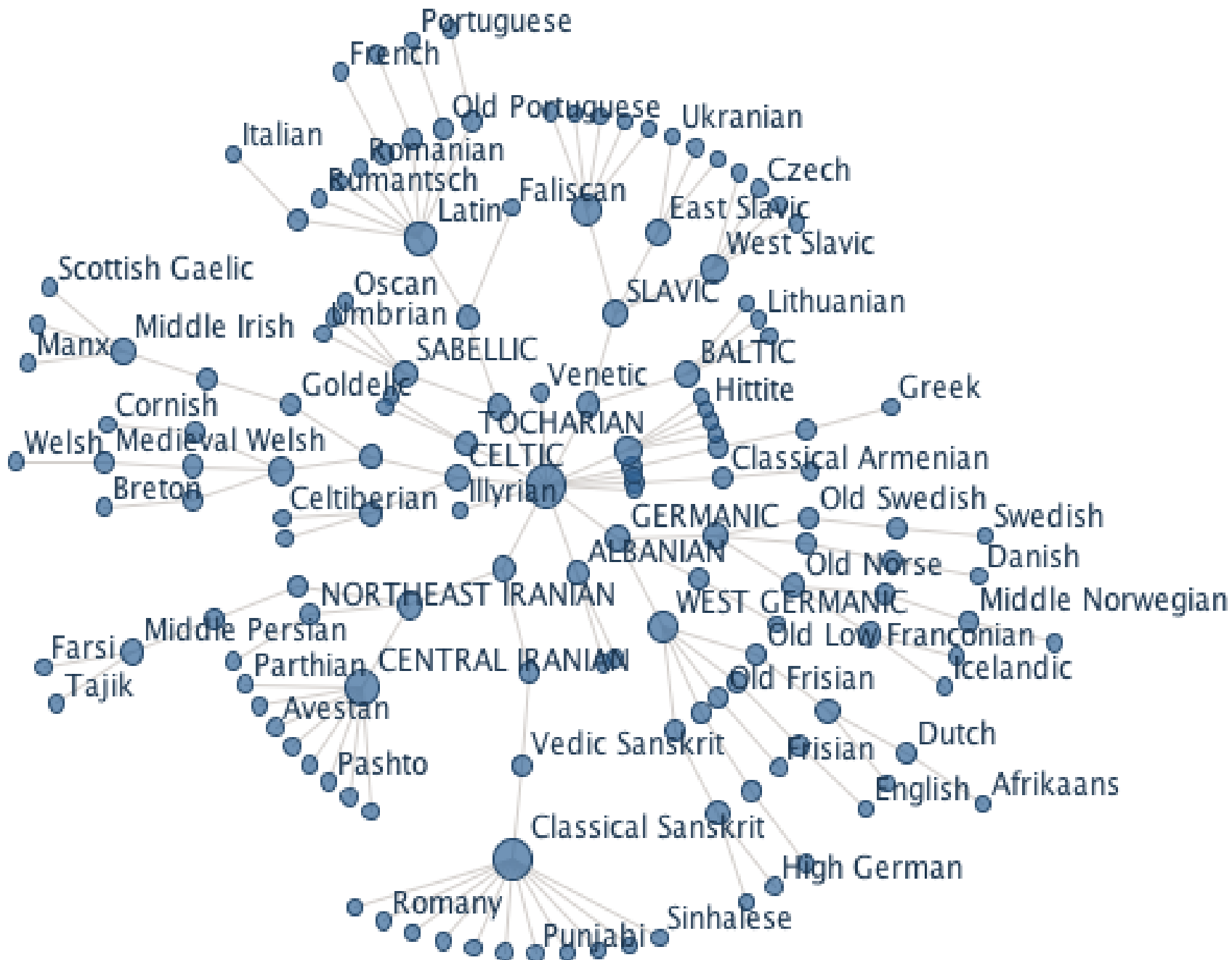
