

Videos:

VLC Objectives link - http://youtu.be/yO_iu4GzRZs

VLC Demo link - <http://youtu.be/nXq60mj9uy4>

The Virtual Learning Commons

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ASM 2009

- ▶ Two workshops
 - ▶ Content requirements
 - ▶ System requirements
- ▶ 48 attendees
- ▶ Results: need for *community-generated* content:
 - ▶ Technical explanations of approaches and tools;
 - ▶ Descriptions of how a specific technology is actually used – the work context and work flow in real settings from users' perspective;
 - ▶ Awareness of social and organizational context – both of those who create technical approaches and of LTER itself;
 - ▶ Understanding of scientific data/methods being supported by IM



Background

- ▶ 2008 Discussion with Kristin
 - ▶ Disconnect between technologies being developed vs IM needs
 - ▶ How to understand and keep up
- ▶ *ASM 2009
 - ▶ Series of working meetings on learning in information management
- ▶ Spring 2010 met with IM Exec (briefly)
- ▶ Finland Jan 2011
 - ▶ Kristin, Deana, Karen Baker, Helena Karasti
 - ▶ Collaborative learning and learning systems
- ▶ March 2011 NSF CI-Team proposal
- ▶ September 2011 award
 - ▶ Built on prior research on human factors in technology learning and adoption; cross-disciplinary learning and diffusion of innovation
 - ▶ 2002-2007 SEEK
 - ▶ 2006-2008; 2008-2010 NSF CI-Team projects



Project Goals

Goal 1: Create a virtual learning environment focused on new and existing techniques for data and information acquisition, exchange, analysis, and integration of data;

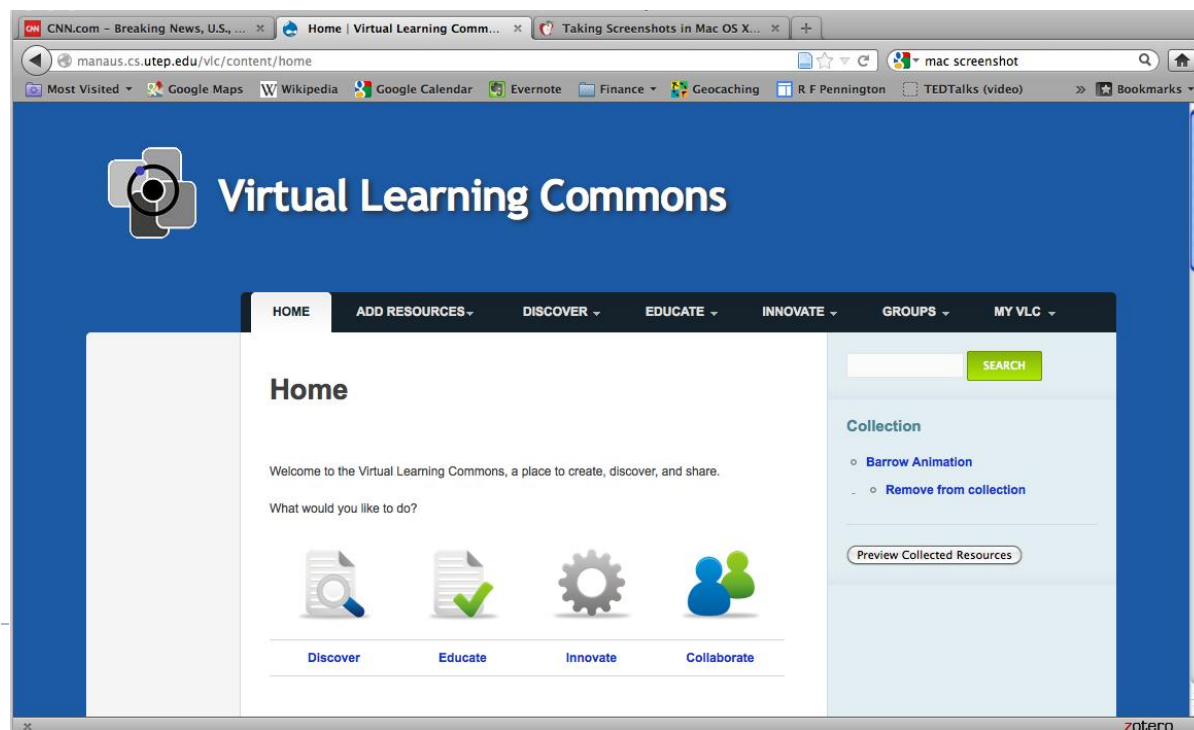
Goal 2: Engage local, regional, national and international STEM research and education communities in both face-to-face and virtual settings; and

