

# Personal Learning in a Connected World: Learning and Performance Support Systems

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September 18, 2014

Riyadh, Saudi Arabia



Yes, we can predict the future



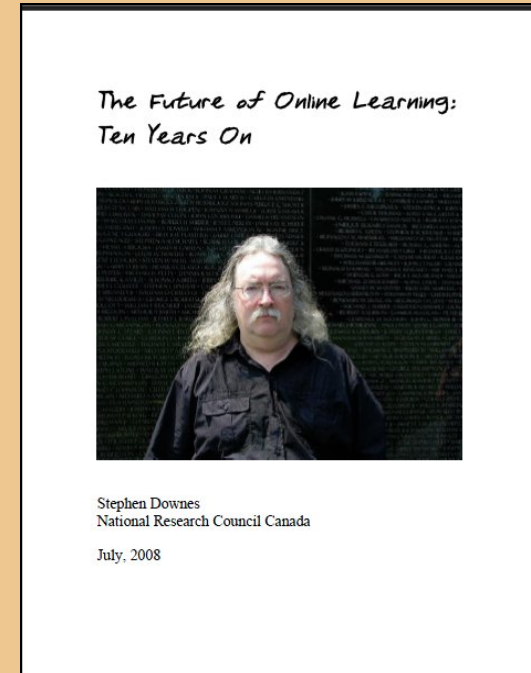
I took this picture yesterday knowing I would want to use it in this presentation today.

# In 1998 I predicted...

- High-speed wireless access
- Importance of audio and video
- The iPad (even got the name right)
- Learning objects (called 'modules')
- Learning management systems
- Personalized education

<http://www.downes.ca/future/>

<http://www.downes.ca/me/mybooks.htm>



# How do we predict the future?

- We predict the future the way we understand the past: by reading the signs
- This is also how we understand the world in general, and how we learn



# Learning is a form of recognition



- It's what we do naturally, as humans, from the day we are born
- And it's something that grows and evolves into a complex set of basic literacies, including pattern recognition, critical thinking, action and behaviour, awareness of context, inference and imagination, and change (the 'critical literacies')

# The learning process is interactive

- Aggregate
- Remix
- Repurpose
- Feed Forward



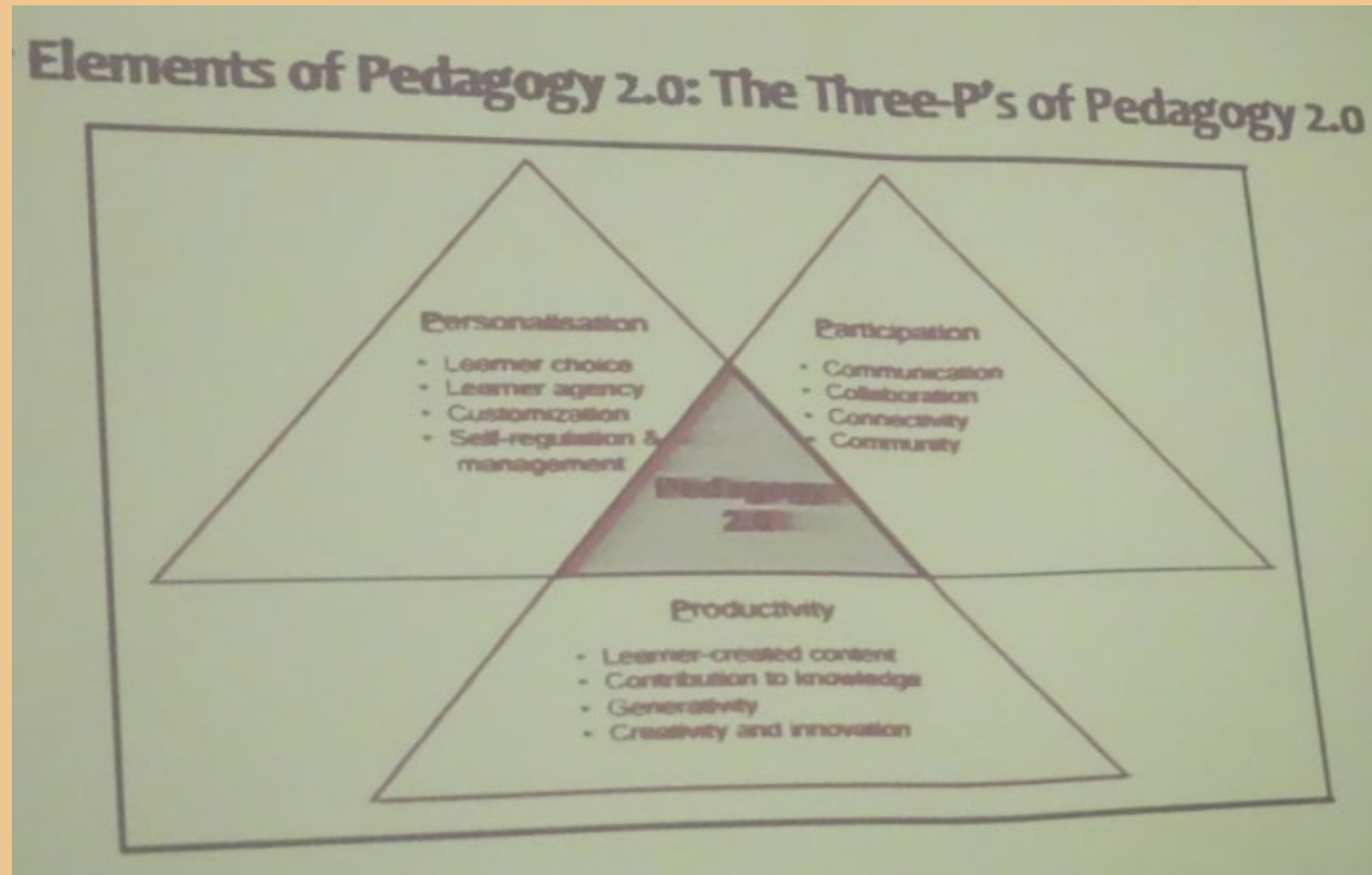
To teach is to model and demonstrate,  
to learn is to practice and reflect

# This is the basis of our approach to learning technologies

- 1999 – Learning communities
- 2001 – The learning marketplace
- 2004 – E-Learning 2.0
- 2005 – Learning Networks / Connectivism
- 2005 – Open Educational Resources
- 2008 – MOOC
- 2010 – Personal Learning Environments
- 2013 – LPSS