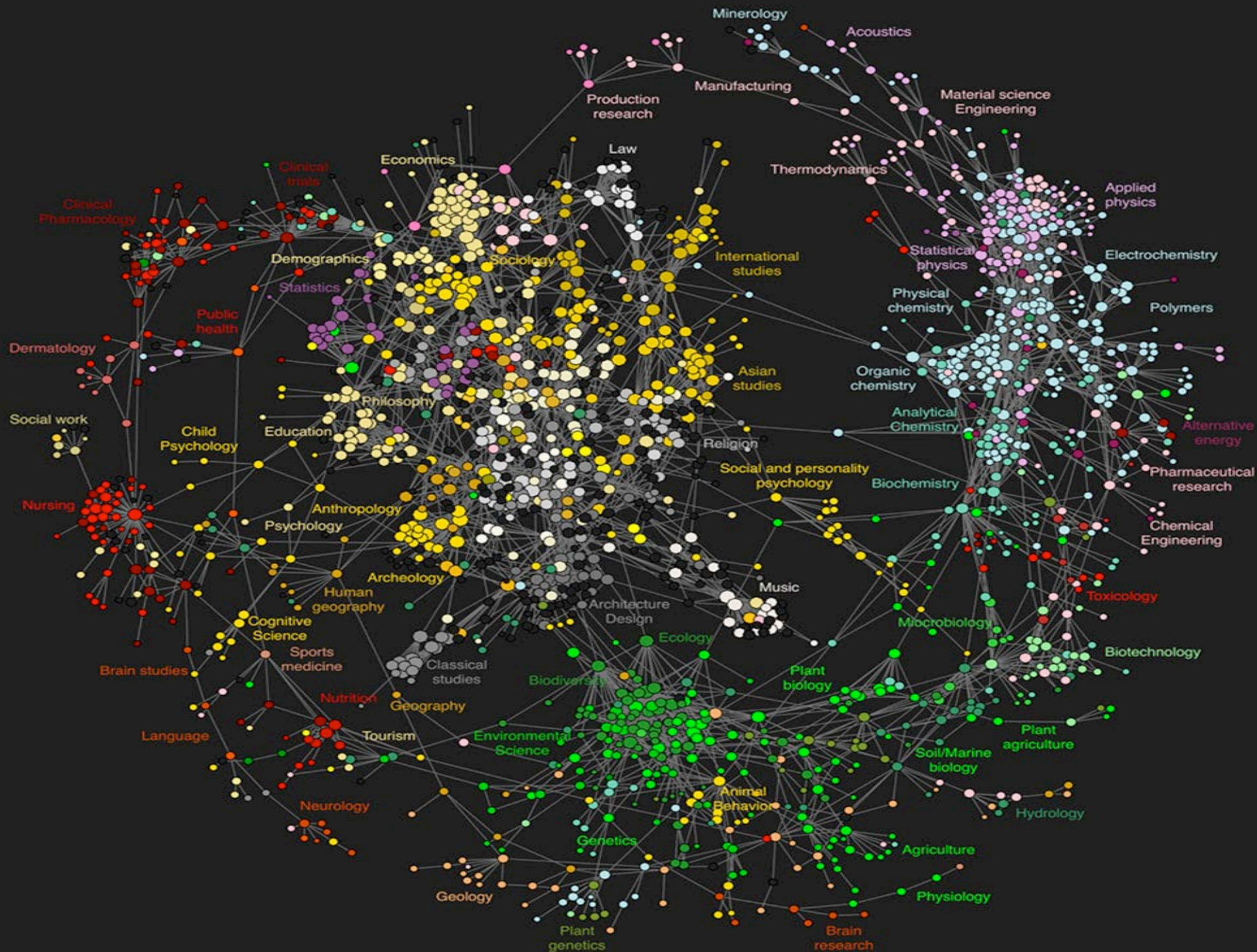


