The internet is the greatest system for learning ever invented

We Learn

Here's how to use it

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How are you keeping informed today?

- Books, newspapers, magazine
- Television and radio
- Courses and lectures (like this)?

How well is it working?

- Can you find people you need?
- Do you feel out of touch?
- Are you always busy?

Symptoms of Distress:

- You feel very much on your own
- Things are so complex and changing
- You don't know where to begin

Crisis-Level Symptoms

- There's never enough resources
- I'm always out of time
- It's too complicated

Toffler: ~~Future~~ Past Shock

- Expecting:
    - Unchanging facts and principles
    - Single perspective or point of view
    - Causes, solutions, and systems

What I do

What does 16,000 posts look like?
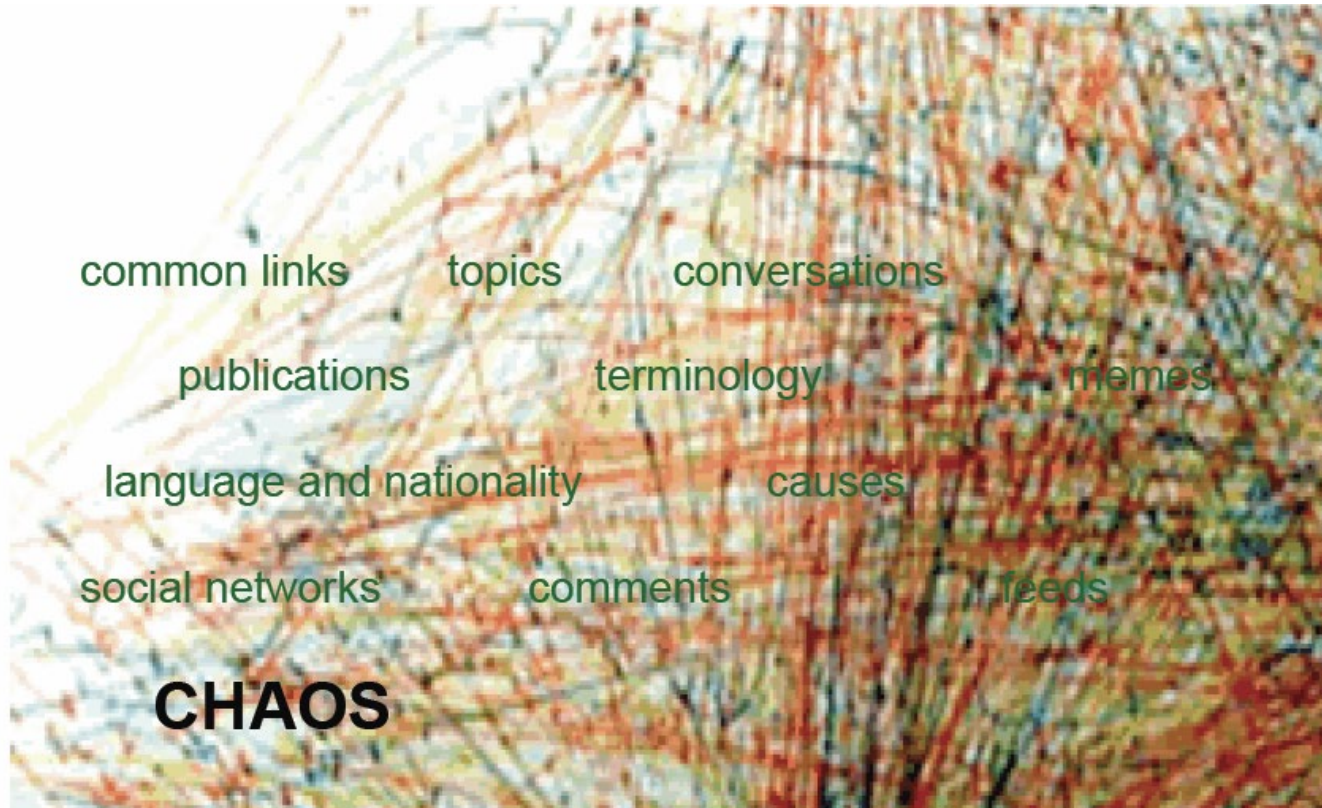
Complicated, Complex
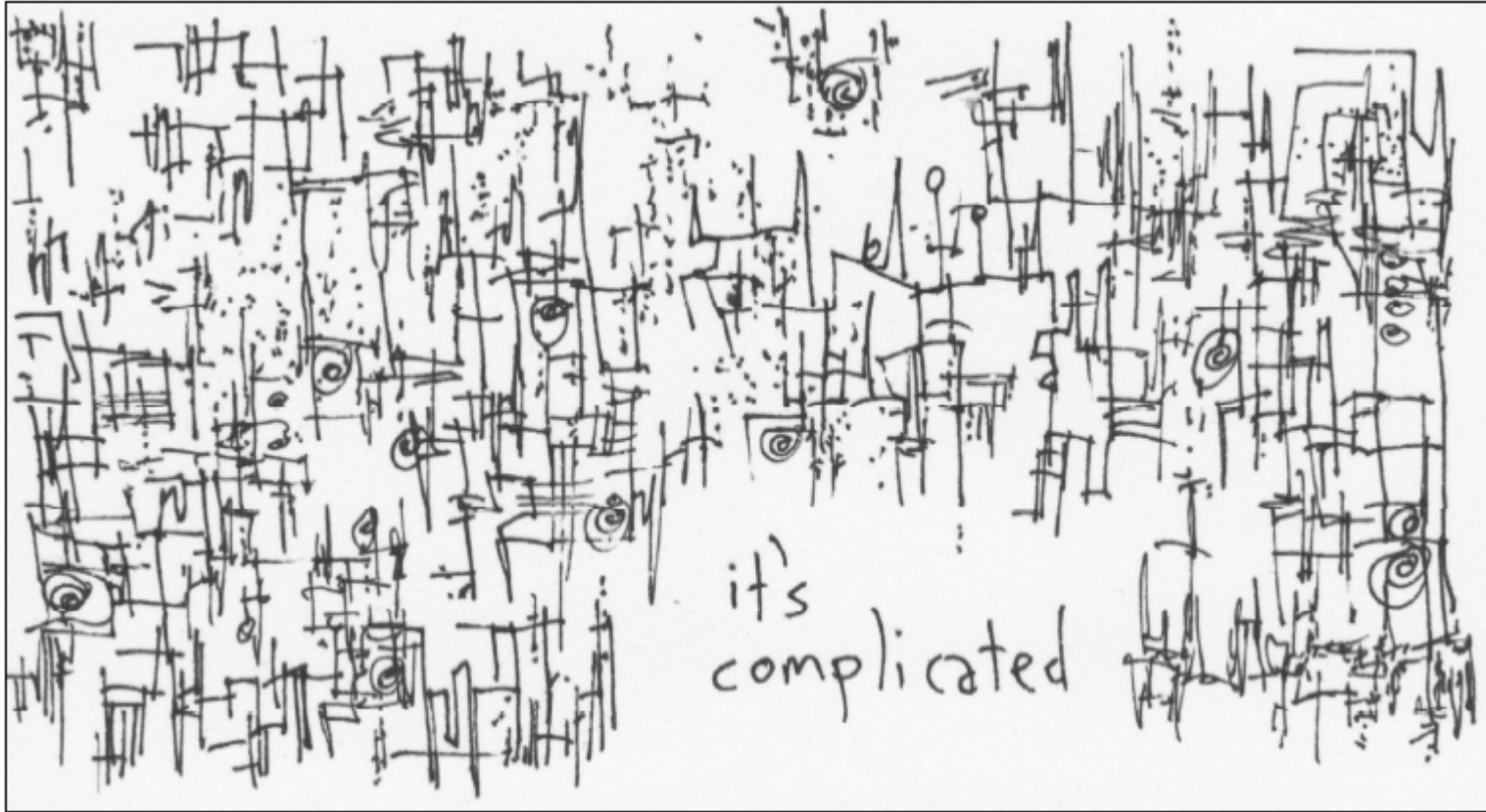
The Butterfly Principle
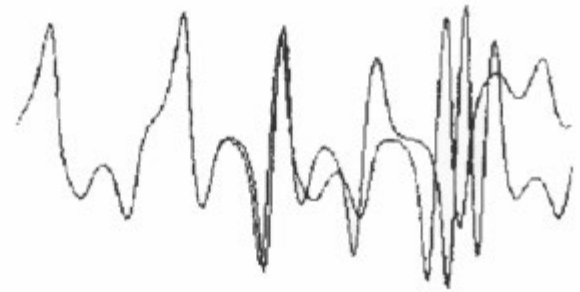
a butterfly flapping its wings in South America can affect the weather in Central Park…. so why don't we get that butterfly?

