Trends in education

Facts, Fads and Fiction

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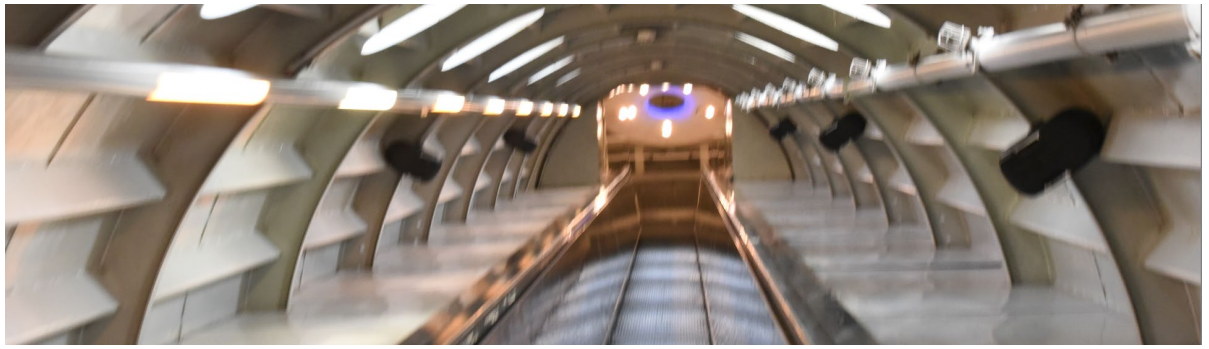
It’s harder to predict a failure than it is to predict a success

Everything on the upslope looks promising, but few products actually make it into the trough of disillusionment (which actually indicates they’re still worth talking about)

Source: Gartner (July 2016)

http://www.gartner.com/newsroom/id/3412017



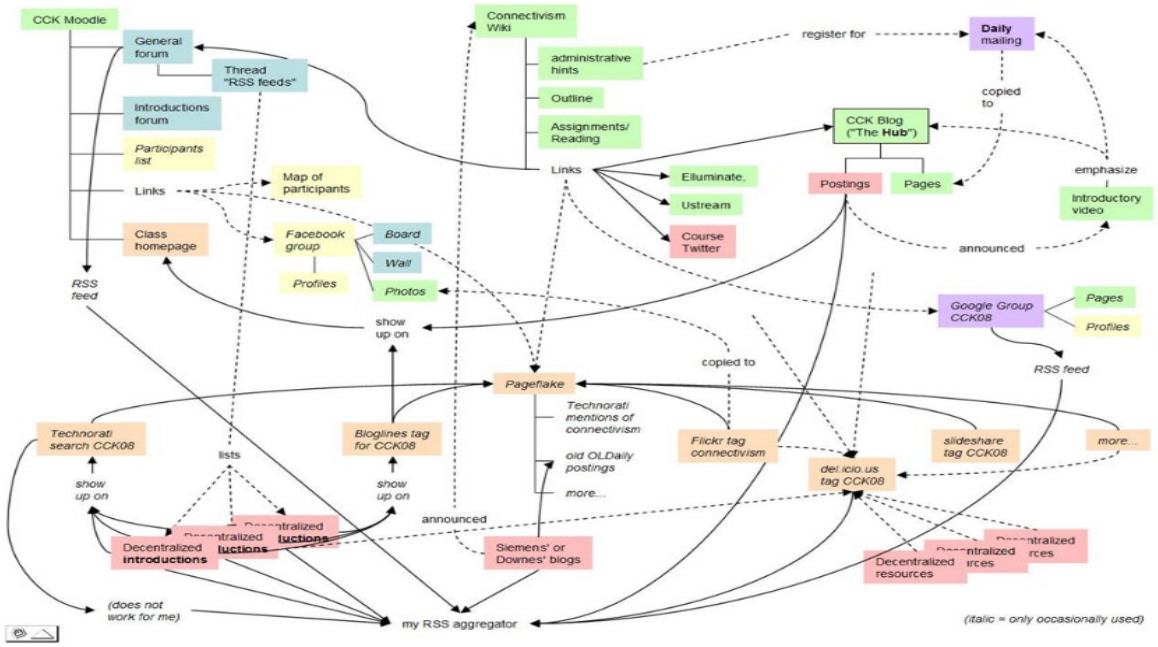
Some of the more promising candidates…

- Open online learning
- Learning analytics
- Personalized learning
- Competencies
- Digital badges
- Blockchain security
- Virtual personal assistants
- Internet of things

MOOCs and open online learning

A lot of scepticism today… but more people took MOOCs in 2015 than in all previous years combined

