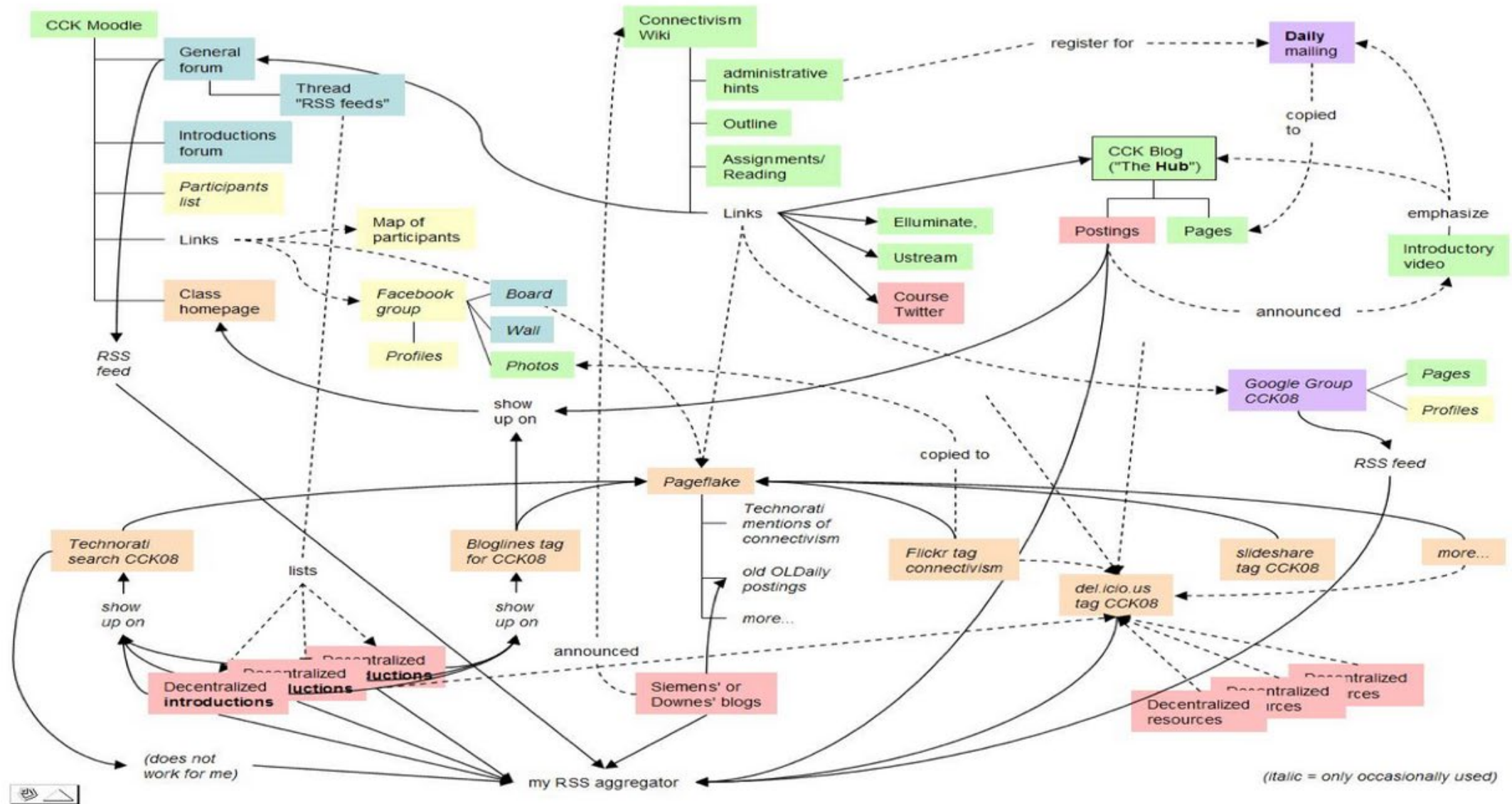


Creating a Learning Network

Stephen Downes

ABED – Curitiba, Brazil

October 7, 2014



We built a MOOC...

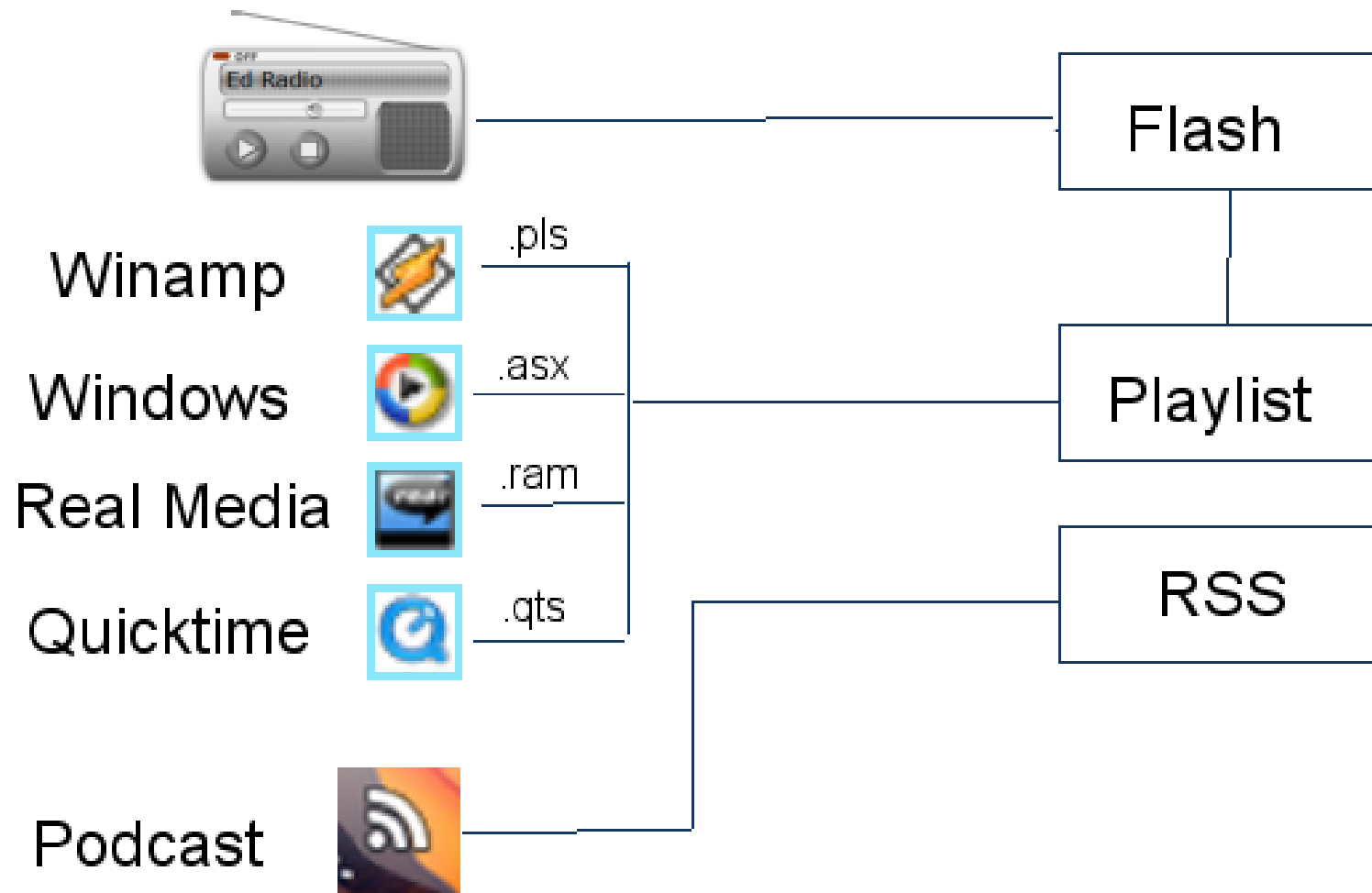
DS106 – Grant Potter



<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-->
```



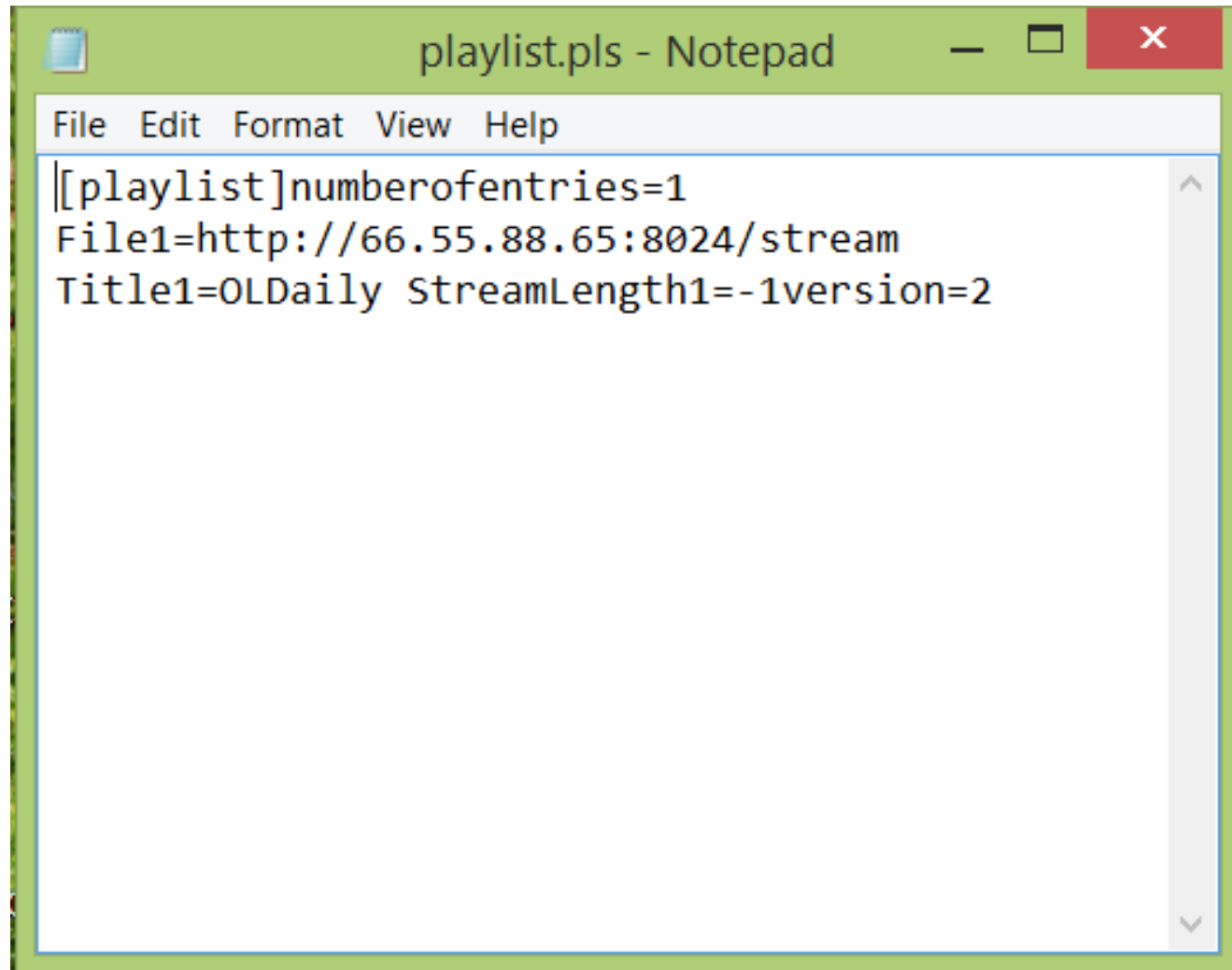
- Flash



- HTML5



.pls



The image shows a Notepad window with the title bar 'playlist.pls - Notepad'. The menu bar includes '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

Files

Playlist

Mic

Stereo
Mix



Speakers
Headphones