Goal 3: Continue to develop and extend our understanding, theories, concepts, and models of interdisciplinary collaboration and diffusion of technical innovations in STEM research settings. [This research builds on two prior CI-Team projects]



Proposed solution: The Virtual Learning Commons (VLC)

- ▶ Assist users in *finding* relevant existing content about a given technology (VLC Discover)
- ▶ Support users in self-directed *learning* about that technology (VLC Educate)
- ▶ Support users in *appropriating* that technology into their work (VLC Innovate)
- ▶ Enable collective *learning and discussion* around content (VLC Collaborate)





What is different about the VLC?

- ▶ Many online learning systems for classroom education
 - ▶ But they assume there is a teacher designing the learning experience and creating content
- ▶ Many online systems for sharing documents
 - ▶ But they assume that you own the content and you just need to share it
 - ▶ The resources you need to share and discuss may not belong to you
- ▶ VLC handles DISTRIBUTED collections
 - ▶ Content of interest exists out on the Web – and need to be organized by you into collections that make sense to you (Semantic Web solution)
 - ▶ You contribute discussion and auxiliary materials around that content (Social Web solutions)
- ▶ VLC is INNOVATION-CENTERED:
 - ▶ Targets learning across disciplines in research settings where materials are limited, for the purpose of appropriating new approaches into different settings





Google Search

semantic web - Google Search - Mozilla Firefox

File Edit View History Bookmarks Tools Help

semantic web - Google Search

https://www.google.com/#hl=en&client=psy-ab&q=semantic+web&oeq=semantic+web&gs_l=hp.3..35i39l2j0l2.3286033.3287656.0.3287855.12.12.0.0.0.2.363.1928.4j5j2j1.12.0.les%3B..0.C

Most Visited Google Calendar EarthCube Socio-Environmental S... EarthSky.org - A Clea... Evernote Web Cyberlearning Resear... Preceden timelines HTask MSpace Mycoted Creativity & ... TEDTalks (video) Quick-R

+Deana Search Images Maps Play YouTube News Gmail Drive Calendar More

Google semantic web

Deana Pennington 0 + Share

Search 40 personal results. 5,810,000 other results.

Web
Images
Maps
Videos
News
Shopping
Blogs
Books
More

El Paso, TX
Change location

Show search tools

Semantic Web - Wikipedia, the free encyclopedia
en.wikipedia.org/wiki/Semantic_Web
The **Semantic Web** is a collaborative movement led by the international standards body, the World Wide Web Consortium (W3C). The standard promotes ...
Semantics - Semantic Web Services - Social Semantic Web - Semantic Web Stack

Semantic Web - W3C
www.w3.org/Standards
The **Semantic Web** is a Web of data — of dates and titles and part numbers and chemical properties and any other data one might conceive of. RDF provides the ...

semanticweb.com - The Voice of Semantic Web Business
semanticweb.com/
4 days ago – News and analysis related to the **Semantic Web**. Focus on the transition from academia to mainstream consumer, business and government ...

