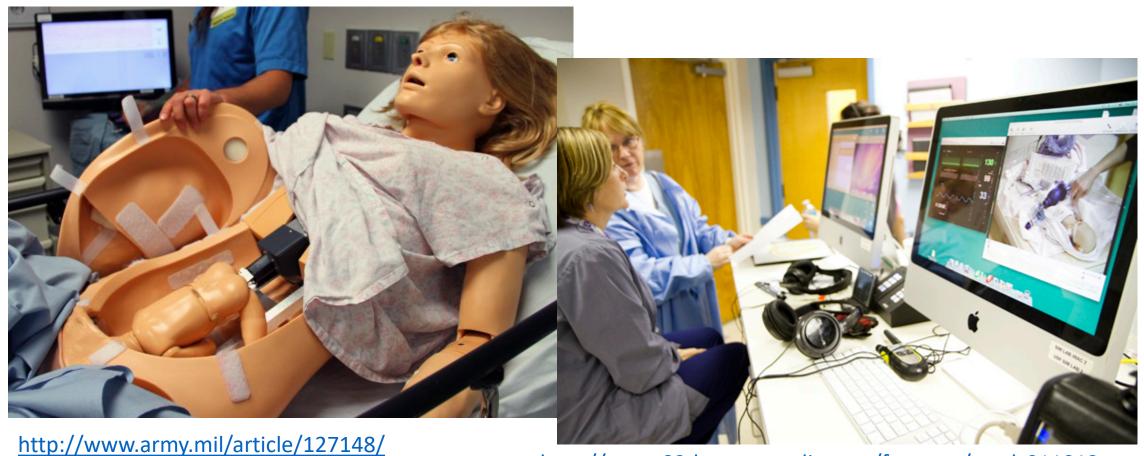


#### Learning Through Practice

When it really matters, we don't simply trust classrooms and texts, we expect hands-on practice...



## ... For medical professionals



http://www.83degreesmedia.com/features/camls011012.aspx

#### ... for pilots and navigators



http://www.cae.com/World-s-first-AW189-full-flight-simulator-ready-for-training/



http://www.aiac.ca/canada-aerospace-industry/success-stories/cae-nh90-helicopter-simulator/