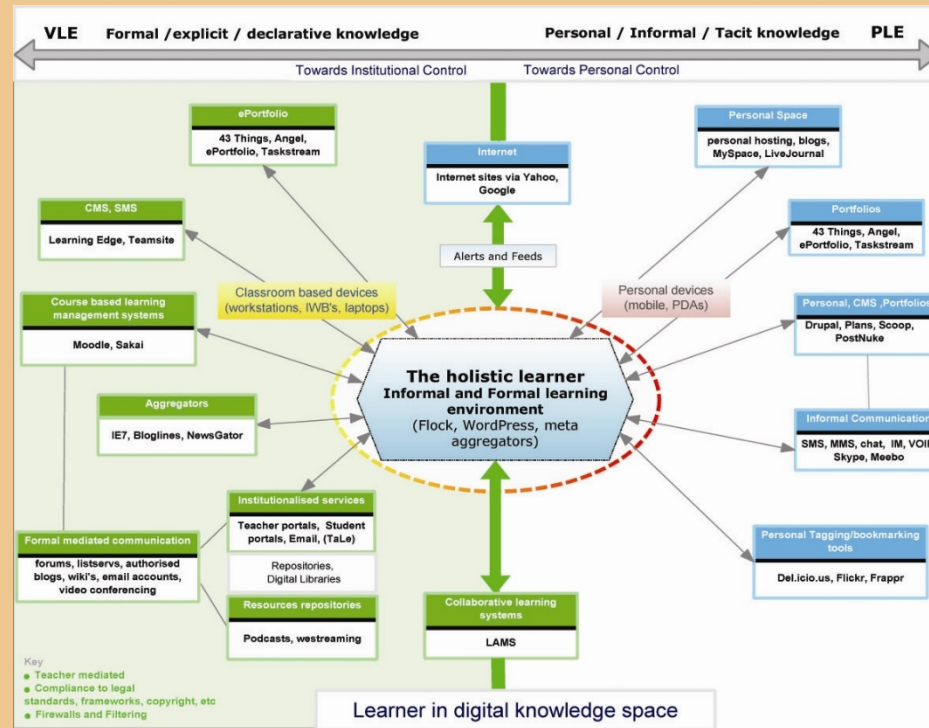
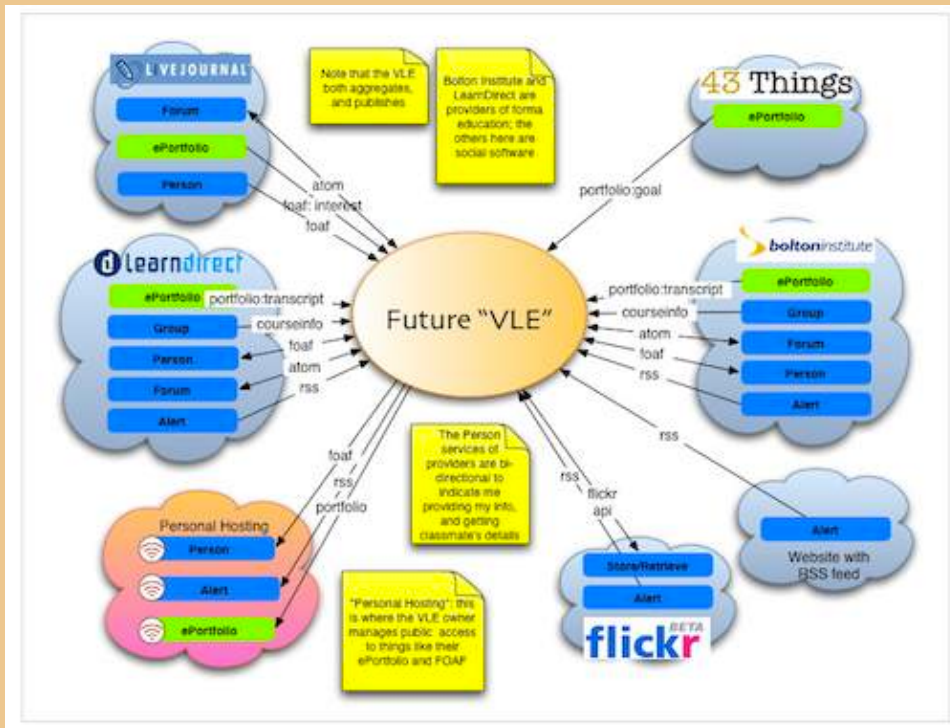
You can also see it in Pedagogy 2.0



Bader A. Alsaleh - <http://halfanhour.blogspot.com/2014/09/bader-alsaleh-september-17-riyadh.html>



# The design is based on putting the learner at the center



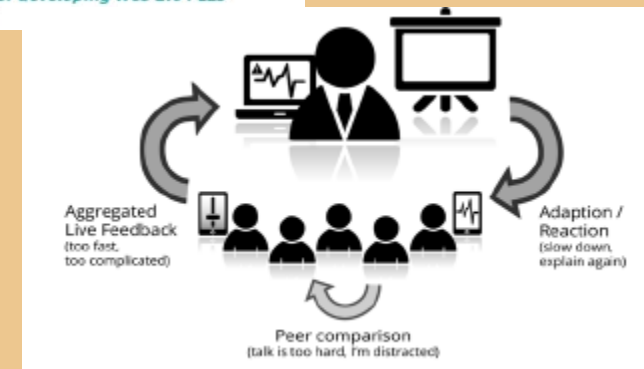
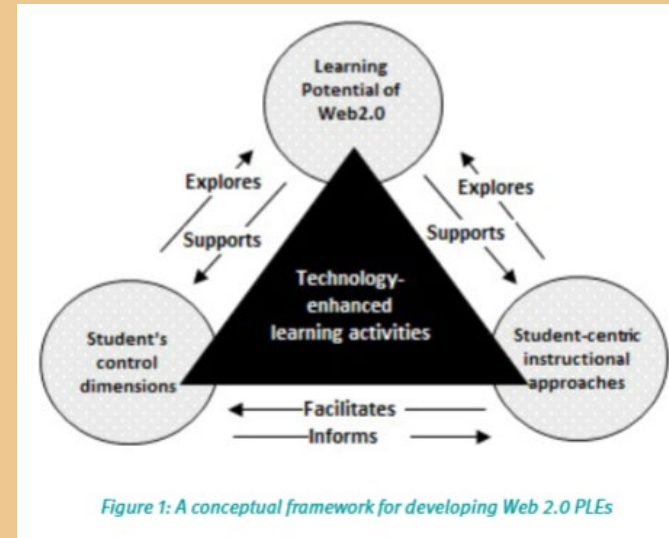
Scott Wilson (left), Tim Hand (right)

