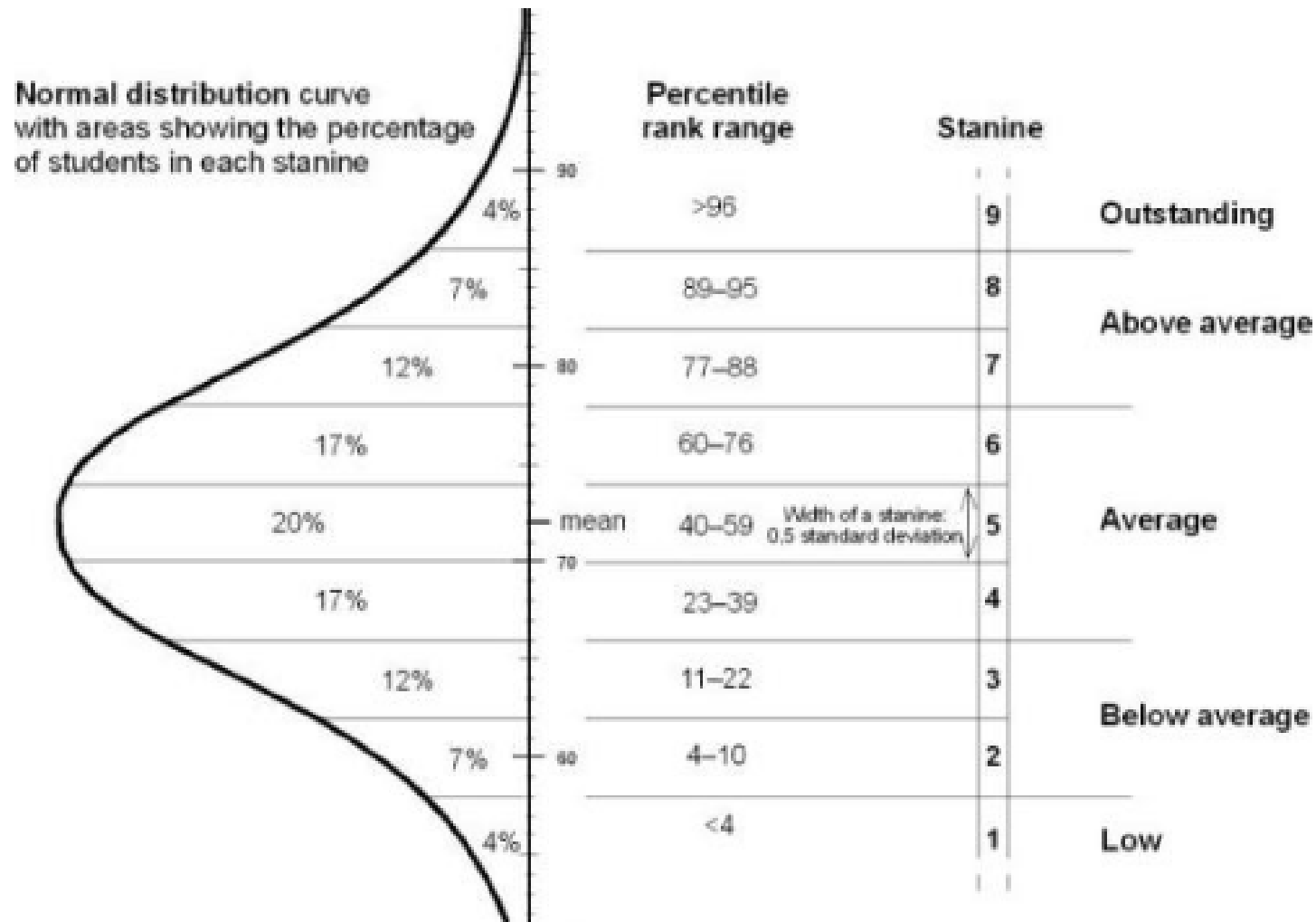
<http://advan.physiology.org/content/36/4/325>