## ... for military and police



http://www.downes.ca/post/59876

## So why not the rest of us?



Image: <a href="https://www.iabti.org/itc">https://www.iabti.org/itc</a>

#### The Case of the MOOC



## xLearning vs cLearning



#### contents

#### engagement

networks

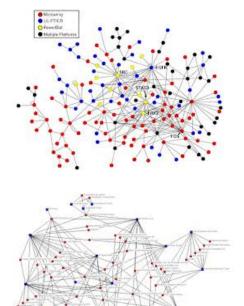


http://www.corestandards.org/

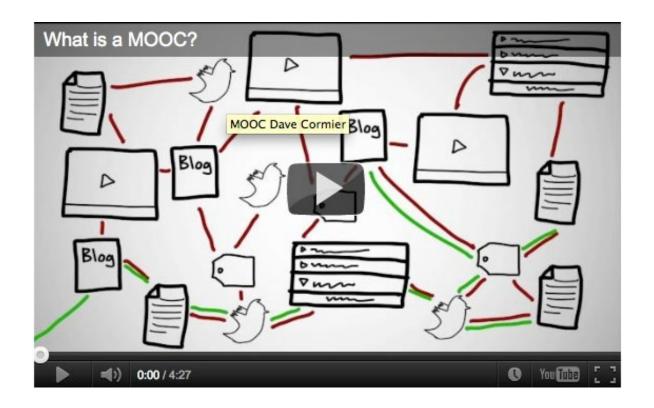


http://www.magnet.edu/





#### How to Learn in a cMOOC



Learning is a process of immersion into a knowing community

http://www.tonybates.ca/2012/03/03/m ore-reflections-on-moocs-and-mitx/

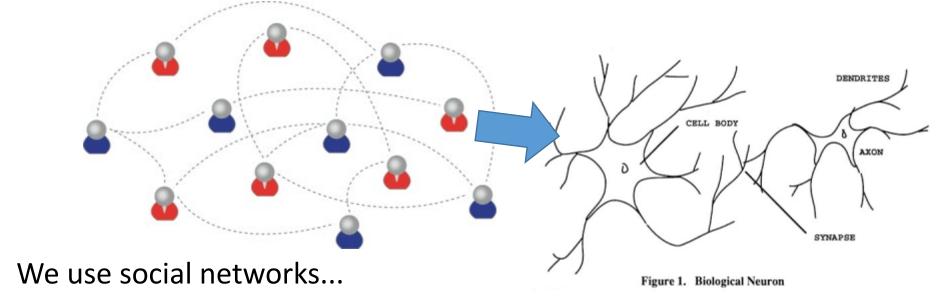
## MOOC Design

- Course structure a series of topics
  - The instructors will not 'teach' the topics, they 'investigate' or 'work through' the topics (model and demonstrate)



#### How to Create a cMOOC

- It's like creating a network
- Don't centralize
- Concentrate on the creation of links

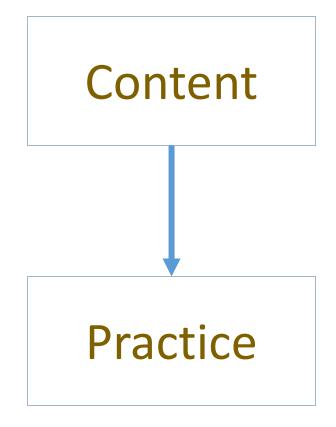


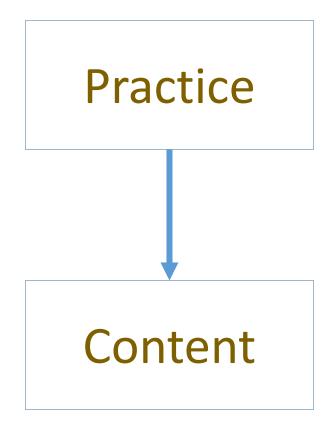
... to create personal knowledge



Learning is a process of *recognizing* and *growing into* or *becoming* an instantiation of those values...