<https://www.google.com/search?q=ple+diagrams>

[http://www.edtechpost.ca/ple\\_diagrams/index.php/mind-map-3](http://www.edtechpost.ca/ple_diagrams/index.php/mind-map-3)

# This is known generally as the 'Personal Learning Environment' (PLE)

- The PLE as concept
- Web 2.0 supported PLEs
- Game-based approaches and 'quantified self'
- Mobile learning
- The PLE as an assessment tool

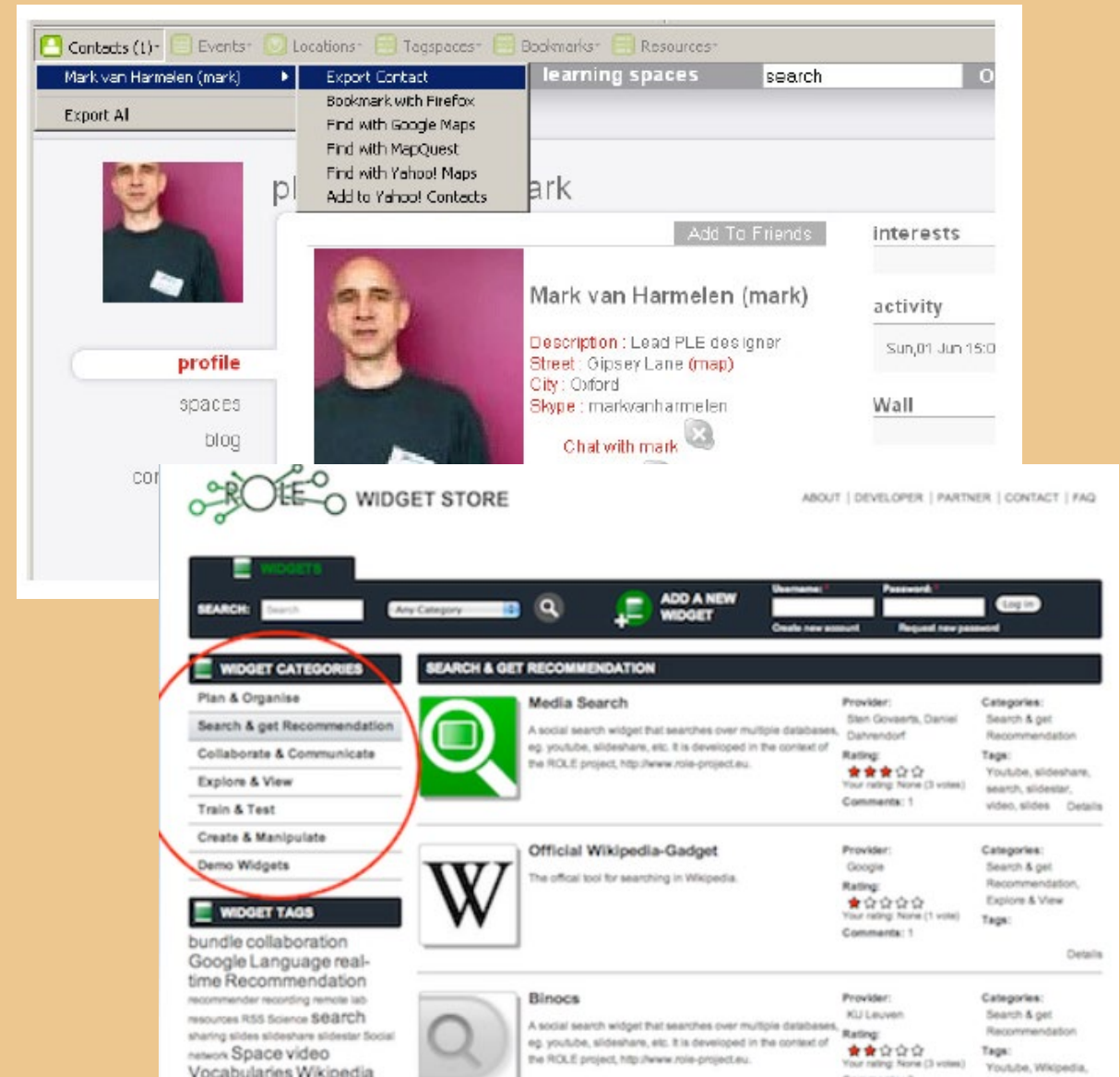


[http://en.wikipedia.org/wiki/History\\_of\\_personal\\_learning\\_environments](http://en.wikipedia.org/wiki/History_of_personal_learning_environments)  
[http://pleconf.org/2013/files/2014/07/v3.0\\_PLE\\_Conference2013\\_ResearchReport\\_BeuthUniversity\\_MonashUniversity.pdf](http://pleconf.org/2013/files/2014/07/v3.0_PLE_Conference2013_ResearchReport_BeuthUniversity_MonashUniversity.pdf)