ISWC2012 | The 11th International Semantic Web Conference
iswc2012.semanticweb.org/
ISWC 2012 is the premier international forum, for the **Semantic Web** / Linked Data Community. Here, scientists, industry specialists, and practitioners meet to ...
You've visited this page 5 times. Last visit: 9/13/12

Semantic Web
semanticweb.org/
Apr 1, 2012 – The Business Special Interest Group provides a survey of companies, technologies and products likely to support **Semantic Web** projects.

Images for semantic web - Report images

Semantic Web
semanticweb.org/ - Cached - Similar

Page: Discussion Read View source View history On Search

Semantic Web

Main Page

The **Semantic Web** is the extension of the World Wide Web that enables people to share content beyond the boundaries of their chosen web browser. It is a vision of a future web where data is organized in a way that is easy to understand and use. It is a vision of a future web where data is organized in a way that is easy to understand and use. It is a vision of a future web where data is organized in a way that is easy to understand and use.

Getting started

- Introduction to the Semantic Web
- Getting started

Community

- Community parties
- Events
- Projects

Technology

- Semantic Web standards
- Tools
- Languages

Popular vocabularies

- People & Organizations
- RDF
- OWL
- XSD
- XML
- SOAP
- REST
- HTTP
- FTP
- SSH
- Telnet
- IRC
- XMPP
- SIP
- VoIP
- WebRTC
- WebSockets
- WebRTC
- WebSockets
- WebRTC
- WebSockets

Task Force Spam Fighting

The site has been hit by several waves of spam recently, and measures are now being taken to reduce the number of spam messages. However, spam is still a problem, and we need your help to keep the site clean. Please report any spam messages you see on the site. Thank you for your help.

The **Semantic Web** is no place for spam!

