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Applications of  
Social and Collaborative  
Technologies in Education

Stephen Downes ~ April 8, 2008



National Research  
Council Canada

Conseil national  
de recherches Canada

Canada

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# Why I came to New Brunswick



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A photograph of the NRC-IIT Moncton building, a modern multi-story structure with a prominent glass facade and red horizontal accents. The building is set in a winter landscape with snow on the ground and bare trees. A Canadian flag is visible on a tall pole to the left. The sky is overcast and grey.

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# The Fall Foliage

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# NAWeb 1996

Wu Centre, Fredericton



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Rik Hall

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1997

## TeleEducation NB Staff

- [Rory McGreal](#), Executive Director
- [Roger Doucet](#), Learning Design Specialist
- Marilyn Holland, Learning Support Coordinator
- Joel Vautour, Technical Services Coordinator
- Claudette Grexton, Secretary
- Brad Donovan, Technical Support
- Annette Selmes, Scheduler - Financial Officer
- [Dwight Spencer](#), Internet Services Manager



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[Fredericton, NB, Canada](#)  
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Last Update: 11:31 AM ADT, Friday July 7 2000 by the [the webmaster](#)



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People helping each  
other learn



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EduCamp Colombia

# EduCamp Colombia

Software social para la enseñanza y el aprendizaje



<http://www.colombiainformatica.edu.co>

Escuela  
de Ingeniería  
de Sistemas



Colombia  
aprendiendo  
en línea

Ministerio de  
Educación Nacional  
República de Colombia



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**Kuala Lumpur,  
Malaysia**





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# Communities of Educators Online





# Educational Bloggers

Discussion Pool Map 203 Members Invite

<http://www.flickr.com>

## Group Photo Pool (See all 459 photos)



NEW From [Edu-Tourist](#)



From [netbobz](#)



From [netbobz](#)



From [Danica](#)



From [netbobz](#)



From [netbobz](#)

[More photos...](#)



# Google Reader

All items Search

- [Home](#)
- [All items \(109\)](#)
- [Starred items](#) ★
- [Trends](#) 📊
- [Your shared items](#) 🔄
- [Friends' shared items](#) 👤 [Manage friends »](#)

[+ Add subscription](#)

- Show: updated - all
- [cyberculture \(9\)](#)
  - [Jon's Radio \(1\)](#)
  - [Mashable! \(3\)](#)
- [Manage subscriptions »](#)

## edubloggers

Folder settings... ▾ Expanded view List view

Show: 12 new items - [all items](#) Mark all as read Refresh

★ **Wiki Way** » 12:43 PM (22 minutes ago)

from [CogDogBlog](#) by Alan Levine aka CogDog

Wikis are one of the most powerful, and low barrier entry of Web2.0 technologies, and ironically, ancient, almost as old as HTML itself. Thanks to a twitter links from Vicki Davis ([twitterbuton](#)), I came across one today that is certainly proving itself as a wiki way to do things.

This post is not strictly about the wiki itself, but a snippet I saw there, but it is the [TwitterPack wiki](#), that asks the question:

If someone were joining Twitter today, who might they follow?

▲ Previous item ▼ Next item

13 items

<http://www.google.com/reader>

Search ▾

- Applications edit
- Photos
  - Groups
  - Socialistics
  - more

## The New Media Consortium

Global

### Information

#### Group Info

Name: The New Media Consortium  
Type: Internet & Technology - General  
Description: Let's get to 1000 members! We are almost there!



sparking innovative  
learning & creativity

This group provides an avenue within Facebook for NMC members and friends to connect. We will use this space for early release of news, announcements and more from the NMC.