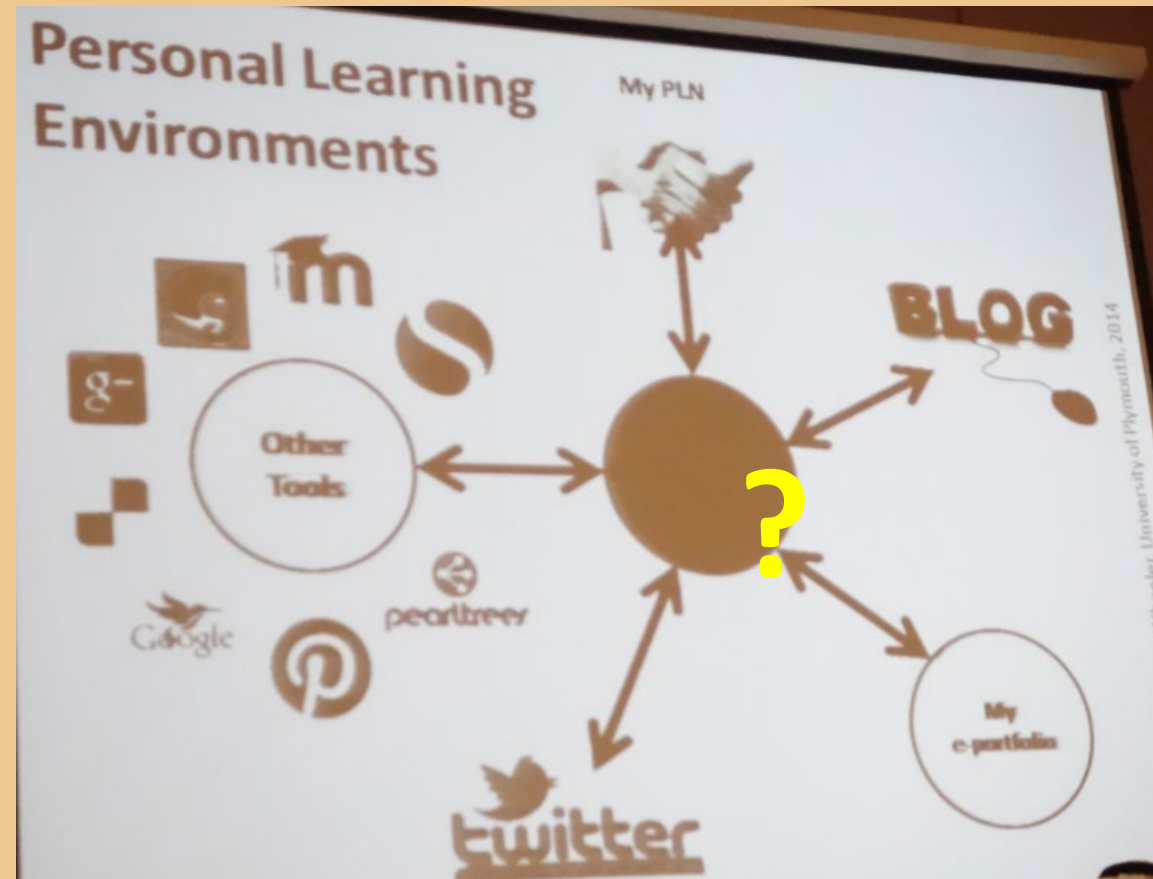
Images: Ebrahim Rahimi, Jan van den Berg, Wim Veen; Benedikt S. Morschheuser, Verónica Rivera-Pelayo, Athanasios Mazarakis, Valentin Zacharias

# Relevant Projects

- Manchester PLE Project
  - Responsive Open Learning Environments (ROLE) <http://www.role-project.eu/>
  - Known <http://withknown.com/>
  - Learning Locker <http://learninglocker.net/>
  - Mahara <https://mahara.org/>
- <http://personalis.wikispaces.com/PLE+Projects>

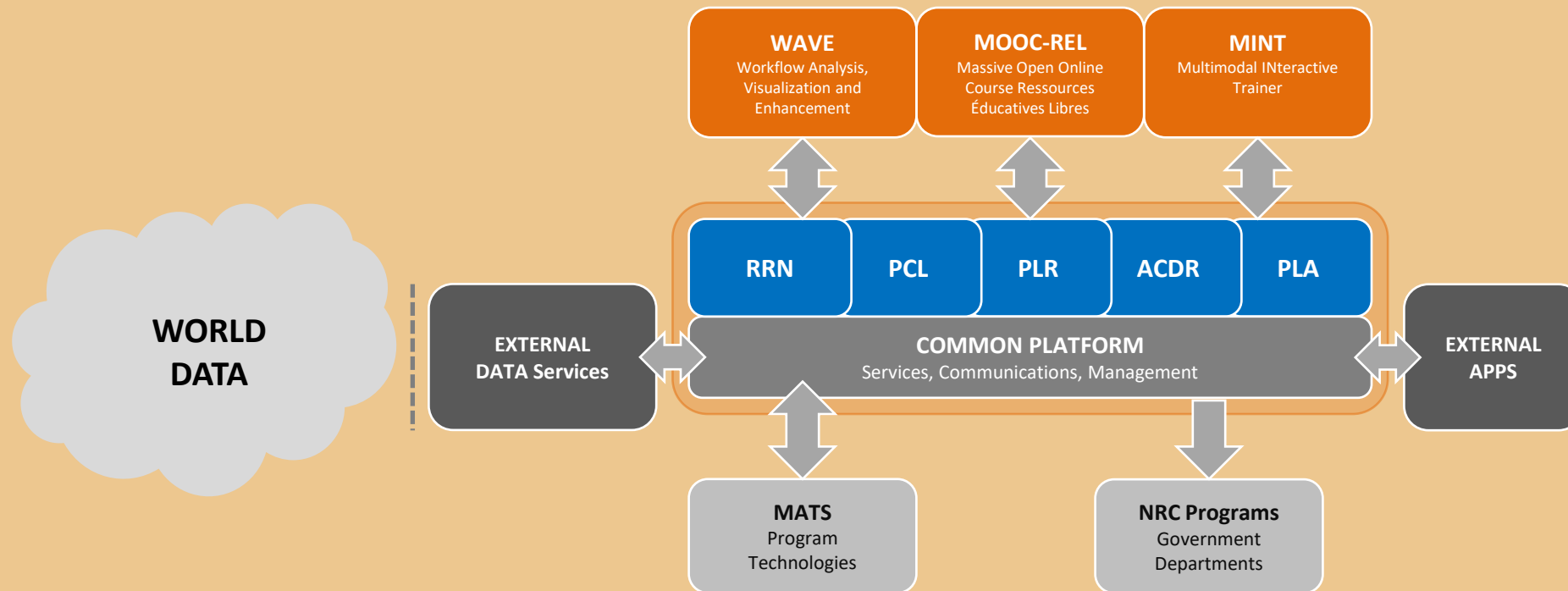


We are focused at the technology at the center



<http://halfanhour.blogspot.com/2014/09/steve-wheeler-september-17-riyadh-notes.html>