vs Inquiry / Discovery

Thresholds / Levels

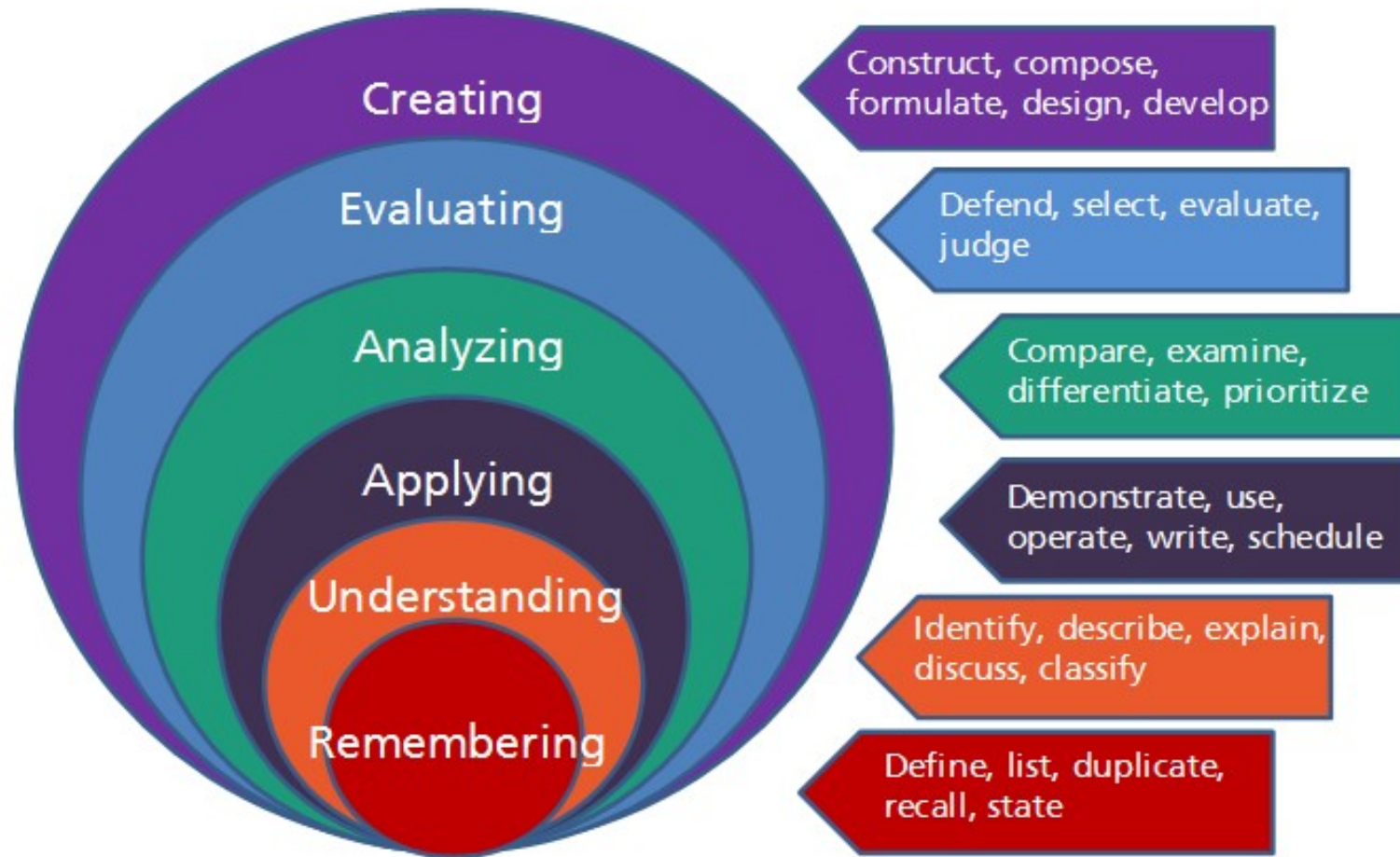


Position / Ranking



vs
Clustering
or grouping

Objectives or outcomes



vs Serendipity
or emergence

Leading / Led



vs Centered

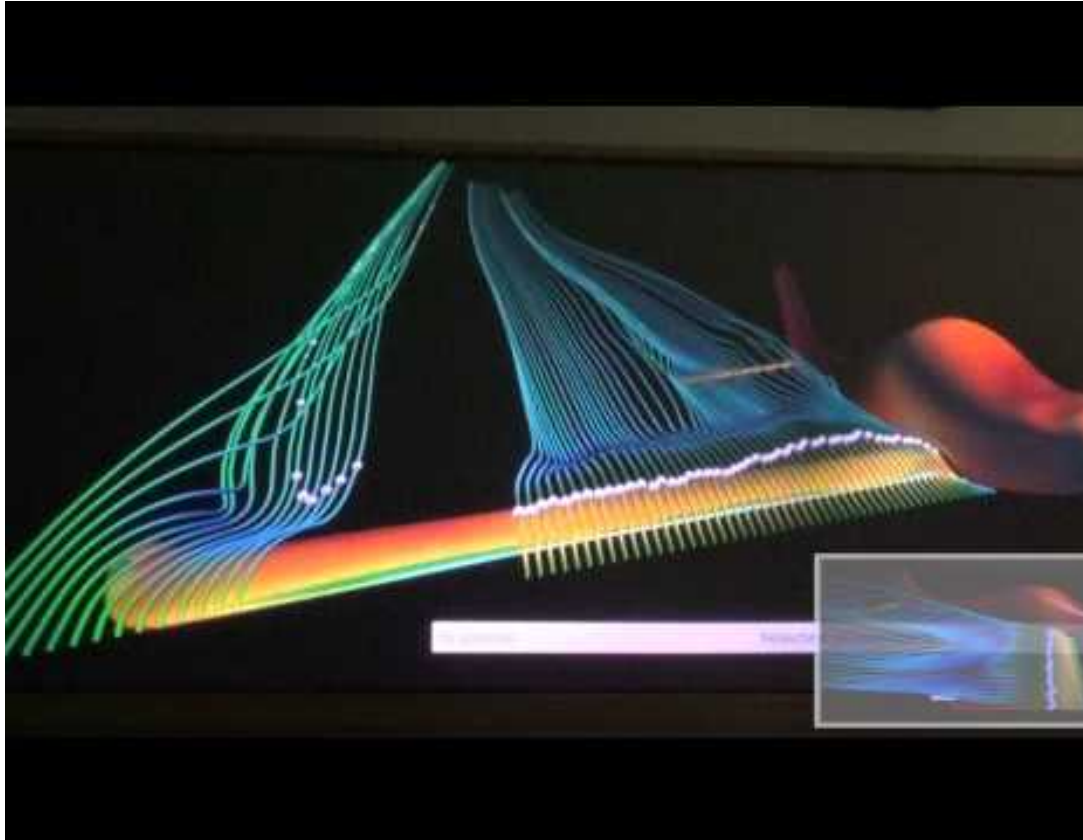
Summary

Path	Field
Course	Curriculum (as in 'mapping')
Sequence / Prerequisite	Core / periphery / foundation
Movement / covered	Inquiry / Discovery / Gaps
Threshold / Levels	Coverage / Construction
Positioning – first / last	Grouping / Clustering
Objective / target	Serendipity / emergence
Leading / Led	Centred