The Connectivist MOOC (cMOOC) Design

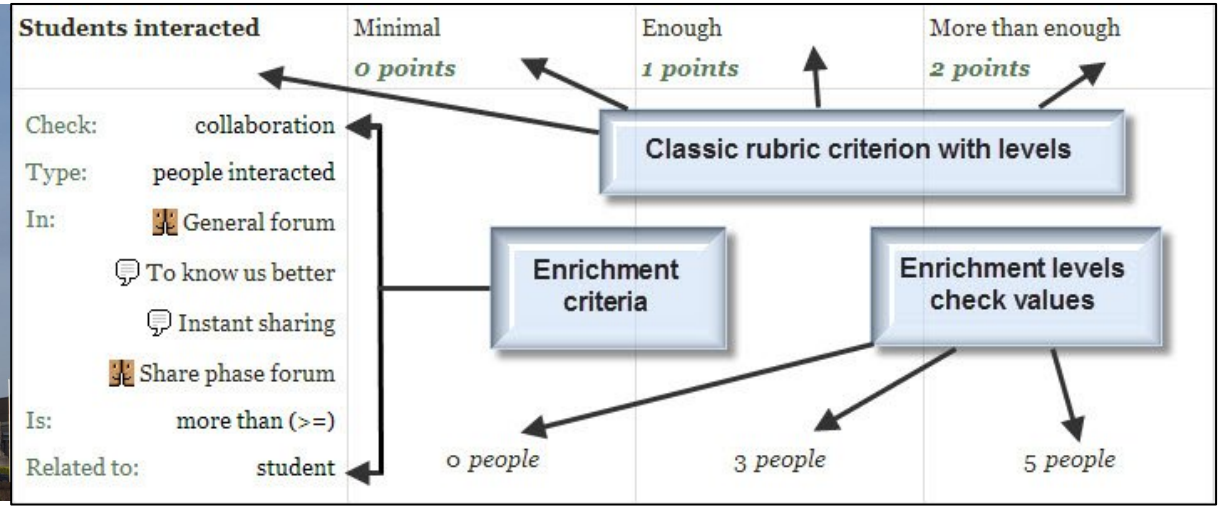


Instead of seeing a course as a series of contents to be presented, a course is a network of participants who find and exchange resources with each other

- An initial structure is developed and ‘seeded’ with existing OERs
- Participants encouraged to use their own sites to create or share resources
- A mechanism (gRSShopper) is employed to connect them

Machine learning and analytics

- decision engines - these are expert systems that are based on rule-driven strategies
- pattern recognition - perceptual systems that identify patterns from partial or disorganized data
- cluster detection - detecting nearest neighbours and categories of things



Learning analytics

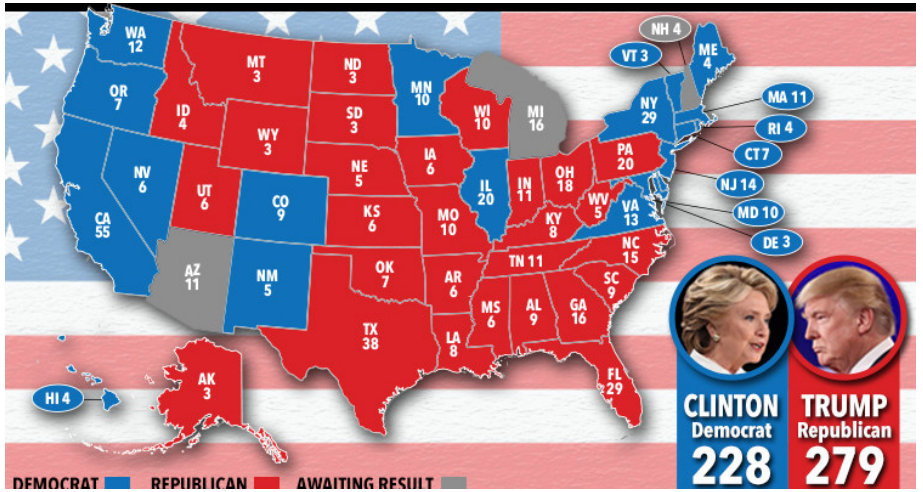
- patterns of behaviour for individual learners
- predictors of students requiring extra support
- to help teachers and support staff plan
- improve current courses or develop new offerings
- Marketing, efficiency and effectiveness measures

http://publications.cetis.org.uk/wp-content/uploads/2012/12/Institutional-Readiness-for-Analytics-Vol1-No8.pdf