```
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-epsode-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
```

General

Harvester

Users

Newsletters

Database

Meetings

Accounts

Permissions

Viewer

List feeds

Find:

Sort:

title

List Again

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</link>
  <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" over</description>
  <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>

```

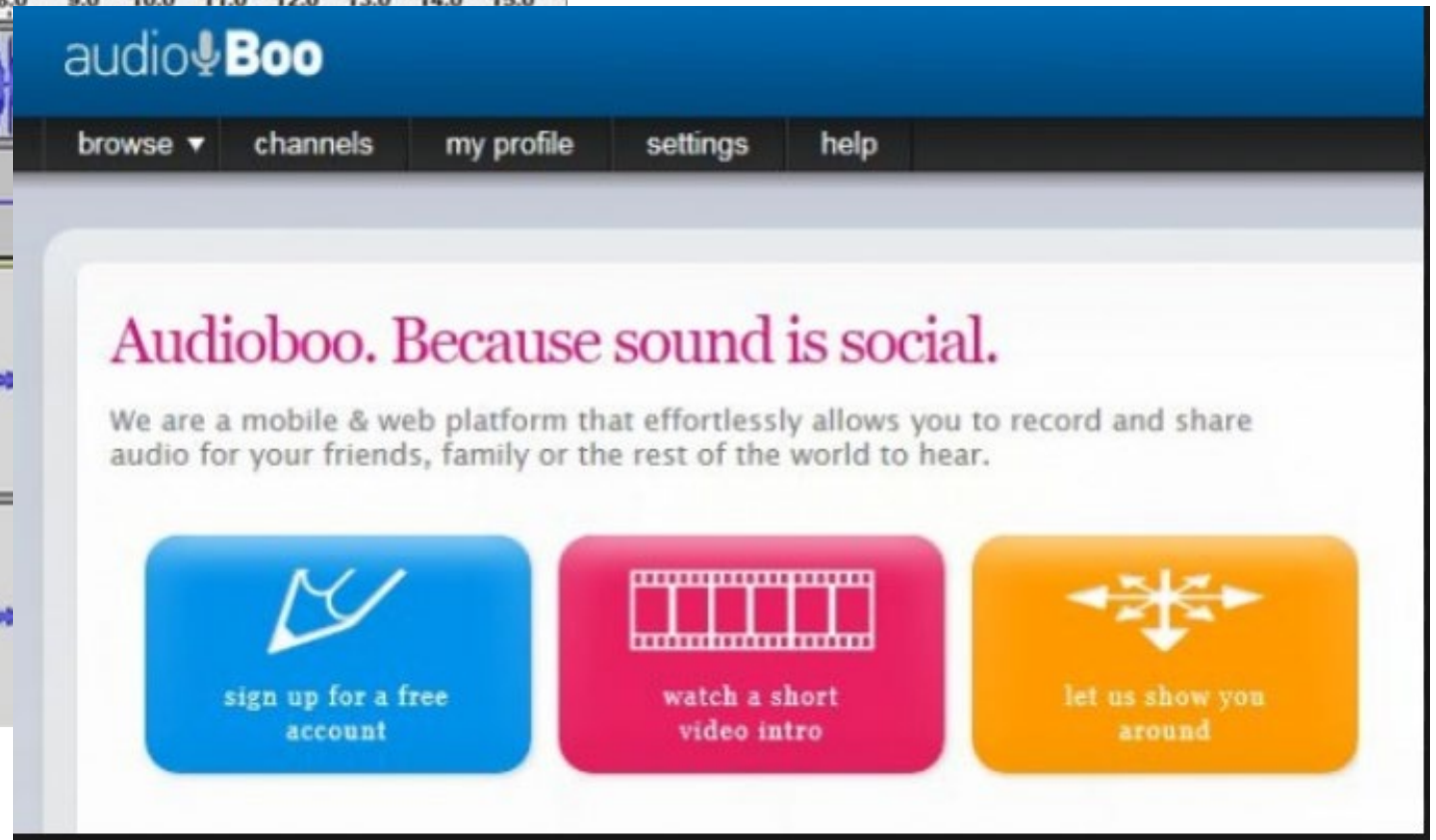
Enclosures in RSS Files indicate MP3 sources



Sources include RSS, Twitter, Facebook APIs, etc.