The Three Body Problem

(1, 2) $\Rightarrow$

$\Leftarrow$ 3
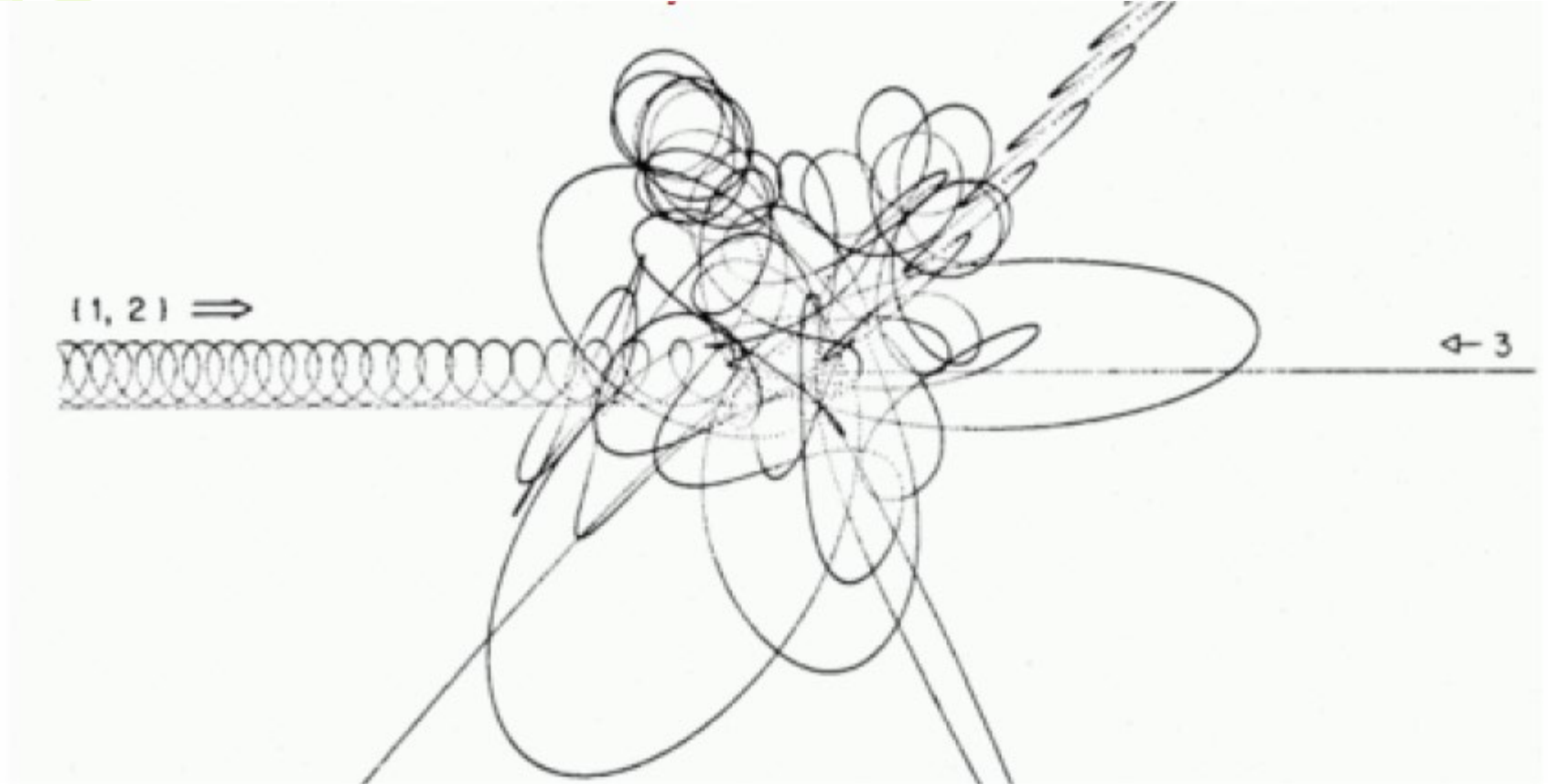
http://www.scholarpedia.org/article/Three-body_problem