Learning analytics

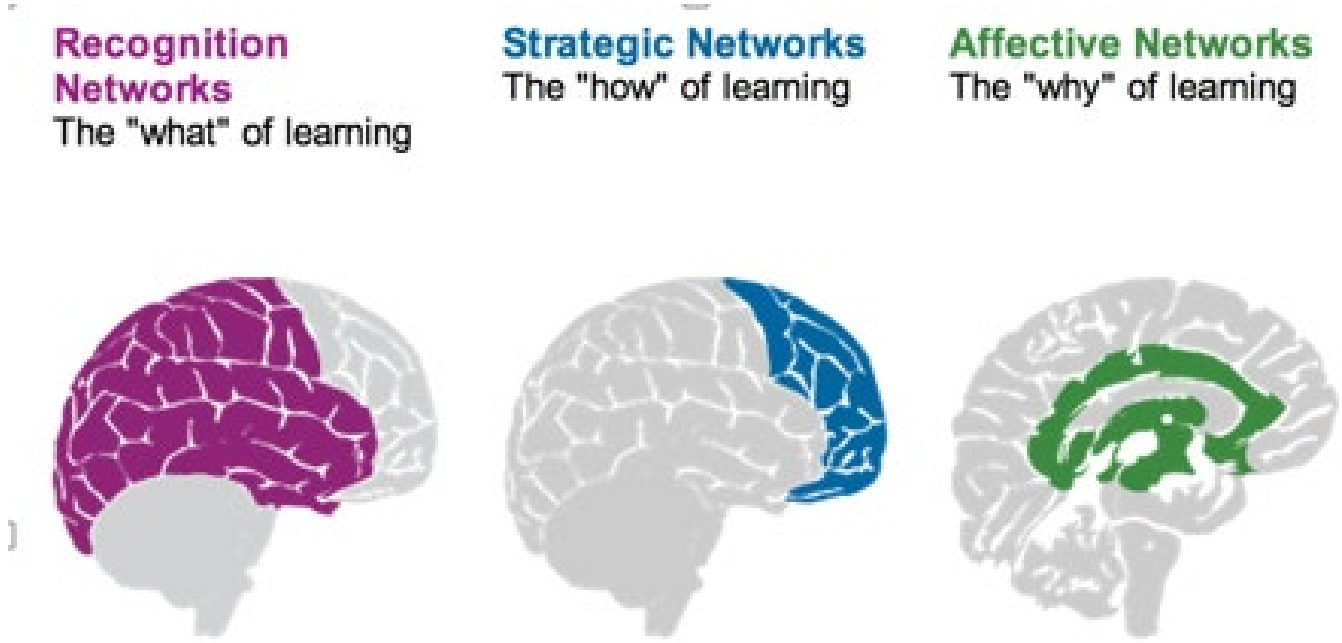
"Data literacy is going to be a fundamental limiter on the uptake of data-driven educational technology products." – Michael Feldstein

http://mfeldstein.com/analytics-literacy-is-a-major-limiter-of-ed-tech-growth/



Personalized learning

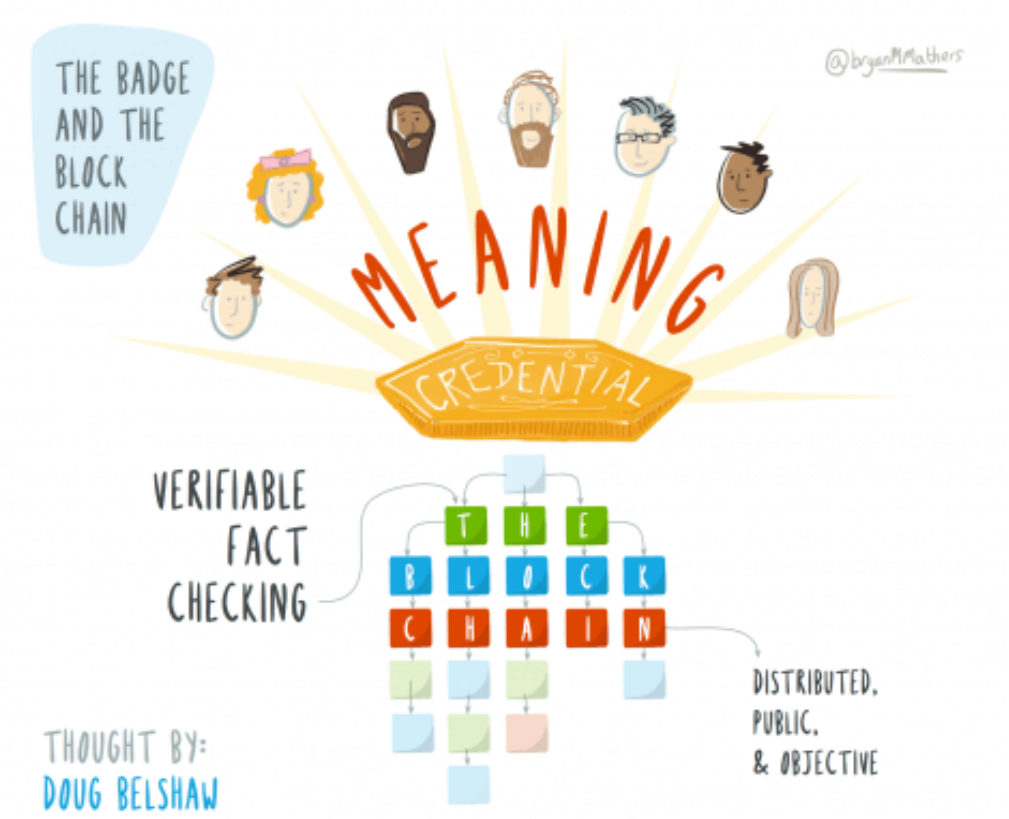
- Rules-Based Events (like notifications)
- User Models
- Adaptive Learning