## Two Approaches...





#### Two Approaches...

Defines an ideal state Content Practice TES1 Person tests you

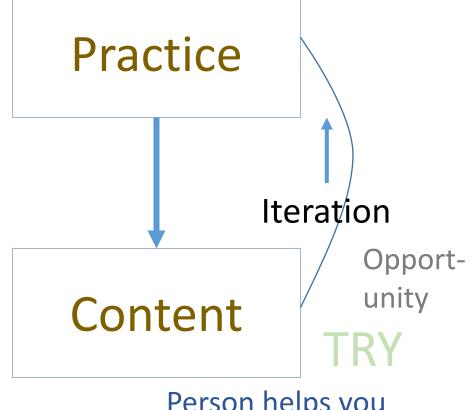
Defines a desired state



#### Two Approaches...

# Defines an ideal state Content Correction **GAP** Practice Person tests you

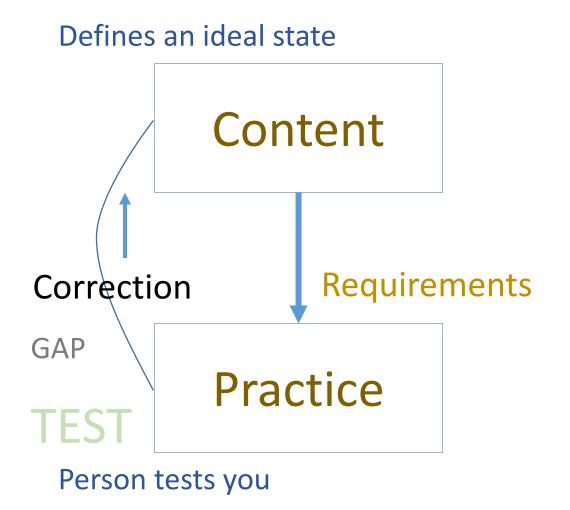
#### Defines a desired state



Person helps you

## Library

#### Environment

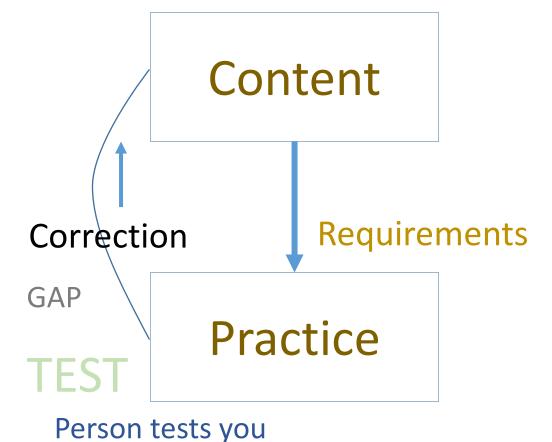


Defines a desired state Practice Affordances **Iteration** Opportunity Content Person helps you