The New Media Consortium (NMC) is a group of more than 250 world class colleges, universities, research centers, and museums dedicated to understanding and using emerging technologies. For more info on the NMC, see [www.nmc.org](http://www.nmc.org)

- [View Discussion Board](#)
- [Invite People to Join](#)
- [Leave Group](#)

Share +

<http://www.facebook.com>





# CLASSROOM 2.0

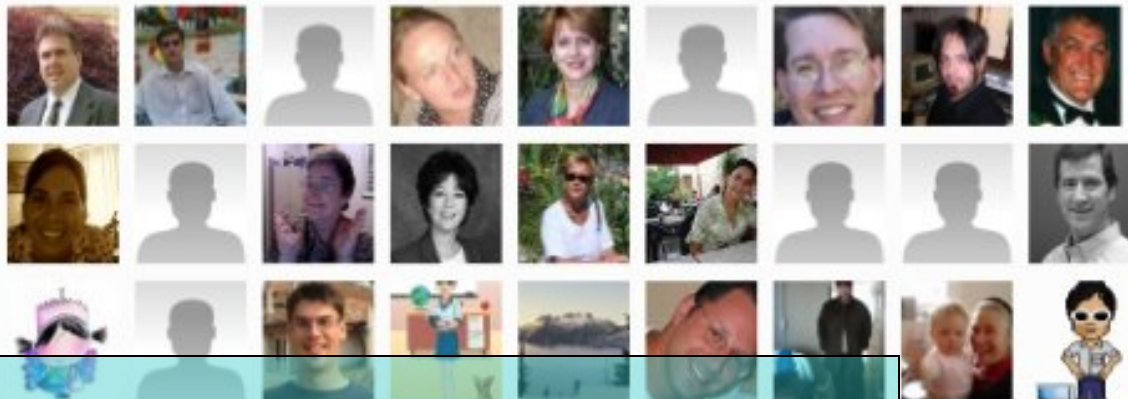
[MAIN](#) [MY PAGE](#) [MEMBERS](#) [NEWS](#) [FORUM](#) [RESOURCES](#) [WIKI](#) [GROUPS](#) [FAQ](#) [PHOTOS](#) [VIDEOS](#)

## WELCOME!

Welcome to **Classroom20.com**, the social networking site for those interested in [Web 2.0 and collaborative technologies](#) in education.

Once you join, please introduce yourself by going to [the introductory forum message](#). We especially hope that those who are "beginners" will find this a supportive community and a comfortable place to start being part of the digital dialog. Feel free to explore! [Here are some starting tips](#), or you can ask help of a "host" below.

## Members



<http://www.ning.com>

Classroom 2.0 "LIVE Conversations"

Classro  
Cla  
The soc  
educato  
7148 m  
Spread t  
Classroo  
website c

[View All](#)



« Back

Welcome to the E-learning group

## E-learning

### Description

Group for all educational professionals who want to take or have taken the next step in learning-effectiveness.

### Web Address

<http://e-learning.plaxogroups.com>

### Tags

e-learning, learning, coaching, online, individual, group, path, blended

## Members

[view all](#)



Eleonora



Emmanuel



Rich



Helga



Jose



Jean-Philip...



Mischa

<http://www.plaxo.com>

Ads

10 F  
Lose  
10 I  
www

Ont  
Get  
you  
www

Aut  
Auto  
Assi  
Blog

Quic  
This  
taxe  
www





# WikiEducator

Search this group

Search Groups

Home

New since last time: **845** messages, **162** members

Discussions 8 of 1526 messages [view all »](#)

[+ new post](#)

[When generating a PDF](#)

By Declan - 7:08am - 3 authors - 8 replies

[Open Web Conference Vancouver April 2008](#)

By Peter - Apr 5 - 1 author - 0 replies

[The best proven way to get Financial Aid!](#)

By university - Apr 5 - 2 authors - 2 replies

[Elsevier](#)

By Nadia - Apr 4 - 3 authors - 3 replies

[Image histories](#)

By Leigh Blackall - Apr 4 - 2 authors - 2 replies

[{{Sustainable Otago}} Pangea day \(well: Pangea predawn\)](#)

By Leigh Blackall - Apr 3 - 1 author - 0 replies

[International accredited OER based university](#)