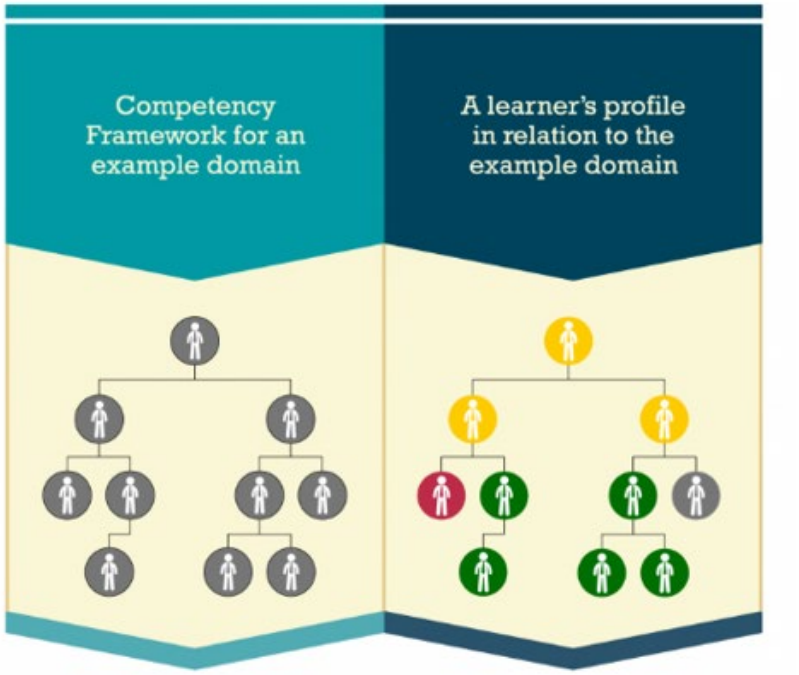
Badges and Credentials

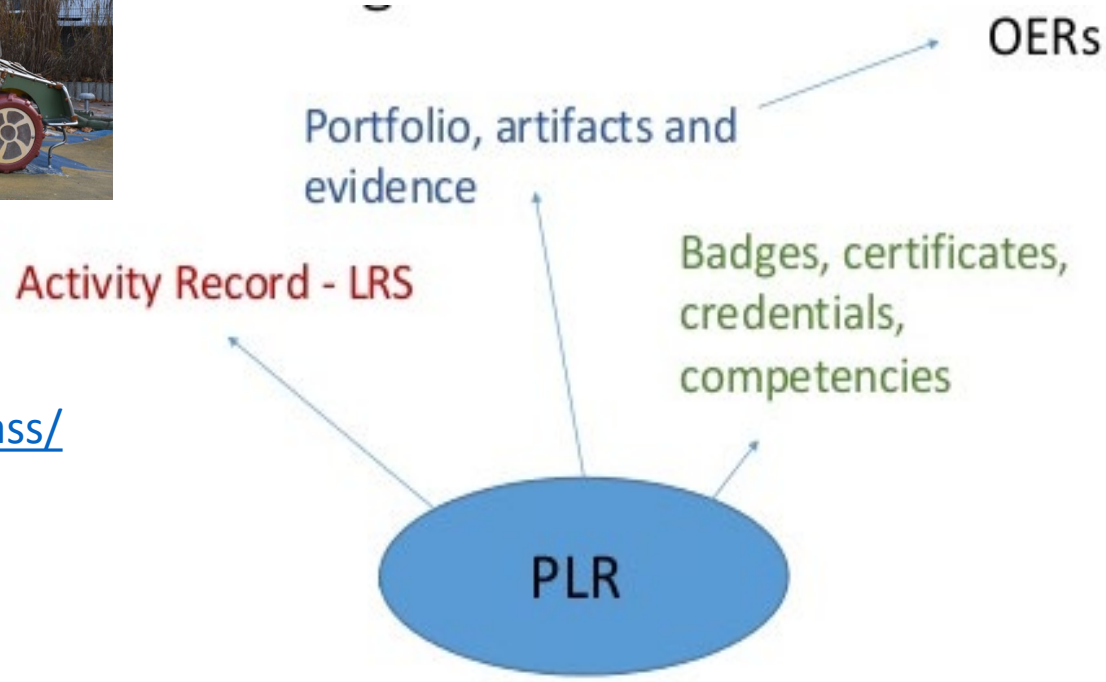
Sony plans to launch a testing platform powered by blockchain and that IBM plans to offer '[blockchain-as-a-service](),'"

