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### Creating a Learning Network Downes, Stephen

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# Creating a Learning Network

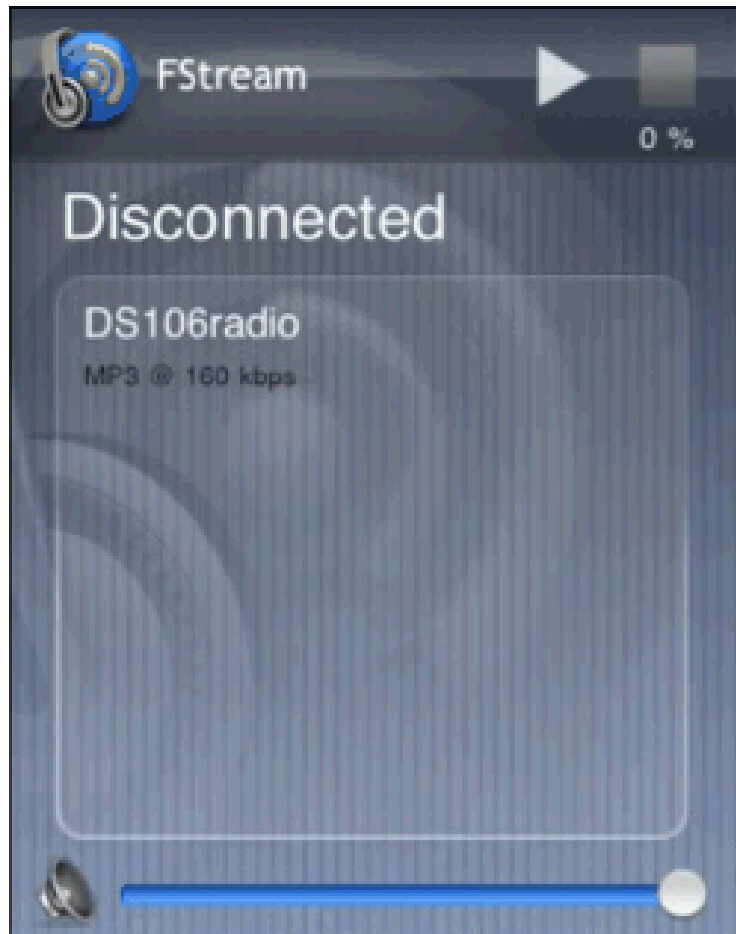
Stephen Downes

ABED – Curitiba, Brazil

October 7, 2014



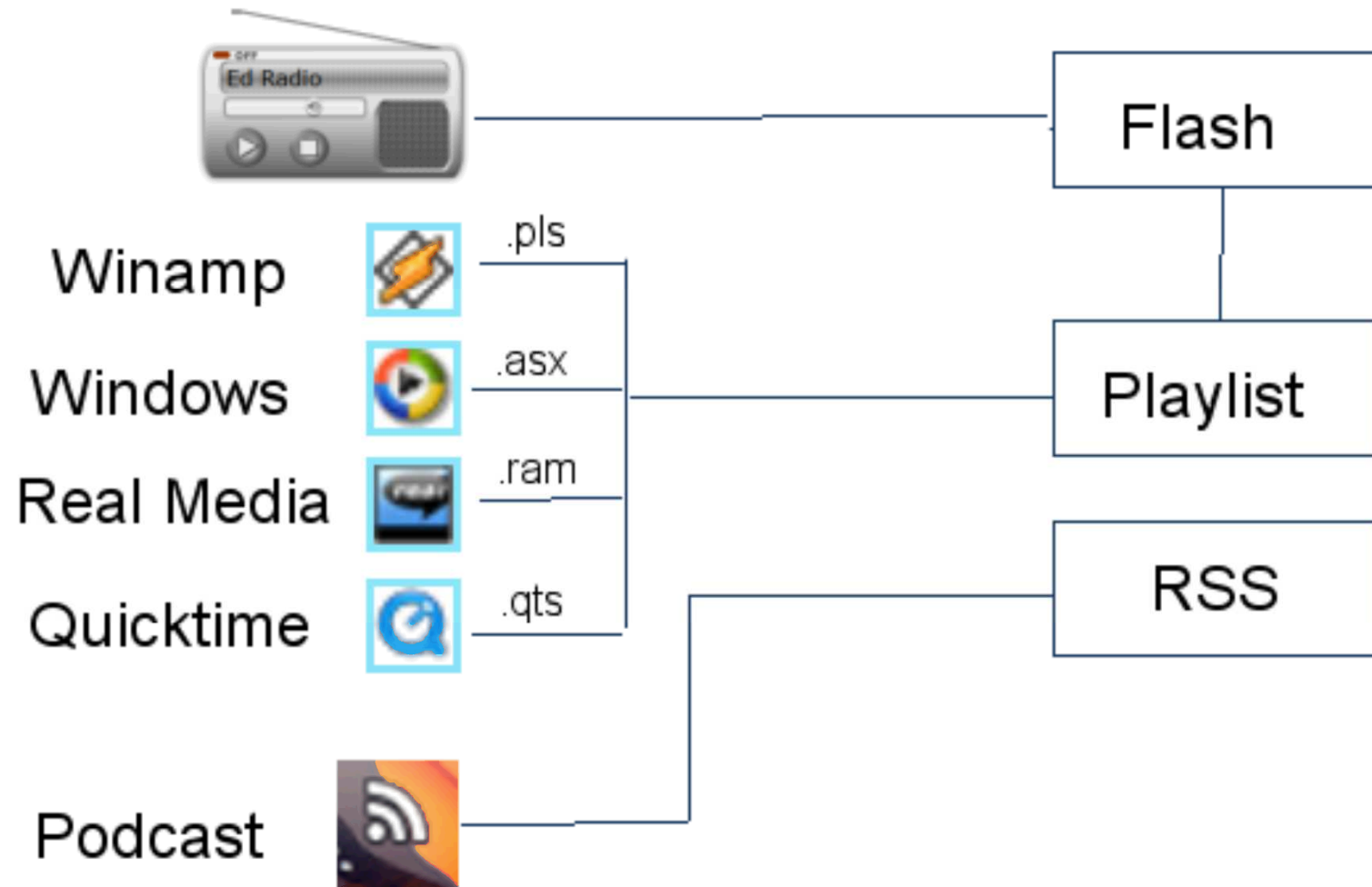
# DS106 – Grant Potter



<http://ds106.us/ds106-radio/>

# How I Built Ed Radio





```
<!-- BEGINS: AUTO-GENERATED PassHosting unlimited SHOUTcast Hosting PassHosting.net  
plans start at $4.91 CODE visit http://www.passhosting.net -->  
<object classid="clsid:D27CDB6E-AE6D-11cf-96B8-444553540000" bgcolor="#FFFFFF"  
height="132" width="205">  
<param name="movie" value="http://www.passhosting.net/ffmp3-config.swf">  
<param name="flashvars" value="url=http://66.55.88.65:8024/stream;&lang=en&  
&codec=mp3&volume=65&introurl=&traking=true&jsevents=false&  
&buffering=5&skin=http://www.passhosting.net/skins/oldradio/ffmp3-oldradio.xml&  
&title=Ed%20Radio&welcome=Welcome%20to ">  
<param name="wmode" value="window">  
<param name="allowscriptaccess" value="always">  
<param name="scale" value="noscale">  
<embed src="http://www.passhosting.net/ffmp3-config.swf"  
flashvars="url=http://66.55.88.65:8024/stream;&lang=en&codec=mp3&volume=65&  
&introurl=&traking=true&jsevents=false&buffering=5&skin=http:  
//www.passhosting.net/skins/oldradio/ffmp3-oldradio.xml&title=Ed%20Radio&  
&welcome=Welcome%20to " scale="noscale" wmode="window" bgcolor="#FFFFFF"  
allowscriptaccess="always" type="application/x-shockwave-flash" height="132"  
width="205">  
</object>  
<!-- ENDS: AUTO-GENERATED PassHosting.net unlimited SHOUTcast Hosting PassHosting.net  
plans start at $4.91 CODE visit http://www.passhosting.net-->
```



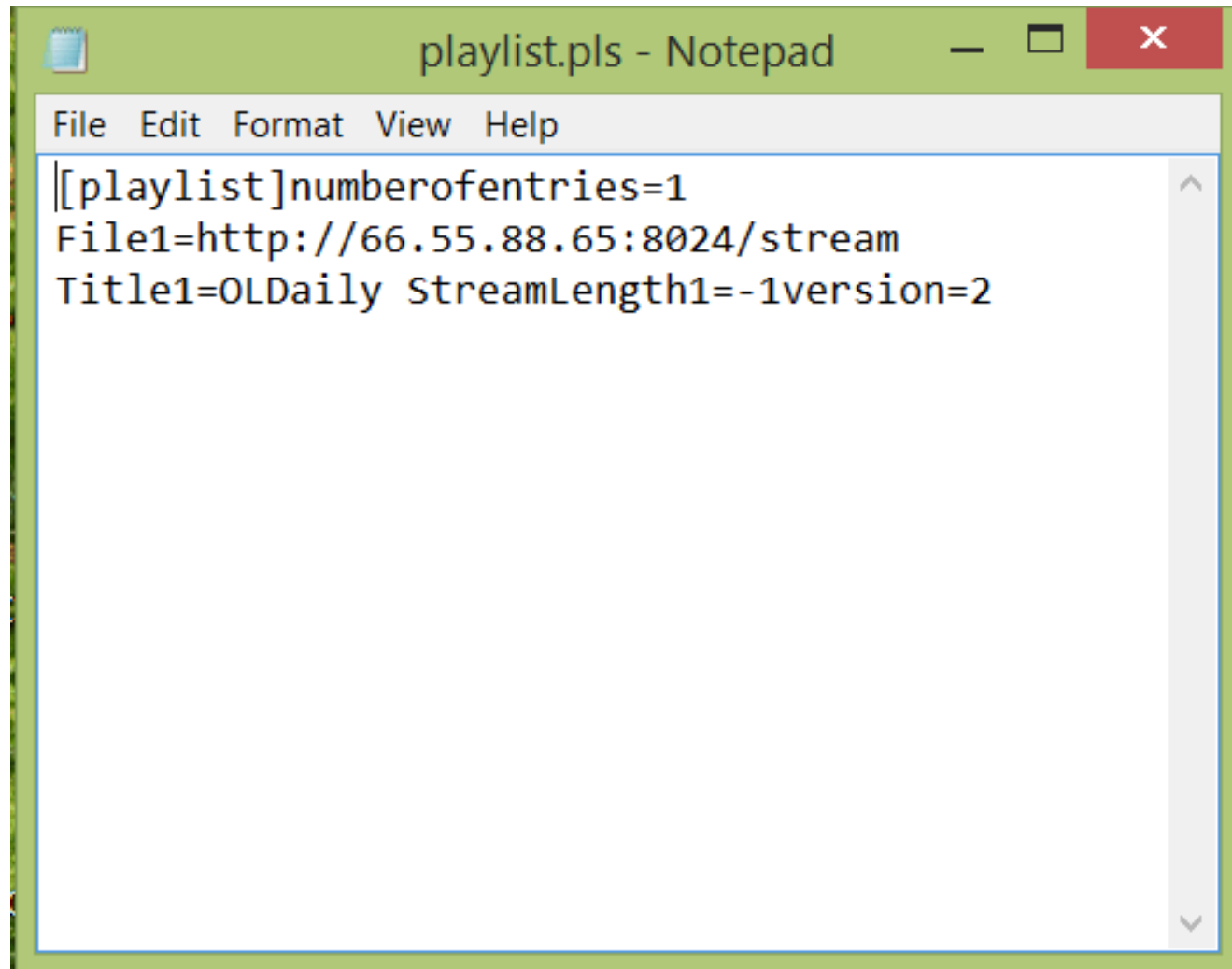
- Flash



- HTML5



.pls



A screenshot of a Notepad window titled "playlist.pls - Notepad". The window has a green title bar and a menu bar with "File", "Edit", "Format", "View", and "Help". The text area contains the following lines:

```
[playlist]numberofentries=1  
File1=http://66.55.88.65:8024/stream  
Title1=OLDaily StreamLength1=-1version=2
```