http://www.dynamical-systems.org/threebody/index.html
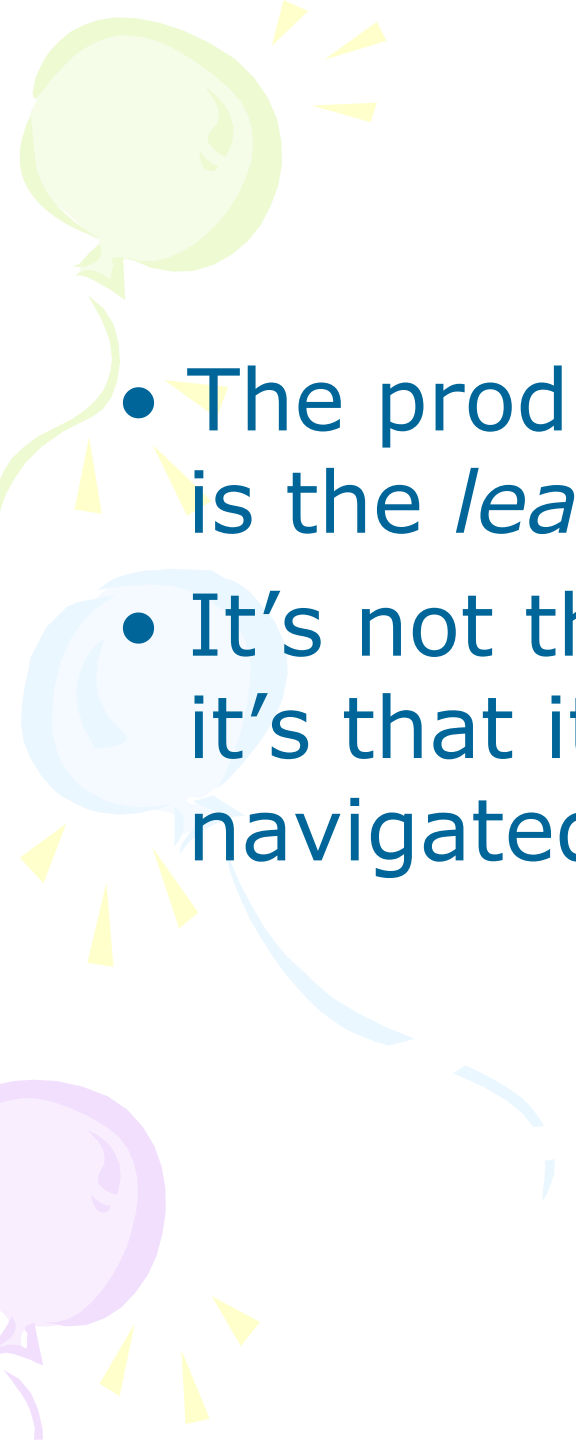
Connectivism: Engagement

- There is no curriculum, no theory, no body of knowledge
  - (or, more accurately, the curriculum is the McGuffin)

CONNECTED=
ENGAGED

not memorized

- The product is not the knowledge, it is the *learner*
- It's not that there's nothing to learn, it's that it's *complex* and needs to be navigated…

So… how can you learn?

The internet is not the problem
It is the solution

Let me explain…

Employ These Three Principles:

- *Interaction* – participation in a learning community (or a community of practice)

Three Principles:

- _Usability_ – simplicity and consistency

Three Principles:

- *Relevance* – or *salience*, that is, learning that is relevant to you, now

Interaction:

"… the capacity to communicate with other people interested in the same topic or using the same online resource."