Audrey Watters
http://hackeducation.com/2016/02/25/blockchain-edu1



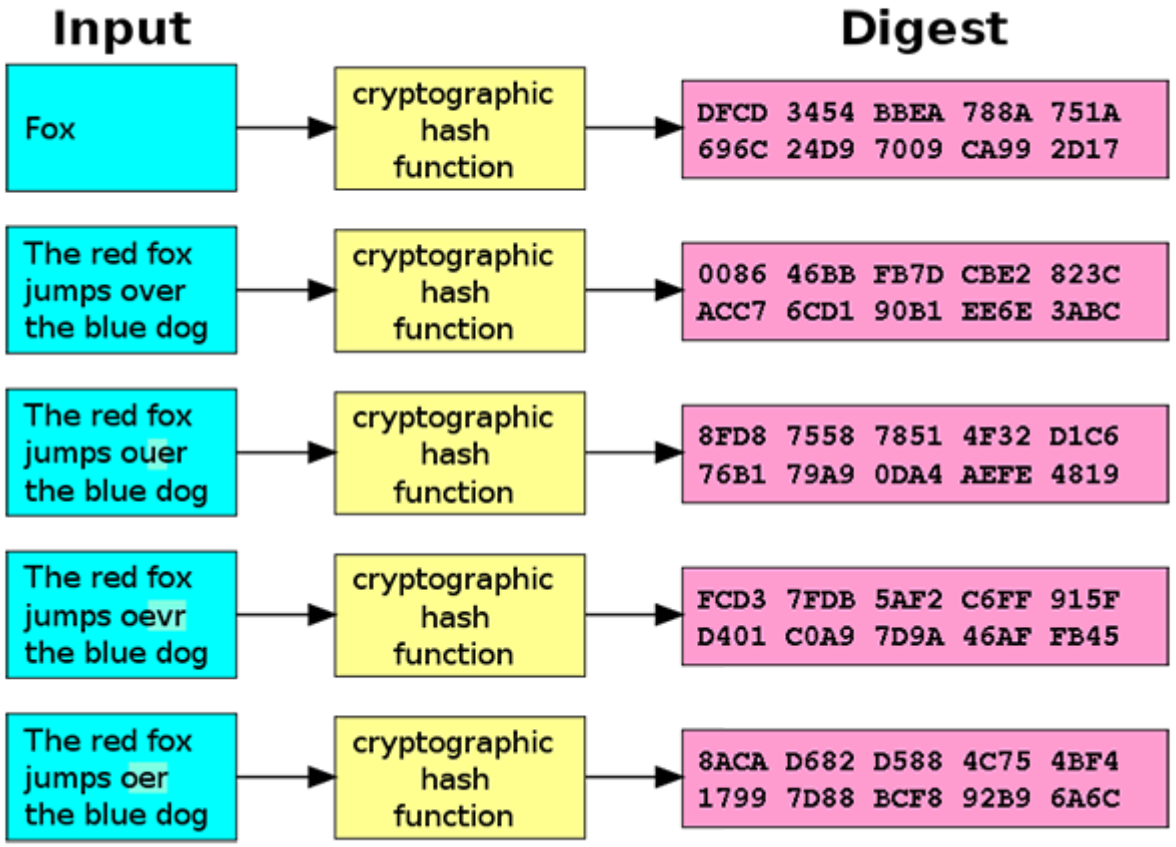
Competency and Skills System (CASS)





https://www.adlnet.gov/introducing-the-next-big-thing-cass/

Badges and Blockchain



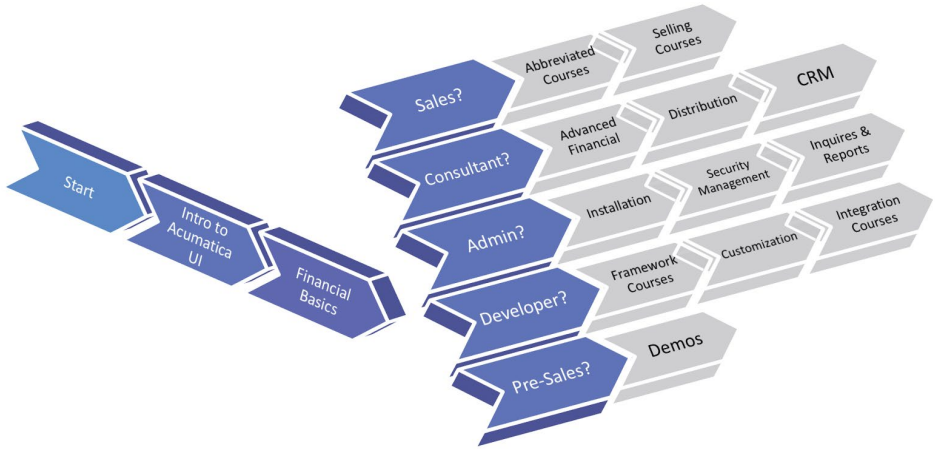
http://dmlcentral.net/blog/doug-belshaw/peering-deep-future-educational-credentialing