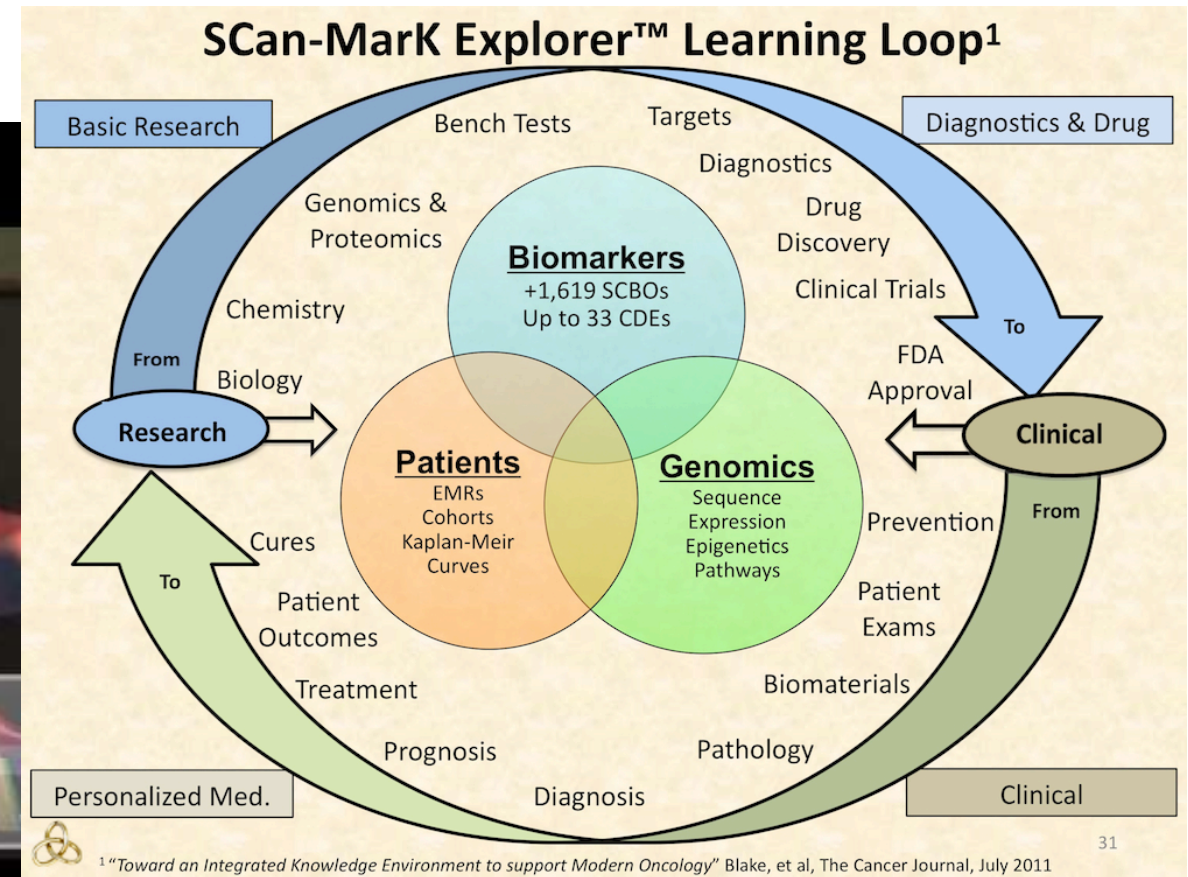
Technologies for a Learning Space



Field or Environment



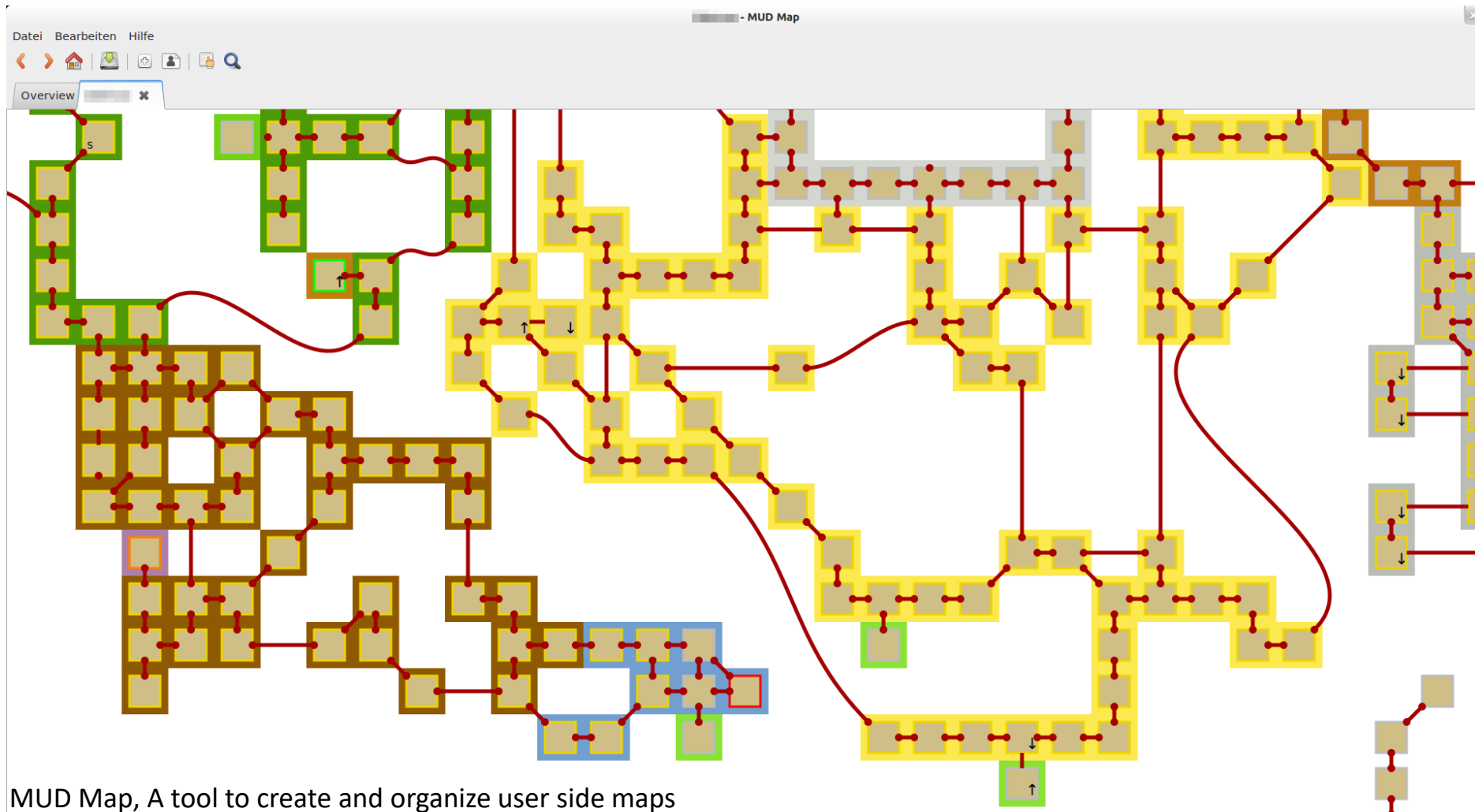
Visualization of simulation data in VR environment
<https://www.youtube.com/watch?v=PBJ98-txTBA>



Sophic Knowledge Environment.