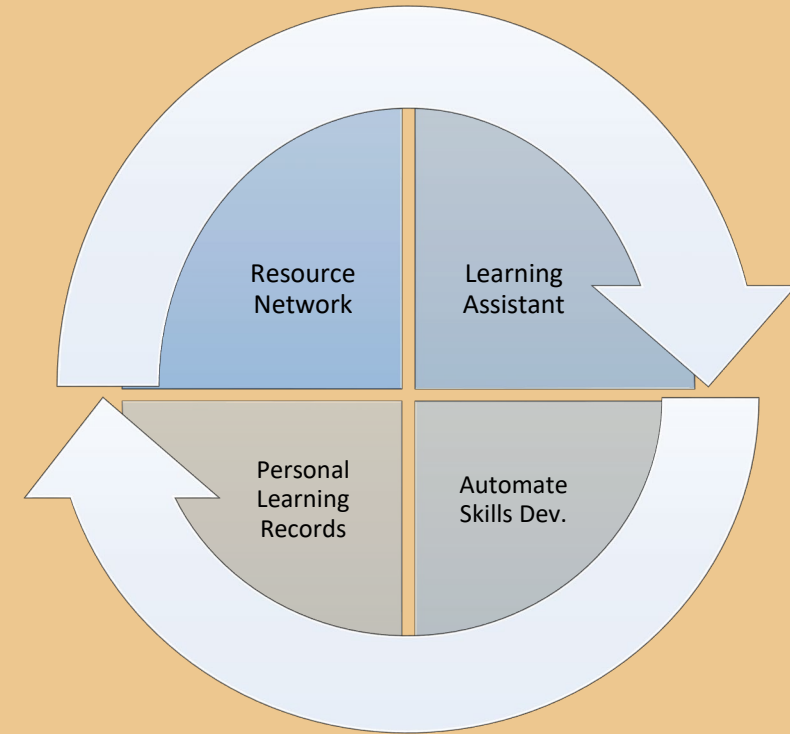
# Learning and Performance Support Systems



- It's a network of personal learning environments...
- ... connected to a large array of learning services

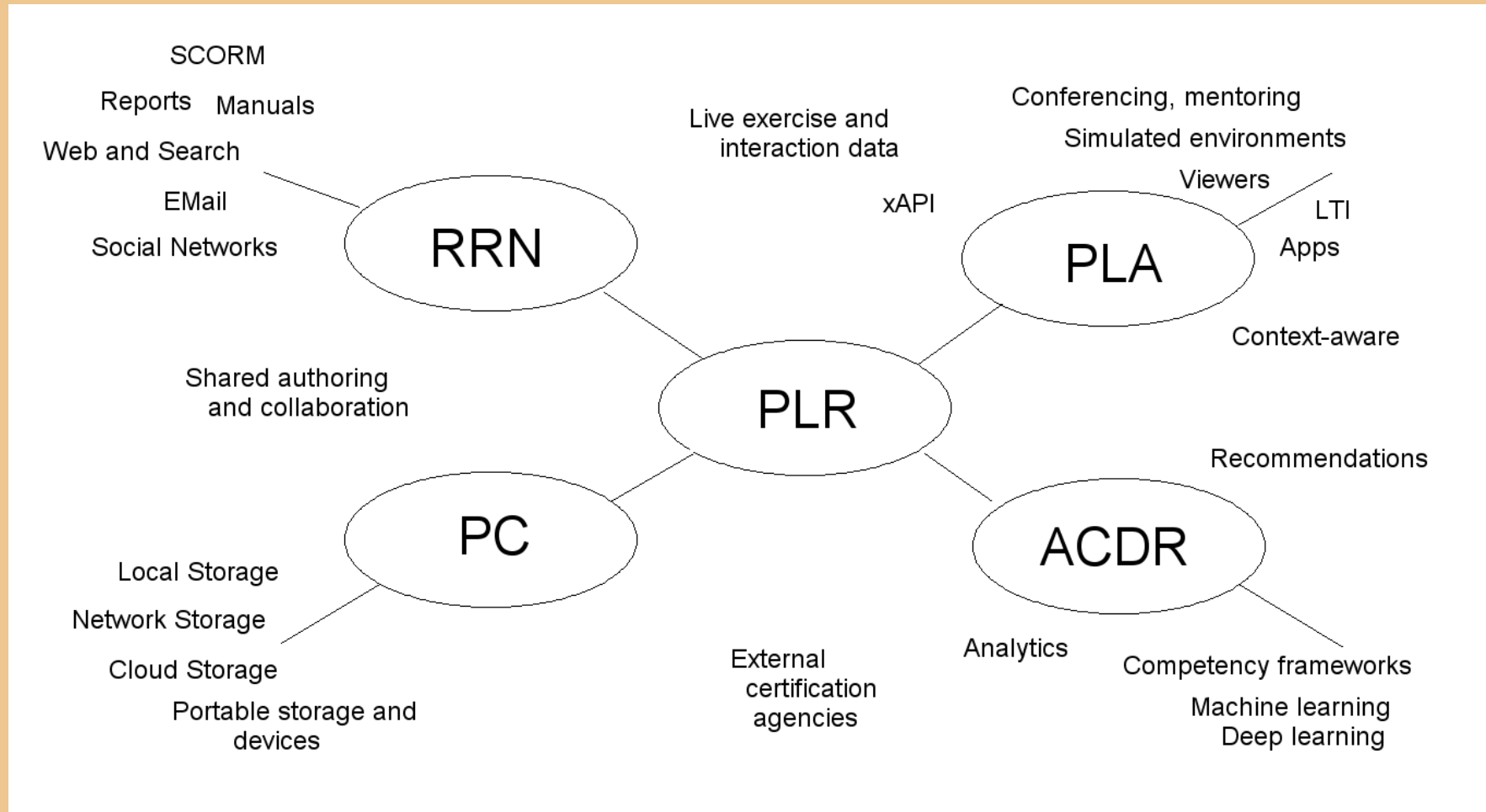
# Core Technology Development Projects

- Learning services network and marketplace
- Automated skills development and recognition
- Lifetime management of learning and training records and credentials
- Personal learning assistant to view, update and access training