.pls file – points to streaming source



Computer

Mobile  
Phone

Streaming  
Media  
Server



Shoutcast  
Icecast  
SAM Broadcaster

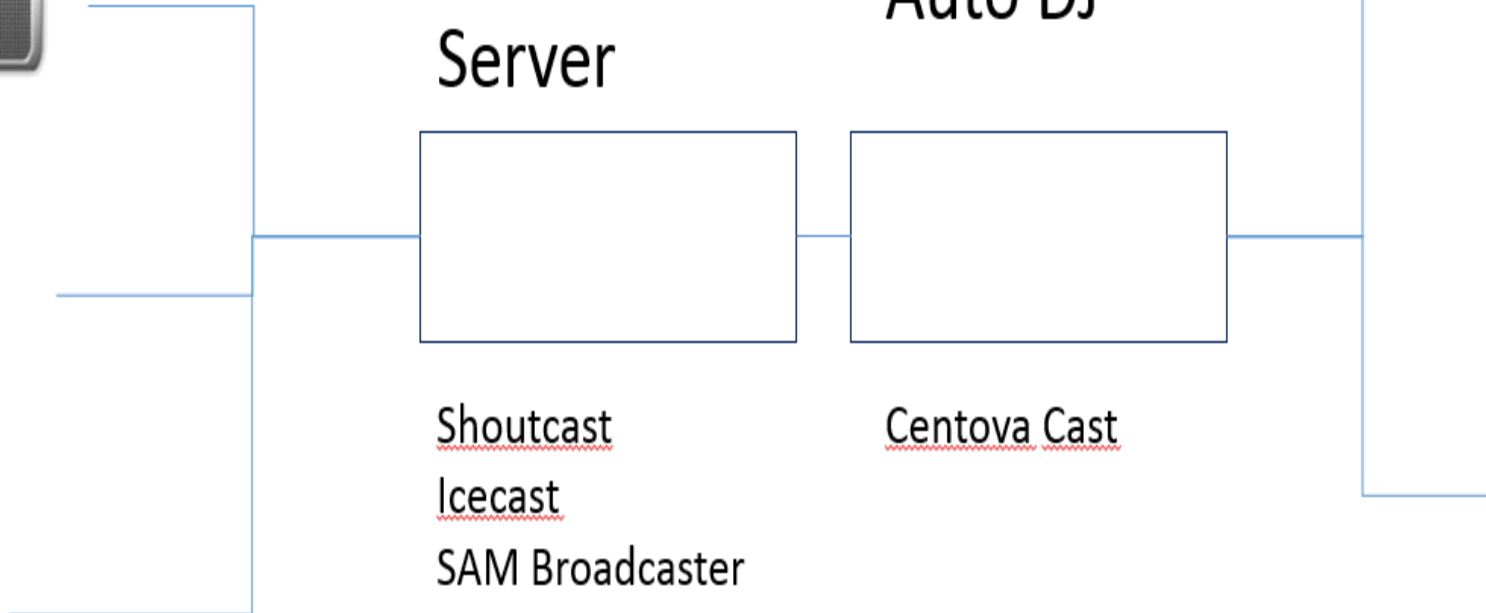
Auto DJ



Centova Cast

FTP File  
Upload

Digital  
Signal





Computer

Mobile  
Phone

Streaming  
Media  
Server

Shoutcast  
Icecast  
SAM Broadcaster

Auto DJ

Centova Cast

FTP File  
Upload

Digital  
Signal



Digital  
Signal



Digital Signal  
Processor

Edcast, Nicecast  
Or Mixxx



Media Player



Speakers  
Headphones

Files

Playlist

Mic

Stereo  
Mix

```
playlist.pls - Notepad
File Edit Format View Help
[playlist]
File1=Weird Al - This Is The Life.mp3
Title1=Weird Al Yankovic - This is the Life
Length1=187
File2=http://www.site.com/~user/gump.mp3
Title2=Weird Al: Bad Hair Day - Gump
Length2=129
File3=http://www.site.com:8000/listen.pls
Title3=My Cool Stream
Length3=-1
NumberOfEntries=5
```

Local file

Web file

Streaming source

Web fil

.pls file – points to mp3 files online

# Ed Radio



Welcome to Ed Radio, the home of all things educational and technology. Hosted by Stephen Downes, Ed Radio plays clips from live conferences, interviews, videos and more. Ed Radio is web radio, meaning you can listen to it over the internet.

Listen Live:    

Listen to today's programming from the start  
[M3U](#) -- [PLS](#)

Subscribe to the [Ed Radio RSS Podcast](#)

Stream

.pls File

RSS

[jot\\_20141007-0247a.mp3](#)

Let's Talk About Tech, [Game On: Kick](#)

[philarms\\_20141006-2015a.mp3](#)

Philosopherâ™s Arms, [philarms: The](#)

[76402-35-randy-j-hunt-we-re-back-c](#)

education on Huffduffer, [#35: Randy J.](#)

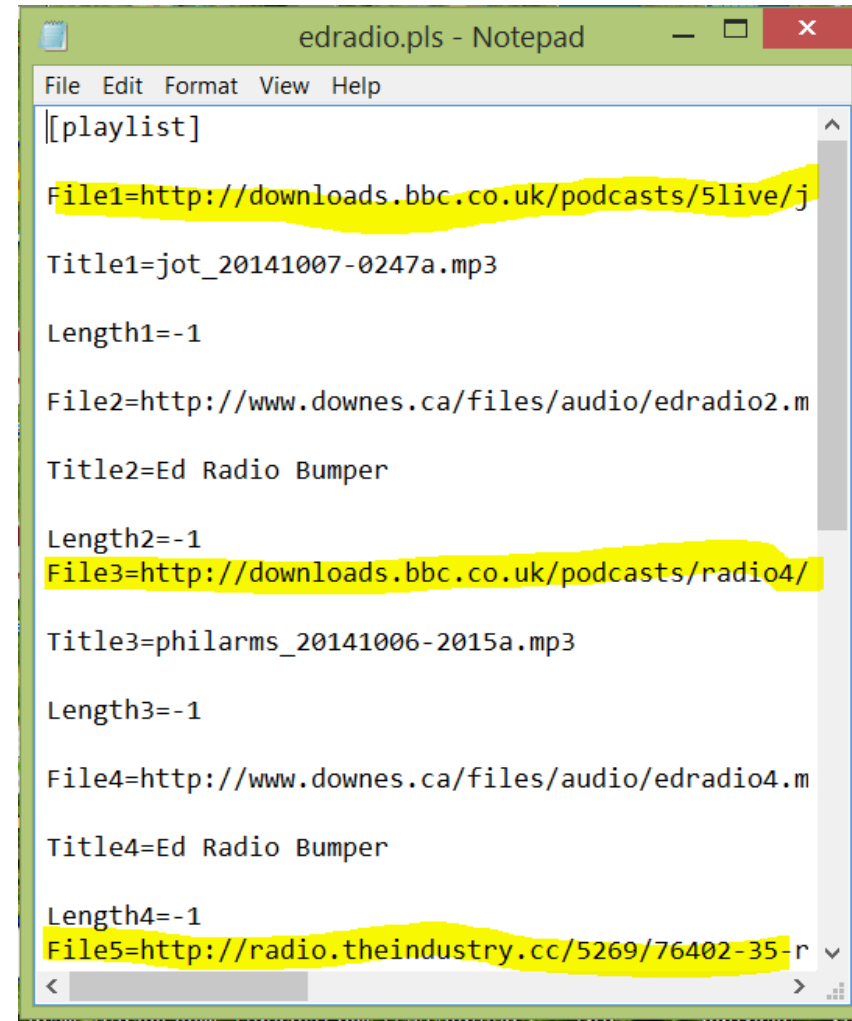
[â€¢ The Industry,](#)

[TLATAudioBLog.mp3](#)

EdReach » Channels » Mission Monda

[106-episode-13.mp3](#)

EDUtalk, [The DS106 Good Spell Epis](#)



```
edradio.pls - Notepad
File Edit Format View Help
[[playlist]
File1=http://downloads.bbc.co.uk/podcasts/5live/j
Title1=jot_20141007-0247a.mp3
Length1=-1
File2=http://www.downes.ca/files/audio/edradio2.m
Title2=Ed Radio Bumper
Length2=-1
File3=http://downloads.bbc.co.uk/podcasts/radio4/
Title3=philarms_20141006-2015a.mp3
Length3=-1
File4=http://www.downes.ca/files/audio/edradio4.m
Title4=Ed Radio Bumper
Length4=-1
File5=http://radio.theindustry.cc/5269/76402-35-r
```

## List feeds

Find:  Sort:

Listing 0 to 1000 of 40 feeds



- [Analyze][Harvest][Retire] [Edit] [Delete] Links: --I know this much is true.-- (category)
- [Analyze][Harvest][Retire] [Edit] [Delete] Links: Circulating Ideas (category)
- [Analyze][Harvest][Retire] [Edit] [Delete] Links: Downes's posts (category)
- [Analyze][Harvest][Retire] [Edit] [Delete] Links: Ed Tech Crew Podcast (category)
- [Analyze][Harvest][Retire] [Edit] [Delete] Links: EdReach » Channels » Mission Monday (Education Technology,,,,,)
- [Analyze][Harvest][Retire] [Edit] [Delete] Links: EdTechTalk (category)
- [Analyze][Harvest][Retire] [Edit] [Delete] Links: Education (category)
- [Analyze][Harvest][Retire] [Edit] [Delete] Links: education on Huffduffer (category)
- [Analyze][Harvest][Retire] [Edit] [Delete] Links: EDUCAUSE | Podcasts (category)
- [Analyze][Harvest][Retire] [Edit] [Delete] Links: EDUtalk (category)
- [Analyze][Harvest][Retire] [Edit] [Delete] Links: Flying Colours Maths » podcasts (category)
- [Analyze][Harvest][Retire] [Edit] [Delete] Links: Forum - A World of Ideas (category)
- [Analyze][Harvest][Retire] [Edit] [Delete] Links: historyofphilosophy.net (category)
- [Analyze][Harvest][Retire] [Edit] [Delete] Links: Ideas from CBC Radio (Highlights) (category)
- [Analyze][Harvest][Retire] [Edit] [Delete] Links: Let's Talk About Tech (category)

