

Supporting an Open Learning Network

Free and Open Source Software, Open Knowledge, Education and
Technology

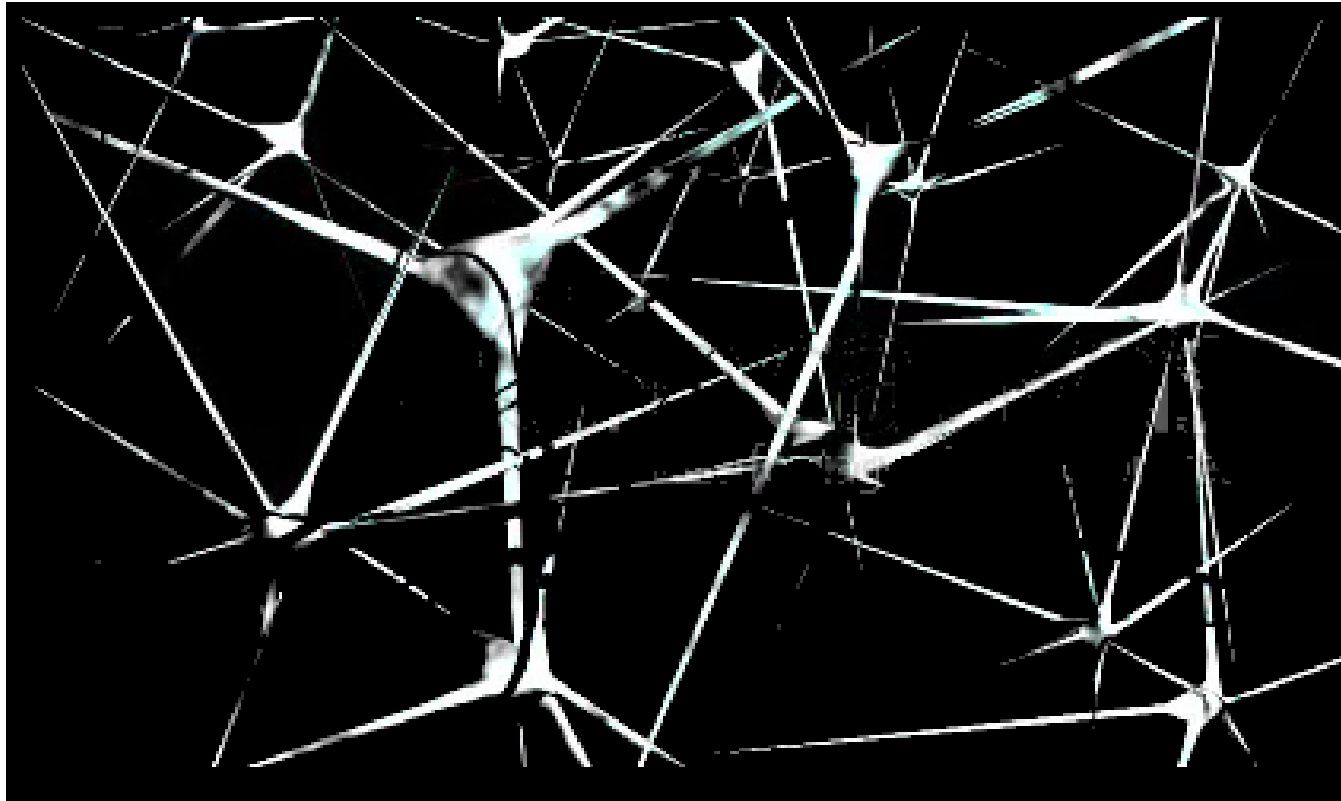
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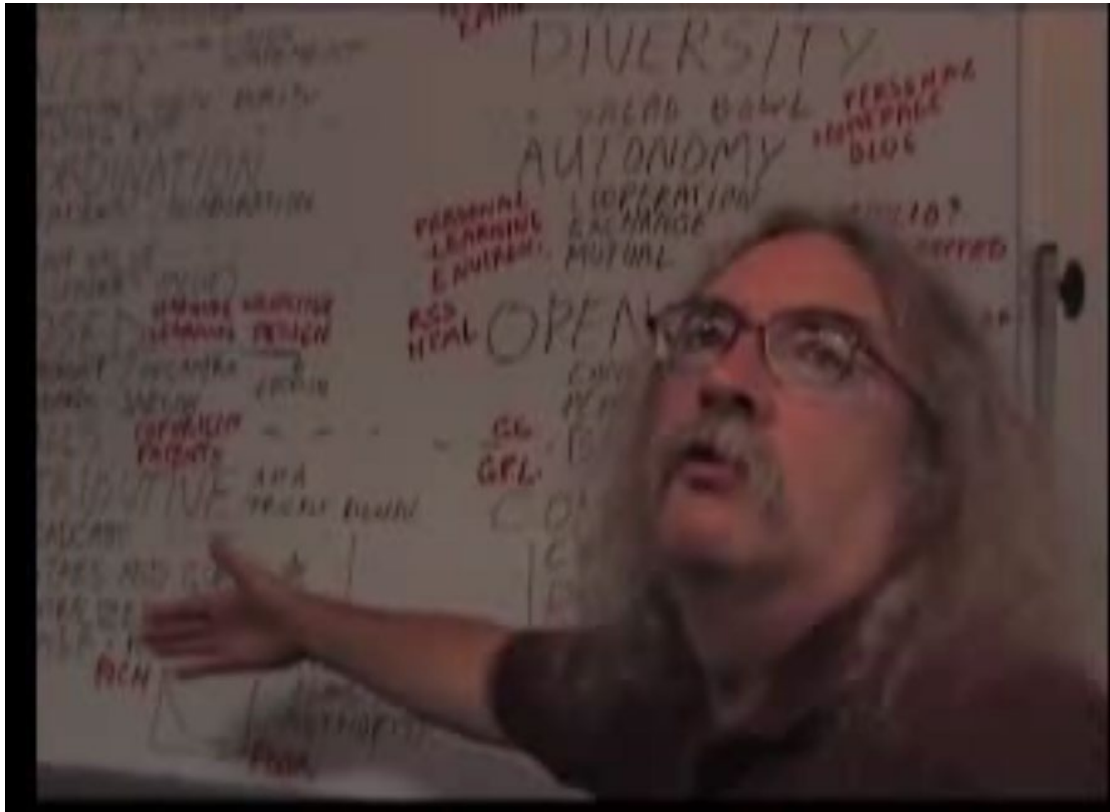