By Leigh Blackall - Apr 2 - 7 authors - 23 replies

[MIT, Elsevier Offer Free Content From More Than 2,000 Journals](#)

Home

Discussions

Members

Pages

Files

[About this group](#)

[Edit my membership](#)

[Invite members](#)

## Group Info

Members: 315

Activity: Low activity

Language: English

Group categories:

[Society > Education](#)

[More group info »](#)

<http://groups.google.com>





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Communities of learners,  
where they need to learn

# IBM Worldwide

## IBM Research Worldwide

*3000 Researchers in eight labs around the world*



# Learning Within a Digital Community

**e physical classroom will be recreated in a virtual form utilizing 3D visualization and Web 2.0 technologies to create an accessible digital learning community**

## Learning 0.0: The Classroom



**Peer to Peer  
Networking and  
community building  
Synchronous  
Time consuming  
and costly**

## Learning 1.0: e-learning



- Individualized learning
- Distributed teams
- Wealth of information
- Self-Paced Learning (SPL)
- *Isolated from community*
- Low effectiveness

## Learning 2.0: Virtual Classroom & CoP



- Collaborative learning
- Distributed teams
- Peer to peer social repartee
- Engaging interface
- Wealth of information
- "Realistic" simulation of business situations

# CompanyCommand

Building Combat-Ready Teams

## Welcome to the CompanyCommand Forum



If you are not a member, you must first [JOIN HERE](#).

*Membership is restricted to current, future, and past company commanders*

\*\*\*\*\*  
Welcome to your professional forum! CC **IS** company commanders. We are a grass-roots, voluntary forum that is **by** and **for** the profession with a specific, laser-beam focus on company-level command. By joining, you are gaining access to an amazing community of professionals who love Soldiers and are committed to building combat-ready teams.  
\*\*\*\*\*

<http://companycommand.army.mil/>

★ Need an AKO account? Visit the [Army Homepage](#) and sign up for one. If you serve in another branch of service, you need to obtain an Army sponsor.

★ Problems? Email us at [cocomd.team@us.army.mil](mailto:cocomd.team@us.army.mil)

★ Having trouble logging on? Clear your browser's cookies, close the browser, and try again.

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SPECIAL WEAPONS AND TACTICS

# SWAT4

GOLD EDITION

SWAT 4 GOLD EDITION AVAILABLE NOW

# SWAT4

SPECIAL WEAPONS AND TACTICS

[ABOUT THE GAME](#)

[NEWS](#)

[SIGNUP](#)

[COMMUNITY](#)

NEWS FEED: SWAT 4 EXPANSION WINS

**BUY OR DOWNLOAD**

INSTANT DOWNLOAD OR  
FREE SHIPPING





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0110

**UCit Instructional &  
Research Computing**

**Learning  
Community  
Office**

UNIVERSITY OF  
**Cincinnati**



Second Life Communities

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# Edublog Awards



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The new technology - even  
games - supports learning by  
supporting community

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# Learning Communities

Photo: Joyce Valenza and Dave Thomson. Photo by Ewan McIntosh

<http://www.flickr.com/photos/edublogger/840478703/>



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# Elements of Learning Communities (Circa 1997)



# Sense of shared purpose



Pam Vesely, Lisa Bloom and John Sherlock  
Key Elements of Building Online Community:  
Comparing Faculty  
and Student Perceptions  
<http://jolt.merlot.org/vol3no3/vesely.htm>