## Personalized

We do for you

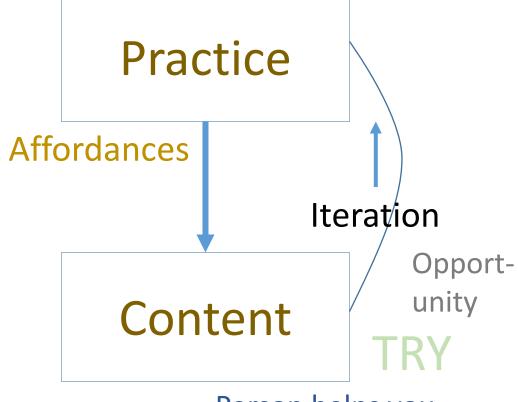
Defines an ideal state



Personal

You do for yourself

Defines a desired state

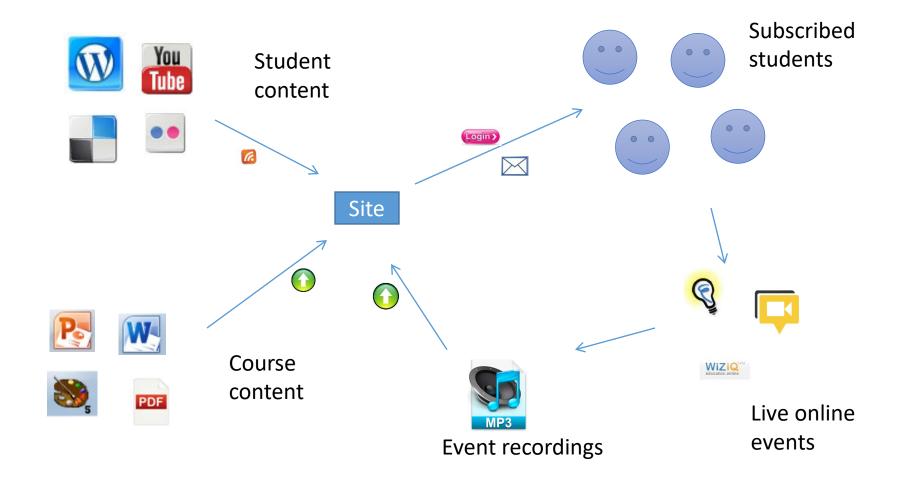


Person helps you

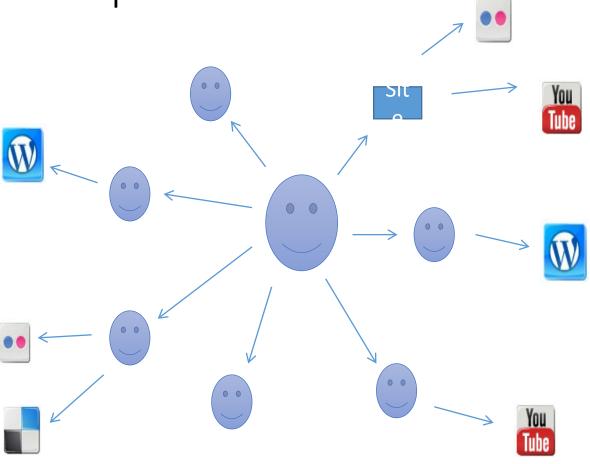
## Personal Learning Environments



#### Course Provider Perspective

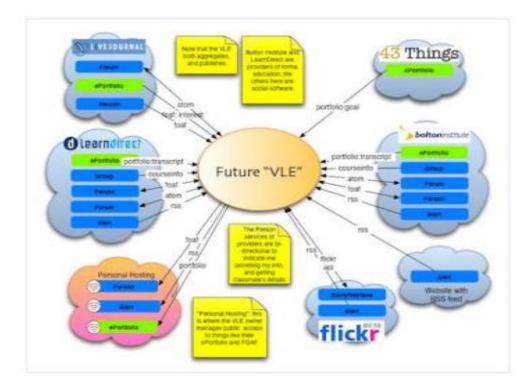


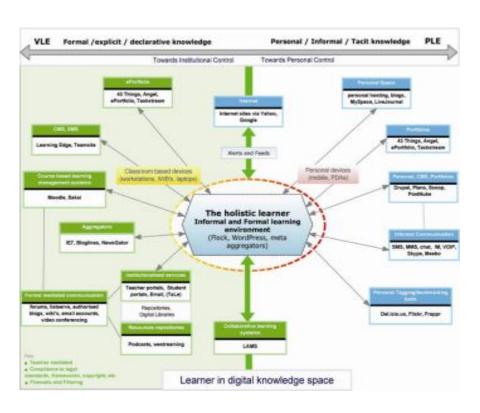
#### The Student's Perspective



A range of different resources and services

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





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

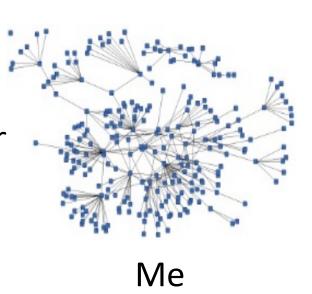
## Learning and Performance Support Systems



#### LPSS is Built Around the Personal Learning Record

This is a *new* type of data – we call it the *personal graph*.

Each person has their own *private* personal graph.

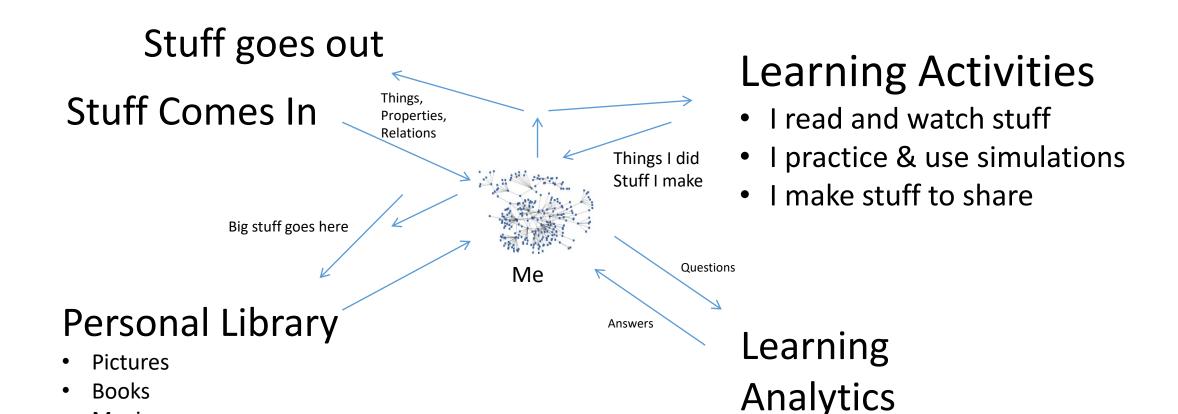


The PLR contains all a person's learning records, including:

- certificates, badges and credentials
- activity records, test results, scores
- Assignments, papers, drawings, things they create

#### LPSS is Built Around the Personal Learning Record

**Movies** 



**Services** 

#### LPSS Details

Management Layer Data, Information Retrieval Search/Recommendation Layer Cleansing/Filtering/Profiling/Proce Learning activity sequencing/modeling ssing Data Representation Prototype Repository Standards/Communication protogols Data Capture Security Protocols Personal Learning Record Security Protocols Distributed Architecture Data synchronization Personal Access to Network Storage Performance Trends Algorithm Cloud Storage and Management Competence Development

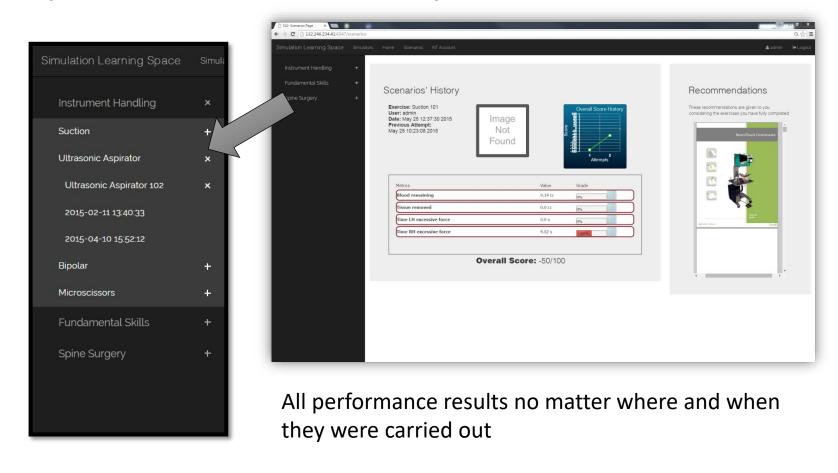
Automated Assessment