<http://www.clipcanvas.com/video-footage/gfx-graphics-neural-network-human-7728.html>

- Learning and cognition happen in a network
- Networks need to be open in order to function

The Argument in One Slide



<http://video.google.com/videoplay?docid=-4126240905912531540#>

- Autonomy – each node is self-governing
- Diversity – nodes encouraged to have varying states
- Openness – unhindered movement of signals, nodes
- Interactivity – knowledge and learning are emergent



<http://www.youtube.com/watch?v=9sJUDx7iEJw>

- Freedom to run, to read, to share, to modify
- Perspectives on freedom, as holder, as searcher

Openness?



- Openness – standards, software, systems
- Openness – educational resources, courses, assessment

Openness in Education



<http://vimeo.com/17570724>

<http://www.adlnet.gov/>

- Learning Object Metadata <http://ltsc.ieee.org/wg12/> <http://www.imsglobal.org/metadata/> SCORM
- Learning Design, Common Cartridge, Tools Interop

Open Standards

an online **Course**



**Management
System**



<http://www.youtube.com/watch?v=WvCiv5KCbeE&fmt=22>

- Moodle <http://moodle.org/>
- Sakai, Elgg, Atutor, LAMS <http://www.schoolforge.net/>

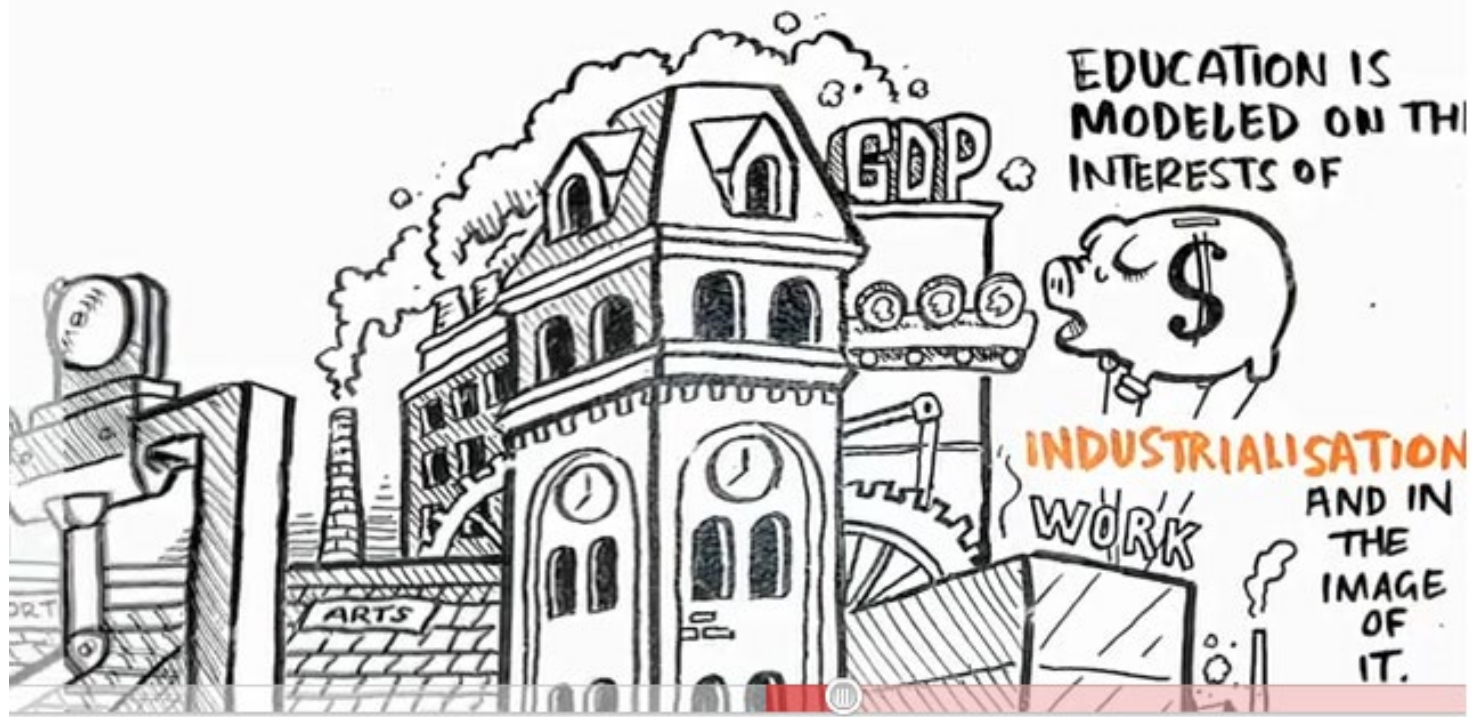
Open Source Software

The image shows a screenshot of the Khan Academy website. At the top, the Khan Academy logo is visible with the tagline "10,000 lessons delivered". The user's name "salman" and a score of "3689" are shown in the top right. A search bar is present. Below the navigation bar, there are sections for "Suggested Exercises" (Addition 1, 195 points), "Recent Exercises" (Linear equations 4, 75 points; Addition 1, 195 points), and "All Exercises (Hide All)" (Addition 1, 195 points). The main content area features a "Knowledge Map" overlay on a video player. The map is a network of interconnected nodes representing mathematical topics, including Linear equations, Functions, Trigonometry, and Calculus. The video player interface at the bottom shows a progress bar at 03:21 / 10:15, a volume icon, and a 360p resolution setting.