http://www.downes.ca/search/blockchain

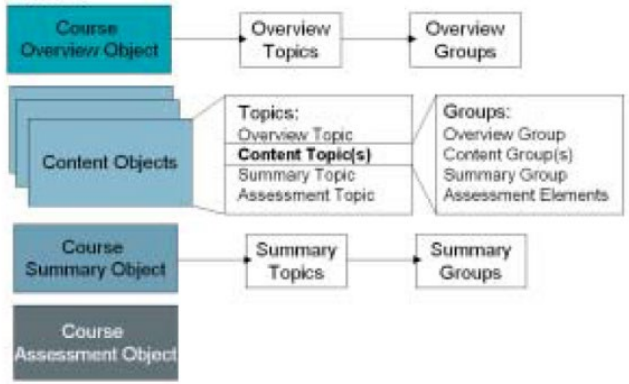
"If we used the blockchain for Open Badges then we could prove beyond reasonable doubt that the person receiving badge Y is the same person who created evidence X.

Doug Belshaw

Learning processes / learning paths



http://asiablog.acumatica.com/2016/02/acumatica-learning-paths.html



- The objective is to create the ‘ideal learning path’ for the student
- The fixed point for all of these is the learning objective, as defined by the competencies

What is Education?

Science as a "combination of evaluating evidence, coordinating evidence and models, and arriving at evidence-based judgments that are communicated through argumentation."

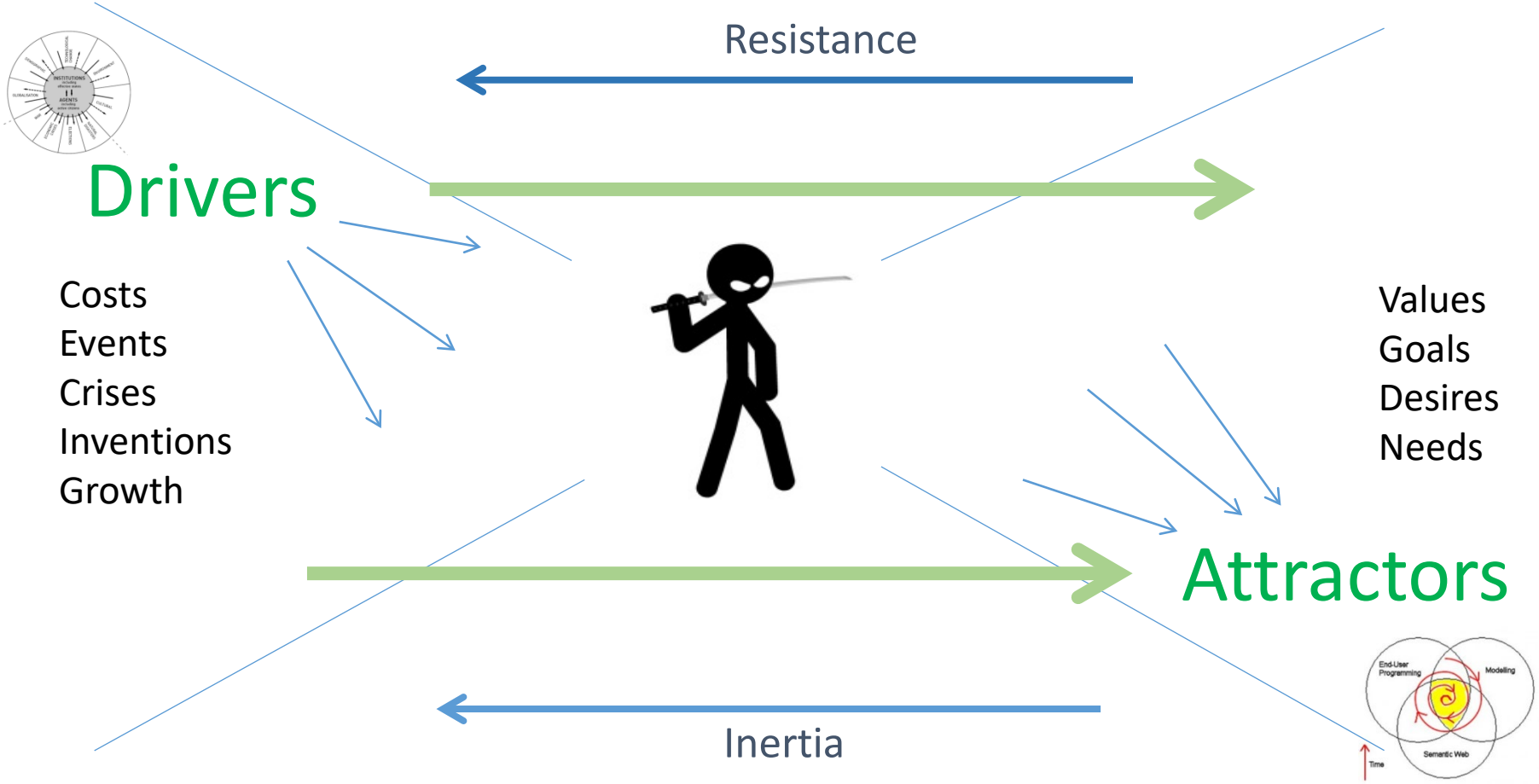
Ronald W. Rinehart, et.al. 2016. Critical Design Decisions for Successful Model-Based Inquiry in Science Classrooms.
https://scholarworks.iu.edu/journals/index.php/ijdl/article/view/20137/28269