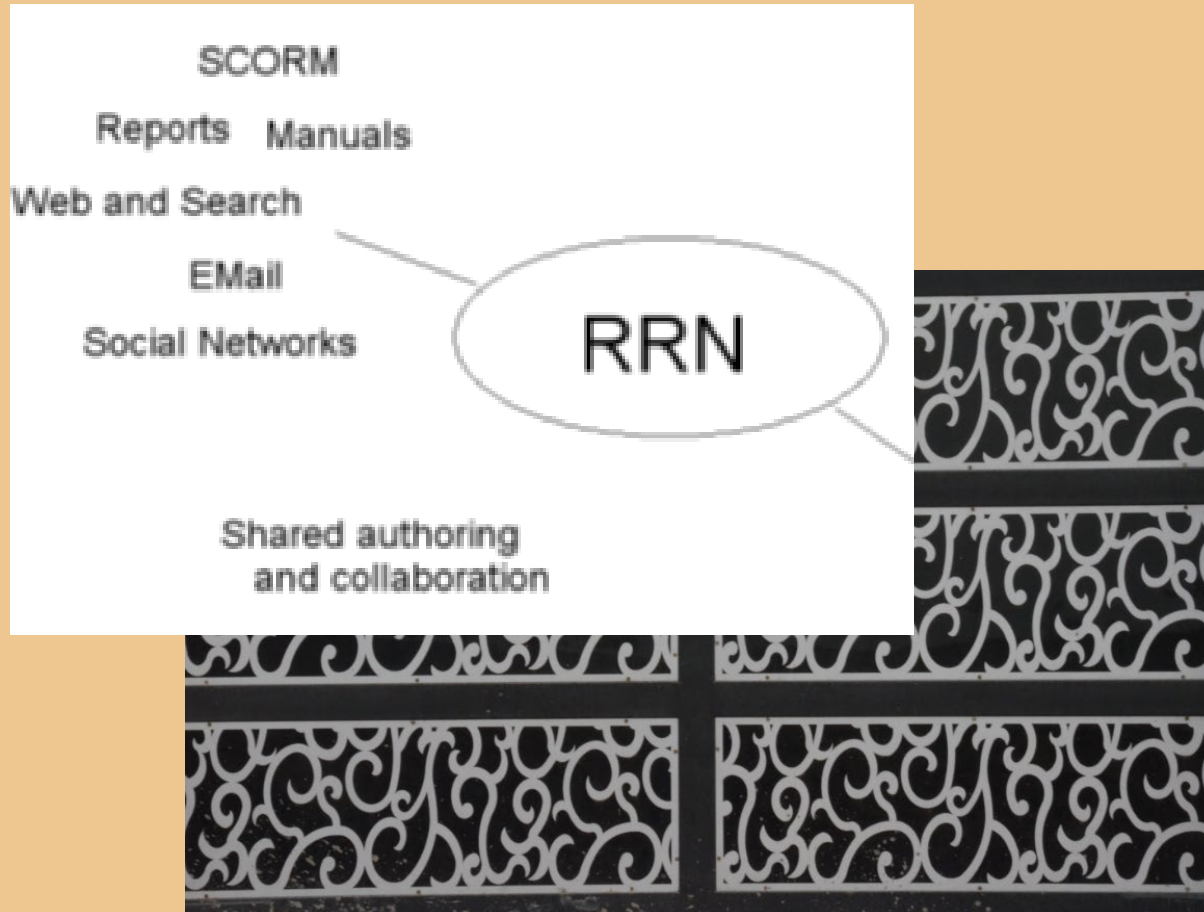


- Learning as a cloud service and deep integration with external systems

# LPSS Core Projects



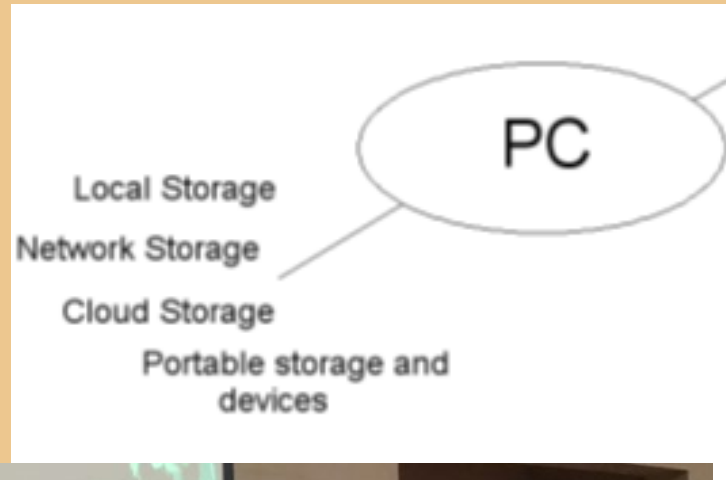
# Resource Repository Network



- Manage and discover list of sources and resources
- Maintain authentication and credentials
- Support APIs and metadata standards
- Gather, analyze and sort resources and/or metadata



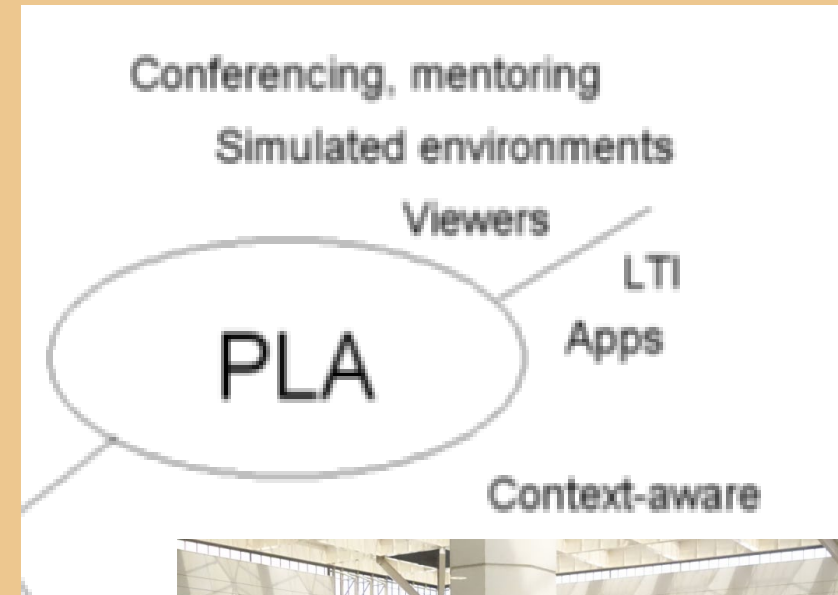
# Personal Cloud



- Manage list of local and remote storage systems
- Maintain security, encryption, authentication and credentials
- Include local or personal device storage
- Manage and synchronize resource sets and data

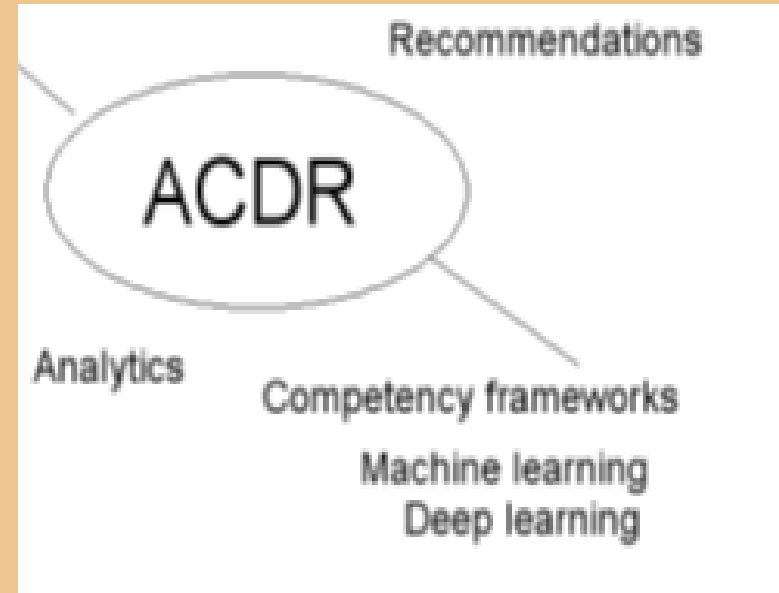
# Personal Learning Assistant

- Collect contextual information for system
- Display resources of various formats, including SCORM, LTI, etc.
- Support (scaffolded) authoring environments
- Project LPSS capacity into external software and devices