MP3 files ← RSS Feeds

```
<item>
  <title>'Rebellen Oekraïne leveren 1200 krijgsgevangenen over'</title>
  <link>http://www.nu.nl/buitenland/3872331/rebellen-oekraïne-leveren-1200-krijgsgevangenen-over
  <guid>http://www.nu.nl/buitenland/3872331/index.html</guid>
  <description>De pro-Russische rebellen in het oosten van Oekraïne hebben in totaal 1.200 "krijgsgevangenen" overhandigd aan de Russische militairen.
  <related>
    <b>Gerelateerd nieuws:</b><br />
    - <a href="http://www.nu.nl/buitenland/3872069/meer-dan-3000-doden-oorlog-oekraïne.html">http://www.nu.nl/buitenland/3872069/meer-dan-3000-doden-oorlog-oekraïne.html</a>
    - <a href="http://www.nu.nl/buitenland/3871987/ondanks-bestand-schoten-in-oekraïne.html">http://www.nu.nl/buitenland/3871987/ondanks-bestand-schoten-in-oekraïne.html</a>
  </related>
  <pubDate>Mon, 08 Sep 2014 15:41:19 +0200</pubDate>
  <category>Algemeen</category>
  <geolocation>47.097133,37.543366999999999,7</geolocation>
  <enclosure url="http://media.nu.nl/m/m10xbu4acrnbsqr256.jpg" type="image/jpeg" />
  <copyrightPhoto>nu.nl</copyrightPhoto>
</item>
```

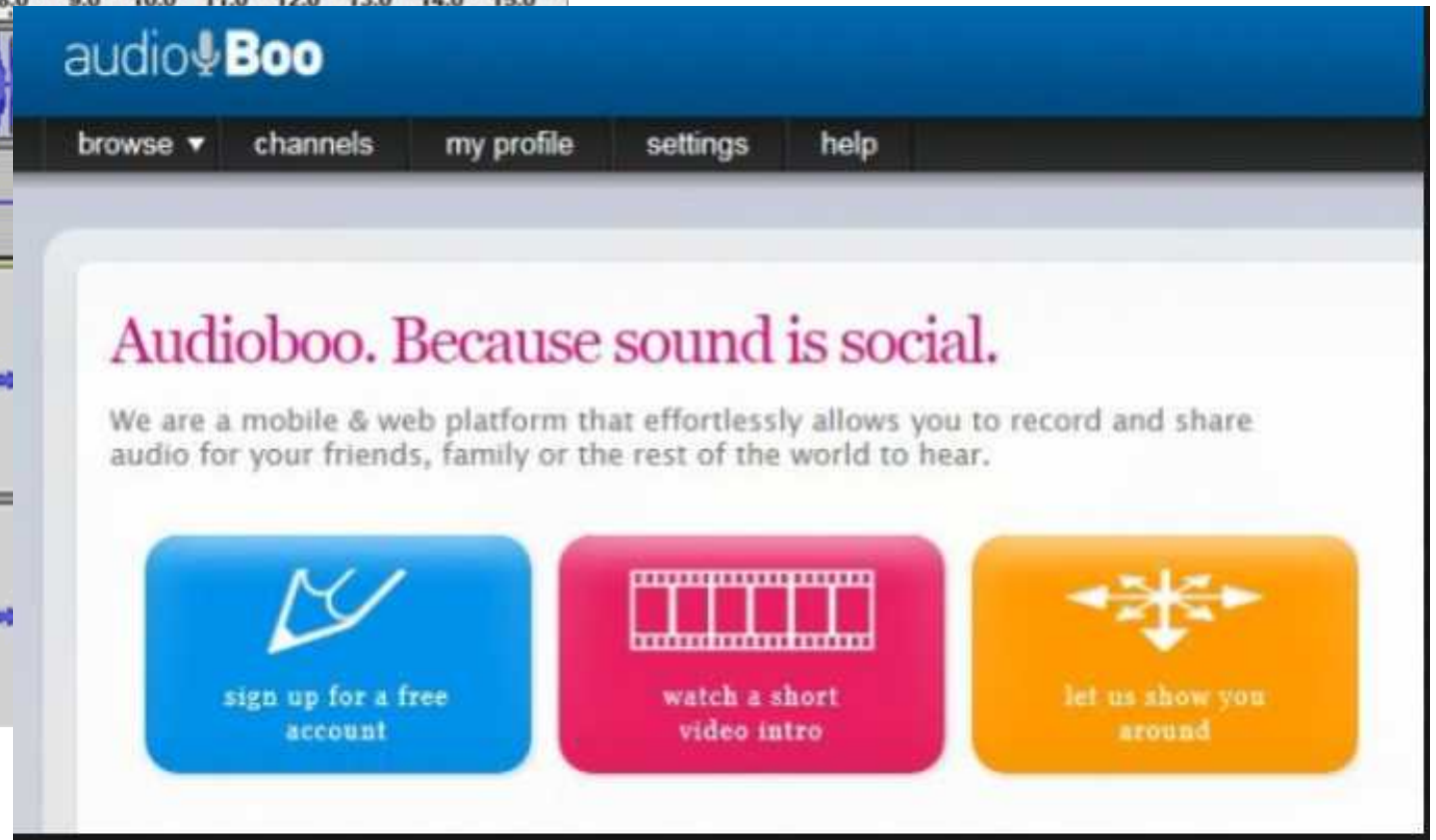
Enclosures in RSS Files indicate MP3 sources



Sources include RSS, Twitter, Facebook APIs, etc.