This page was last modified on 1 April 2012 at 22:16

Privacy policy About semanticweb.org/

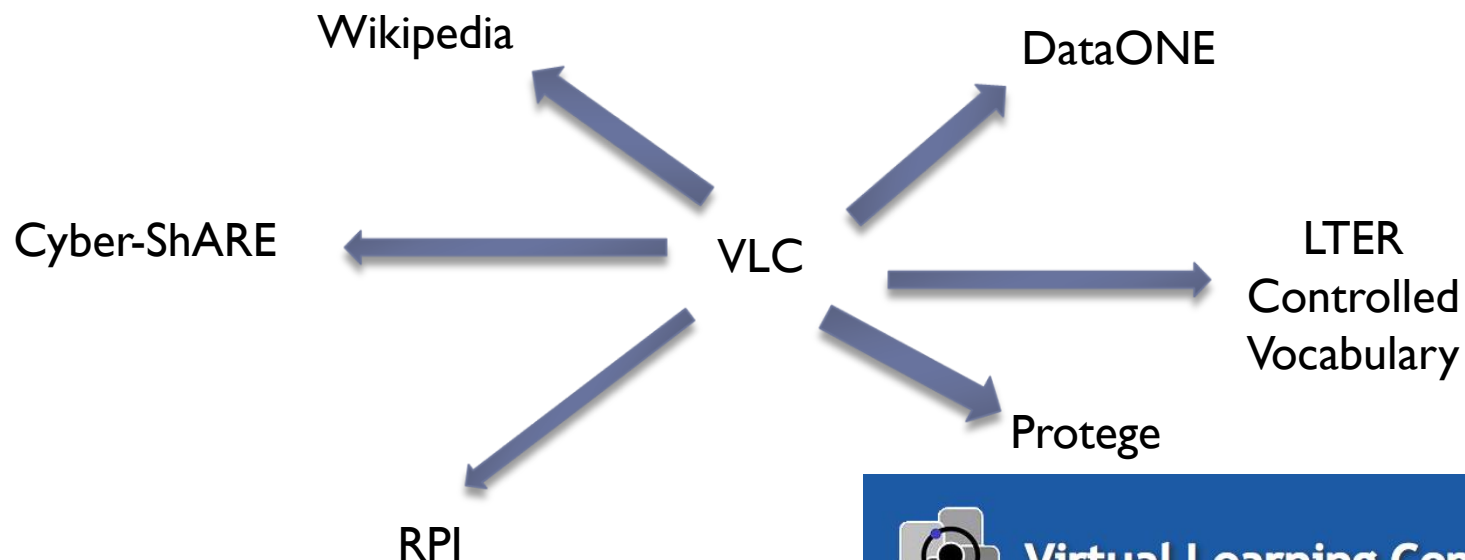
zotero

LTER Controlled Vocabulary??

LTER Projects/People??



Distributed Resources About Semantics



1. Tags embedded in projects' registered website
2. Tags manually captured and managed in the VLC

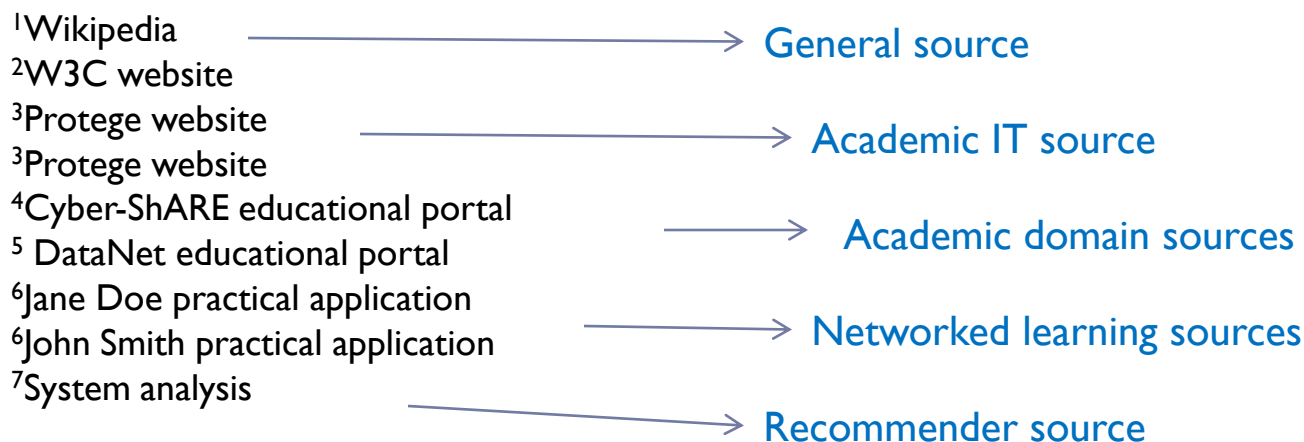






Semantic-Based Mashups

- ¹ Ontologies definition (fact)
- ² Ontology approaches (concepts)
- ³ Pizza ontology (tutorial)
- ³ Wine ontology (example)
- ⁴ Climate ontology (example)
- ⁵ Biodiversity ontology (example)
- ⁶ Jane Doe discussion (synthesis)
- ⁶ John Smith discussion (synthesis)
- ⁷ Recommendations (people who conducted this search also searched...)

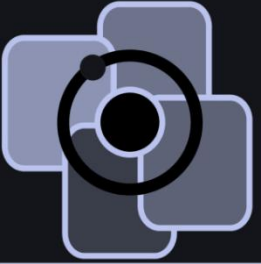




Social Web: STEM Communities

1. LTER Information Managers
2. UTEP STEM Educators
3. Geo-Epidemiology Research Network

VLC targets sharing within and across communities



VLC Discover

Home Add resources Discover Educate Innovate Help Collect My Account Log out

Create collection

- My own (private)

Shared:

- Public (with everyone)
- Private (with specified group)