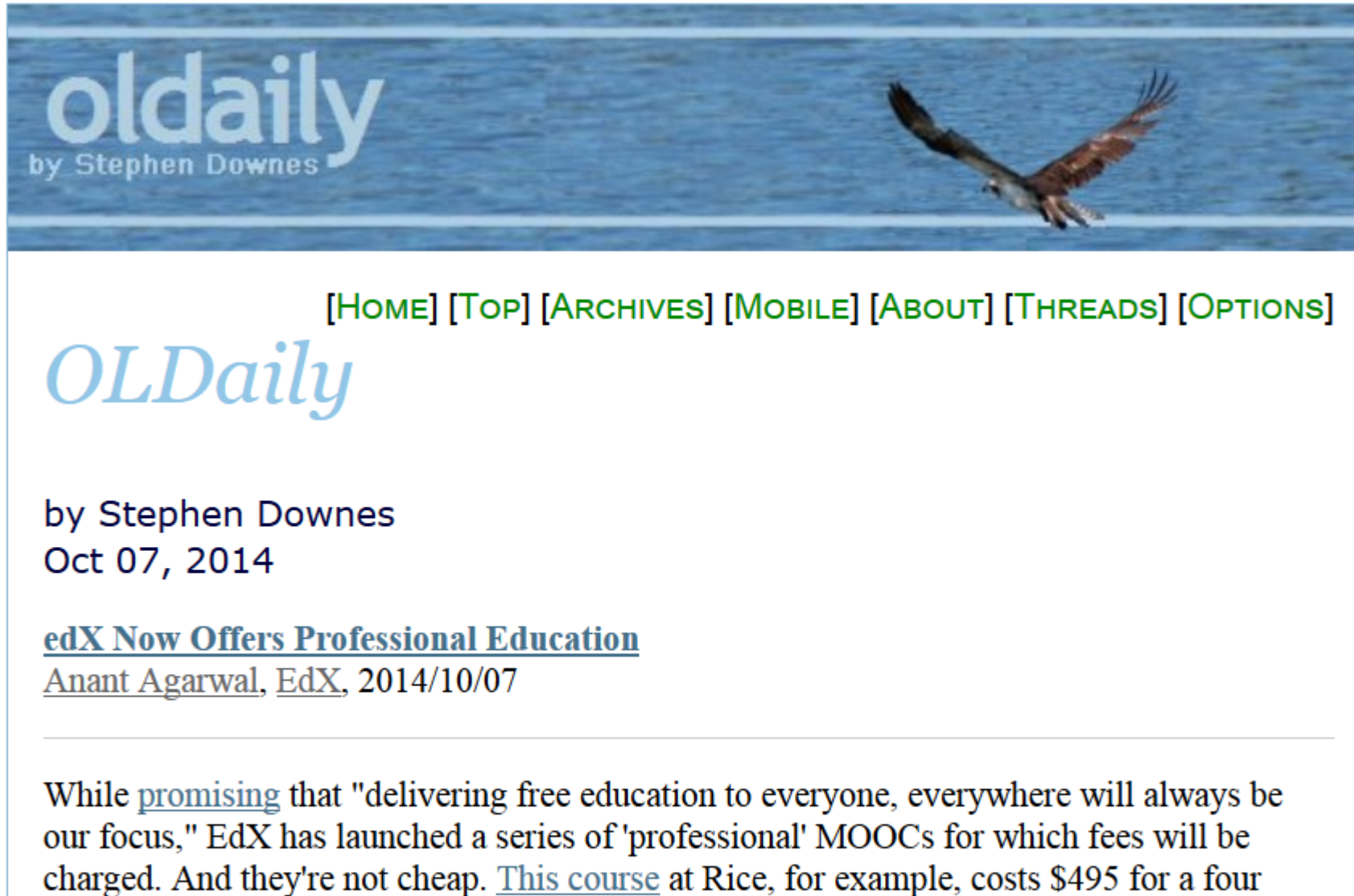
Audioboo

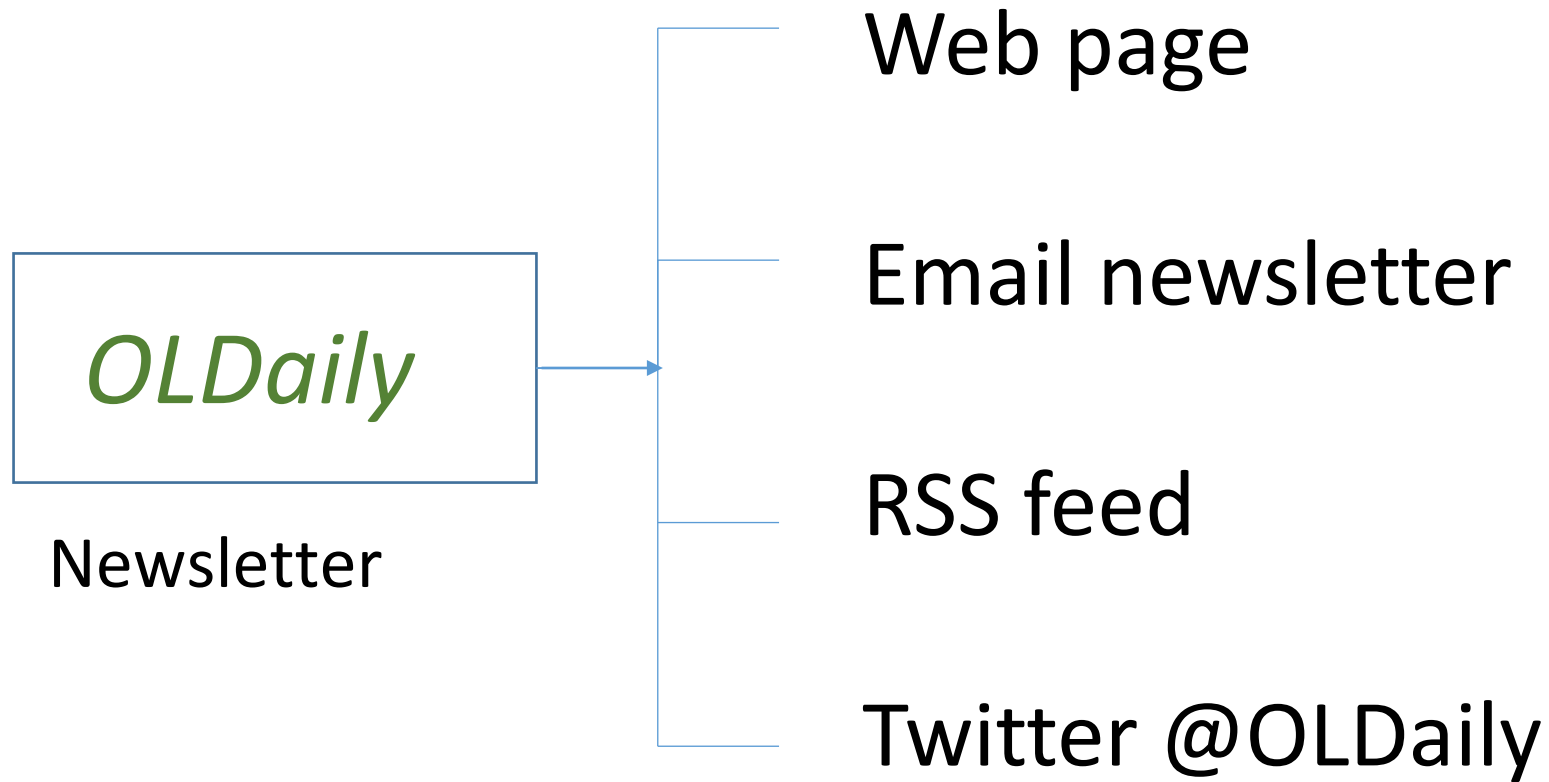


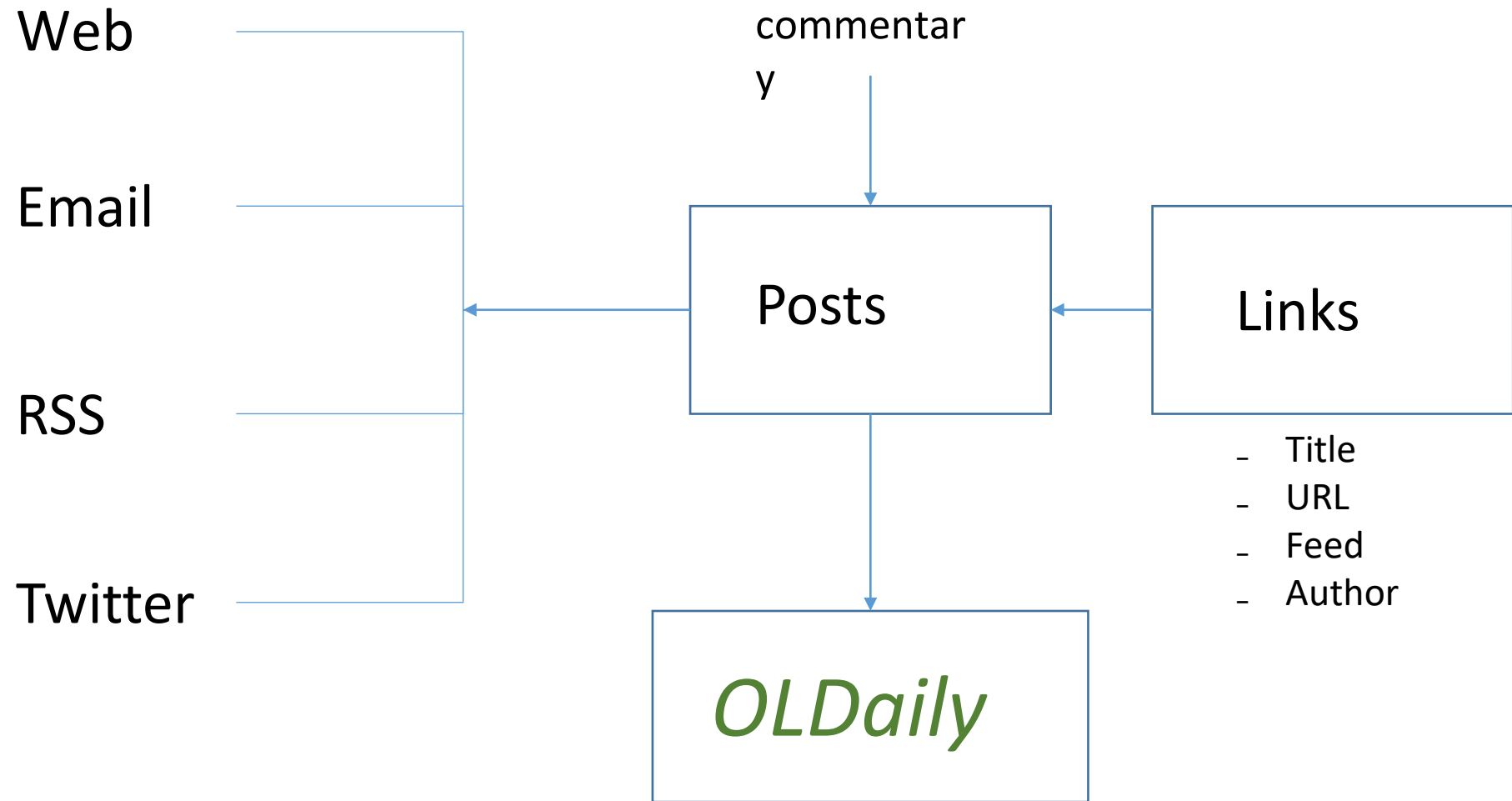
Audacity

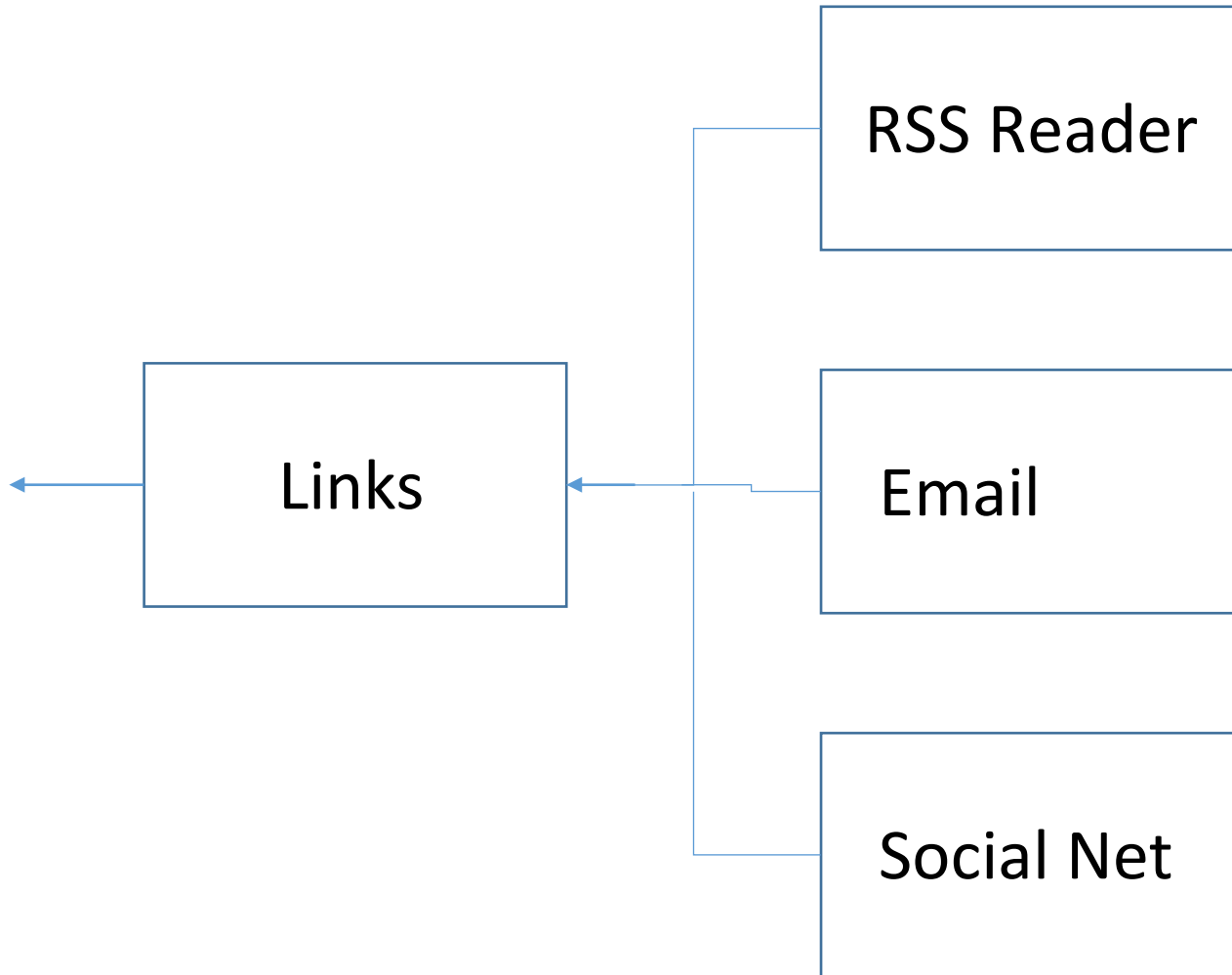
Create MP3 files and upload them to the web