Audioboo

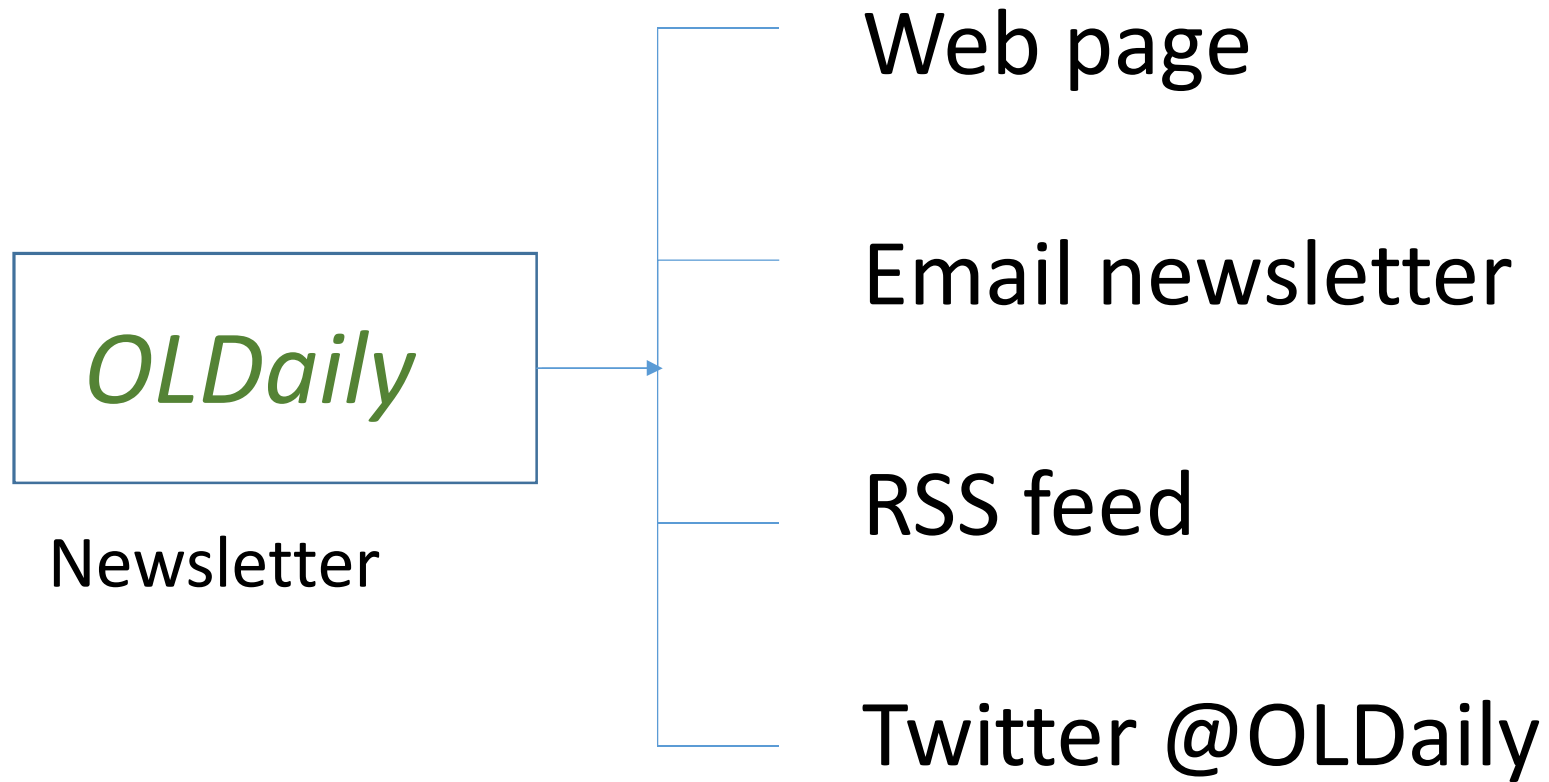


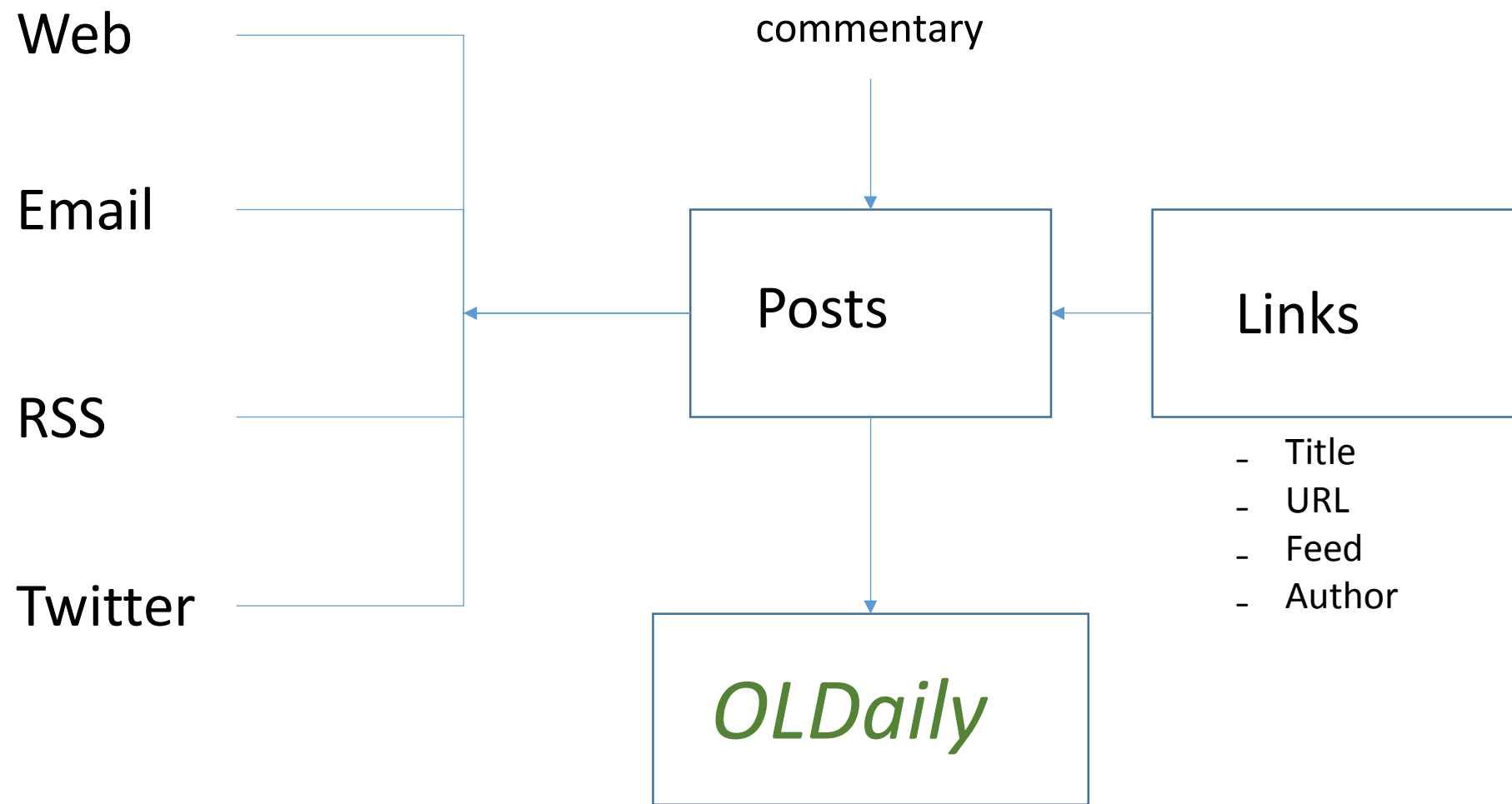
Audacity

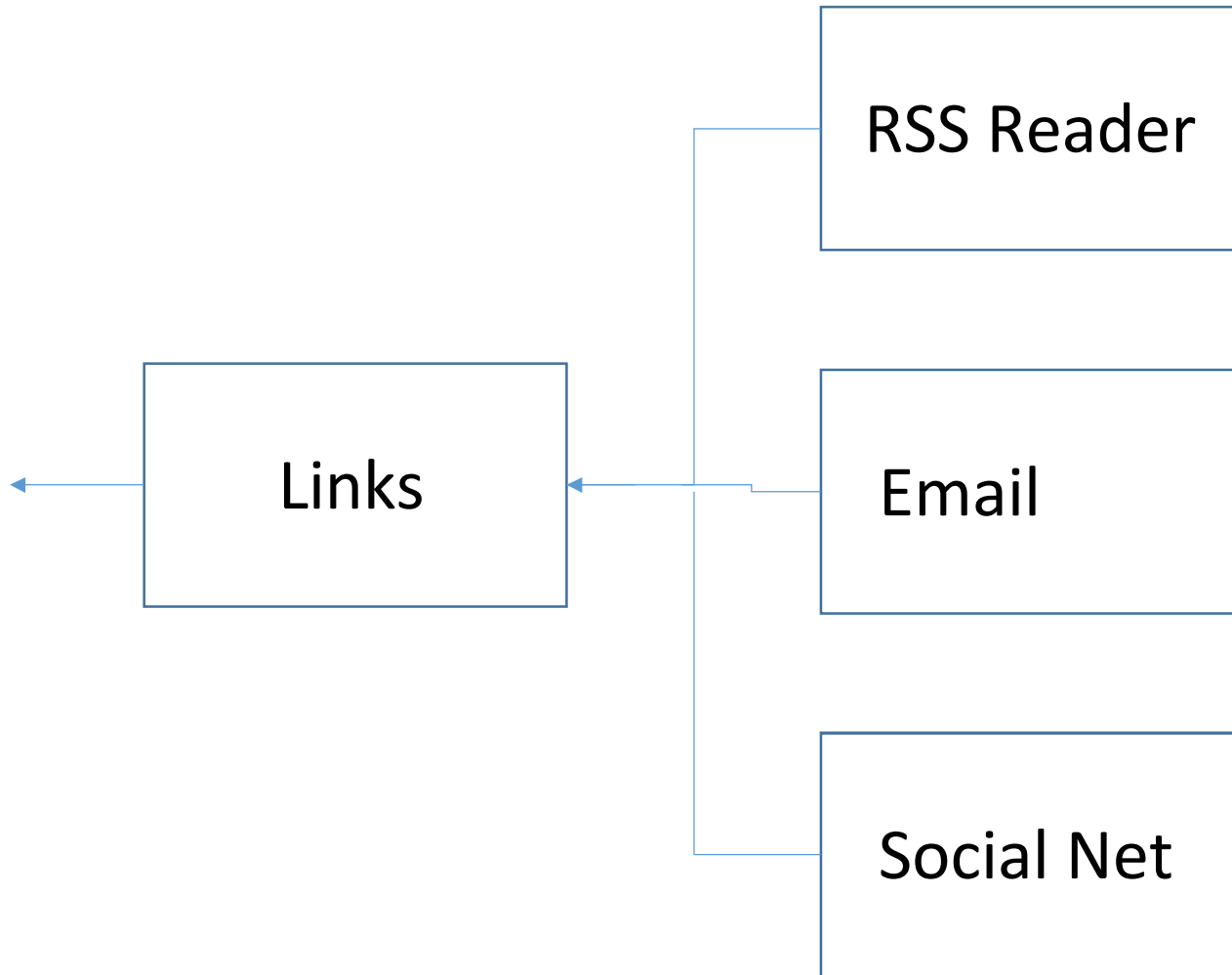
Create MP3 files and upload them to the web