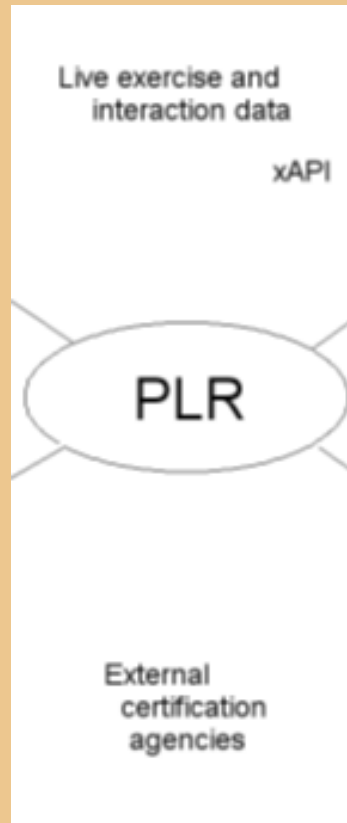


# Competency Recognition and Development

- Import or create competency definitions
- Analyze interactions for skills and learning gaps
- Support development of learning plans
- Provide resource and service recommendations



# Personal Learning Record



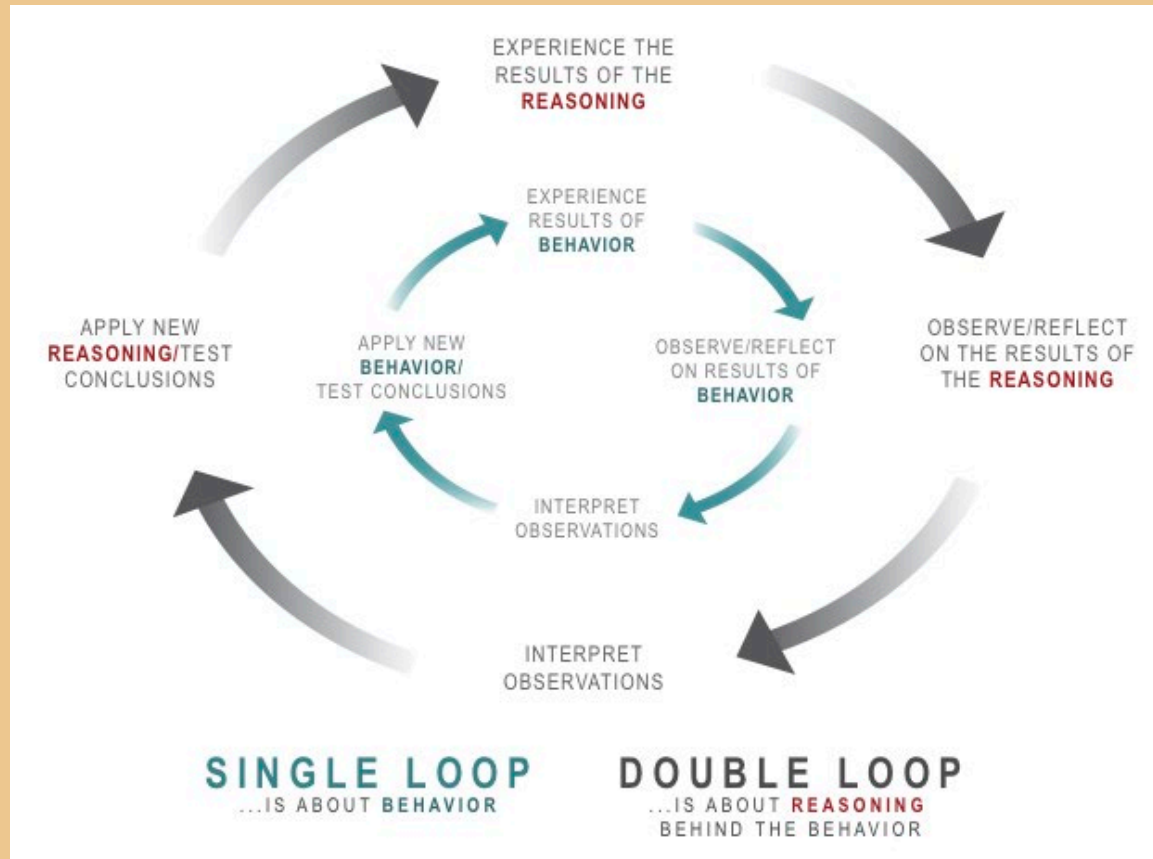
- Collect full record of interactions with all resources, external systems
- Support learning activity data exchange formats (eg. xAPI)
- Collect and present a person's personal portfolio
- Display certifications and credentials (eg. badges)
- Maintain 3<sup>rd</sup> party certification