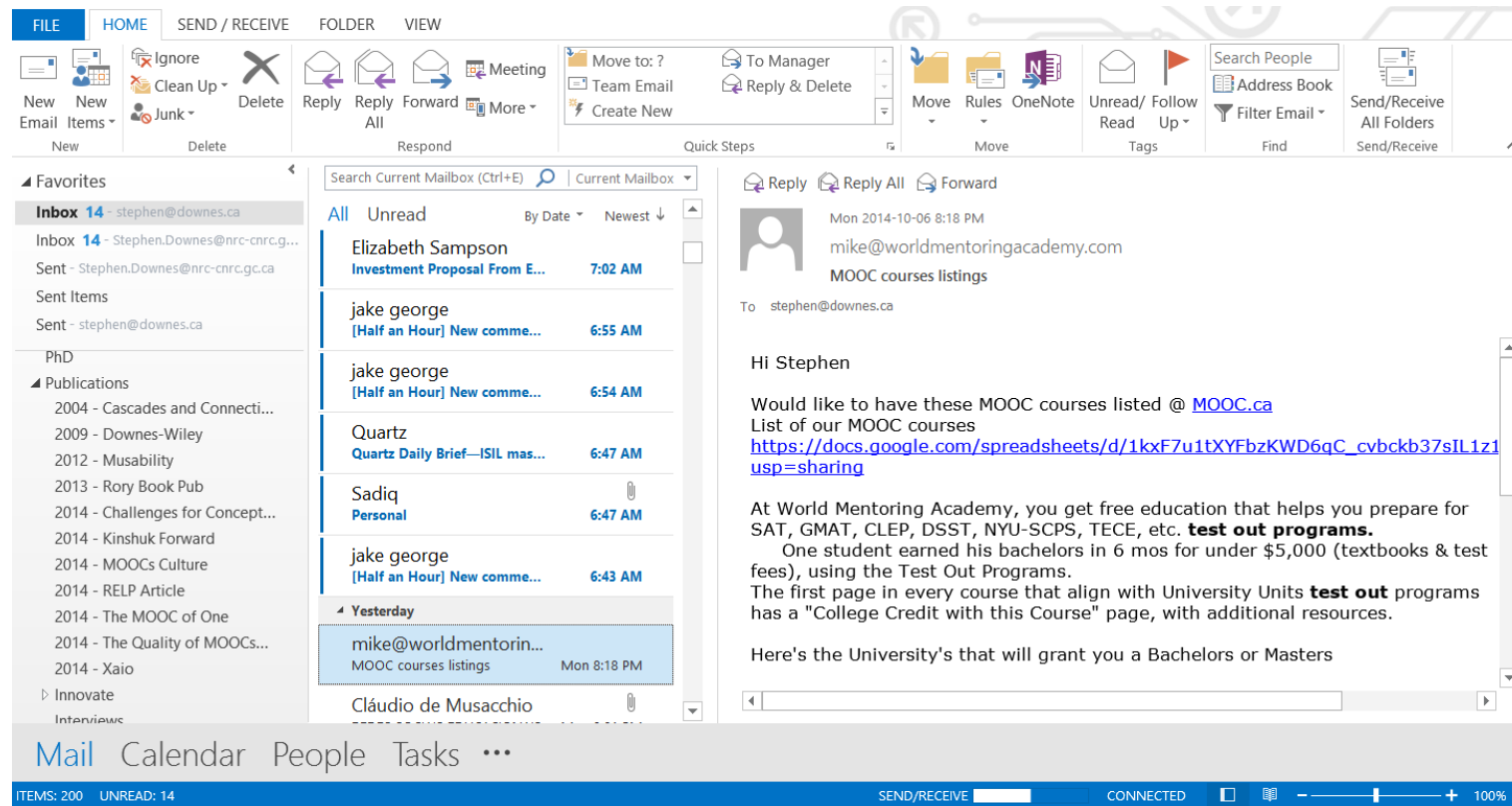
How I Built OLDaily



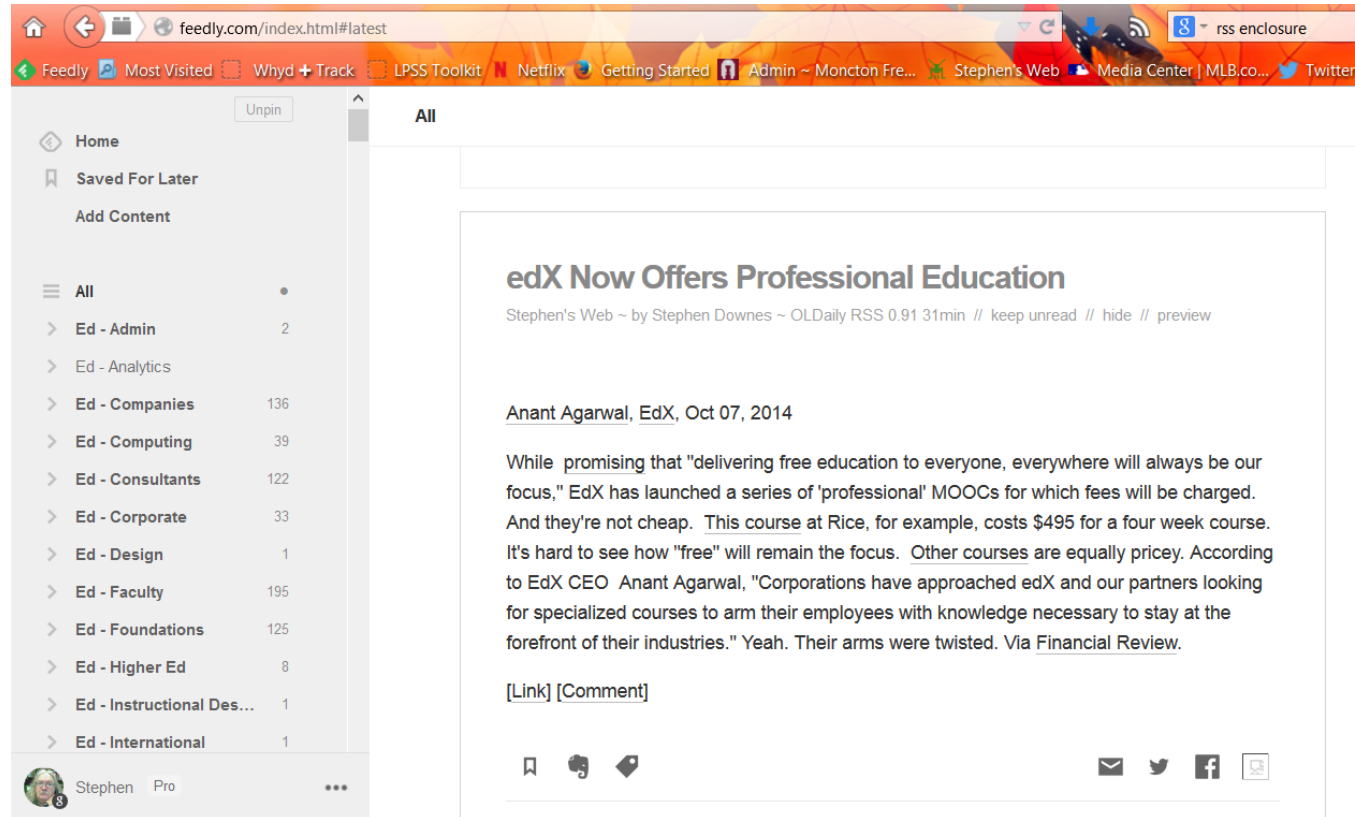








- # Email
- Google groups
 - Mailing Lists
 - Subscriptions
 - Alerts



- RSS
- Feedly
 - Old Reader
 - Outlook

Facebook interface showing a post by Stephen Downes titled "A entrevista-conversa com o conectivista Stephen Downes". The post includes a photo of a stage event with a screen displaying "ABED" and a photo of two men, including Vinicius Lemos, sitting at a table. The right sidebar shows trending news items and a list of groups.

Search for people, places and things

Stephen Home

A entrevista-conversa com o conectivista Stephen Downes

See translation

Moncton Free Press 13

Pages feed 20+

Like Pages

Create Page

Create Advert

GROUPS

- Moncton Municipal M... 6
- Consolvo Bike Sho... 20+
- The Innovative Edu... 20+
- News You Don't H... 20+
- 3D Holographic Proj... 8
- Stop the Royal Hoa...
- Greater Moncton ND... 3
- MIRACLES NATION
- BOYCOTT IRVING 20+
- NBL CANADA FANS 20+
- Velo NB 20+
- AvayaLive for Edu... 20+
- Immersive World ... 20+
- Manage Your Groups

ABED

Vinicius Lemos

7 invitations waiting

Pedro Ramalho and 4 others

TRENDING

- Royal Canadian Mounted Police:** New Brunswick Mountie who smoked marijuana in uniform found dead
- Alfonso Ribeiro:** Actor recreates 'The Carlton' dance from 'Fresh Prince of Bel-Air' on 'Dancing with the Stars'
- Dwayne Johnson:** Actor makes appearance as wrestling persona 'The Rock' on 'Monday Night Raw'

See More

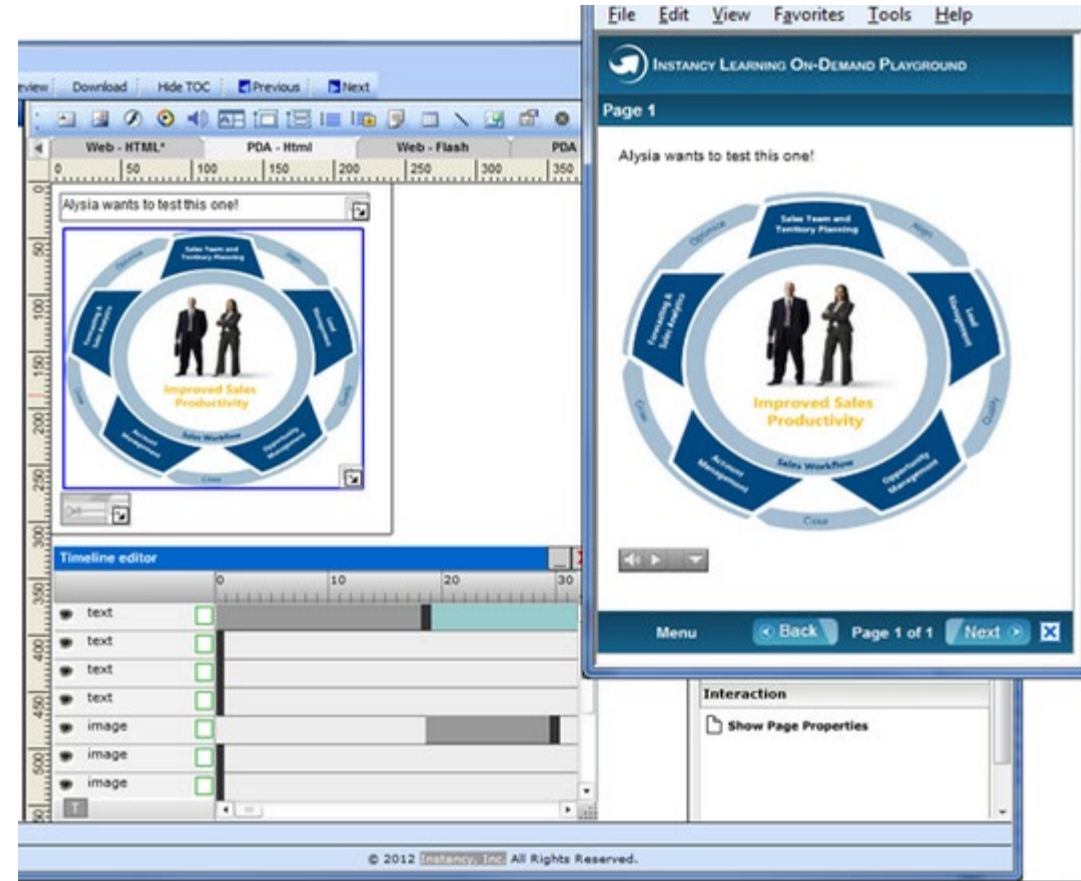
English (UK) · Privacy · Terms · Cookies · More