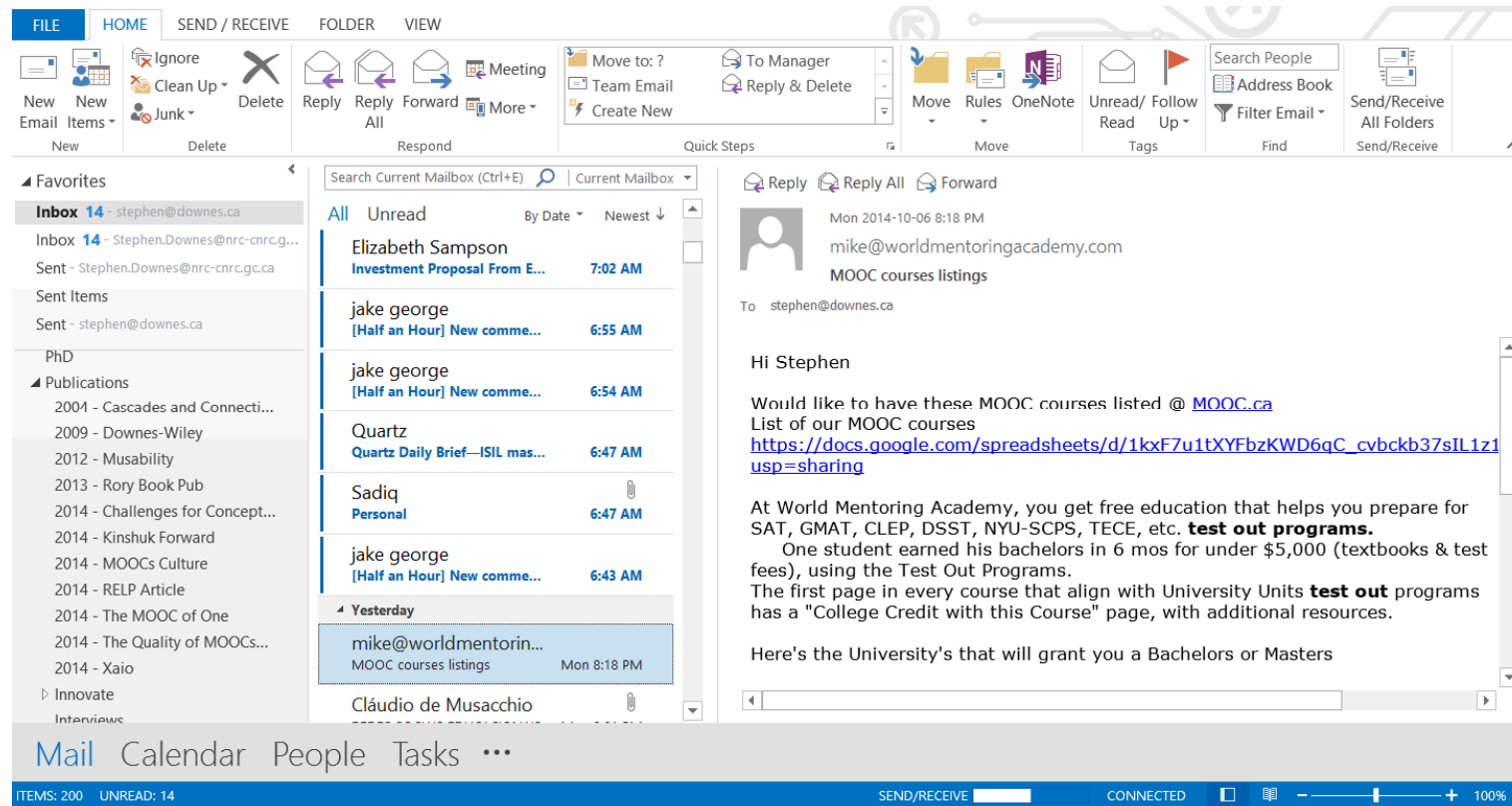
# How I Built OLDaily



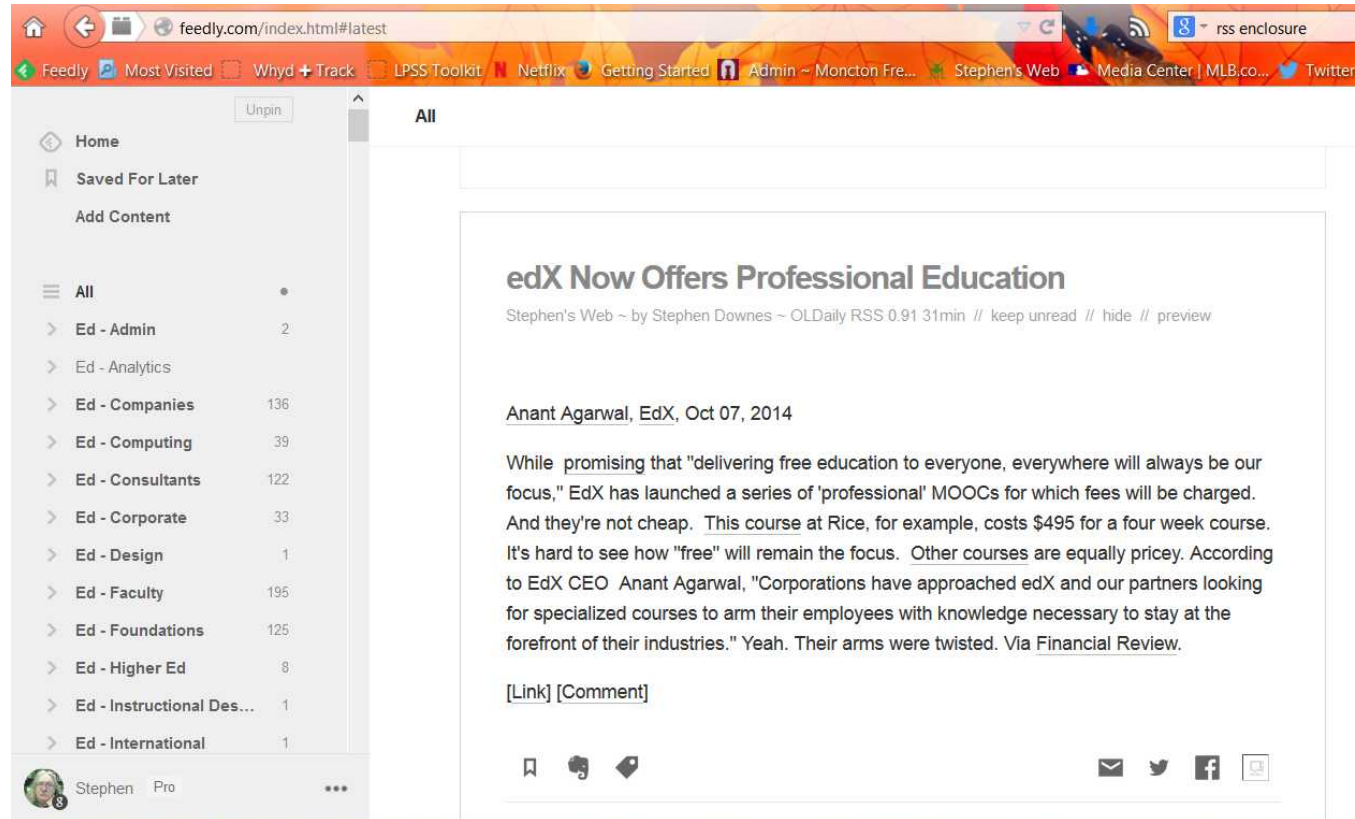








- # Email
- Google groups
  - Mailing Lists
  - Subscriptions
  - Alerts



- RSS
- Feedly
  - Old Reader
  - Outlook



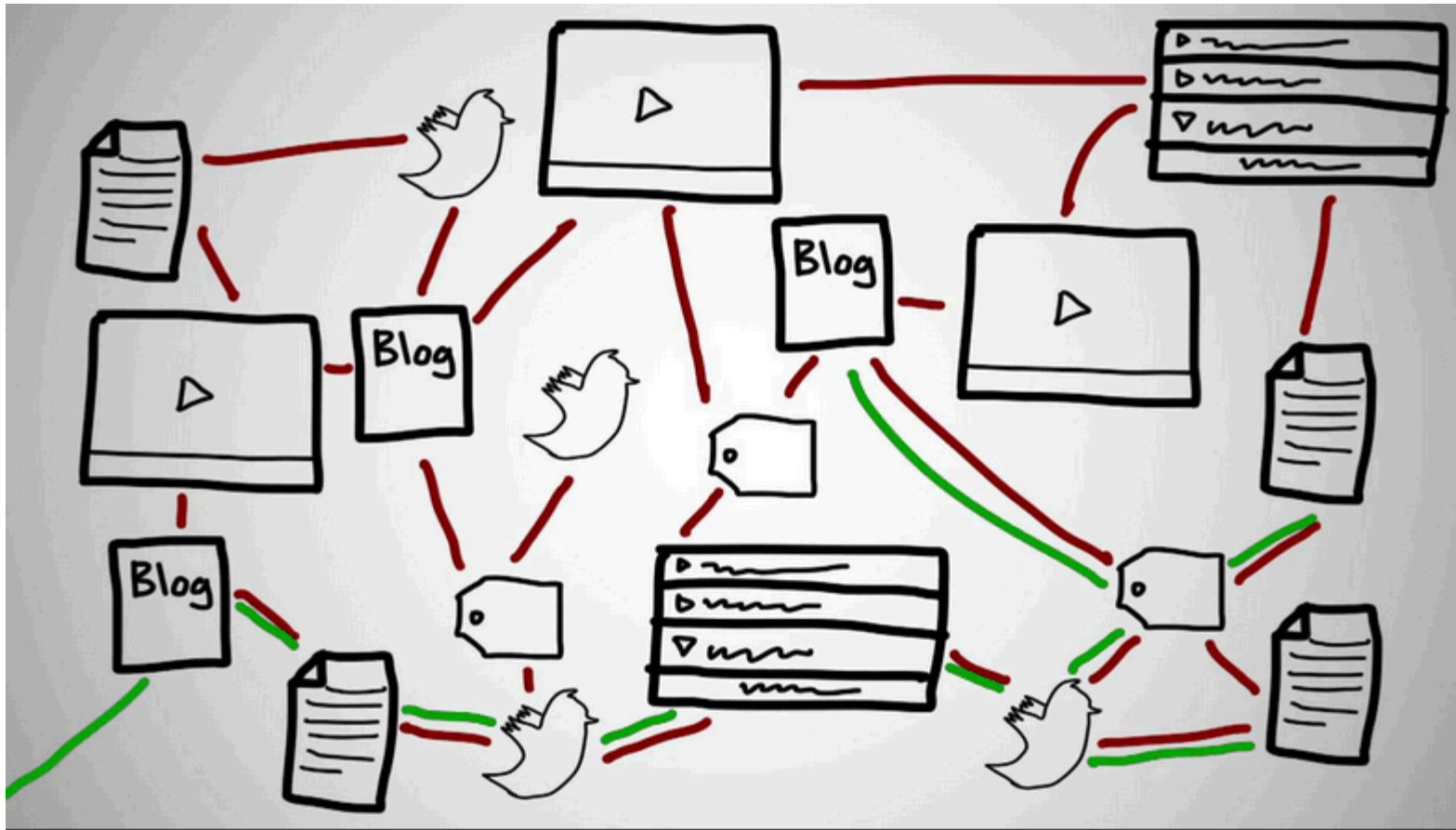
- Social Media
- Twitter
  - Facebook
  - Google+
  - LinkedIn
  - Groups
  - Channels
  - Hashtags

- Content Sources

- Blogger / Wordpress
- Content management system
- Social media
- Discussion groups



# How I Built a MOOC



# Notification – url - sign up for newsletter

[home](#) [about](#) [contact](#)

## Contents

### This Course

[Home Page](#)

[Learning Outcomes](#)

[Course Topics](#)

[Registration](#)

[Your Privacy](#)

[Contact Us](#)

### Your Account

[Register](#)

[Login](#)

[Manage Account](#)

[About OpenID](#)

### Participating

[Read Daily Newsletter](#)

[Newsletter Archives](#)

[Browse Blog Posts](#)

[Add a New Blog Feed](#)

[View List of Blogs](#)

### Feeds

YOU ARE NOT LOGGED IN. [[LOGIN](#)] [[REGISTER](#)]

## Create a new account

### Registration and newsletter subscription

Please choose user name or enter your email address

Enter your password

Enter your email address

Subscribe to newsletters (you may choose more than one; leave blank for none)

☒ Announcements

(Optional) How did you find out about this site?

# Add a New Feed

## Contents

### This Course

[Home Page](#)  
[Learning Outcomes](#)  
[Course Topics](#)  
[Registration](#)  
[Your Privacy](#)  
[Contact Us](#)

### Your Account

[Register](#)  
[Login](#)  
[Manage Account](#)  
[About OpenID](#)

### Participating

[Read Daily Newsletter](#)  
[Newsletter Archives](#)  
[Browse Blog Posts](#)  
[Add a New Blog Feed](#)  
[View List of Blogs](#)

### Feeds

[Announcements RSS](#)  
[Blog Posts RSS](#)  
[OPML List of Feeds](#)

### Contents

Edit Box: Sidebar to fill page  
contents

YOU ARE NOT LOGGED IN. [[LOGIN](#)] [[REGISTER](#)]

## Add A New Feed

### Share Your RSS Feed

We would like you to share blog posts and other online content with us. Here's how the process works:

- you create a blog or some other content somewhere on the internet
- you find the RSS feed of that content and share it with is [here, on the 'New Feed' page](#)
- we look at your feed, to make sure all the links work properly, and then place it on the [course feeds](#) page (note that it might take a day or two to approve new feeds)
- you write a blog post or other content using the tag CFHE12 (that is, you put the tag 'CFHE12' somewhere in the title or text of your post, or as a category for your post)
- we retrieve your post and display it here in the newsletter and elsewhere in the course (more on that to come)

If you need more detailed instructions, you can view one of the videos we've produced describing the process for other courses:

- [Here it is for the PLENK course](#)
- [Here it is for the Critical Literacies course](#)

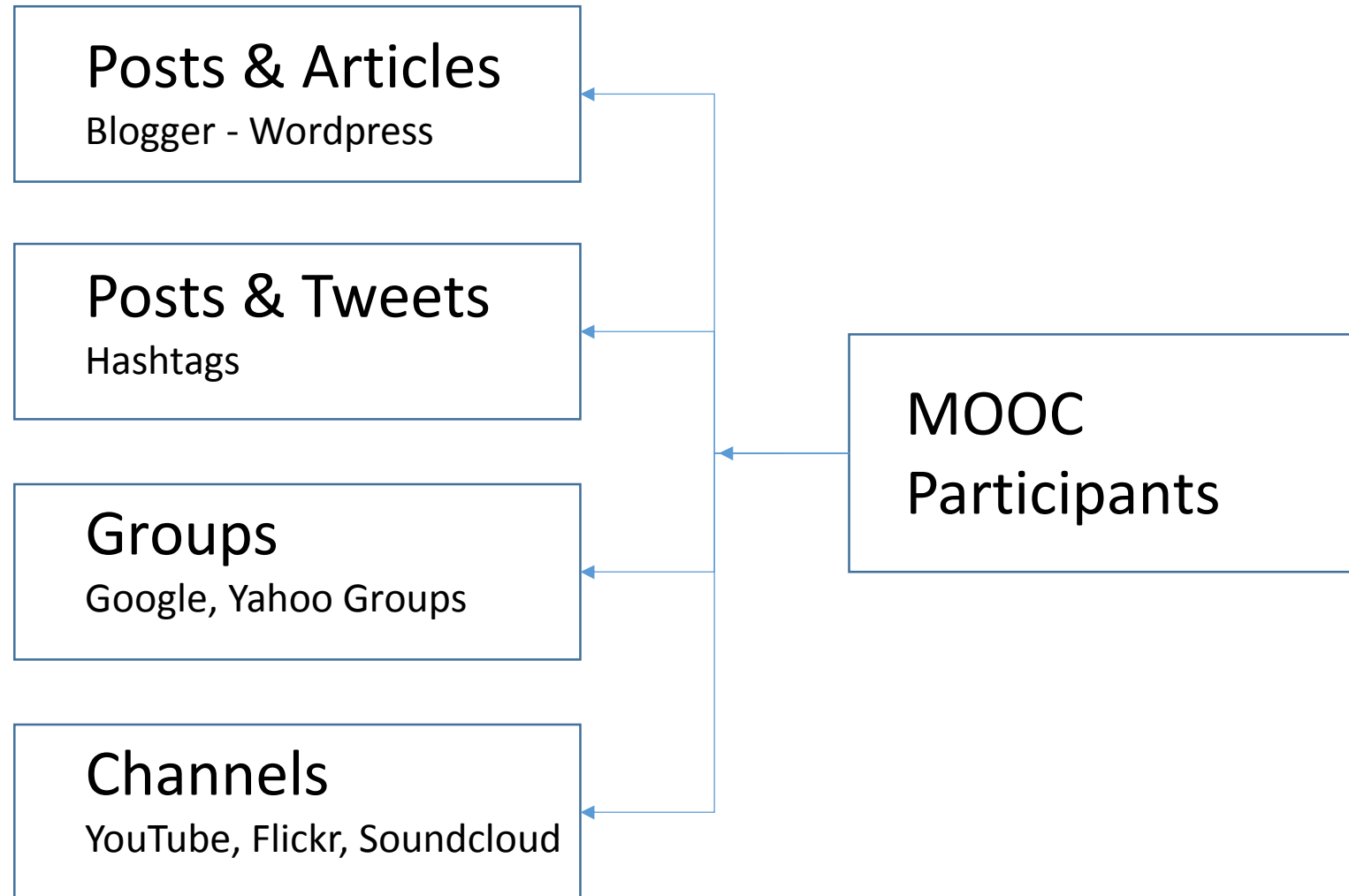
The only difference between this course and the other courses is in (a) where to add a new feed, and (b) the course tag.