A person in a black t-shirt and dark pants is performing a skateboard trick on a light-colored concrete surface. The person is captured in mid-air, with their arms outstretched and one leg bent. The background shows a large, open concrete area with some faint blue markings. The overall scene is brightly lit, suggesting a sunny day.

# Connectivism and Transculturality: Personal Learning Environments

Stephen Downes  
National Research  
Council Canada  
May 6, 2010

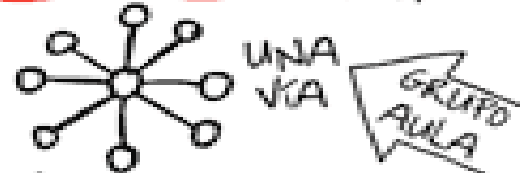




**HOY** IGUALDAD **GRUPO** NACIÓN LENGUA RELIGIÓN

**FUTURO** AFINIDAD **RED** ? ORGANIZACIÓN POST-GRUPO

TV  
RADIO  
LIBRO, PRENSA  
E-MAIL CORPORATIVO



UNA VÍA  
GRUPO AULA

TELÉFONO



MUCHAS VÍAS

E-MAIL PERSONAL

ORGÁNICO - BIOLÓGICO



PORTAL/SITO WEB CORPORATIVO

METÁLICO - ELEMENTAL

UNIDAD

ALGUNAS VECES  
MELTING POT

ENSALADERA

PÁGINA PERSONAL  
BLOG

PLATAFORMA LMS  
CLEARING MANAGEMENT SYSTEM

COORDINACIÓN

LÍDERES - COLABORACIÓN  
VALOR DEL GRUPO  
(= VALOR DEL LÍDER)

PLE  
(ENTORNO PERSONAL DE APRENDIZAJE)

AUTONOMÍA

COOPERACIÓN  
INTERCAMBIO  
VALOR MUTUO

PORTFOLIO?  
APRENDIZAJE AUTODIRIGIDO

LOM  
(METADATOS DE OBJETOS DE APRENDIZAJE)  
MS WORD

CERRADO

ACCESO RESTRINGIDO  
NORMAS - JERGA

RSS HTML

ABIERTO

CONEXIÓN  
PERSPECTIVA / CONTEXTO

COMUNIDAD DE PRÁCTICA

CONTRASEÑAS EMPRESA

BARRERAS

PATENTES DE COPYRIGHT

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PUENTES

IDENTIDAD

PODCAST  
VIDEOCAST

DISTRIBUTIVO

EMISIÓN  
ESTRELLAS Y GURUS  
CENTRALIZADO  
PODER - LEYES

CUESTA ABAJO

CONECTIVO

CONVERSACIÓN DISTRIBUIDO  
DEMOCRACIA (O POST-DEMOCRACIA)

SKYPE?  
PODCAST?

TECHNORATI

EL CONOCIMIENTO FLUYE DE LA AUTORIDAD

EL CONOCIMIENTO EMERGE



GRÁFICO ORIGINAL: STEPHEN DOWNES.



ADAPTACIÓN: PROFESOR POTÔCHOV DE MOLDAVIA





# Diversity

- You need a mixture of materials – you cannot grow organically from carbon alone, or water alone



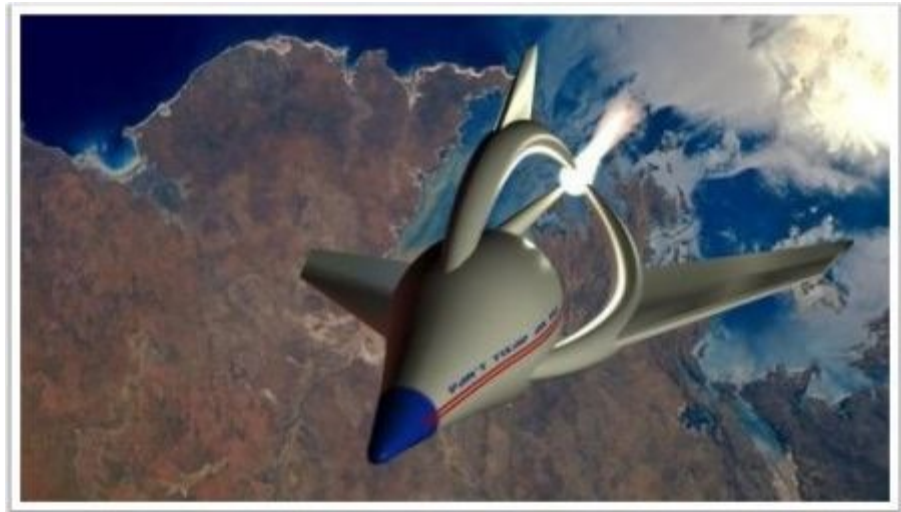
# Openness

- Closed systems become stagnant
- Raw materials are depleted
- The system becomes clogged with the 'creative product' of its members