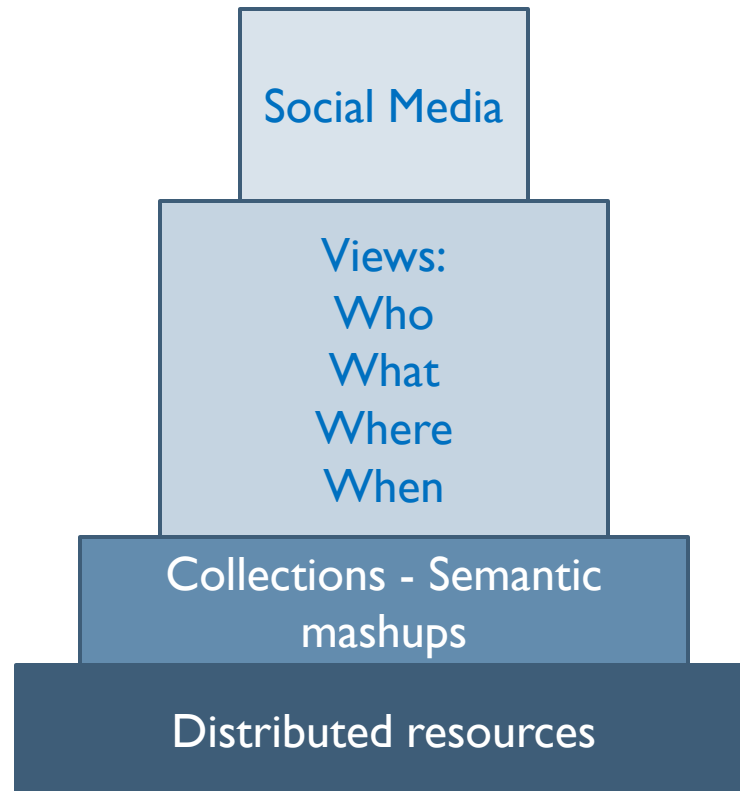
TAG CLOUD
(Newest entries)

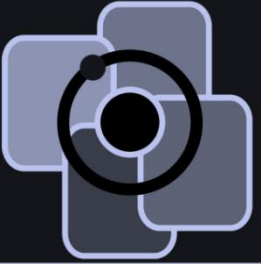
TAG CLOUD
(Entire site)