<http://www.sophicalliance.com/Knowledge%20Environment.php>

Mapping

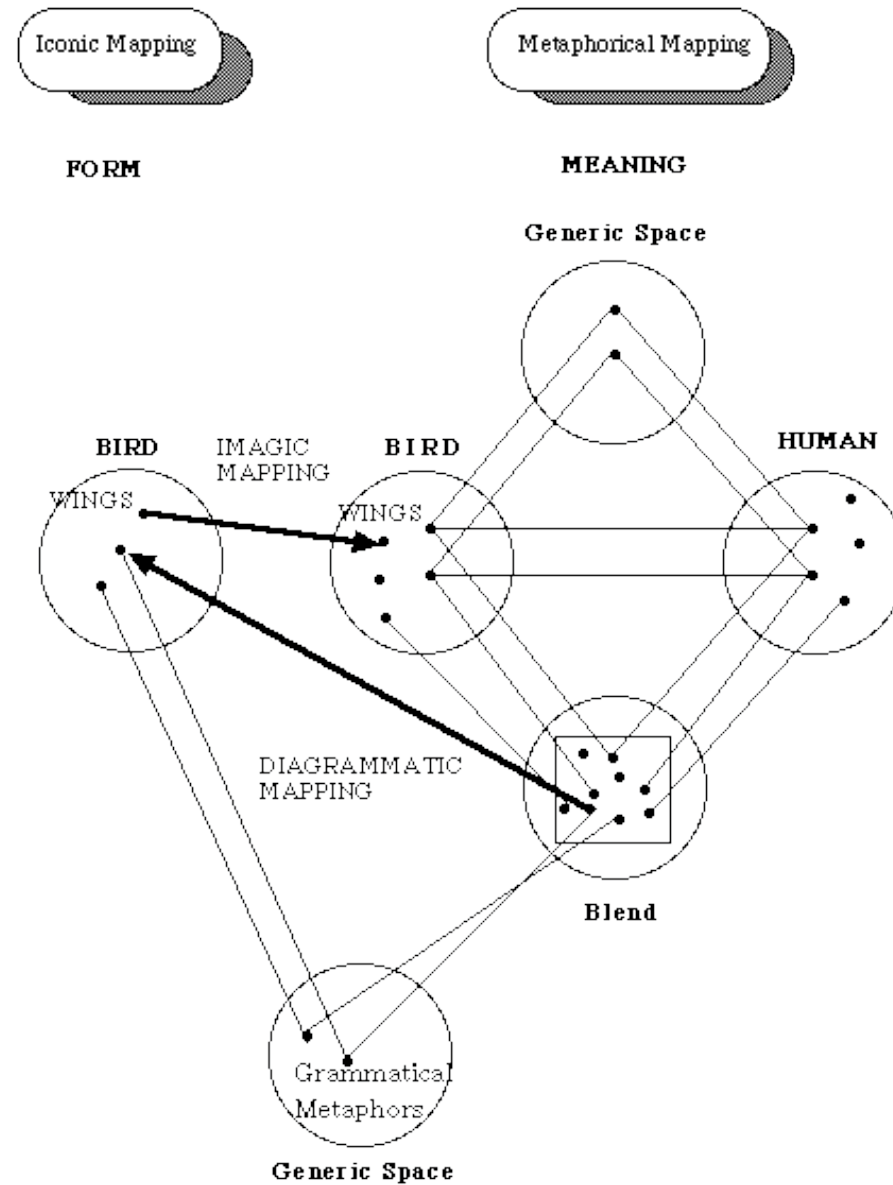


MUD Map, A tool to create and organize user side maps

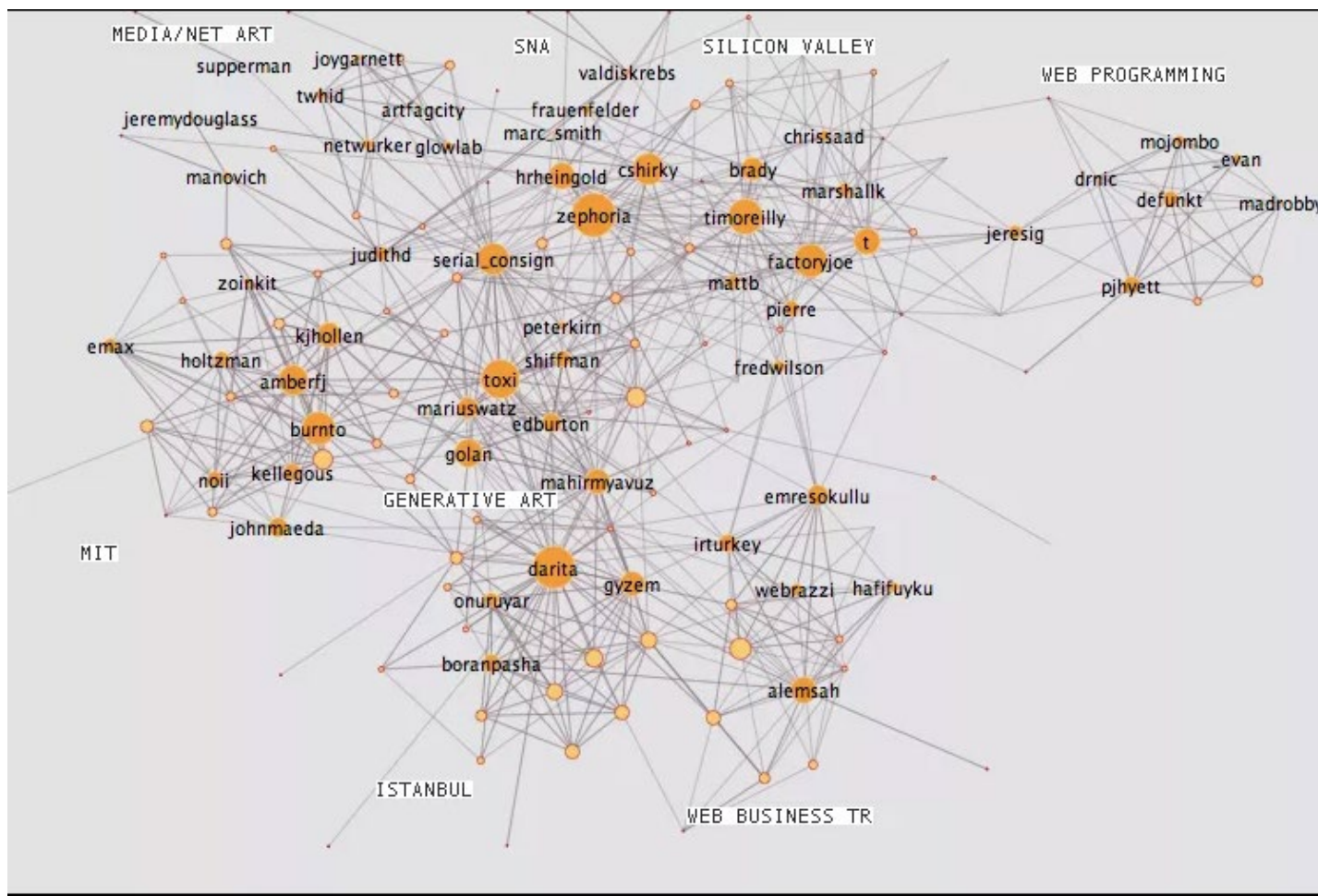
<https://sourceforge.net/projects/mudmap/>

Mapping Tools

- Concept maps
- Graph Databases



Core / Periphery



- Social network formation / following
- Network traversal tools
- Graph analysis

Inquiry / Discovery

Develop General Theories

General theories must be consistent with most or all available data and with other current theories.