Facebook © 2014

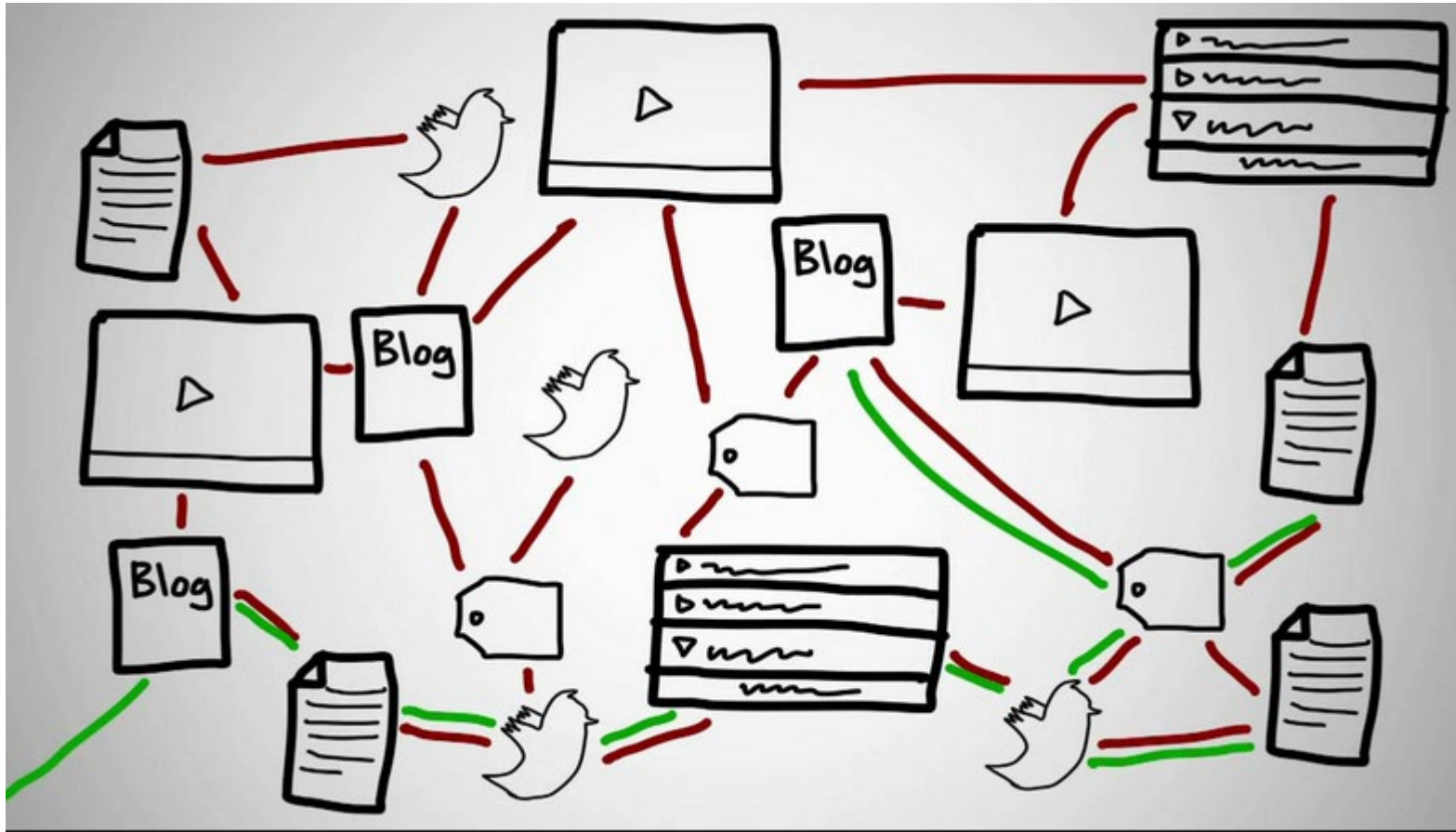
- Social Media**
- Twitter
 - Facebook
 - Google+
 - LinkedIn
 - Groups
 - Channels
 - Hashtags

- 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](#)

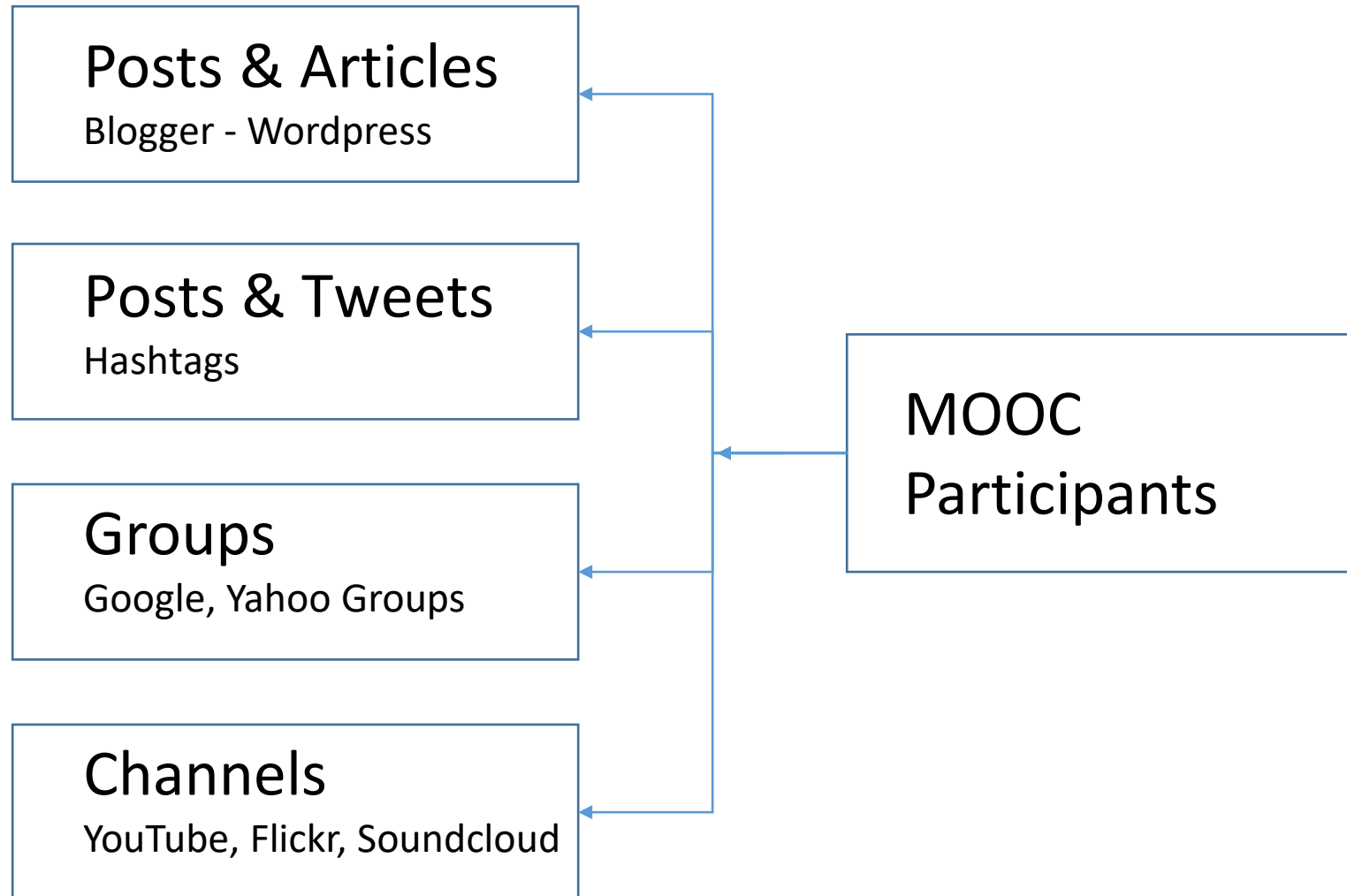
The only difference between this course and the other courses is in (a) where to add a new feed, and (b) the course tag.