- *Why do we want it?*

  - **Human contact …** *talk to me…*

  - **Human content …** *teach me…*

Interaction: How to Get It

- You cannot depend on traditional learning for interactivity…

  - Most learning based on the broadcast model

  - Most interactivity separated from learning

Interaction: How to Get It

- Built your own interaction network
  - Place *yourself*, not the content, at the centre
  - Don't connect to *things*, connect to *people*
  - Create the environment that suits you best
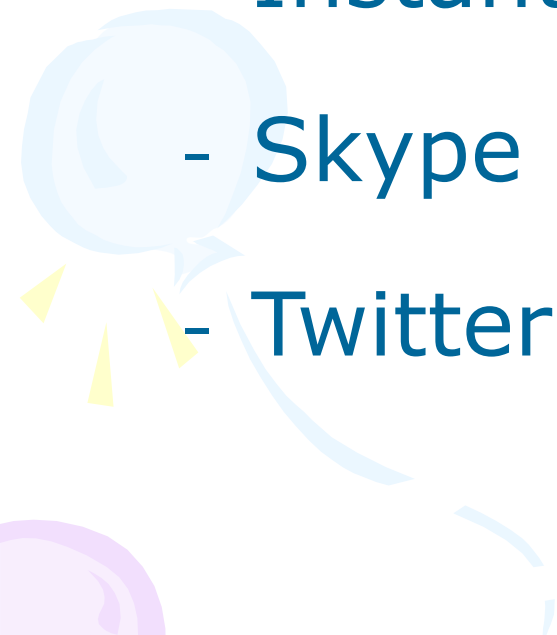
Interaction: Your Personal Network

- A place to write...

  - Weblogs and online journals

  - Email and mailing lists

Interaction: Your Personal Network

- A way so send quick messages

    - Instant messaging tools, SMS

    - Skype   http://www.skype.com

    - Twitter   http://www.twitter.com

Interaction: Your Personal Network

- A place to connect with friends

  - Social networks (eg. Facebook)

  - Threaded discussion lists (eg. Like the ones on Moodle)

  - Live events (eg. Elluminate, Ustream, DimDim, etc.)

Interaction: Connectivist Principles

- It's about what *you want*, not what others want you to hear

- Speak in your own (genuine) voice (and listen for authenticity)

Interaction: Connectivist Principles

- Share your knowledge, your experiences, your opinions

- Make it a habit and a priority

Interaction: The Connectivist Way

What Are You Waiting For?
Built a Blog and Wiki Now!

- If interaction isn't provided, create it…
  - If you are at a lecture like this, blog it or tweet it

Interaction: The Connectivist Way

– If there is no official discussion, create it

– set up a Ning or a wiki or a Google Doc
http://www.ning.com
http://www.pbwiki.com
http://docs.google.com

WEB 2.0 - THE PEOPLE SPEAK

Interaction: The Connectivist Way

- Use back-channels
  - Private lists http://groups.yahoo.com/
  - Gmail accounts http://mail.google.com
  - Flickr tags
  - Twitter #hashtags

Web 2.0 Don't touch that telephone, Comrade! We have Skype now

Usability:

"… probably the greatest usability experts are found in the design labs of Google and Yahoo!"

- *Elements of Usability*

    - **Consistency …** *I know what to expect…*

    - **Simplicity …** *I can understand how it works…*

Consistency? As a Learner?

- Yes! <u>Take charge</u> of your learning…

Consistency? As a Learner?

- Clarify first principles…

    – for example, how do *you* understand learning theory? Eg. Five Instructional Design Principles Worth Revisiting

Consistency? As a Learner?

- Organize your knowledge
  - For example, build your own CMS (using, say, Drupal or Joomla)

- Summarize, summarize, summarize
  - (and then put it into your own knowledge base)

Simplify the Message

- Use your own vocabulary, examples
  - *You* own your language – don't let academics and (especially) vendors tell you what jargon to use

    (The definitions aren't important and foster a false sense of precision – don't let other people dictate language to you)

Simplify the Message

- Don't compartmentalize (needlessly)

  (It's not 'math' vs. 'language' vs 'art' – it's all a single body of knowledge with various facets)

Usability: Principles

- Usability is Social:
  - Can you search your own learning?
  - Do you represent similar things in similar ways?

- Usability is Personal:
  - Listen to yourself
  - Be reflective – eg., is your desktop working for you?