Gather Data to Test Predictions

Relevant data can come from the literature, new observations or formal experiments. Thorough testing requires replication to verify results.

Make Observations

What do I see in nature?
This can be from one's own experiences, thoughts or reading.

Think of Interesting Questions

Why does that pattern occur?

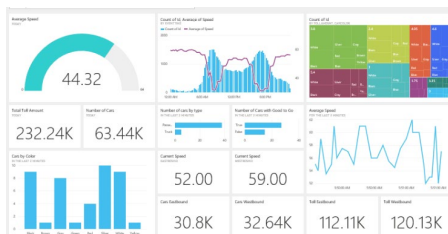
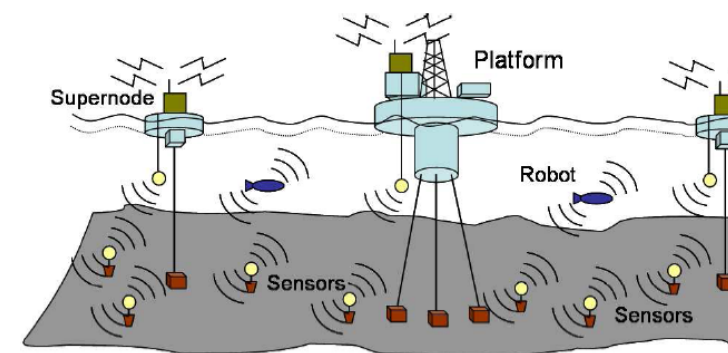
Refine, Alter, Expand or Reject Hypotheses

Develop Testable Predictions

If my hypothesis is correct, then I expect a, b, c, ...