Photo: Frederick Noronha

<http://www.flickr.com/photos/fn-goa/236214205/>



Photo: Loungerie <http://www.flickr.com/photos/loungerie/827362903/>

**Establishment of boundaries defining  
who is a member and who is not**

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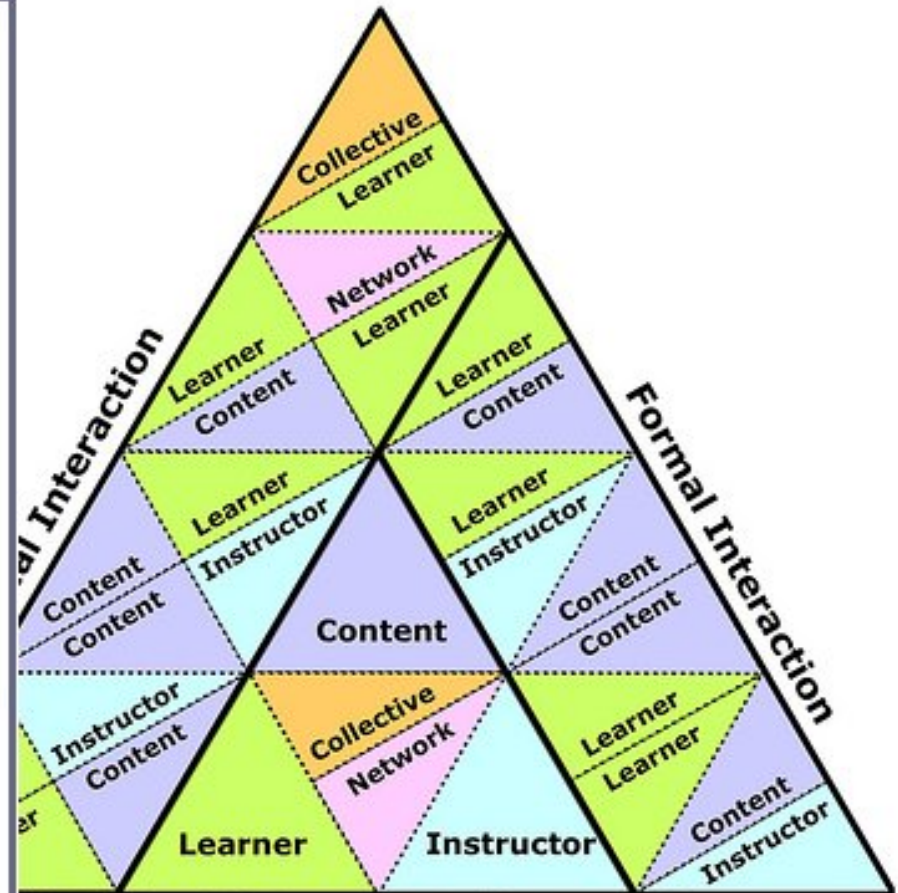
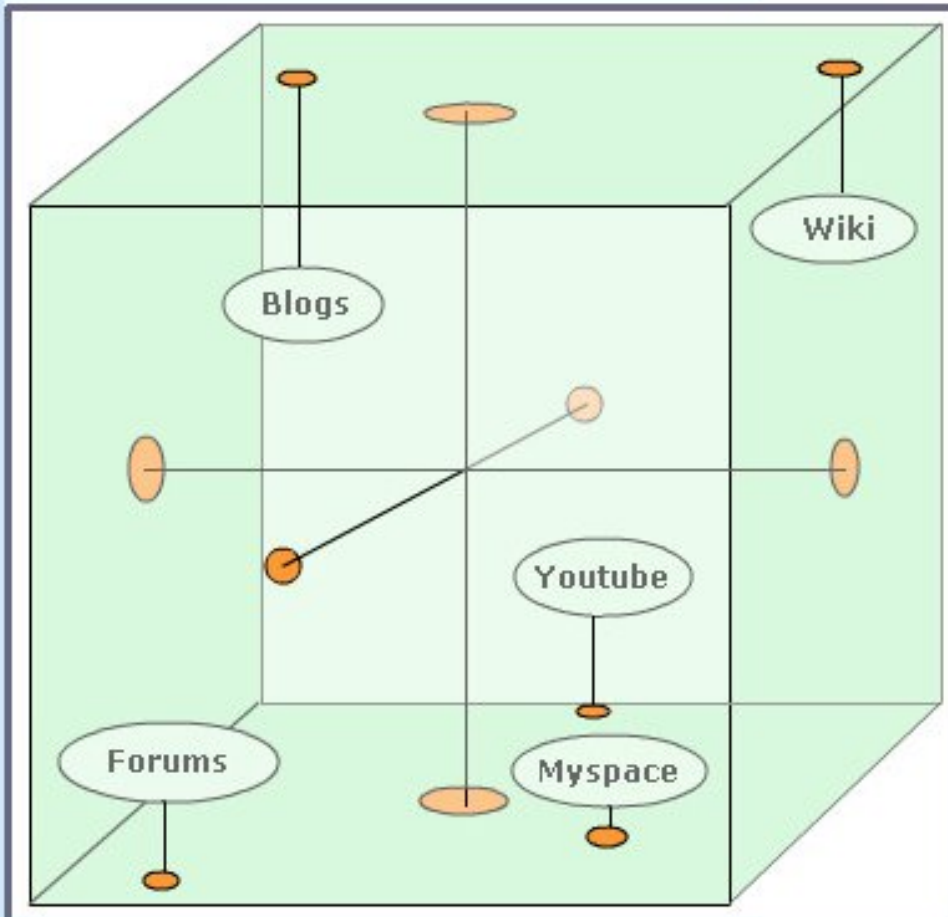