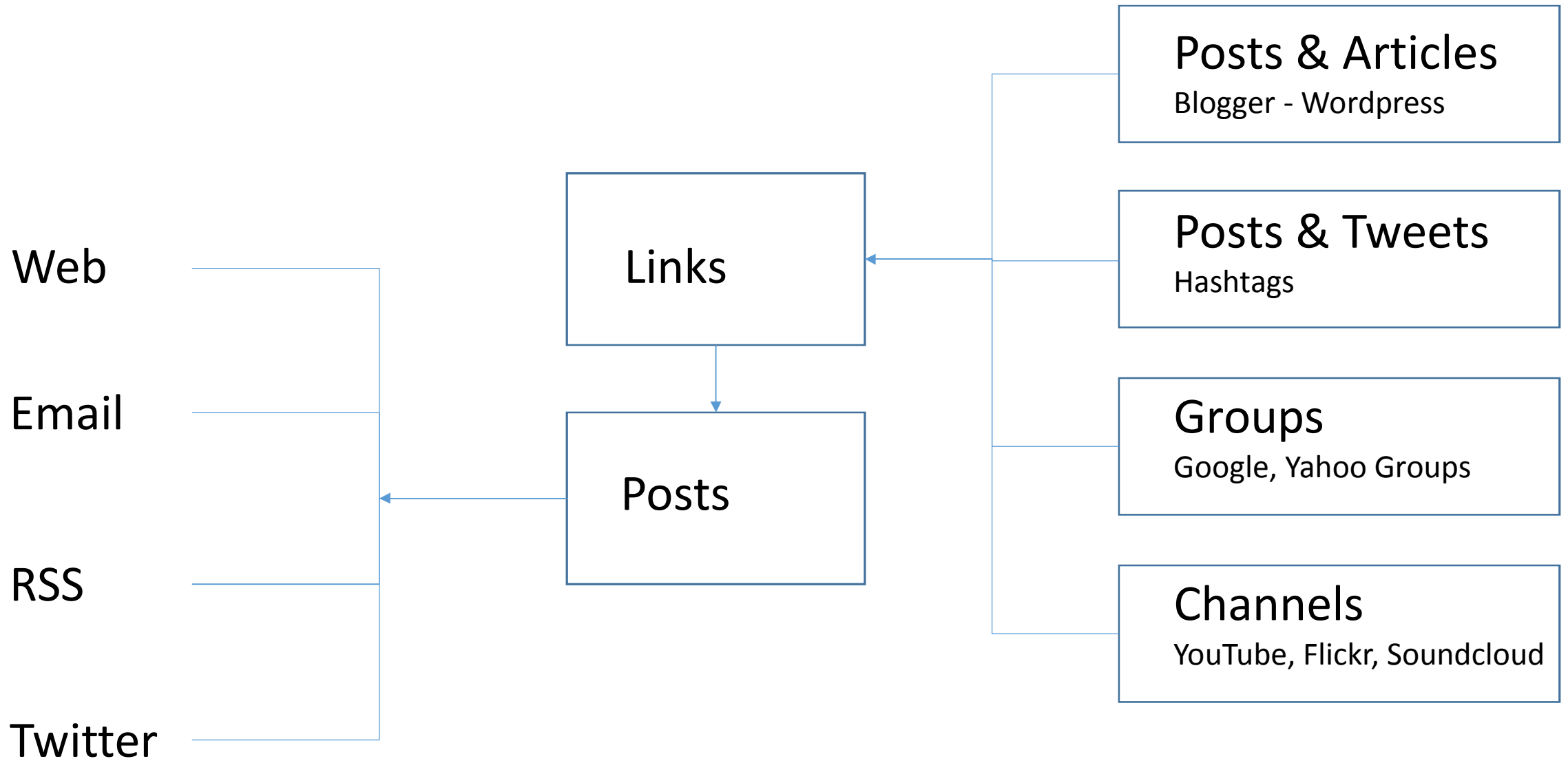
New feeds: [http://edfuture.mooc.ca/new\\_feed.htm](http://edfuture.mooc.ca/new_feed.htm)

Course Tag: CFHE12

Fill out the form below to share your feed:

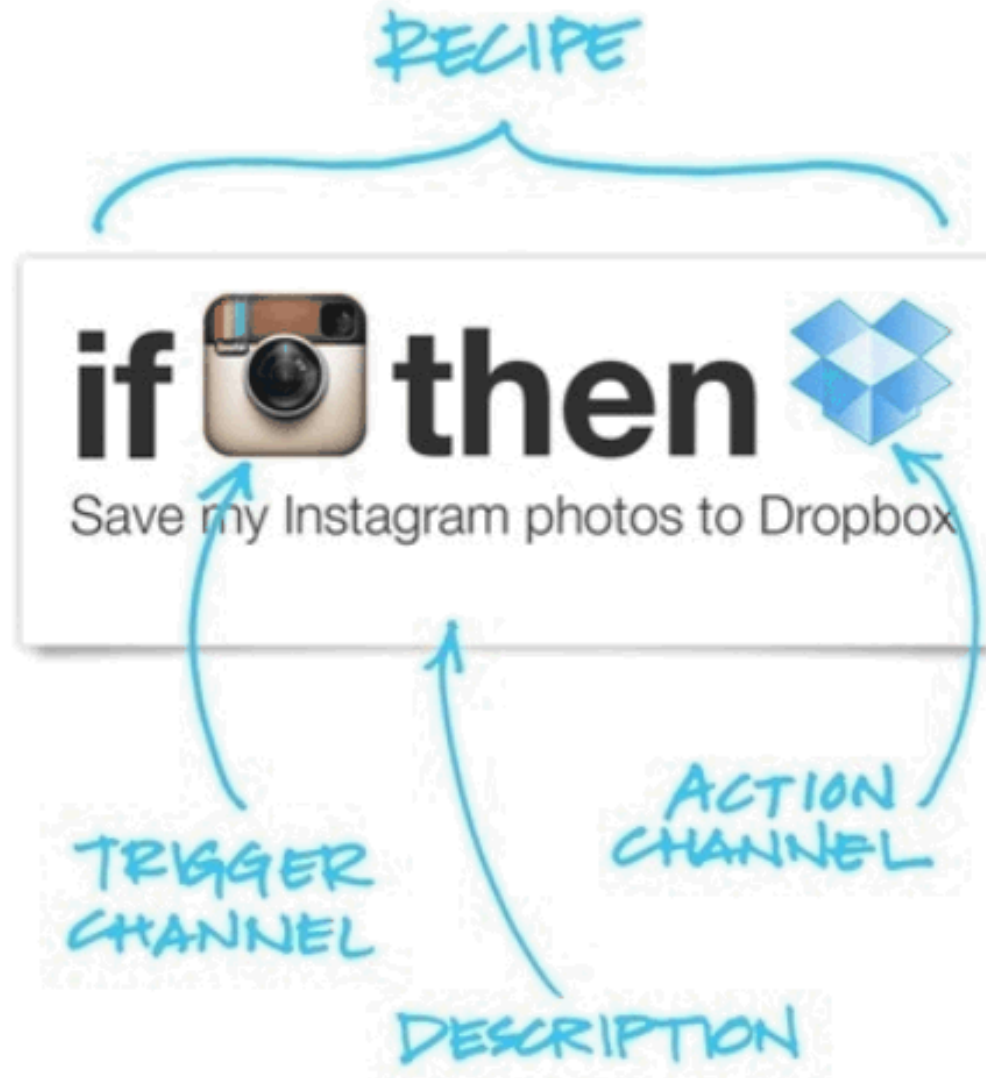
Title	<input type="text"/>
Author	<input type="text"/>





## RSS content

- Feed list
  - Submit feed - RSS
    - Blog, twitter, group, etc.
  - Sign up account API
  - Relays
    - Yahoo Pipes
    - IFTTT →
    - Hootsuite
    - Evernote



## Daily news

- Announcements
- Calendar of events
- Posts
- RSS content

## *Edfuture Daily Newsletter*

January 23, 2013

### **Participants' Blog Posts**

This is a list of the blog posts mentioning the 'CFHE12' keyword or tag harvested from the li

[\[Add your blog!\]](#) [\[See the List of Feeds\]](#) [\[Browse all Blog Posts\]](#)

### **Twitter Posts**

If you use the 'CFHE12' tag on Twitter, your Twitter posts will be collected and listed here.

[@tcchawaii](#) tweeted: 2013-01-22T17:01:45Z

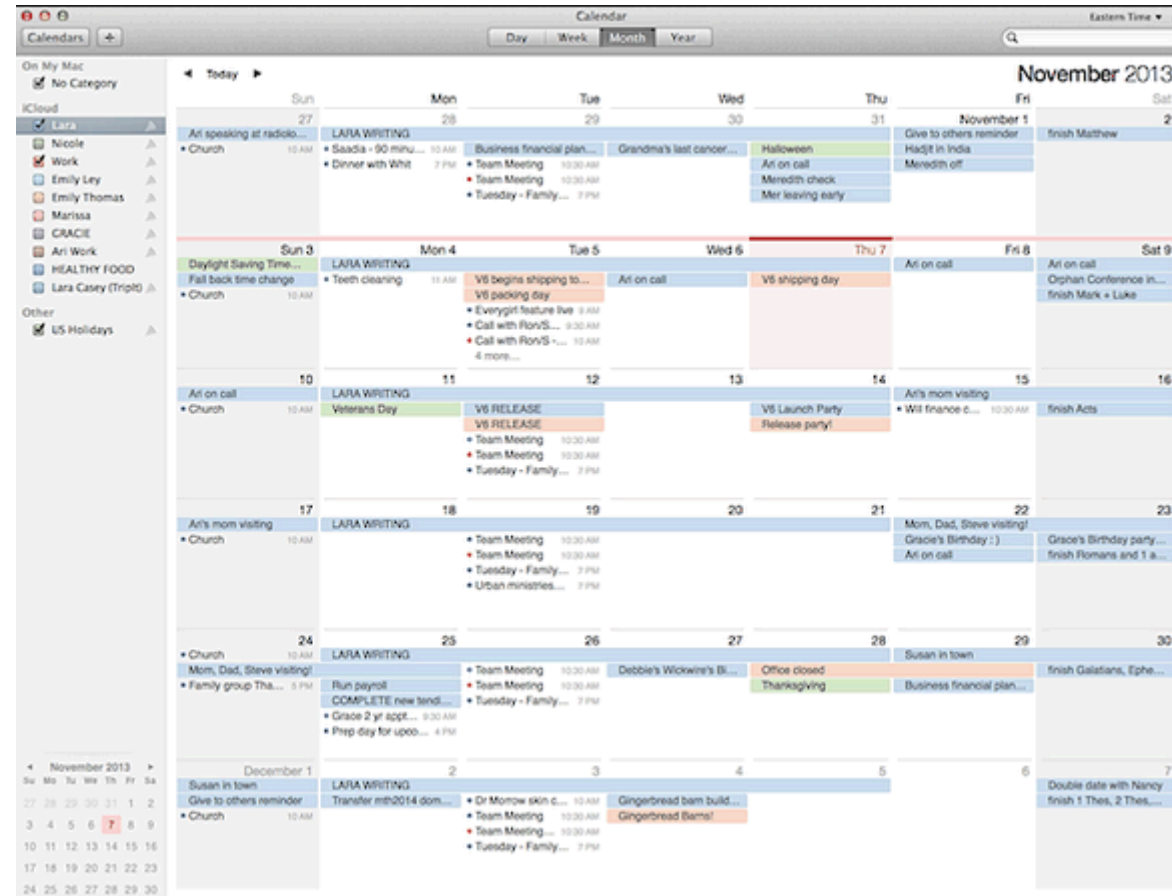
*Please note:* due to the way Twitter provides feed updates, some tweets might not be collecte

### **More to come!**

As the course progresses, we will add more features to this newsletter. So watch this space!