<http://www.youtube.com/watch?v=hw5k98GV7po>

- Projects: OCW, Khan, MERLOT http://www.oergrapevine.org/OER_projects
<http://wiki.oercommons.org/mediawiki/index.php/Projects>
- Licensing: GFDL; CC by, SA, NC, ND <http://creativecommons.org/>

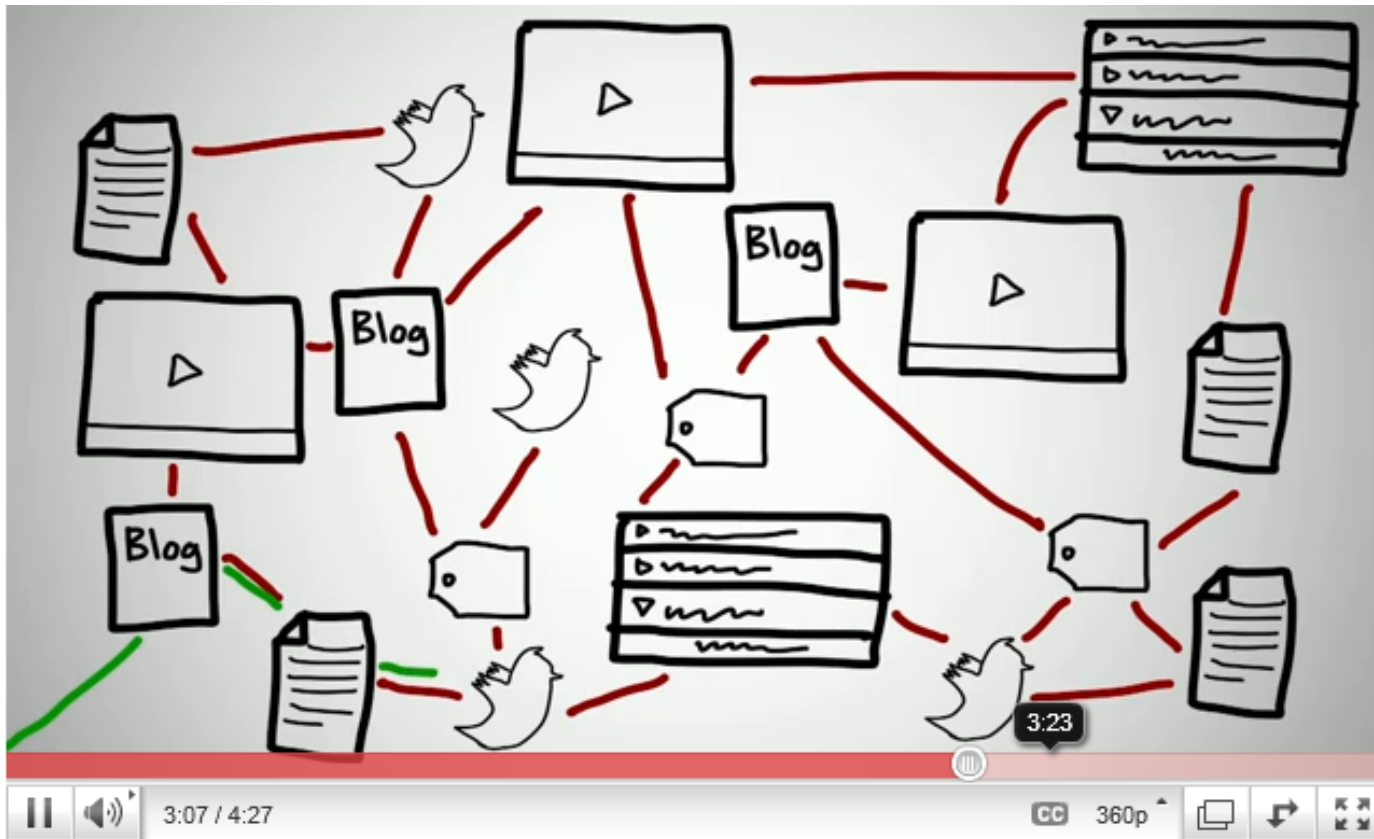
Open Educational Resources



<http://www.youtube.com/watch?v=zDZFcdGpL4U>

- Models: Endowment, Membership, Donations...
<http://ijello.org/Volume3/IJKLOv3p029-044Downes.pdf>
- Issues: Lock-in, high-bar, flooding, conversion
<http://www.downes.ca/post/7804>