**Establishment and enforcement of  
rules and policies**

Photo: ClintJCL <http://www.flickr.com/photos/clintjcl/375585107/>



## e-Learning Interaction Matrix: Essential Elements of a Socially Constructed Learning Environment



Meaningful & Memorable Learning

# Interaction among members

Photo: Jason Rhodes <http://www.flickr.com/photos/jrhode/2040911590>

PUT MONEY IN MUG  
(OR RING BOTTOM BELL)

PERCENTAGES TO "CHILDREN WITH  
LEUKAMIA"  
AND ST. MUNGOS  
HOMELESS

Trust, respect  
and support

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# Group identity

Misanchuk and Anderson


<http://www.mtsu.edu/~itconf/proceed01/19.html>



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Since then, we've  
learned...





Online communities are not as  
united as supposed...

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We don't want our  
classrooms to be like  
classrooms...



Photo: Inx <http://www.flickr.com/photos/Inx/6257130/>



## Far from it...

The challenge for educators across the nation has become how to design and develop a teacher corps and a school structure that allows for a school that operates in a completely different manner than the classrooms we experienced in our own education. - Sammon 2000, 2. <http://www.stanford.edu/group/cubberley/node/2383>

Photo: Georgie Sharp <http://www.flickr.com/photos/georgiesharp/1180689591/>

# Different levels of interaction:

- Communication - individualism
- Cooperation - mesh, or network
- Collaboration - unity, or whole





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Which level prevails  
in Web 2.0?