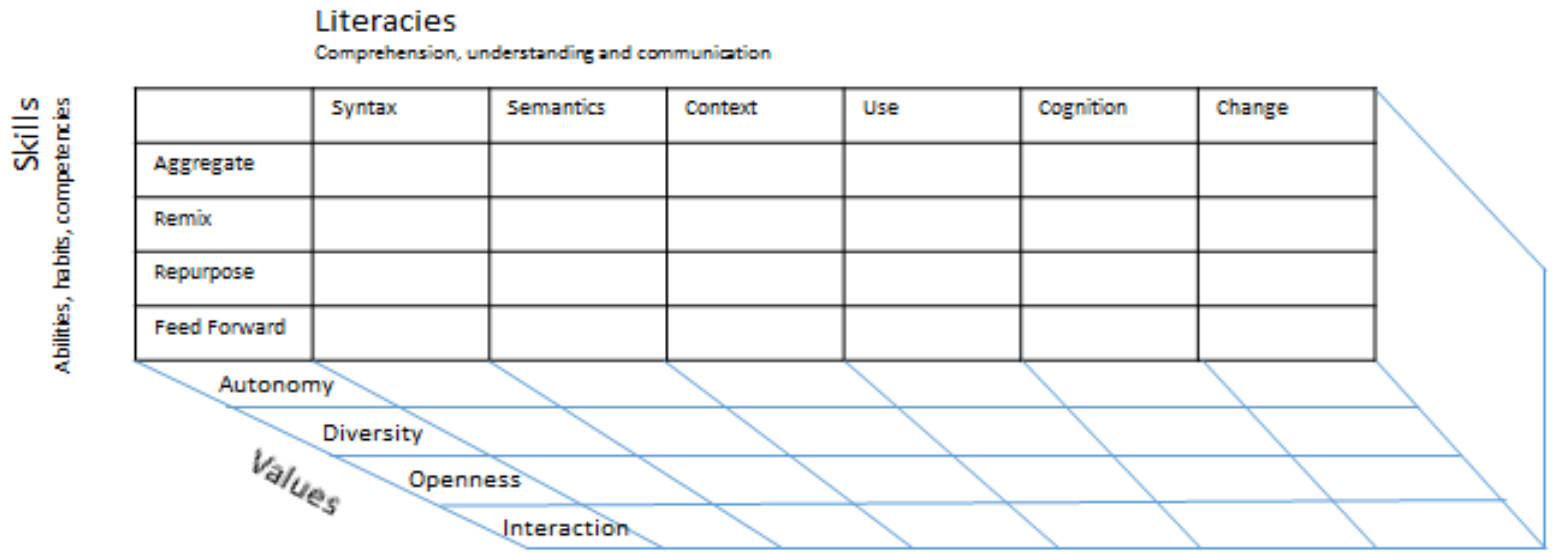
Design vs Environment

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

Carrie Paechter, Metaphors of Space in Educational Theory and Practice
http://www.tandfonline.com/doi/pdf/10.1080/1468136040020202