## LPSS-Sim Project Overview



## Combining Experiences

One place for all simulation experience

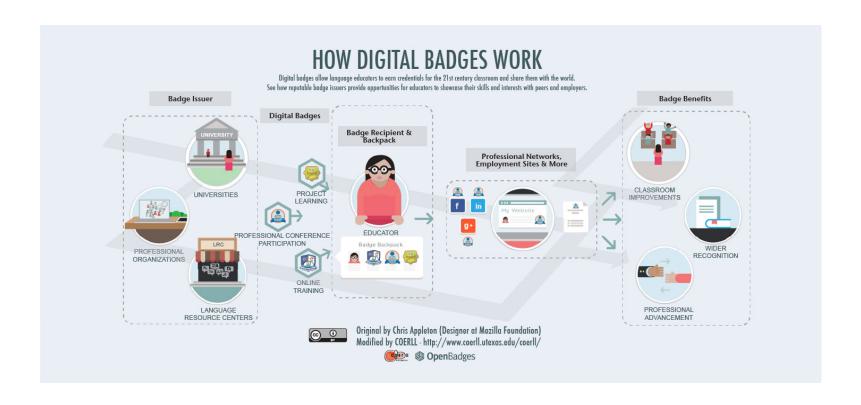


#### OIF — MOOC-REL



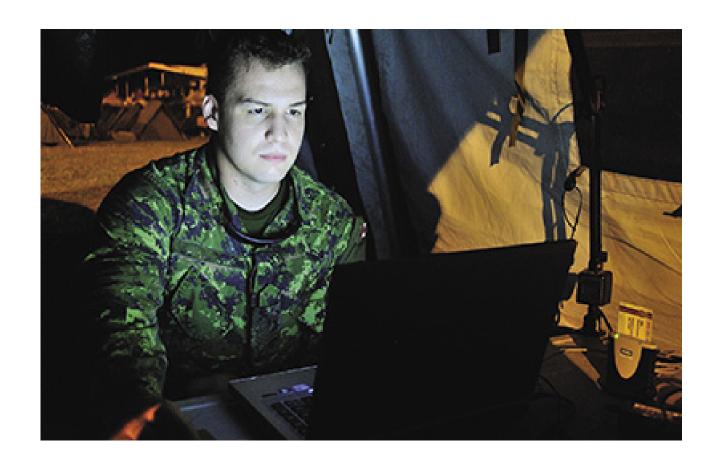
http://rel2014.mooc.ca/

## PCO Badges for Learning



http://www.downes.ca/post/63738

#### ONGARDE

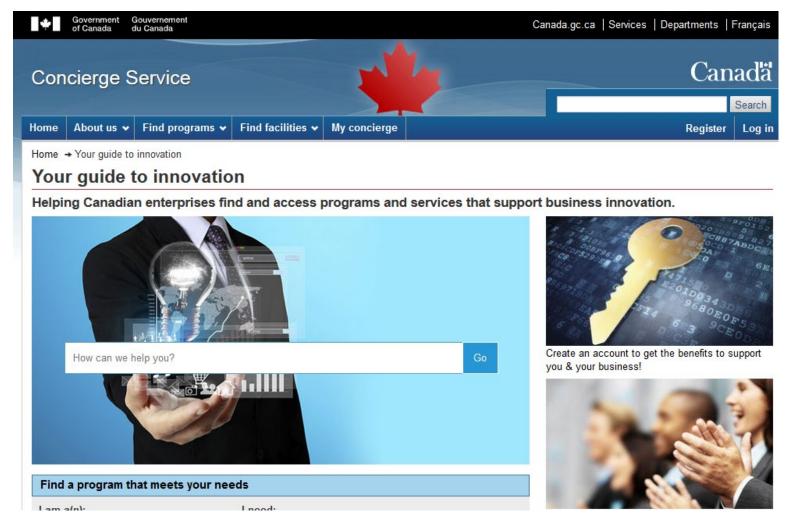


http://www.journal.forces.gc.ca/vol14/no2/page70-eng.asp

## ALECSO – Capacity Building



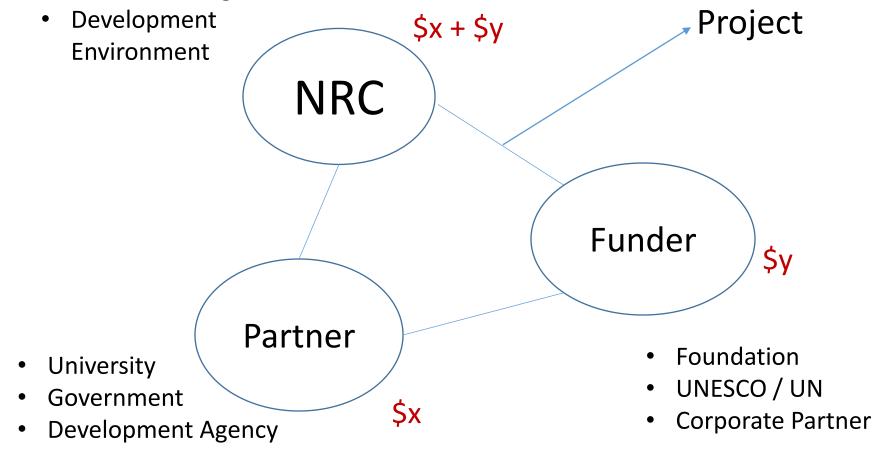
### Concierge OMS



https://concierge.portal.gc.ca/

#### **Expanding LPSS**

- \$20 Million Investment
- NRC Technologies



#### Possible Projects...

- OERs, Repositories, Marketplaces
- Badges, Credentials, Recognition
- Simulations & Workplace Support
- Matching People to Opportunities





Stephen Downes http://www.downes.ca