# Learning in a Mesh

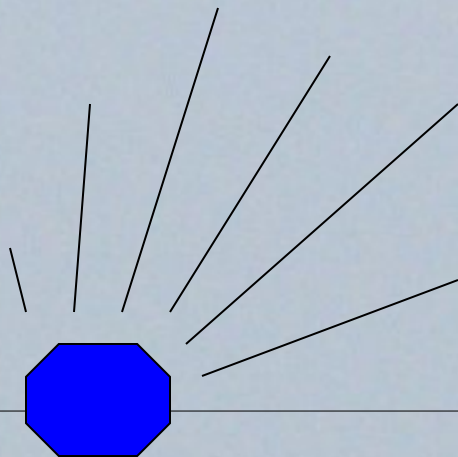
**Collaborative**

**Cooperative**

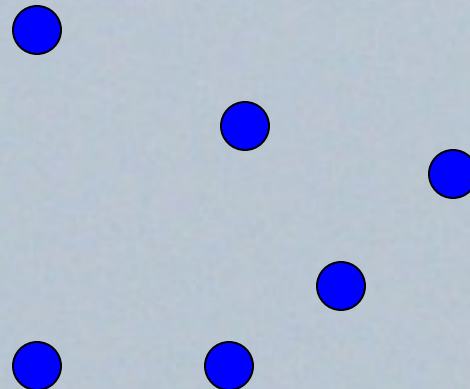
# Learning in a Mesh

**Collaborative**

**Cooperative**



One content



Many contents

# Interacting in the Network



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# Interactive Content



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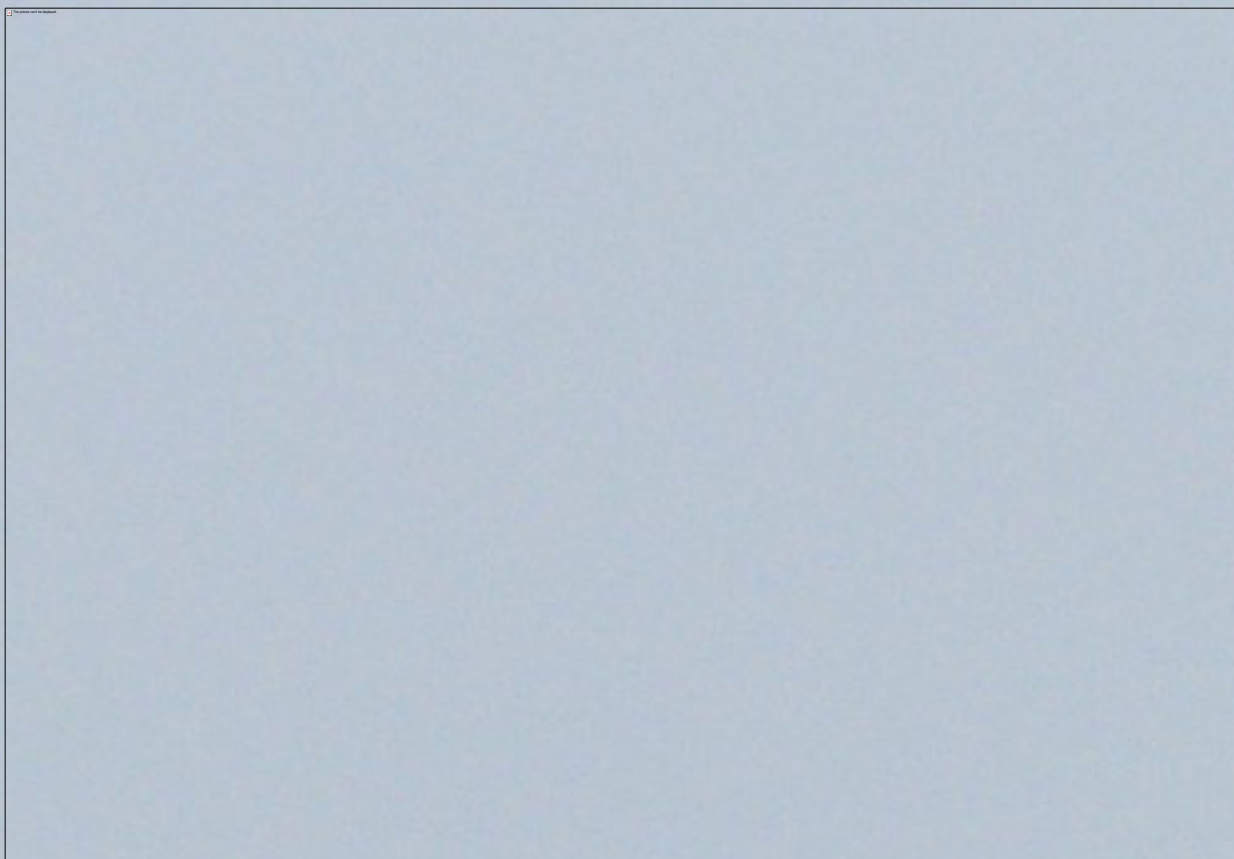
# Personal Learning Environments



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# Personal Learning Landscape



# PLE as Functions in Social Media



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# PLE as applications

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# -Office 2.0



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-Office1 etc - bookmarking  
del-iciou.us