# Calendar

- (broken bit)
- List of events
- Calendar formats
  - - .ical

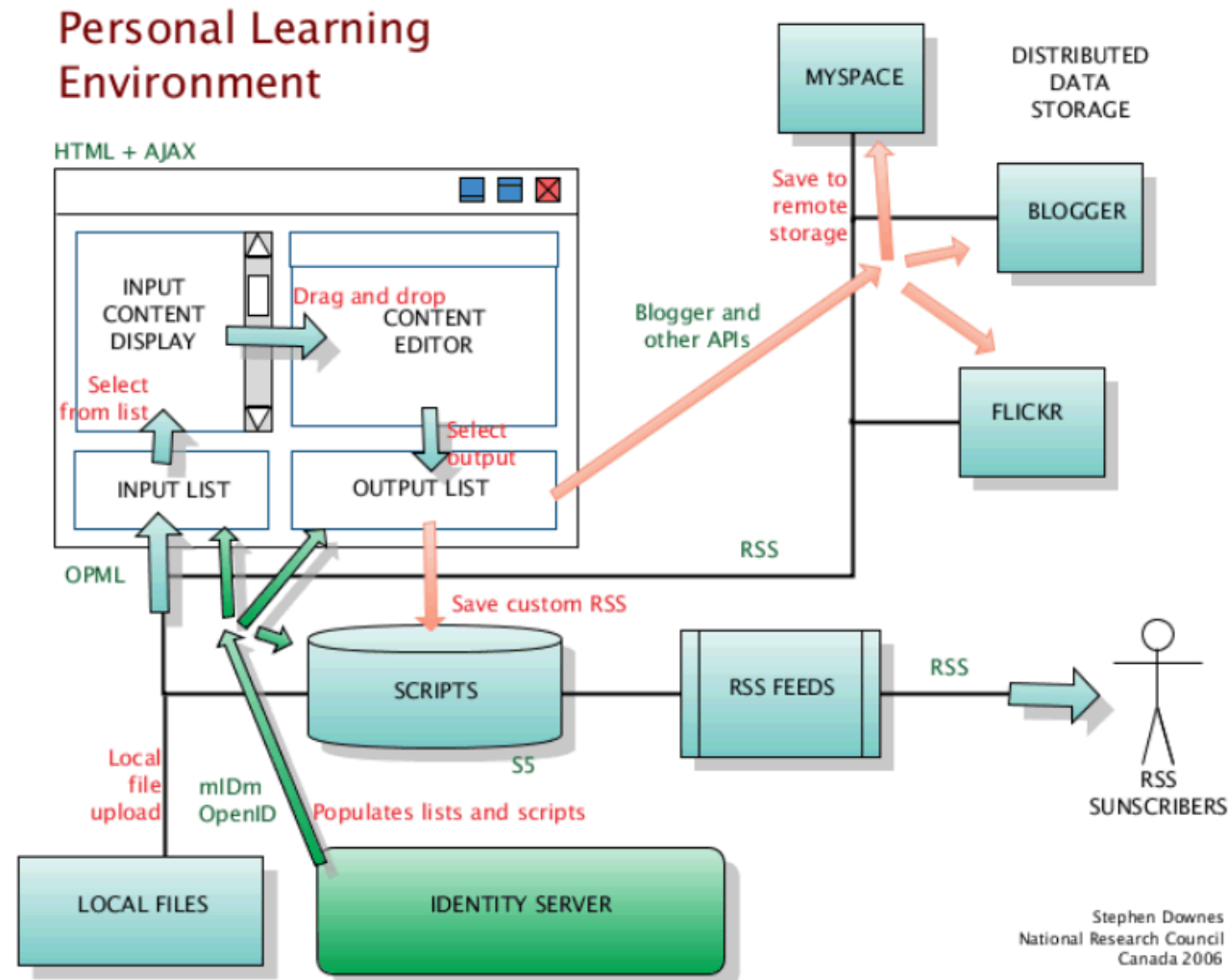


# Events

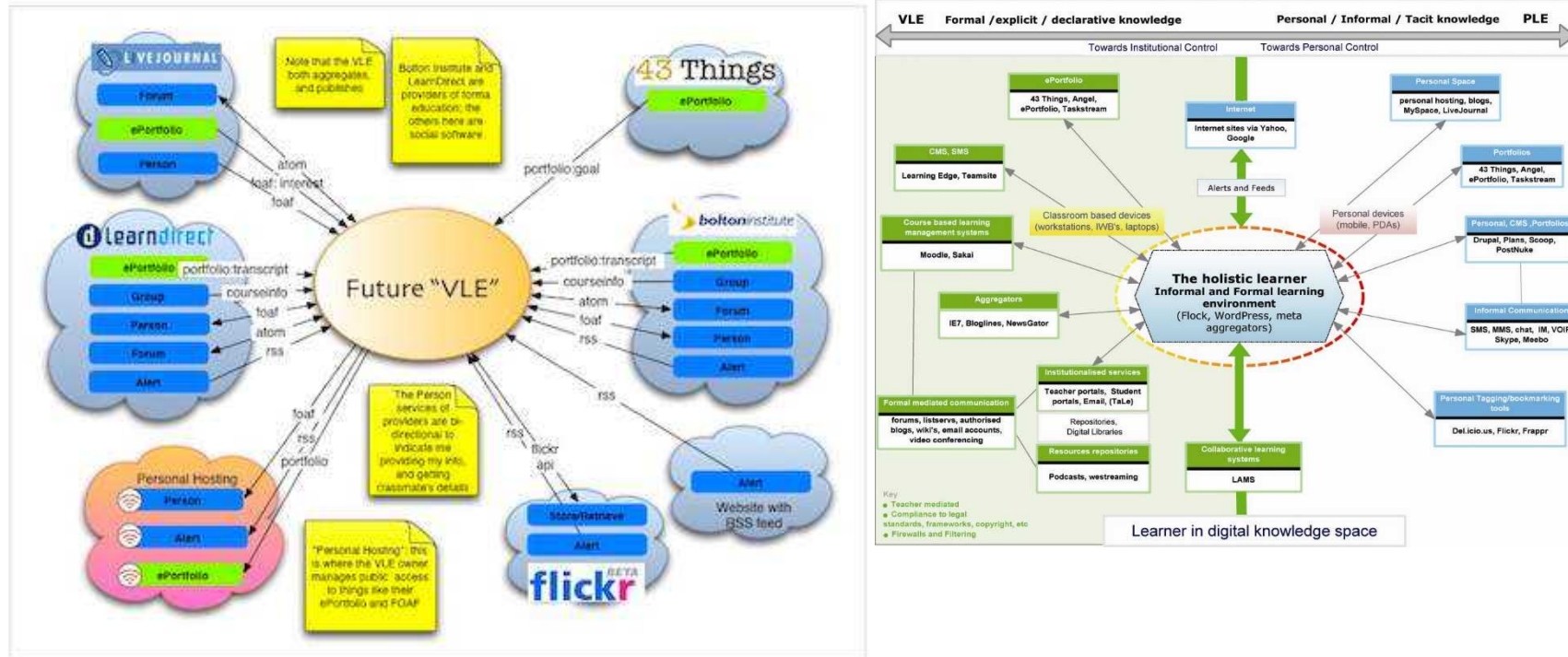
- - BB Collaborate
  - Recordings / URL + Player (Java)
- Others – Webx, Wiziq, Adobe Connect
- Webcasting =
  - Conferencing tool (any of above or Skype) +
  - Webcasting tool – YouTube, LiveStream, Ustream
- Recordings



# How to Build A Learning Network



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

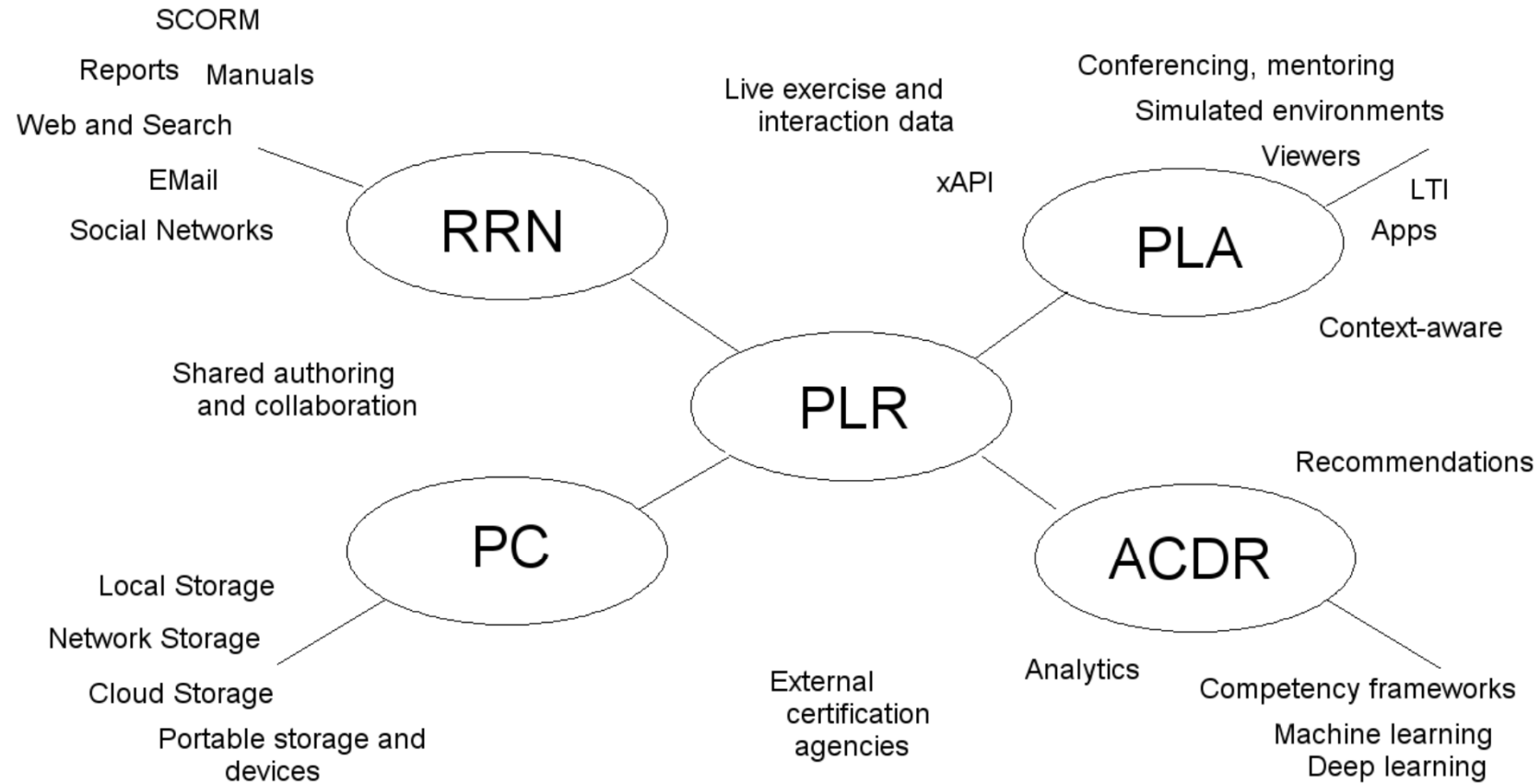


Scott Wilson (left), Tim Hand (right)