Formulate Hypotheses

What are the general causes of the phenomenon I am wondering about?



Coverage / Construction



- Create

Create Explore Learn at RCH

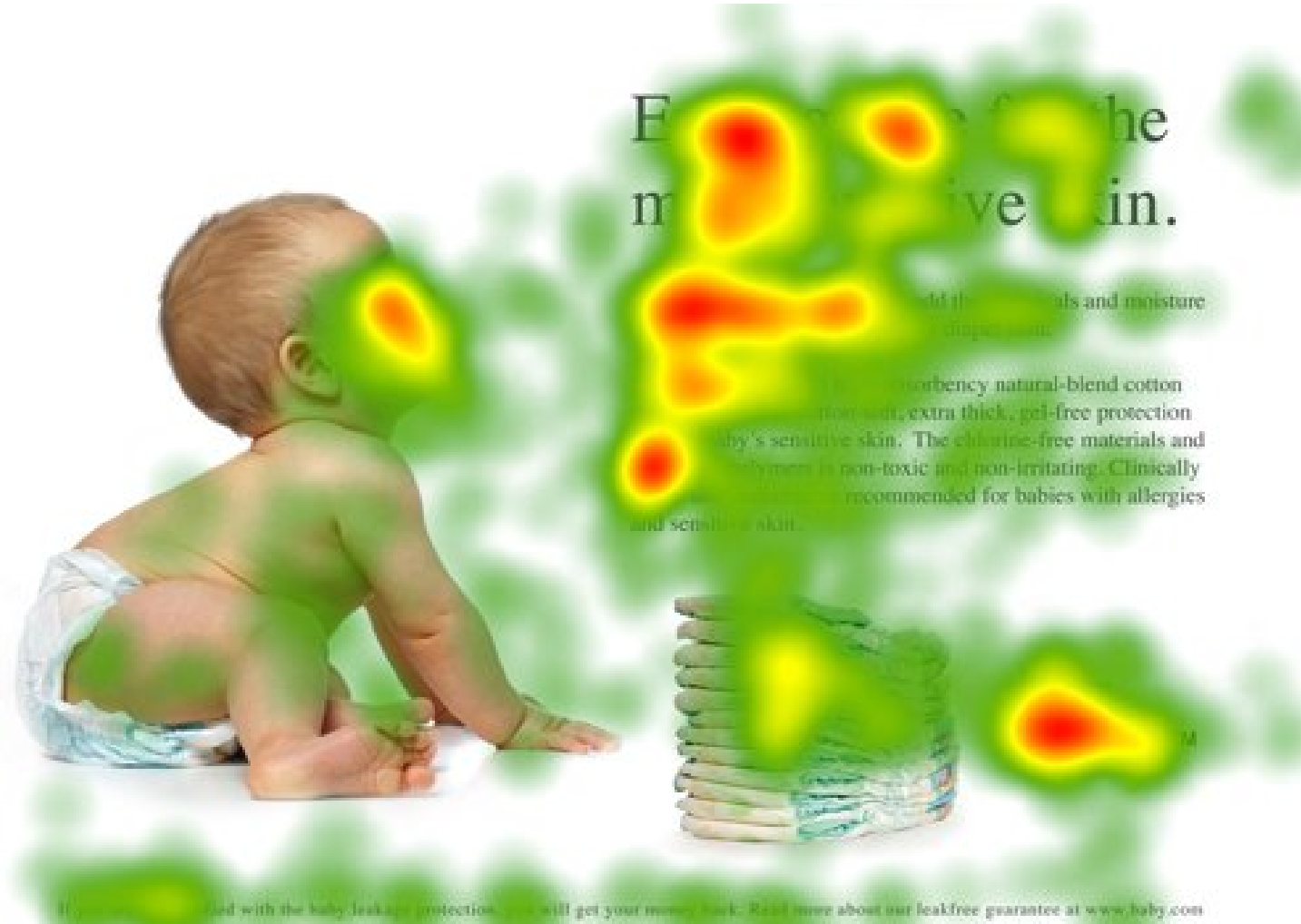
<https://play.google.com/store/apps/details?id=com.mediasaints.rch>

Clustering / Grouping



Rob Marvin, 5 Web Tools to Help You Stop Emailing, Start Collaborating,
<http://uk.pcmag.com/slack/74054/feature/5-web-tools-to-help-you-stop-emailing-start-collaborating>

Serendipity / Emergence



Emergence of the
most sensitive skin.