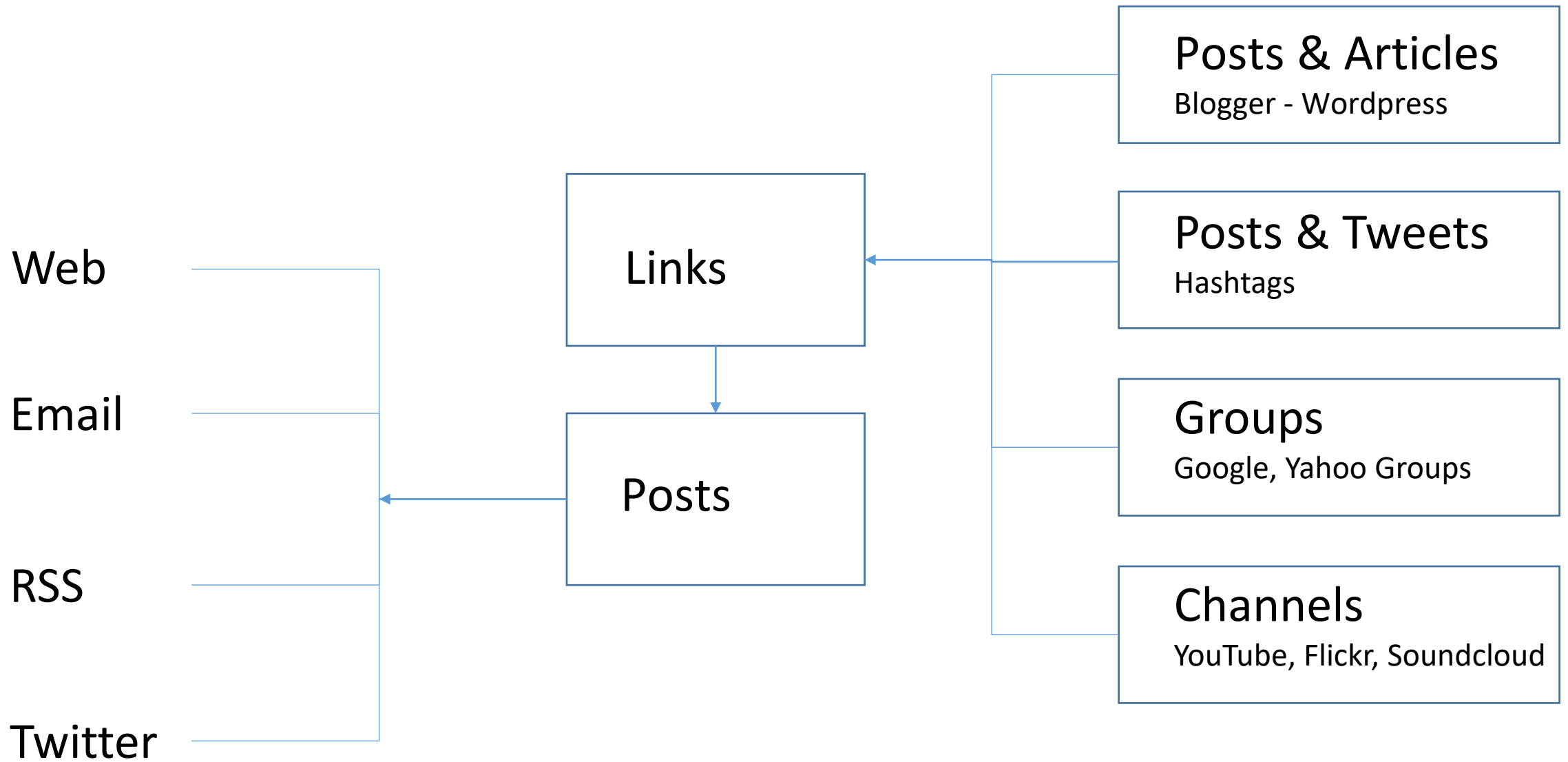
New feeds: http://edfuture.mooc.ca/new_feed.htm

Course Tag: CFHE12

Fill out the form below to share your feed:

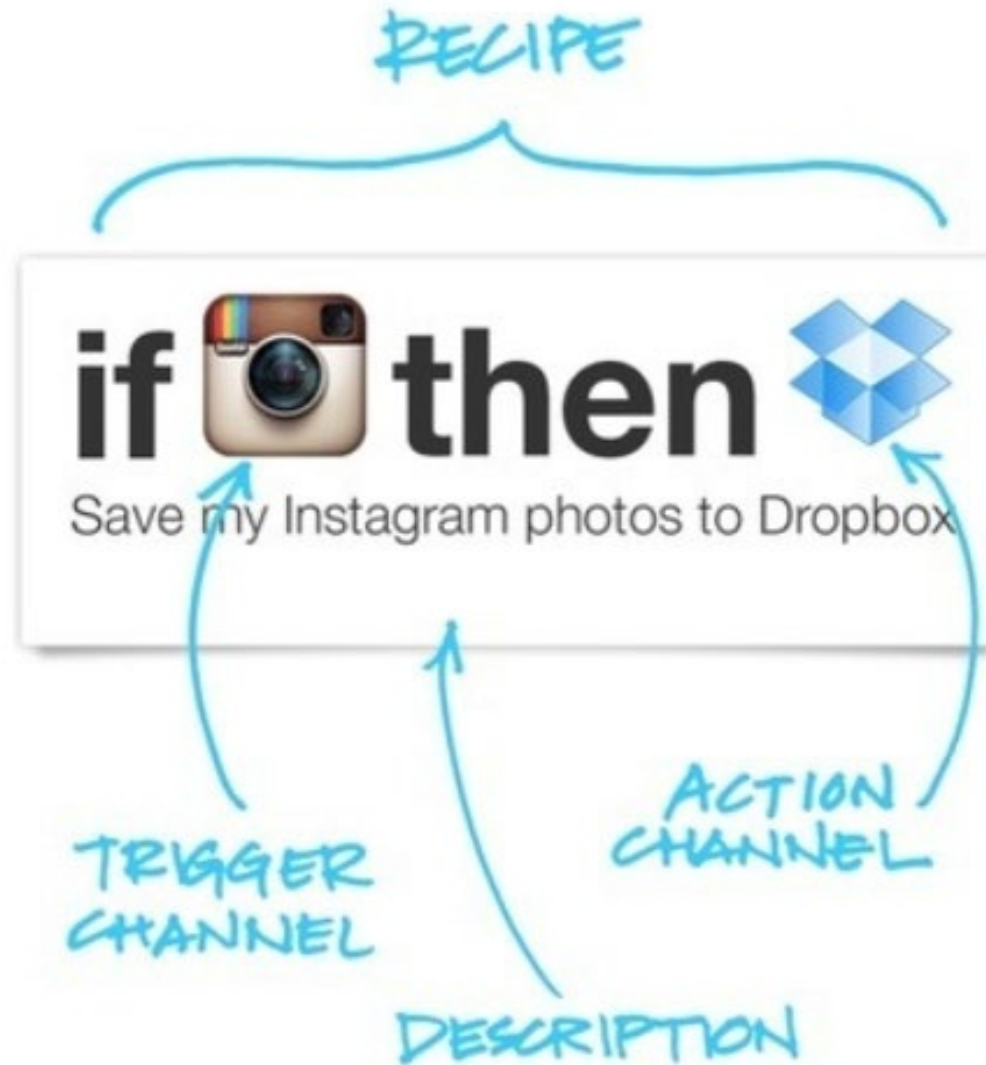
Title	<input type="text"/>
Author	<input type="text"/>





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

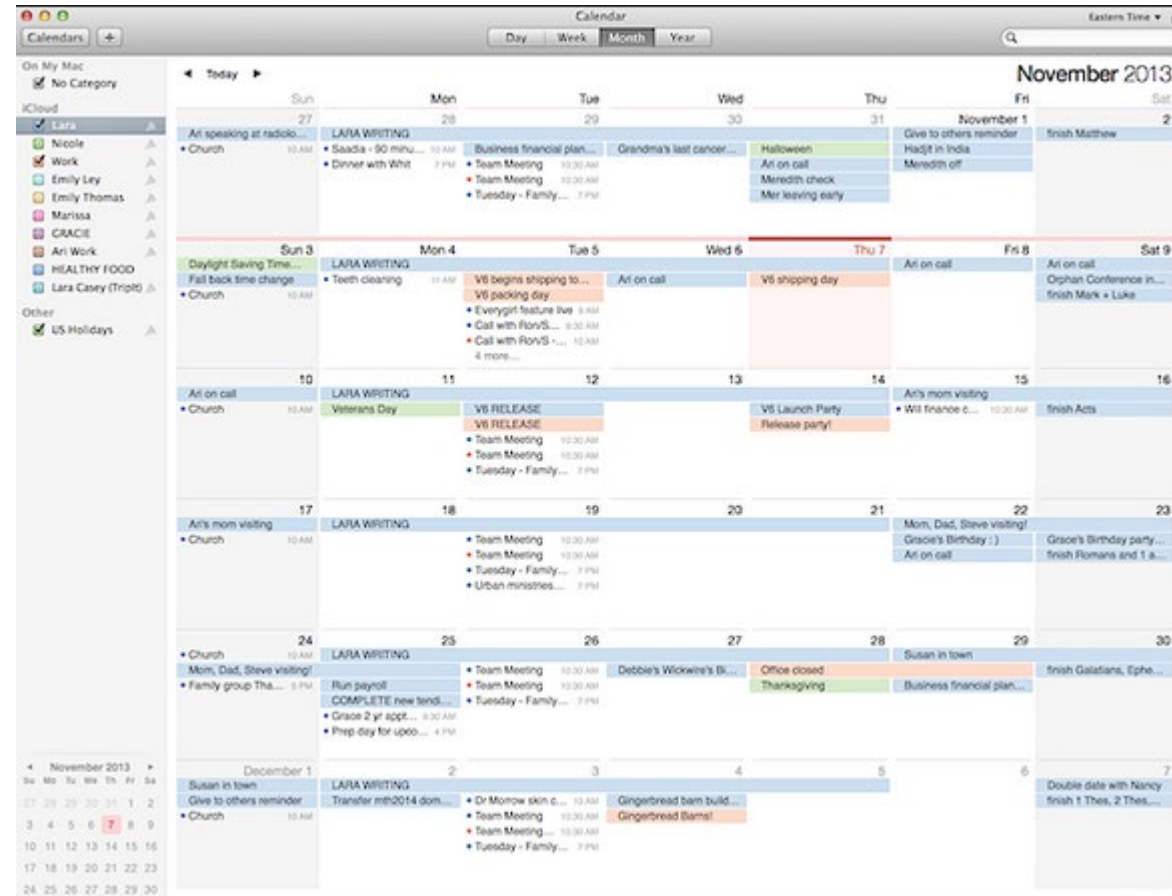
Please note: due to the way Twitter provides feed updates, some tweets might not be collecte

More to come!