<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)

# LPSS Core Projects

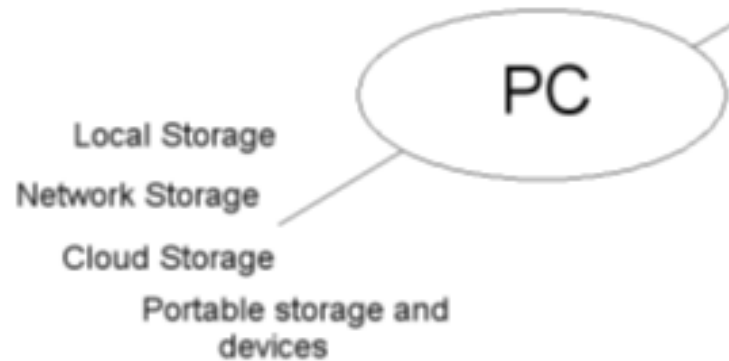


# Resource Repository Network



- 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

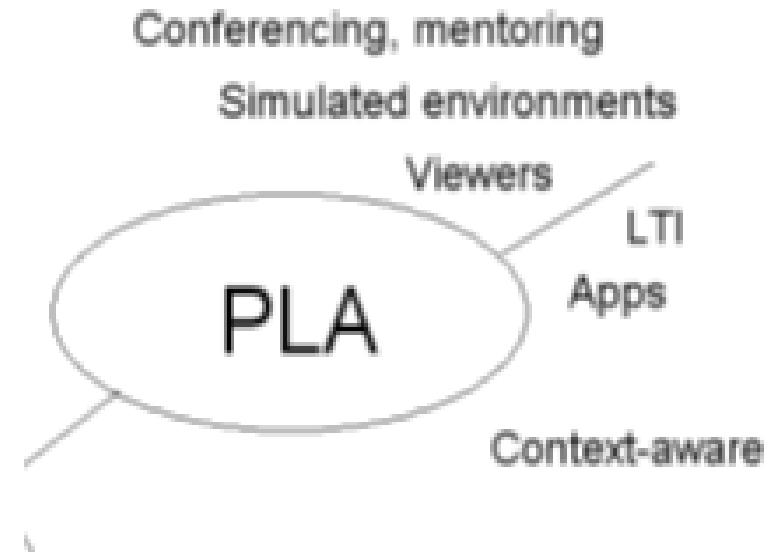
# Personal Cloud



- 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

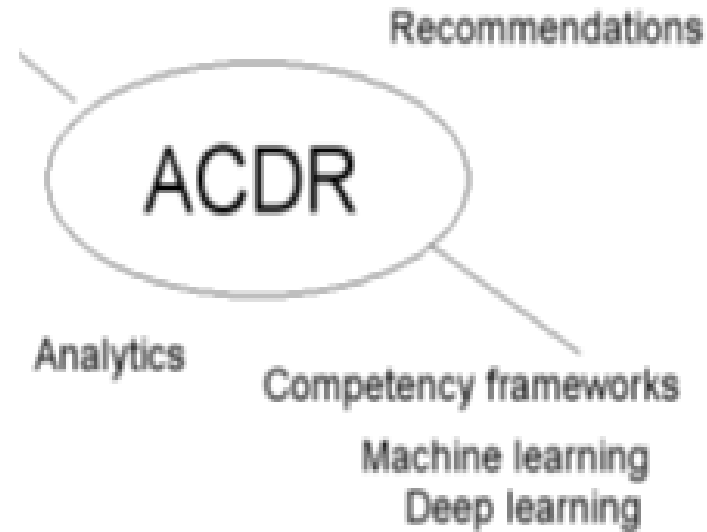
# Personal Learning Assistant

- 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

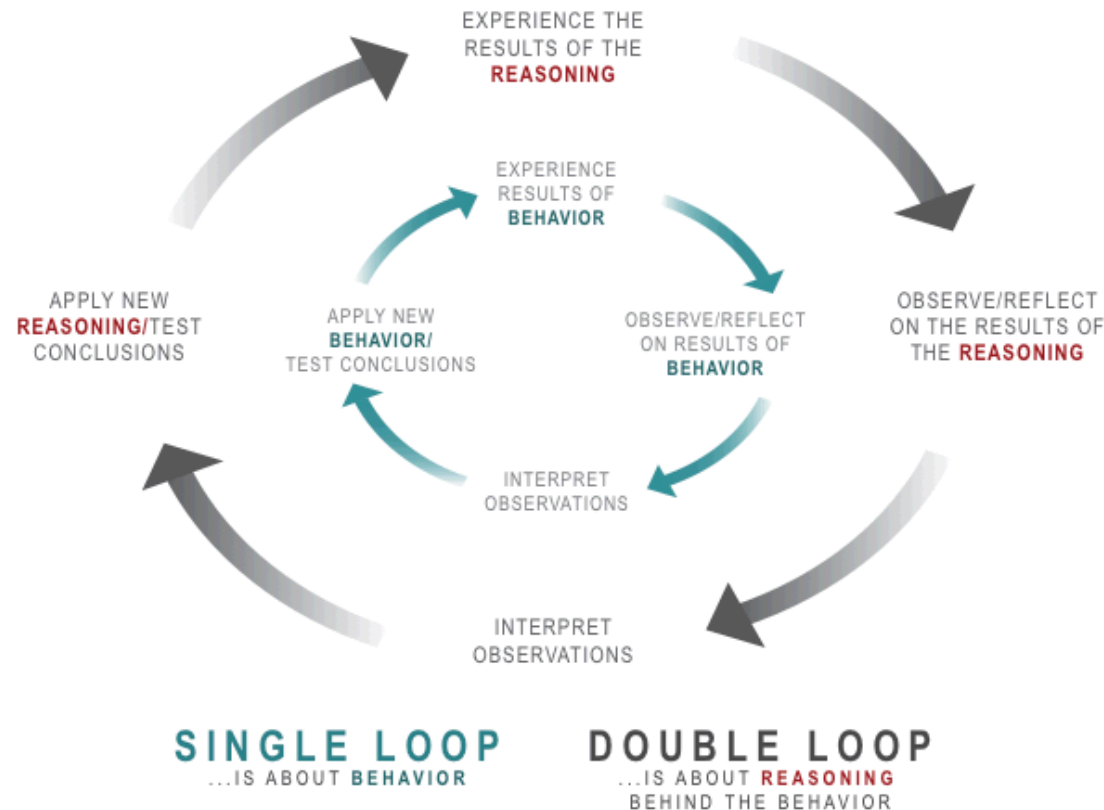
# Implementation – from MOOC to Personal Learning

- 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/>

# Corporate / institutional clouds

- xMOOCs
- Content libraries
- OAI



## 3rd party services

- Recommender / indices / translation
- Simulations / multiplayer games
- IoT



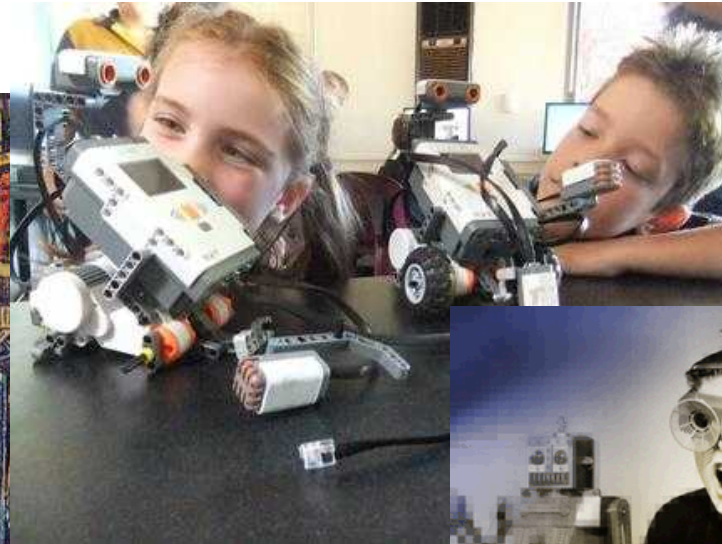
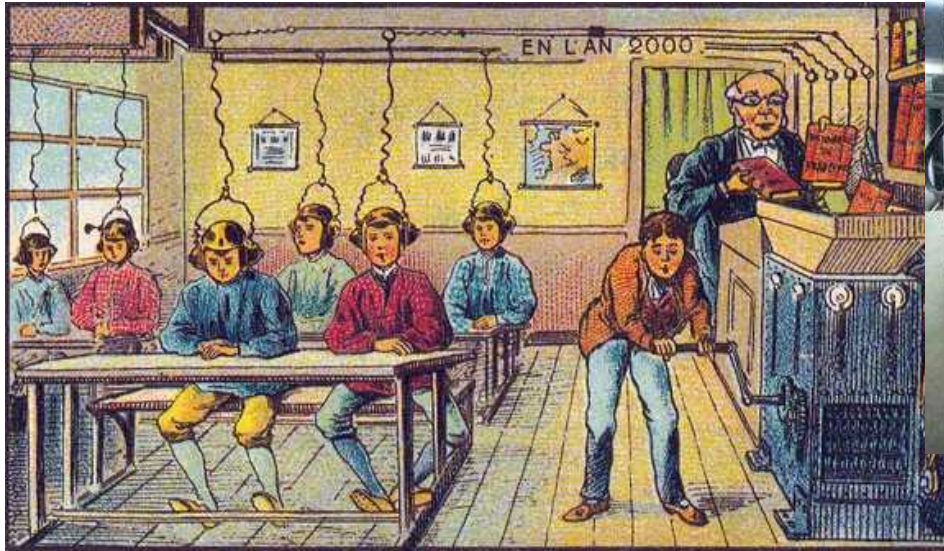
Logo for the MOOC "Your World is Your Lab." Credit: Michael Schatz

# 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>

Stephen Downes  
<http://www.downes.ca>



National Research  
Council Canada

Conseil national  
de recherches Canada

Canada