# Implementation – from MOOC to Personal Learning

- MOOC-REL (OIF)
- ALECSO
- MINT
- SHARE
- Badges
- Simulator
- Workplace T&D



# Implementation Projects

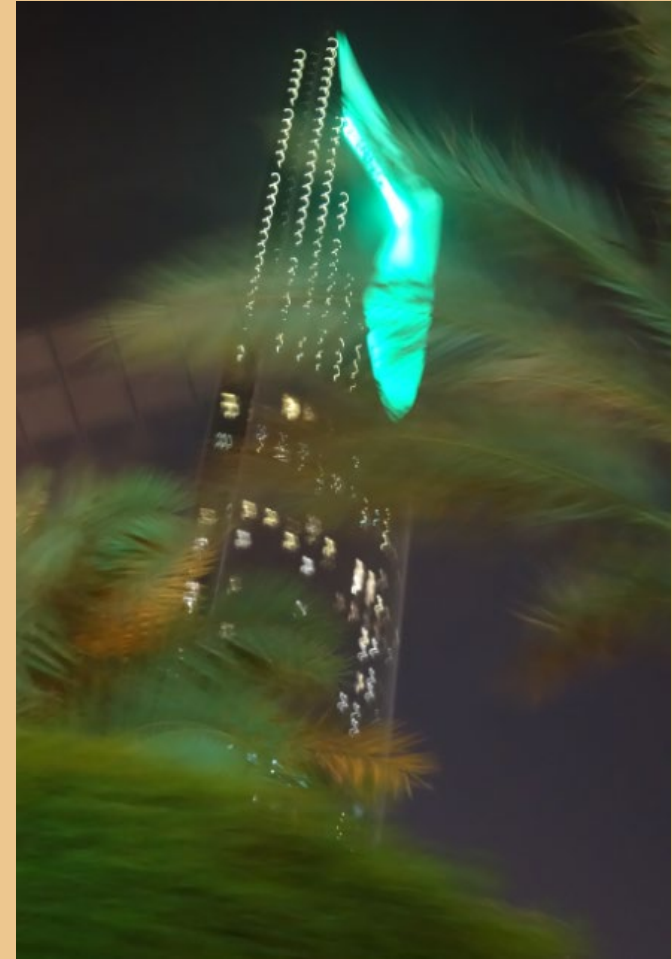


Ultimately, the objective is to support individual learning in a network

<http://integralleadershipmanifesto.com/manifesto/making-subject-object/>

# Launch

- Limited beta starting at the end of September
- Hosted service offered at <http://lpss.me>
- Slow roll-out of capacity over next 18 months
- Development of partnerships and capacity building projects



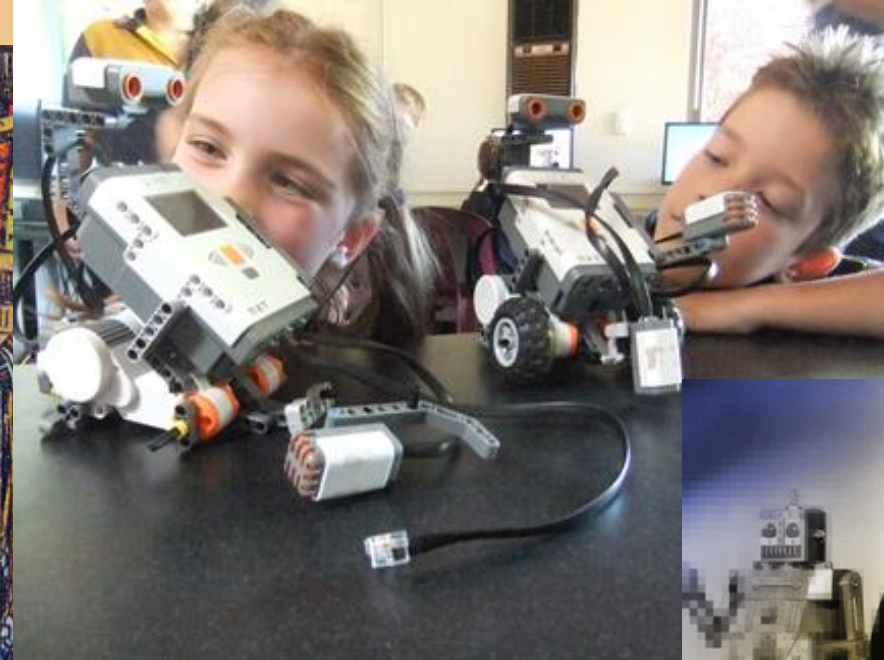
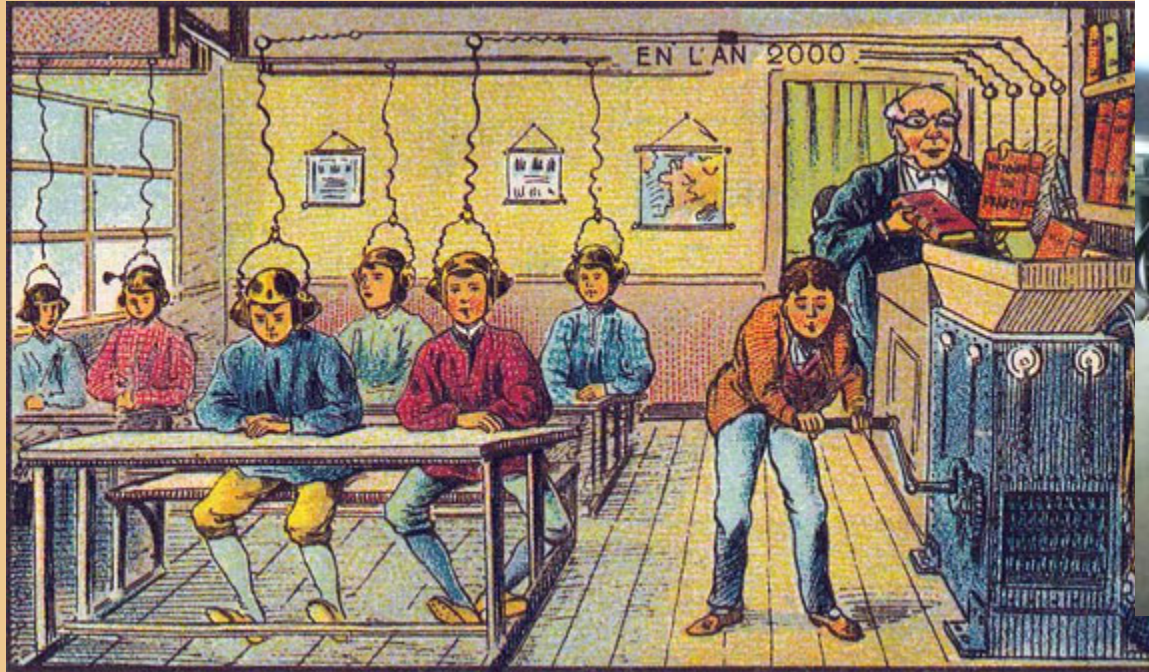
# Why is this important?

- Because technology is *not* just a tool
- It gives us the capacity to do new things (the ‘affordances argument’)
- It represents an extension of our perceptions (the McLuhan argument)
- “We shape technology, and then technology shapes us”





# What kind of learner we become depends on what kind of learning technology we choose



<http://singularityhub.com/2012/10/15/19th-century-french-artists-predicted-the-world-of-the-future-in-this-series-of-postcards/>  
<http://www.alter-inc.com/wearable.html>  
<http://www.keithcotps.sa.edu.au/Learning.htm>



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