Causes of Change



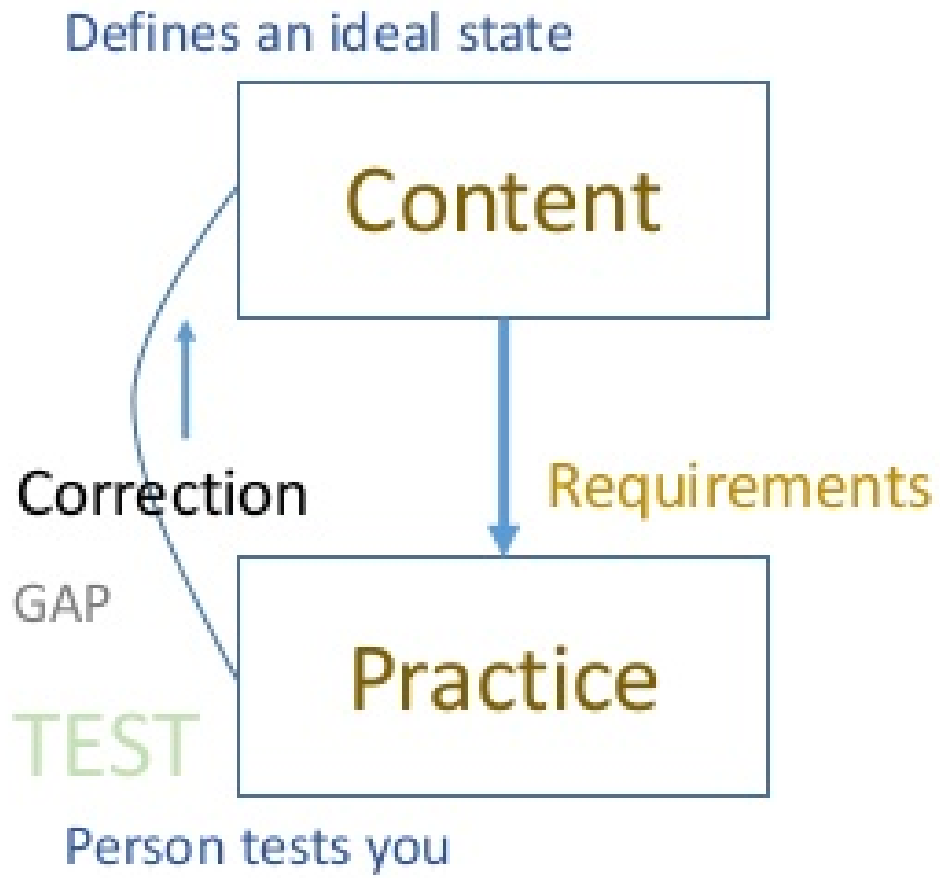


Method as Discovery:

- You don’t learn a language, you discover it
- To discover a language is to be immersed in it, to speak it and listen to people speaking in it
- My scientific method (if it can be called that) is to go to the office each day and immerse myself in the world – to try listening, and to try speaking

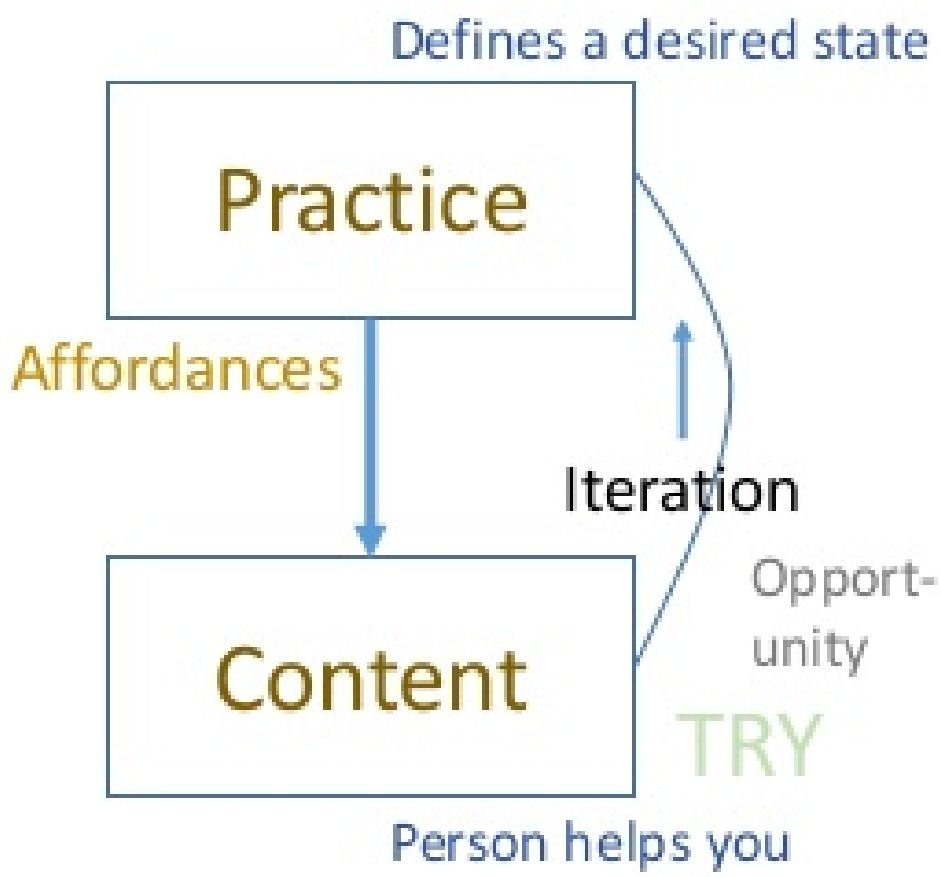
Personalized

We do for you



Personal

You do for yourself



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http://www.downes.ca