Feedback box



VLC Approach





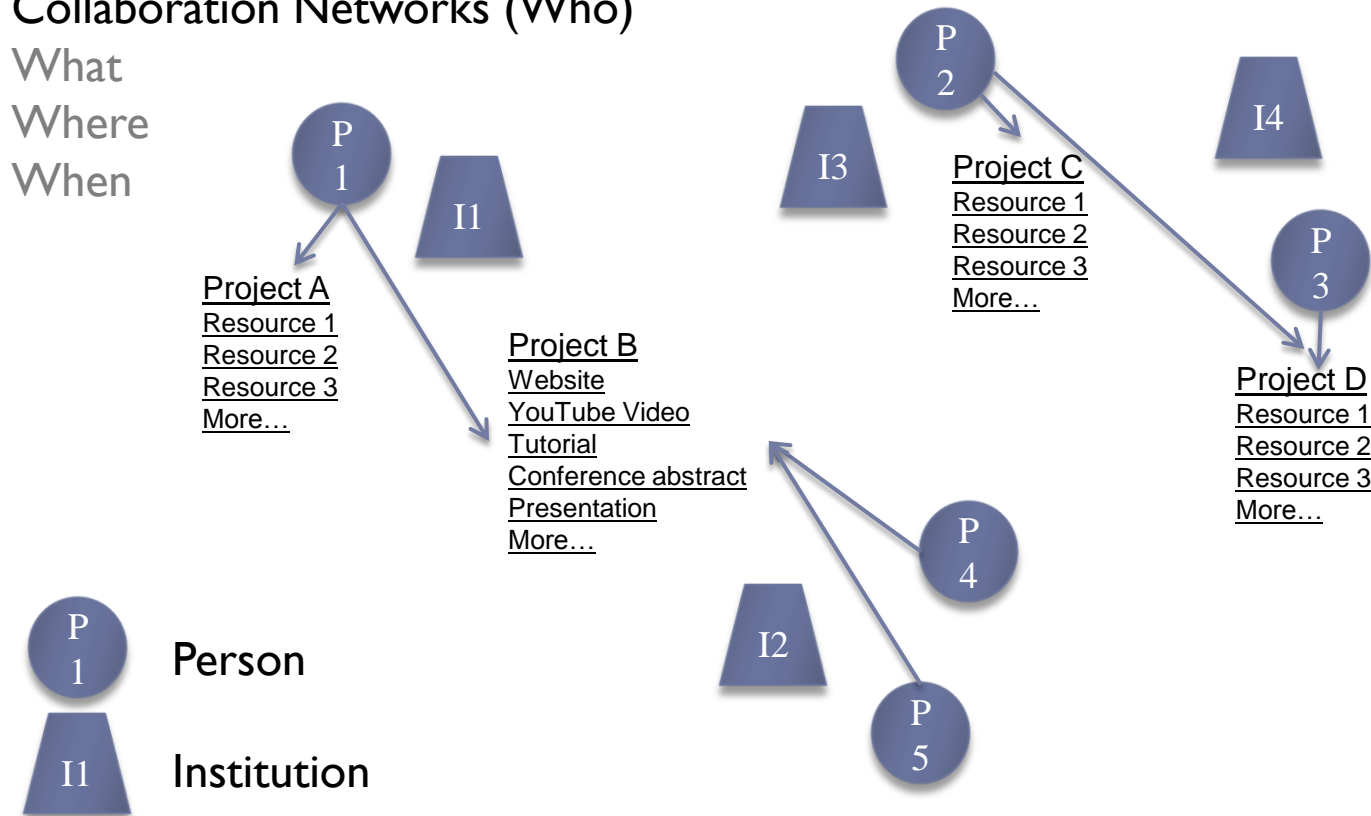
VLC Discover

Home Add resources Discover Educate Innovate Help Collect My Account Log out

Discover!

Collaboration Networks (Who)

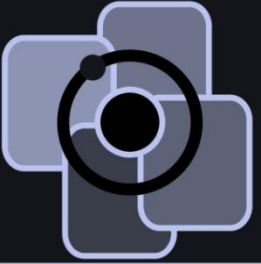
What
Where
When



LIST: People

LIST: Institutions

Feedback box



VLC Discover

Home Add resources Discover Educate Innovate Help Collect My Account Log out

Discover!

Who
List (What)
Where
When

- | | |
|-------------------------------------|--------|
| <input type="checkbox"/> Resource 1 | NEWEST |
| <input type="checkbox"/> Resource 2 | |
| <input type="checkbox"/> Resource 3 | |

[More](#)

- | |
|-------------------------------------|
| <input type="checkbox"/> Resource 1 |
| <input type="checkbox"/> Resource 2 |
| <input type="checkbox"/> Resource 3 |
| <input type="checkbox"/> Resource 4 |
| <input type="checkbox"/> Resource 5 |

[More](#)

TAG CLOUD
(Newest entries
with these
tags/terms)

TAG CLOUD
(Entire site with
these tags/terms)