# Autonomy

- The simple cloning of entities does not allow for progress or development
- Each individual entity must manage its own growth in its own way



# Interactivity

- A system cannot grow unless its parts interact – flowers need bees, cows need grain, beavers need trees
- Growth is created not by accumulation but by *flow*, by constant activation and interaction





# Connectivist teaching = Managing Connections

## Personal Learning Landscape

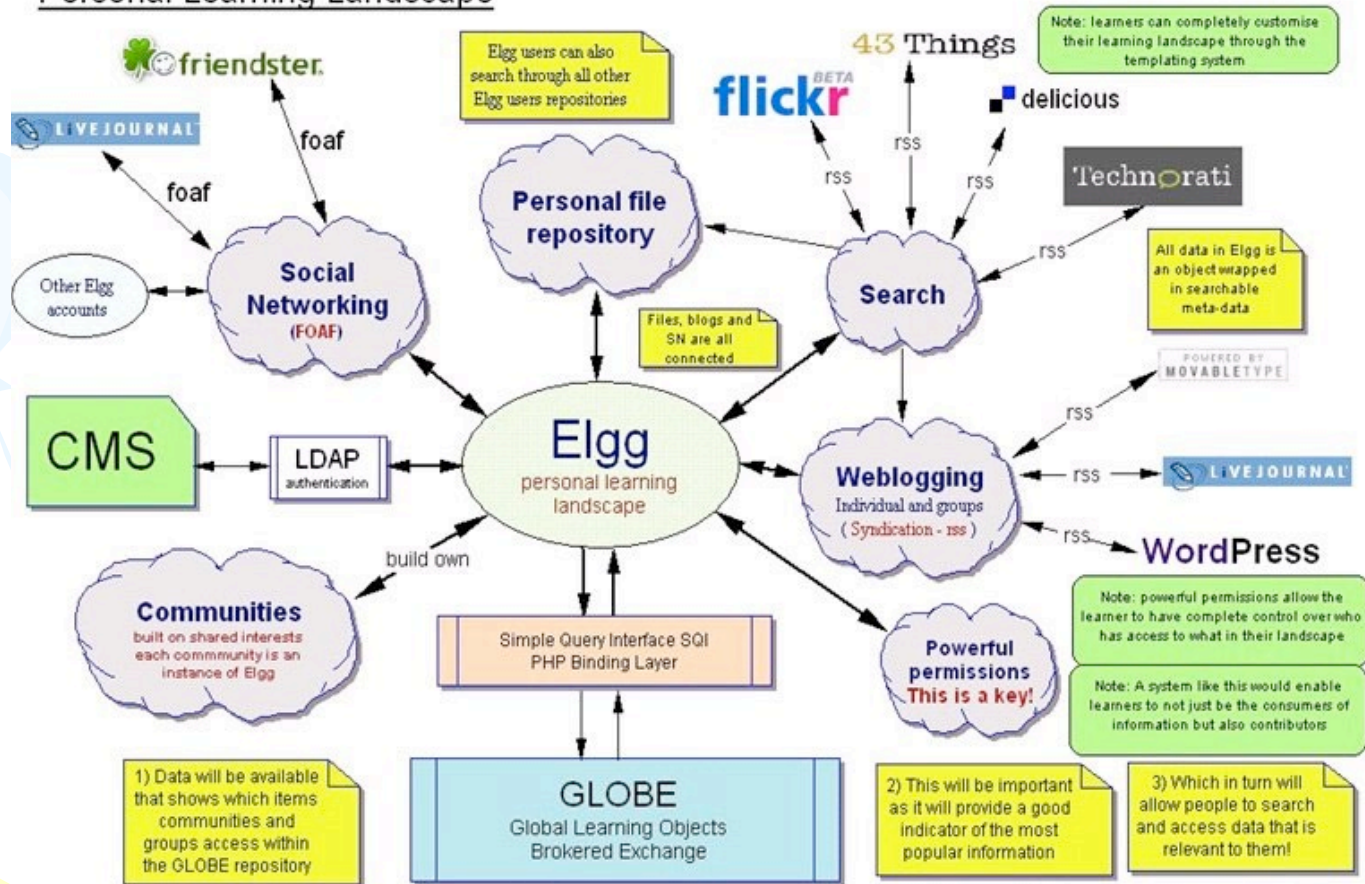


image developed by the Elgg development team - contact [d.tosh@ed.ac.uk](mailto:d.tosh@ed.ac.uk)



# Two Kinds of Knowledge

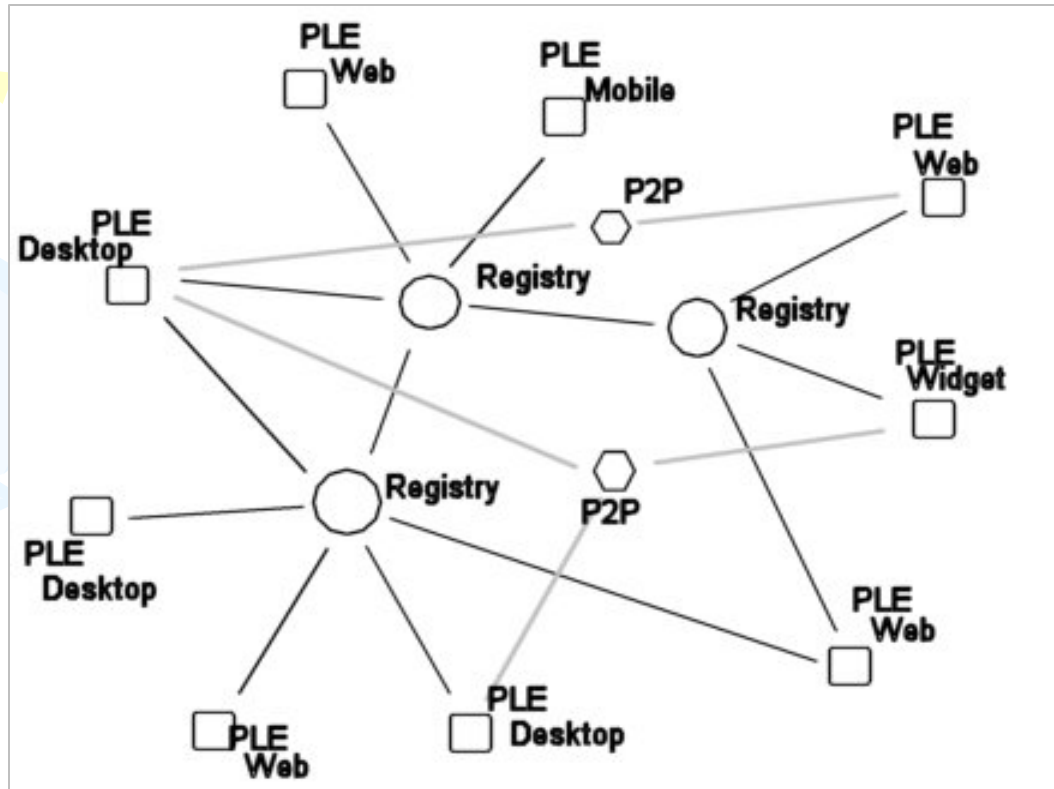
## Knowledge in the Classroom:

- Static
- Declarative
- Authority-based

## Knowledge in the Network:

- Dynamic
- Tacit / Non-Declarative
- Constructed

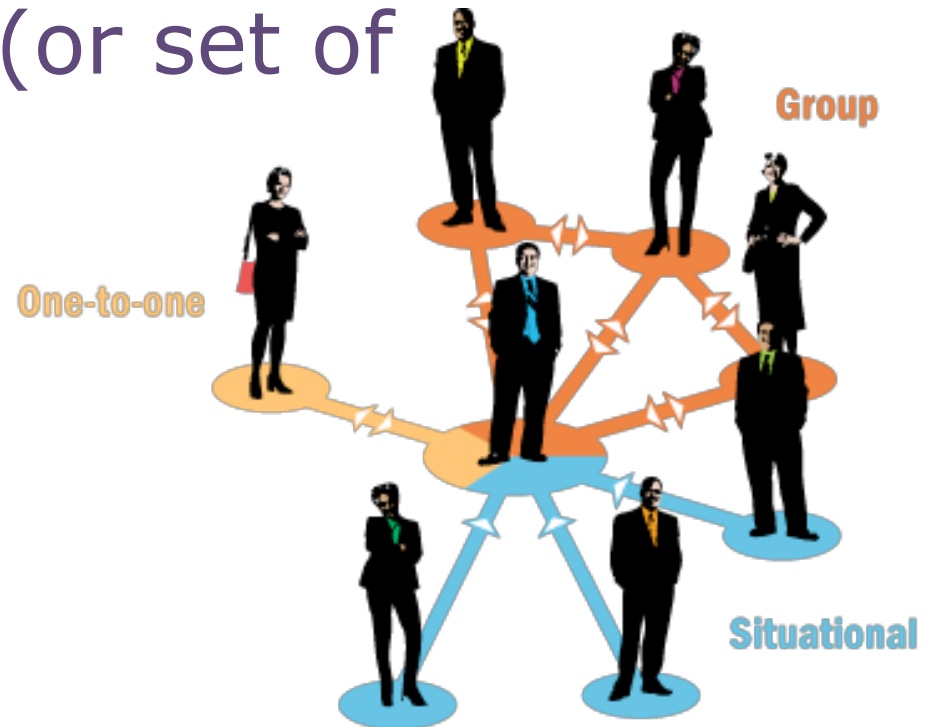
# PLEs in a Network



Teachers and students are envisioned as working as a network

# Social Learning

- The next step in such a discussion is usually to describe a theory of social learning, depicting learning as an external process (or set of processes)



# Some Forms of Social Learning

- Behaviourism / Instructivism
- Interaction & Interaction Theory (Moore)
- Social Constructivism (Vygotsky)
- Problem-Based Learning (Johnnasson)



Image:

<http://ibis.tau.ac.il/twiki/bin/view/Zoology/Lotem/MyResearch>





# Aspects of Social Learning

- **Externally-Based Definitions**
  - Learning objectives, Body of Knowledge
- **Externally-Based Processes**
  - Learning activities, Processes and conversations
  - Interaction and communication
- **External Systems**
  - Classes, networks, groups, collaboration
- **External Evaluation**



# Personal vs Social

Social knowledge is *not* personal knowledge

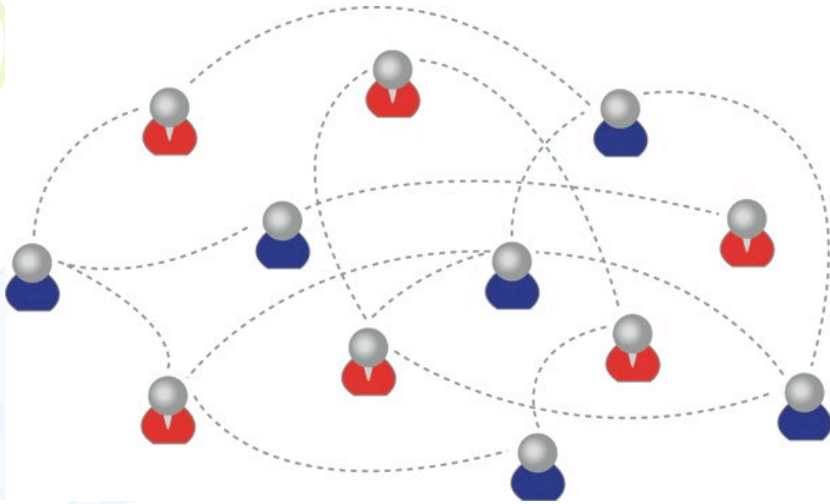
- Personal Knowledge management = Learning
- Social Knowledge Management = Research (or, *social* learning)