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-Calendar - google calendar



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# -Contacts - LinkedIn



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# -CRM - Salesforce



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# -Database - Dabble



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-Desktop- Google Homepage





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# -Document Management - scribd



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# -Email - Google Mail



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# -Feed Reading - Google Reader



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# -Presentation - Zoho Show



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# -Spreadsheets - Google Spreadsheet



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# - Weblog - Word Press



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-Documents - Google Docs



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# - 14 - Drawing - Gliffy





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# -15 - Group Management - Ice Core



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# -16 Mind Mapping - MindMeister



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# -17 Photo Editor - Picnik



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# -18 Photo manager - Flickr



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# -19 Web Conferencing - Vyew



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-20 Webcasting - Ustream.tv



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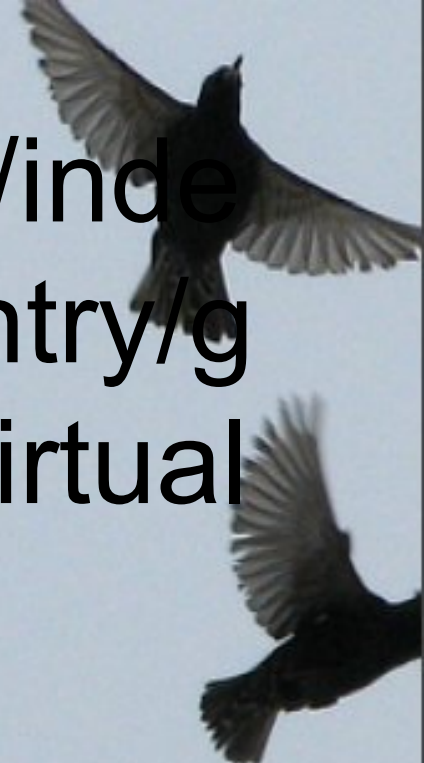


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Virtual World -

[http://www.secretlair.com/index.php?/clickableculture/entry/google\\_spreadsheet\\_as\\_virtual\\_world/](http://www.secretlair.com/index.php?/clickableculture/entry/google_spreadsheet_as_virtual_world/)