Usability: The Connectivist Way

- <u>Important</u>: your institutional CMS is almost certainly dysfunctional – create your own *distributed* knowledge management system…

Usability: The Connectivist Way

– Create a blog on Blogger, just to take notes

- Keep your notes on a USB and sync with different computers with SyncToy

WE HEAR THE BLOGOSPHERE NOW
Web 2.0

http://halfanhour.blogspot.com
http://lifehacker.com/326199/synchronize-folders-with-synctoy-20

Usability: The Connectivist Way

– Store photos on Flickr

This lets you create your own image library and share with others

Don't just take party pictures, take pictures of whatever you might need

Remember to tag Flickr photos for later use

http://www.flickr.com/photos/stephen_downes/

Usability: The Connectivist Way

– Create a GMail account and forward important emails to yourself (and take advantage of Google's search)

- Use the Firefox calendar sync extension to create your own master calendar

https://addons.mozilla.org/en-US/firefox/addon/9411

Relevance:

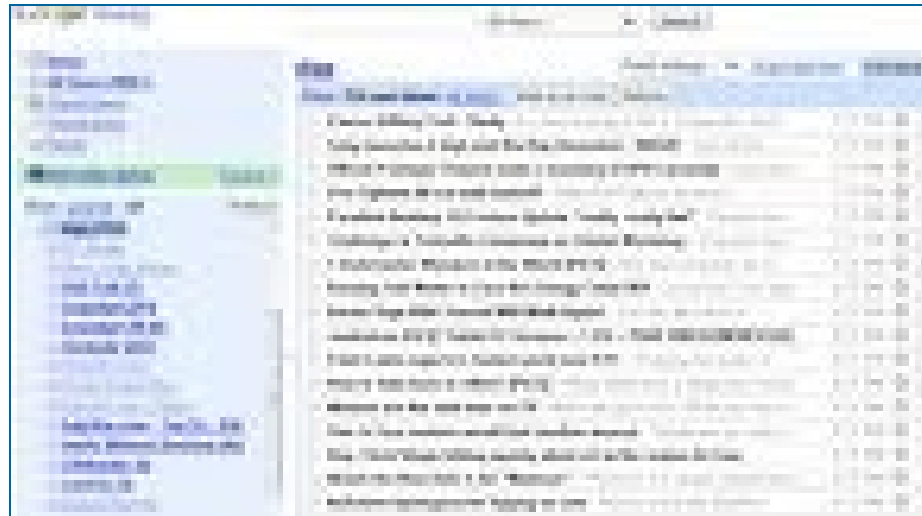"… learners should get what they want, when they want it, and where they want it "

- *Generating Relevance*

  – **Content …** *getting what you want*

  – **Location, location, location***…*

Getting What You Want

- Step One: maximize your sources – today's best bet is RSS – go to http://www.google.com/reader , set up an account, and search for topics of interest

Getting What You Want

- <u>Step Two</u>: filter ruthlessly – if you don't need it now, delete it (it will be online somewhere should you need it later)
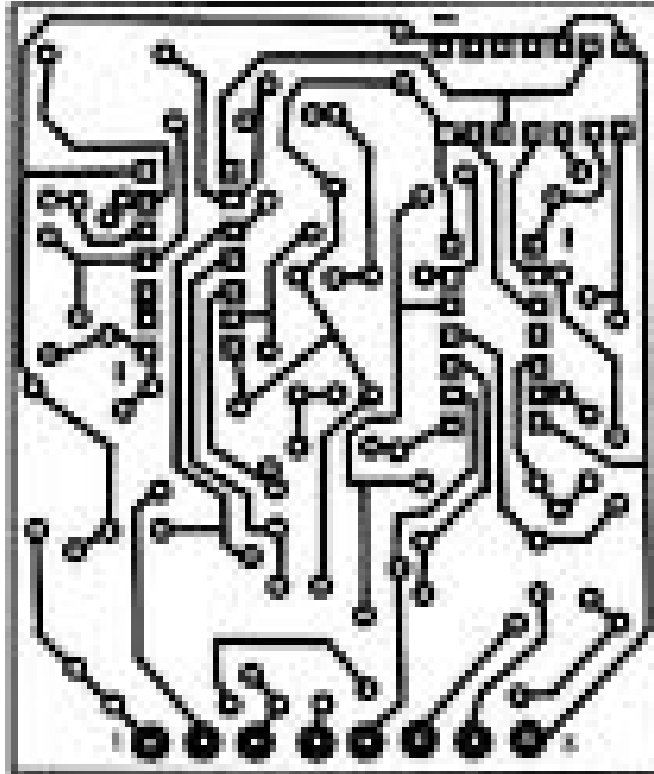
Getting What You Want