The product of the educational system is not a *social* outcome (knowledge, skill, problem, community) but a *personal* outcome



Image: [http://www.stalipius.com/?page\\_id=43](http://www.stalipius.com/?page_id=43)

# Personal Knowledge



We are using one of these

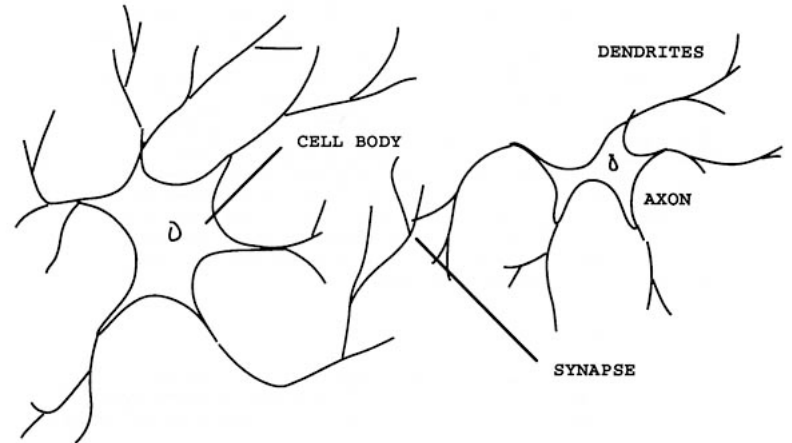


Figure 1. Biological Neuron

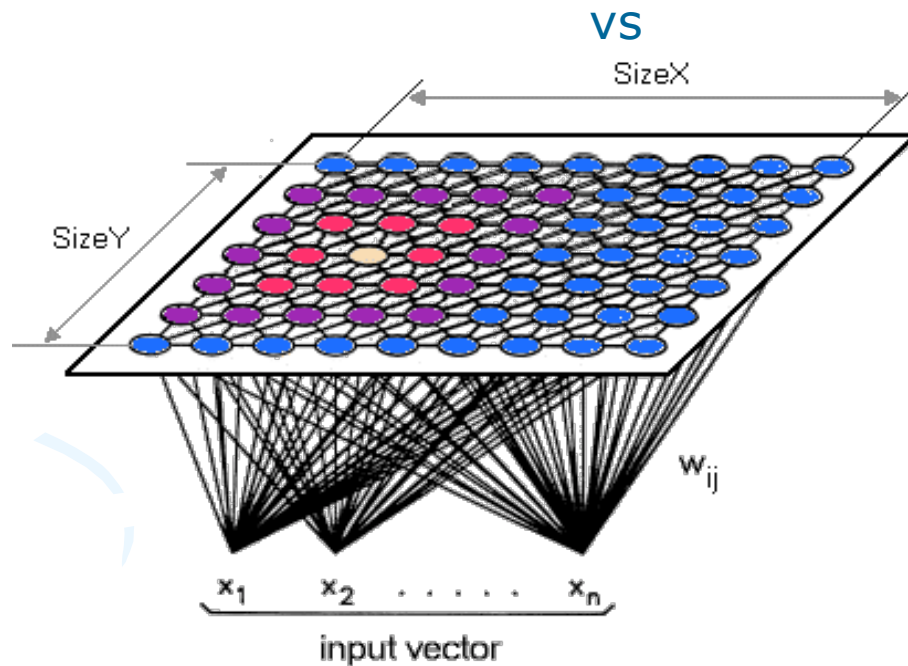
To create one of these

Personal knowledge consists of *neural* connections, not social connections

# Learning Outcomes

Simple vs complex – text vs network

“Paris is the capital of France”







It's the difference between:

- 'Knowing' that 'Paris is the capital of France' or even some sort of 'knowing how' (these are *external* definitions of this knowledge) and
- What it *feels like* to have geographical knowledge; what it *feels like* to be a speaker of a language