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

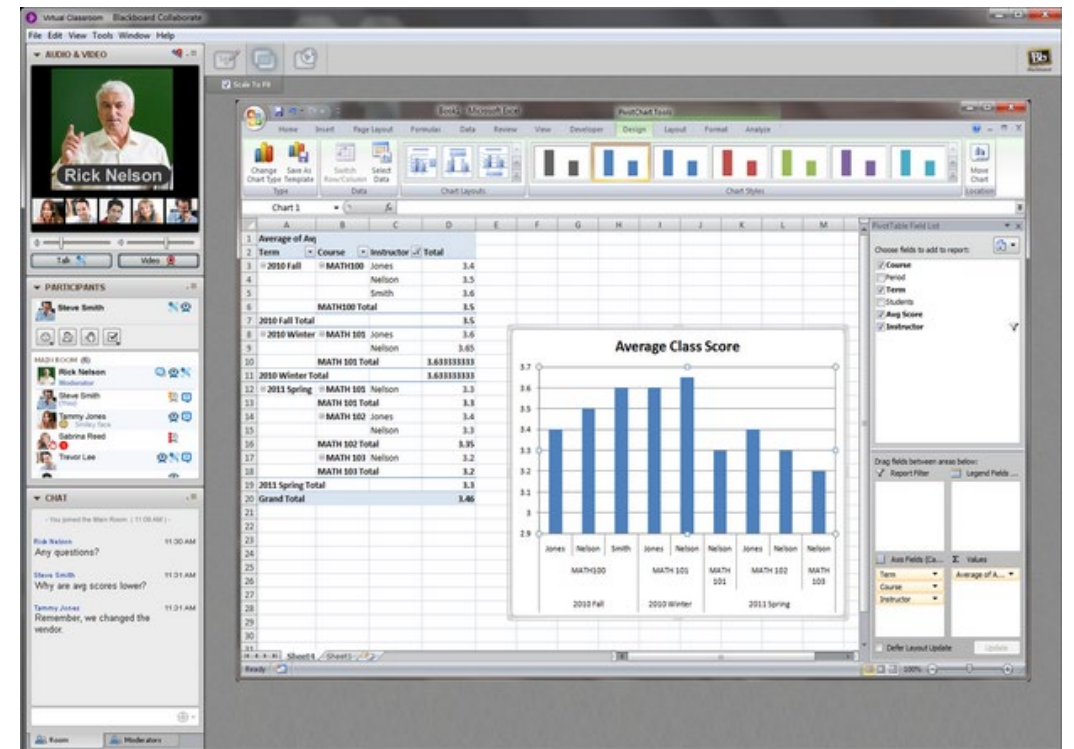
Calendar

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

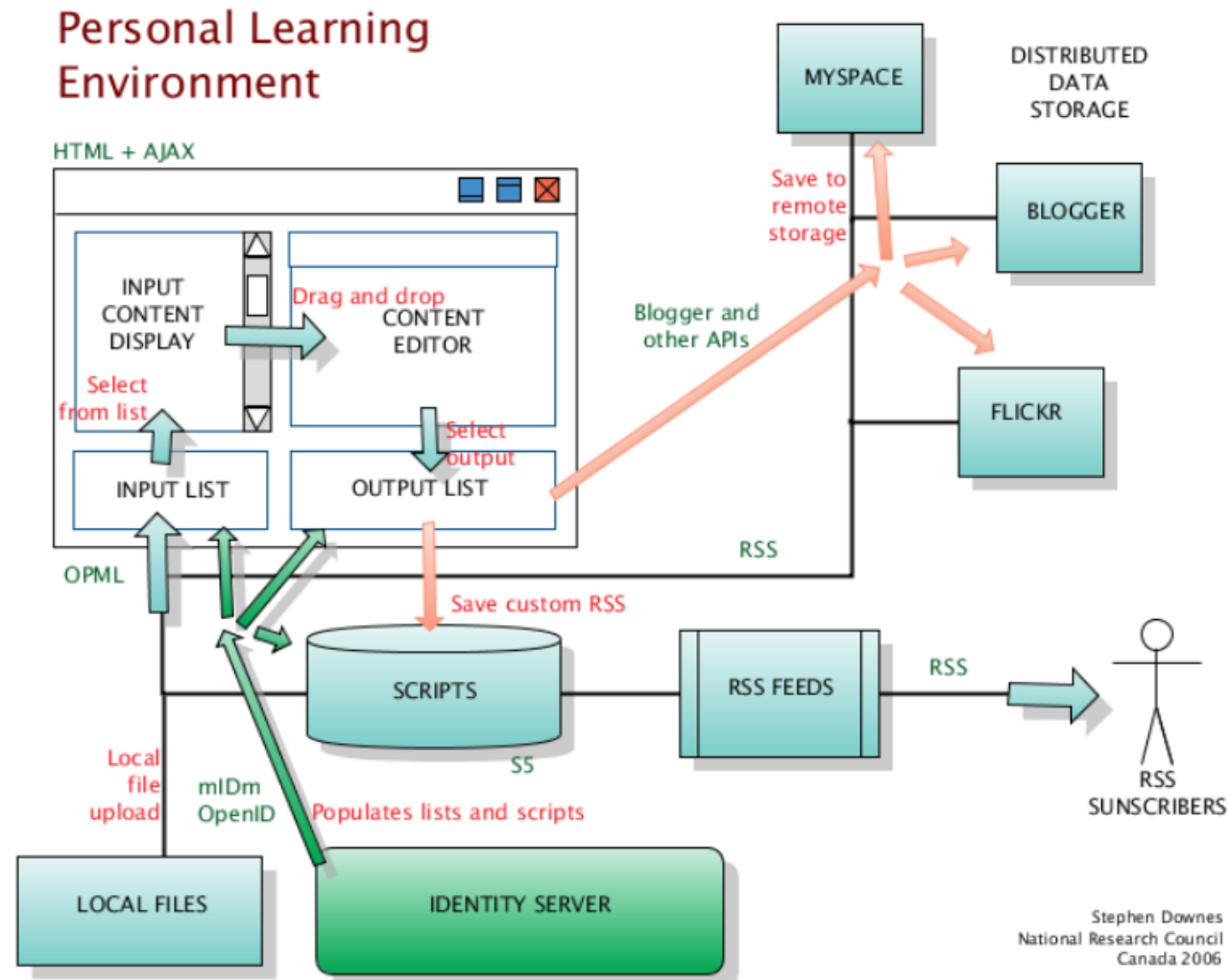


Events

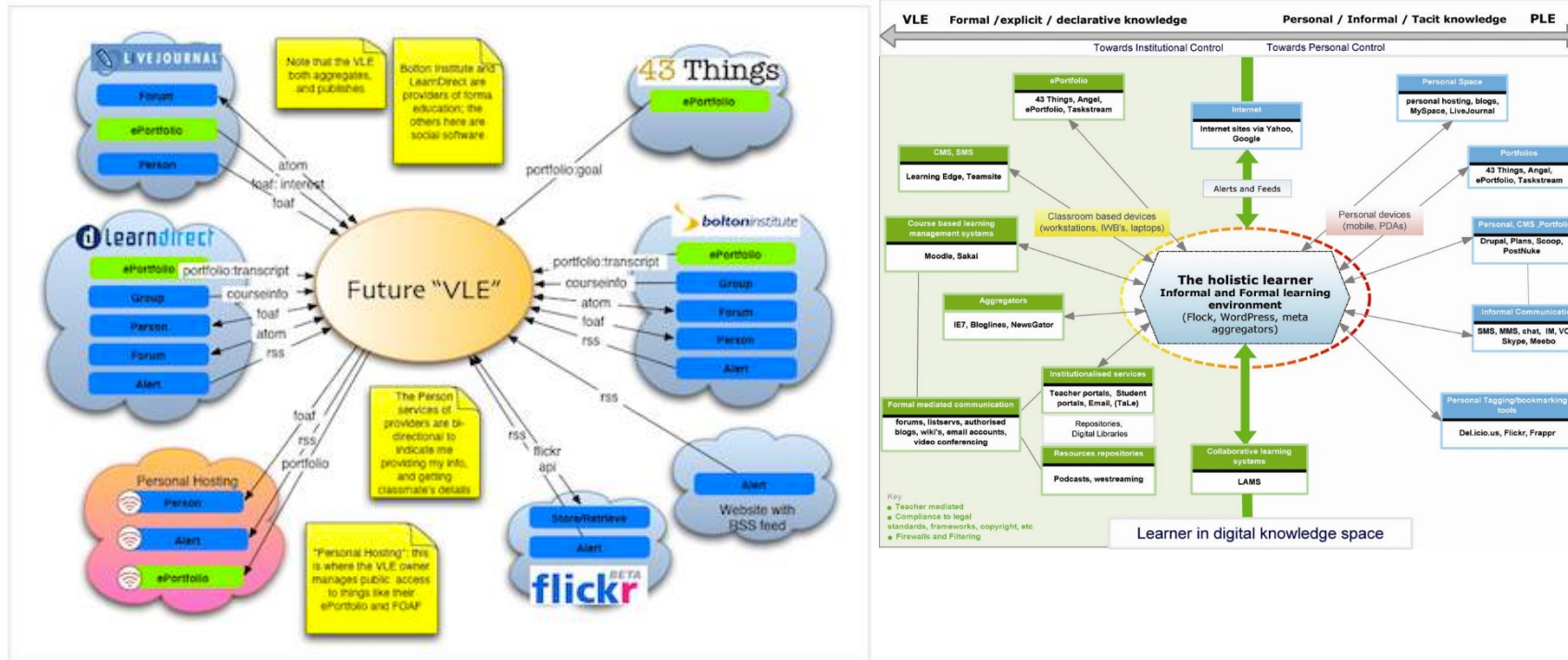
- - BB Collaborate
 - Recordings / URL + Player (Java)
- Others – Webx, Wiziq, Adobe Connect
- Webcasting =
 - Conferencing tool (any of above or Skype) +
 - Webcasting tool – YouTube, LiveStream, Ustream
- Recordings