Sustainability Issues



<http://www.youtube.com/watch?v=eW3gMGqcZQc>

- MOOC: Massive Open Online Course
- Network Design, Community Based

<http://cck11.mooc.ca/>

Open Courses



<http://www.youtube.com/watch?v=FPEuu5mpC4s>

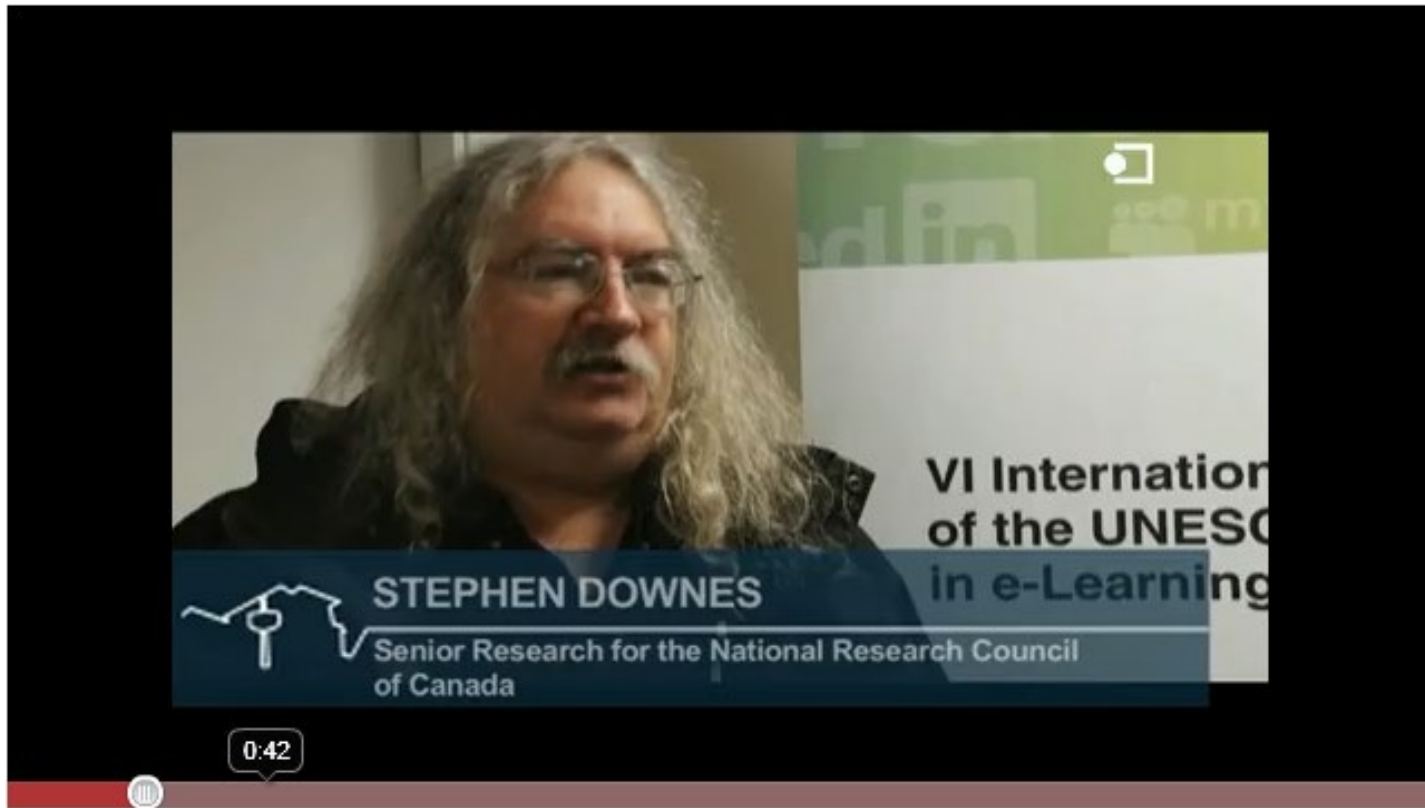
- Aggregate – gather resources from wherever they may be
- Remix – mash up, put together, join
- Repurpose – localize, adapt, mark up, tag, review, lip dub
- Feed forward – as video, slides, graphics, text



http://www.youtube.com/watch?v=iLL6x_TNMSo

- Big Data, Web of Data, Semantic Web, RSS, Geo, FOAF...
- Mash-ups, APIs, the Cloud, Social Network

The Open Learning Ecosystem



<http://www.youtube.com/watch?v=X0il0pgTUx0>

- <http://www.downes.ca>
- Free Learning

Stephen Downes