Feedback box

Collect

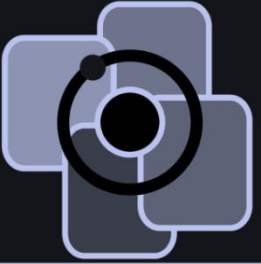




Who
Cluster (What)
Where
When



Feedback box

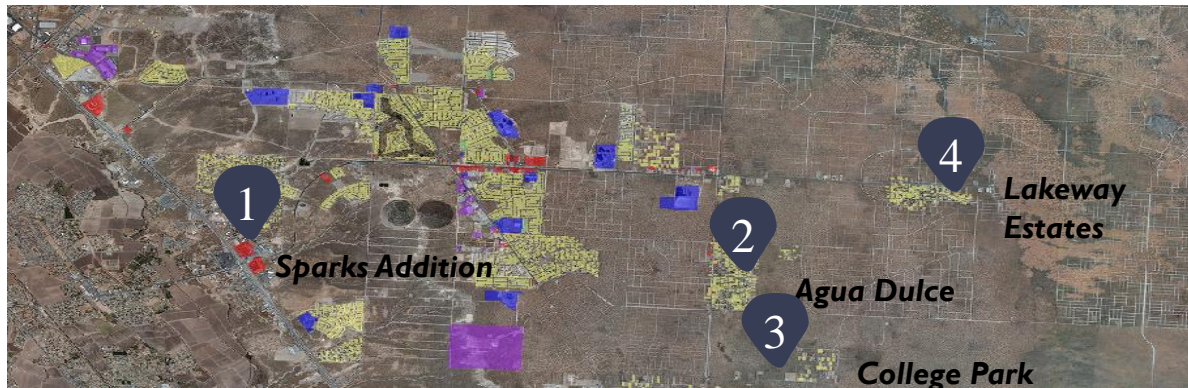


VLC Discover

Home Add resources Discover Educate Innovate Help Collect My Account Log out

Discover!

Who
What
Where
When



1 [Project A Website](#)
[YouTube Video](#)
[Tutorial](#)
[Conference Presentation](#)
[More...](#)

2 [Project A Resource 1](#)
[Resource 2](#)
[Resource 3](#)
[More...](#)

3 [Project B Resource 1](#)
[Resource 2](#)
[Resource 3](#)
[More...](#)

4 [Project C Resource 1](#)
[Resource 2](#)
[Resource 3](#)
[More...](#)



earthquake

tsunami

fukushima

radiation

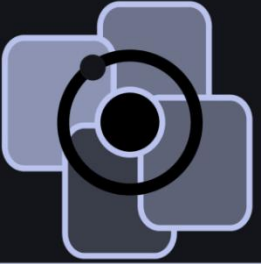
nuclear waste

explosion

melt down or meltdown

tokyo electric or teppo

▶ 18

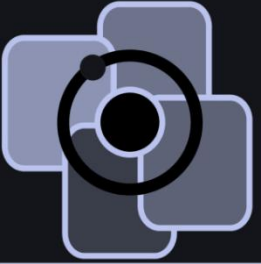


VLC Educate

[Home](#) [Add resources](#) [Discover](#) [Educate](#) [Innovate](#) [Help](#) [My Account](#) [Log out](#)

Educate!
Create course
Create virtual conference



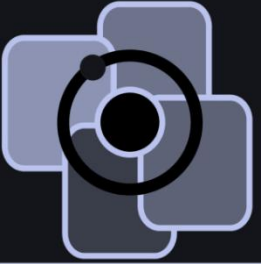


Innovate!

Search term(s)

Searches:

- *Elevator speeches*
- *One page flyers*
- *Lightning talks*
- *Semantic Abstract workflows*
- *Tutorials*
- *Exercises*



Design research

- *Semantic abstract workflows*
- *Data management planning*



VLC Research

- ▶ What are the patterns that researchers use to discover and evaluate resources in virtual space?
- ▶ How does networked learning impact those patterns?
- ▶ What is the impact of networked learning on technology adoption?



LTER IM is KEY

1. I know the community and you know me!
2. The project has evolved from discussions with you
3. I *think* I understand your problems
4. VLC success depends on community contribution and sharing of content, knowledge, and expertise...I *think* your wealth of experience will make this a success
5. We have budgeted funds for small meetings of LTER IMs specifically to work on content (Kristen)
6. We have budgeted funds for an extra day at the annual IM meetings for training (Kristen).



Acknowledgements

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