- <u>Step Three</u>: convert – don't just acquire and store, you'll never remember it later

- Instead convert it into your language, your system – if it's not worth taking a few minutes to summarize, it's not worth saving

Getting What You Want

- *Important*: Don't let someone else dictate your information priorities – only you know what speaks to you

Getting It Where (and When) You Want

- Shun formal classes and sessions in favour of informal activities

Or if you must be there, maximize their value to you:
-Use them as raw material for blog posts
-Make connections with people in class

Getting It Where (and When) You Want

- *Do* connect to your work at home (and even on vacation) – *but* – feel free to sleep at the office

  – Your best time might not be 9 to 5 …

  – Ideas (and learning) happen when they happen

Principles of Relevance

- Information is a <u>flow</u>, not a collection of objects

  - Don't worry about remembering, worry about <u>repeated exposure</u> to good information

- Relevance is defined by <u>function</u>, not topic or category

- Information is relevant only if it is available <u>where it is needed</u>

Relevance: The Connectivist Way

- Develop unofficial channels of information (and disregard most of the official ones)

THE WISDOM OF CROWDS

Relevance: The Connectivist Way

– For example, I scan, then delete, almost all institutional emails

– Traditional newspapers and press form only a *small* part of my knowledge base (simply because the world is no much more than politics and Paris Hilton)

Relevance: The Connectivist Way

- Create 'project pages' on your wiki (you have a wiki, right?) with links to templates, forms, etc.

Eg. The Plearn Trac Wiki

http://trac.edgewall.org/

Relevance: The Connectivist Way

- Use TweetDeck or Tweetie to follow networks of colleagues on Flickr

- (Or do what I do and follow their RSS feeds)

- Use Facebook or MySpace to have conversations and share resources

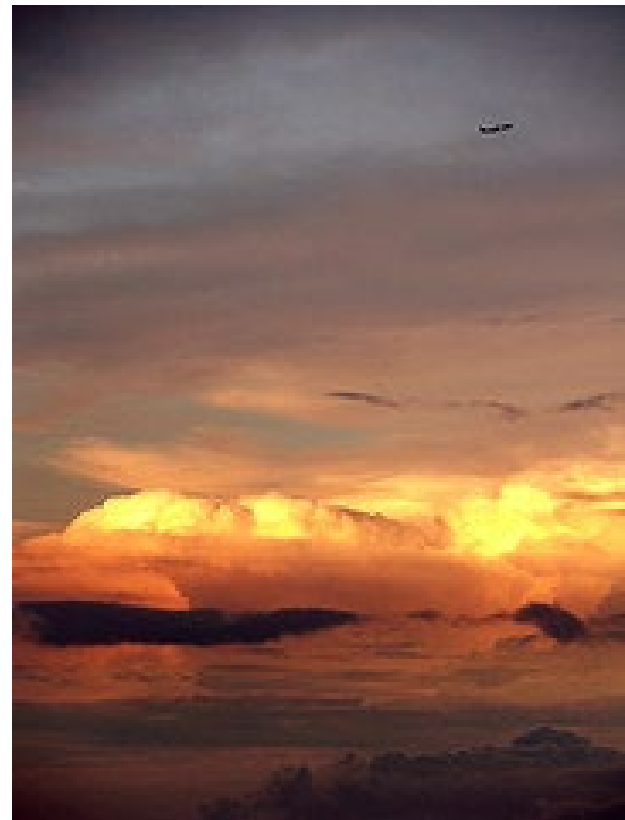# Relevance: The Connectivist Way

- Demand access

What I'm _Really_ Saying Here…

1. You are at the centre of your own _personal learning network_

What I'm *Really* Saying Here…

2. To gain from self-directed learning you must *be self-directed*

What I'm _Really_ Saying Here...

3. These principles should guide _how we teach_ as well as how we learn

- Stephen Downes
- http://www.downes.ca

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