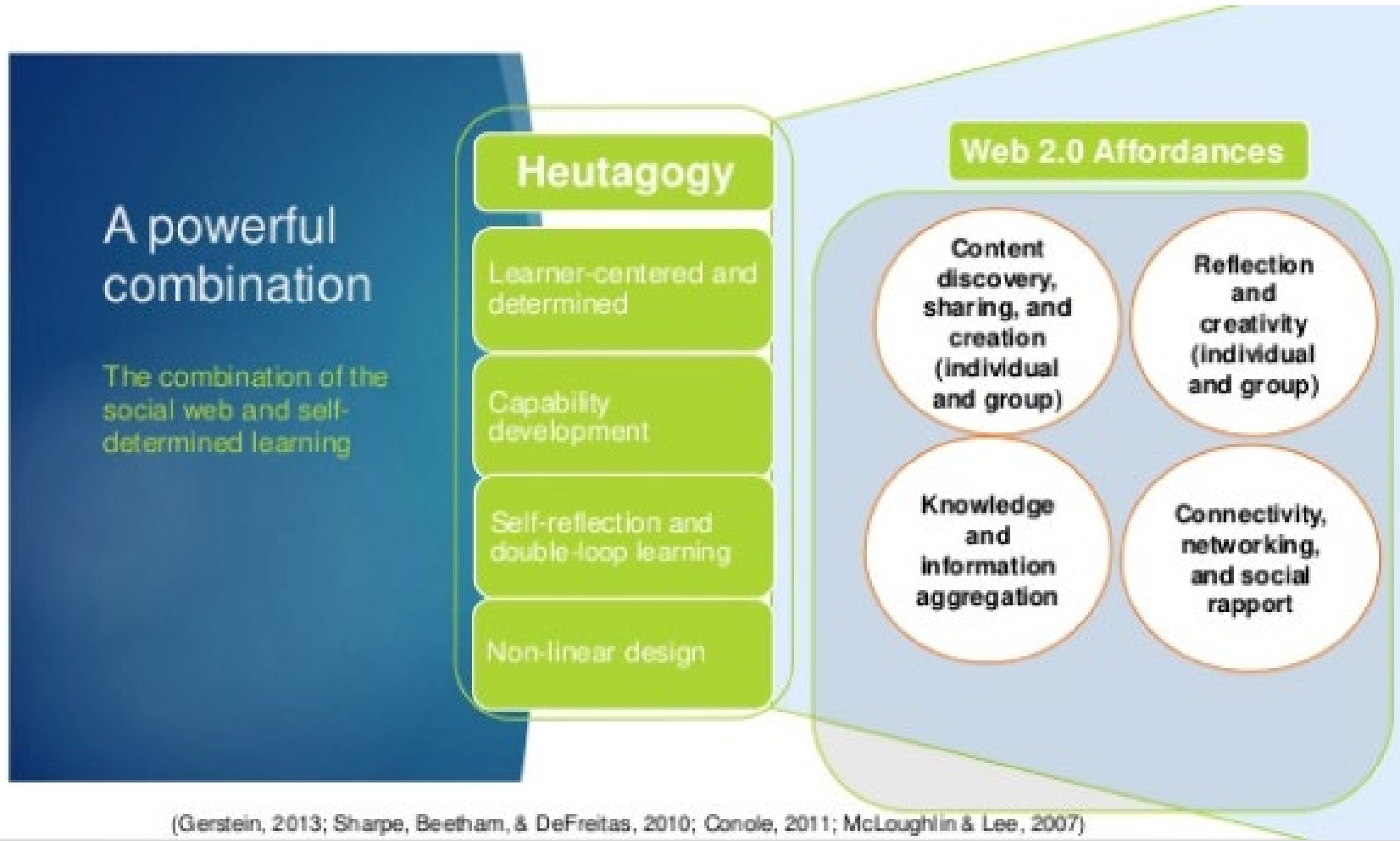
did the...als and moisture
...mpact...

...sorbency natural-blend cotton
...non-sat, extra thick, gel-free protection
...y's sensitive skin. The chlorine-free materials and
...olymers is non-toxic and non-irritating. Clinically
...recommended for babies with allergies
and sensitive skin.

...ed with the baby leak-free protection... will get your money back. Read more about our leak-free guarantee at www.baby.com

- The Wisdom of Crowds
- Business intelligence

Centered





Stephen Downes

<http://www.downes.ca>