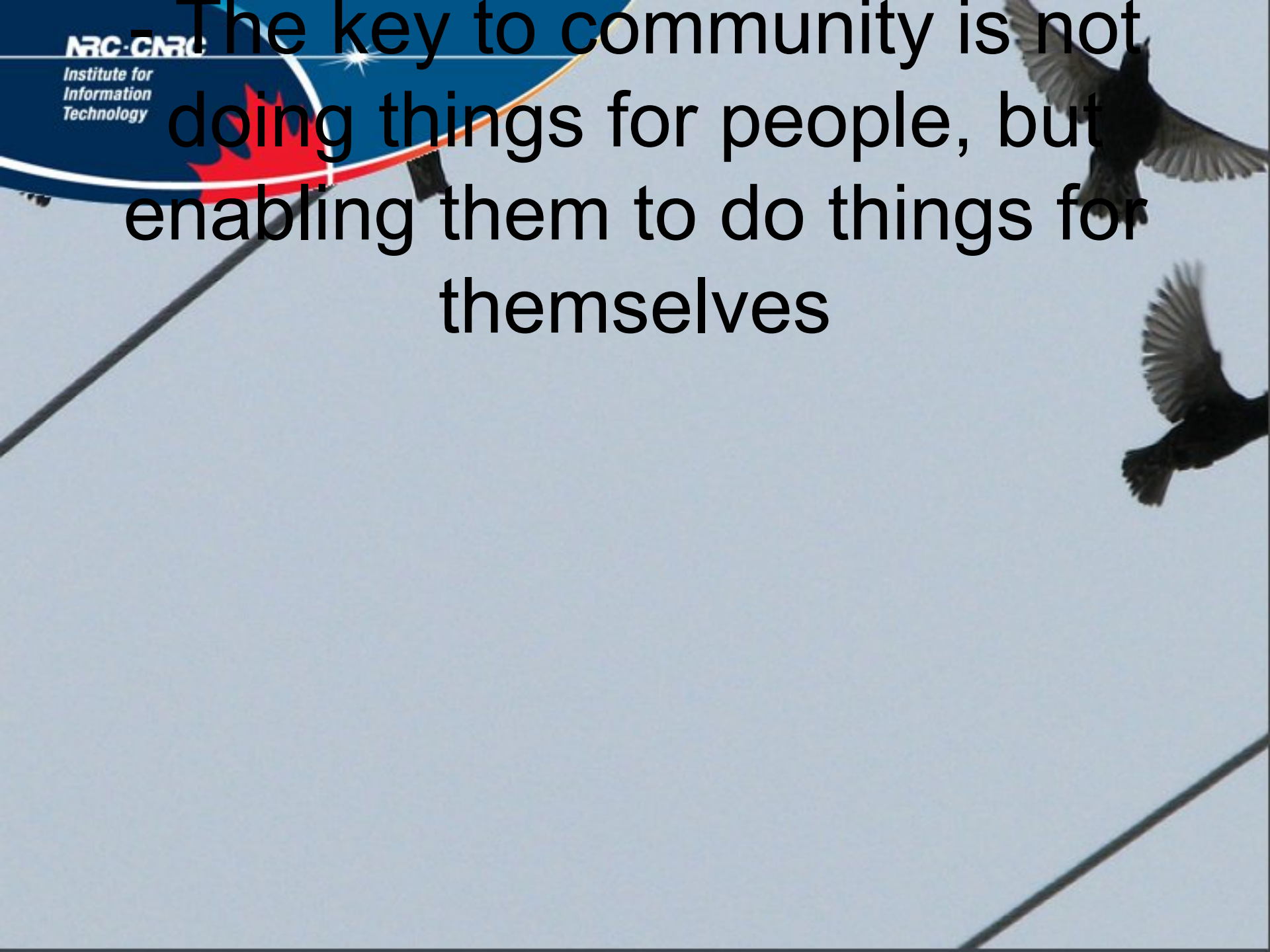


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- The key to community is not doing things for people, but enabling them to do things for themselves



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# Web 2.0



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UGC



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syndication



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# SaaS - ajax



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# Identity & OpenID



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# <http://www.maine.edu/pdf/CooperativeLearning.pdf>

In contrast to competitive and

individualistic learning, students can work together cooperatively to accomplish shared learning goals. Each student achieves his or her learning goal if and only if the other group members achieve theirs. Students work together in small groups to ensure that all group members achieve up to a preset criterion. When all group members reach criteria, each member may receive bonus points.

Cooperative learning is the heart of problem-based learning. It is related to collaborative learning, which emphasizes the "natural learning" (as opposed to training resulting from highly structured learning situations) that occurs as an effect of community in which students work together in unstructured groups and create their own learning situation.

Not all that glitters is gold, of course, and not all group efforts are cooperative.

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Noakes paper - diagrams -

Groups collaborate,  
networks cooperate.

<http://kolea.kcc.hawaii.edu/tcc/tcon99/papers/noakes.html>

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# Yahoo Pipes



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# Google gears



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# gRSShopper



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changing nature of community

-

[http://www.mguhlin.net/archives/02-13-2008\\_02-11-2009.htm#6926](http://www.mguhlin.net/archives/02-13-2008_02-11-2009.htm#6926)



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# Diveresity



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# Autonomy



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# Openness



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# Connectedness



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# Supporting Educational Communities





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The idea of providing services



\*  
Structured, easy-to-use  
forums and mail lists for  
different purposes (support,  
discussion, suggestions)

\*

A central transparent place  
to safely store all source code  
(a CVS server)

\*

A tracker to keep track of

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# Connexions



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**JISC**



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# European schoolnet



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nmc



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EdNA



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# Edublogs





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