How to Build A Learning Network



The design is based on putting the learner at the center

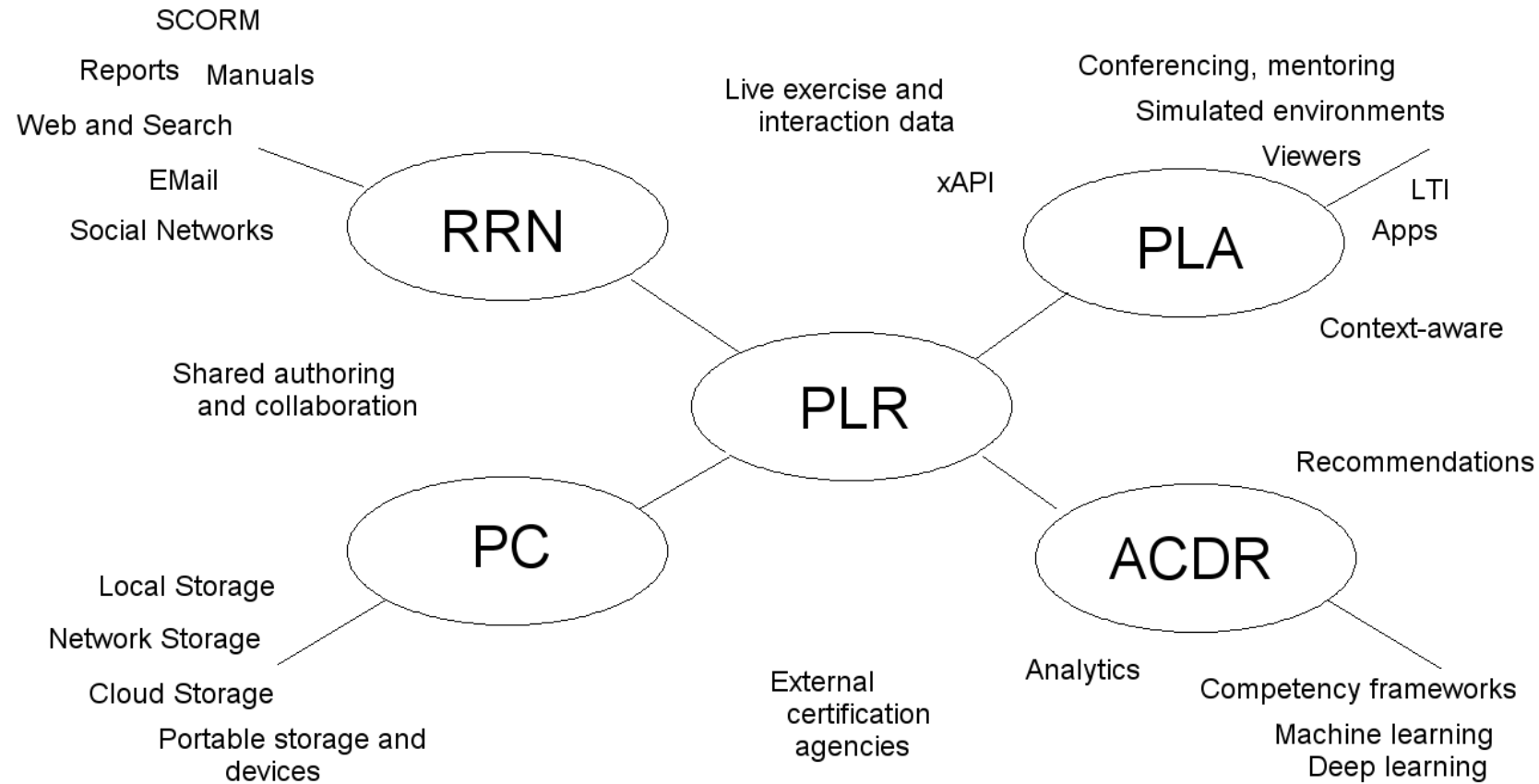


Scott Wilson (left), Tim Hand (right)

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

http://www.edtechpost.ca/ple_diagrams/index.php/mind-map-3

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

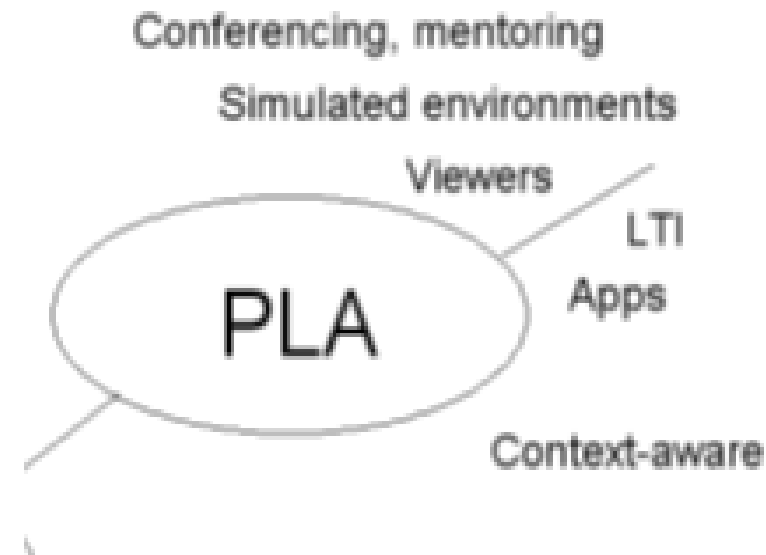
Personal Cloud



- 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

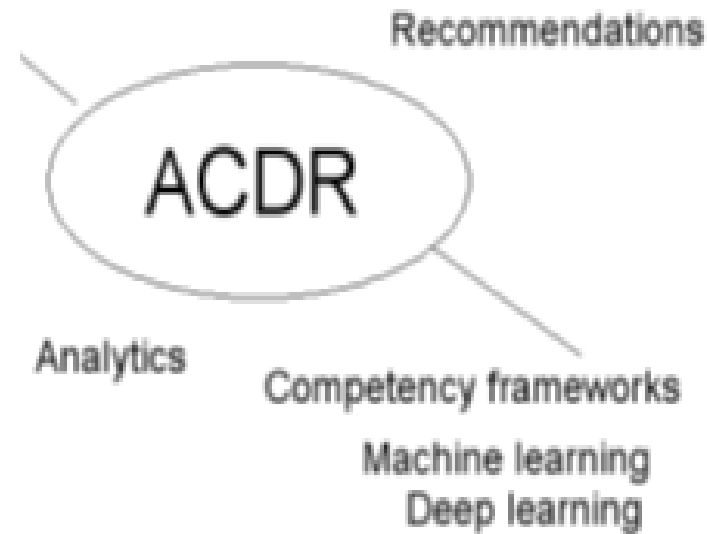
Personal Learning Assistant

- 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 3rd party certification

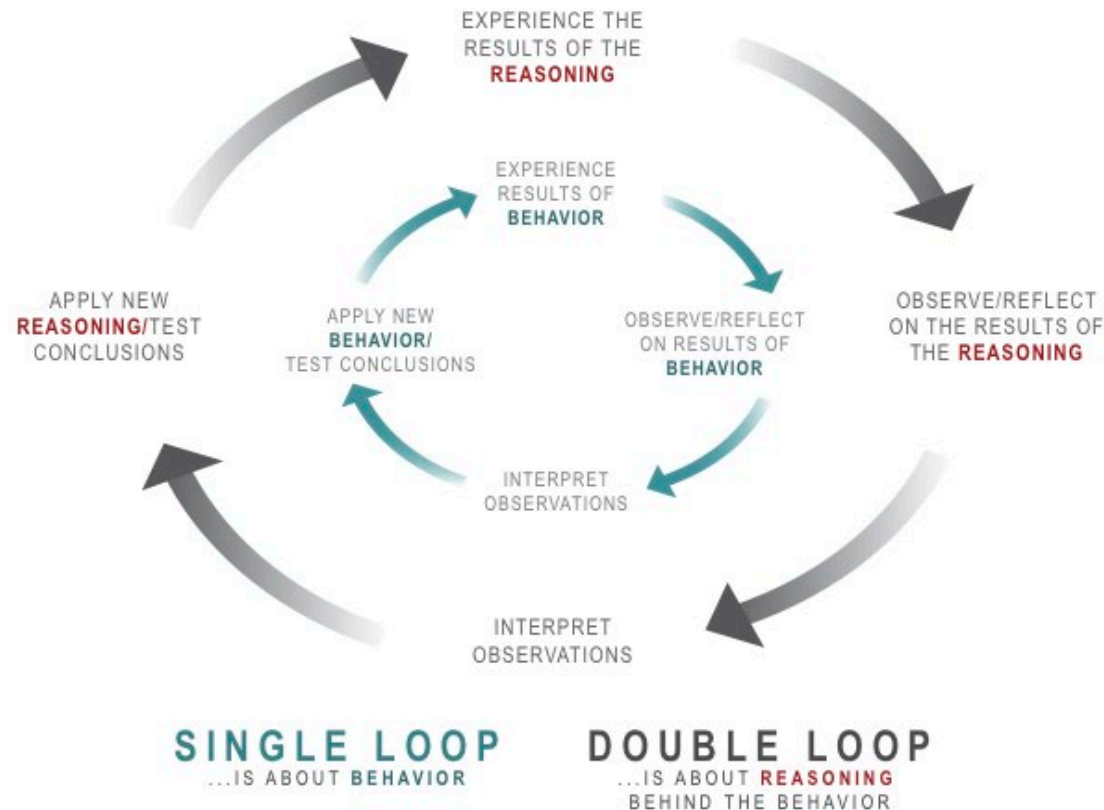
Implementation – from MOOC to Personal Learning

- 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



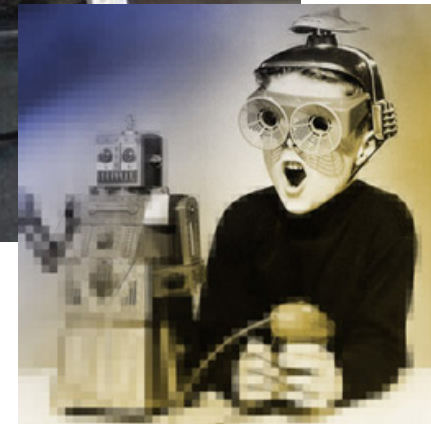
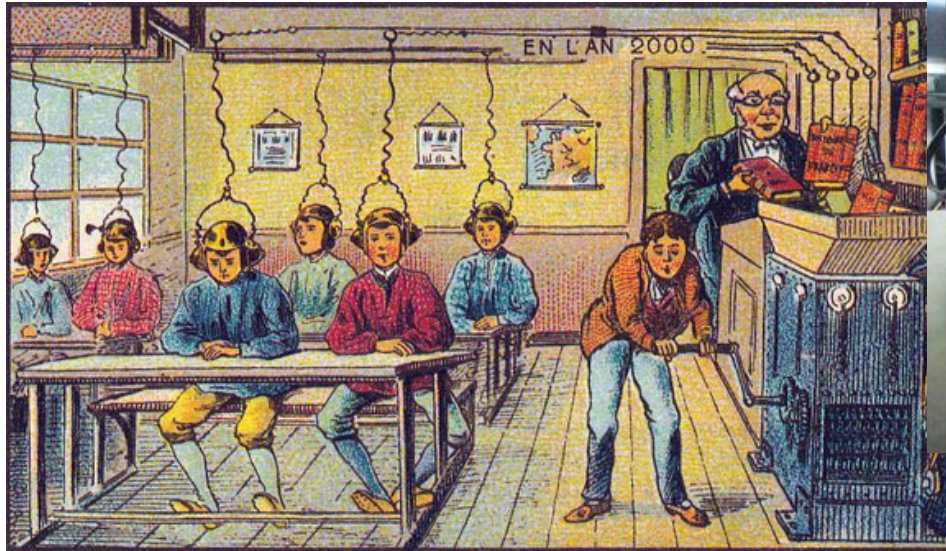
Logo for the MOOC "Your World is Your Lab." Credit: Michael Schatz

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