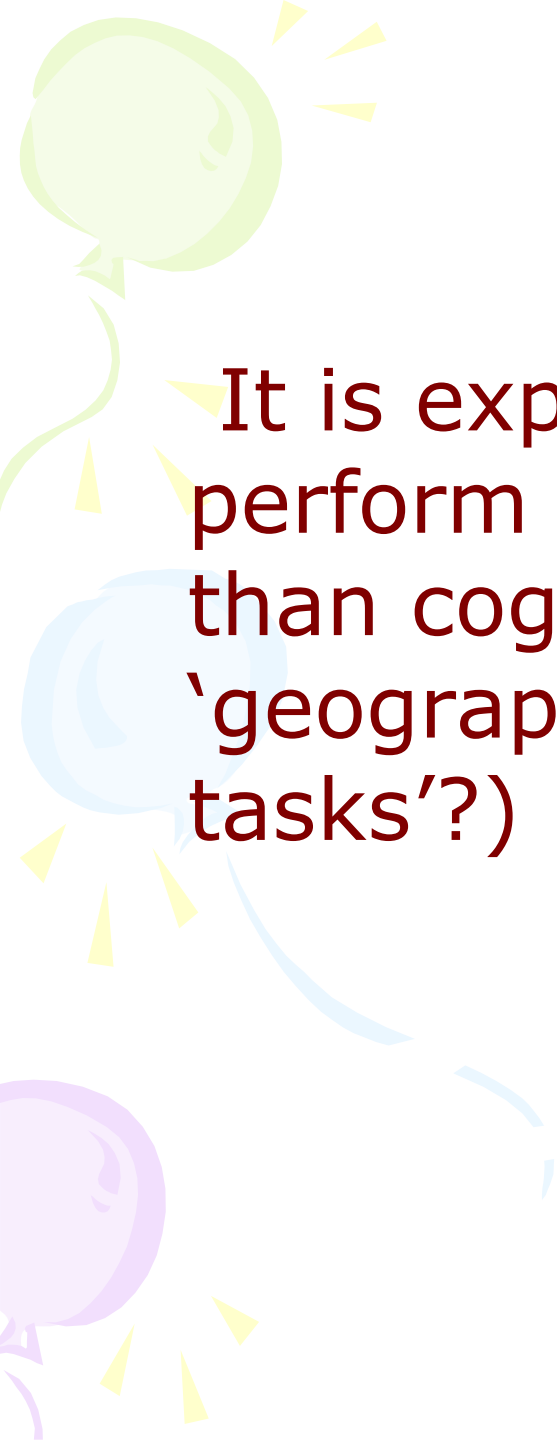
Learning a discipline is a *total state* and not a collection of specific states



It is obtained through *immersion* in an environment rather than acquisition of particular entities



Image: <http://www.perthenglish.com/English/aboutus.html>



It is expressed functionally (can you perform 'as a geographer'?) rather than cognitively (can you state 'geography facts' or do 'geography tasks'?)

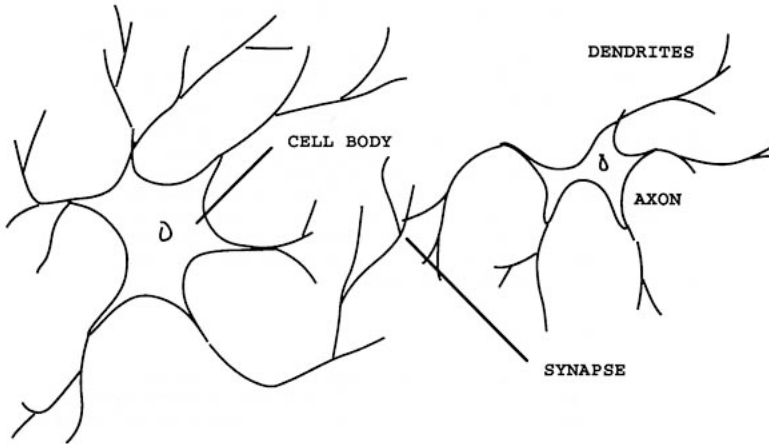
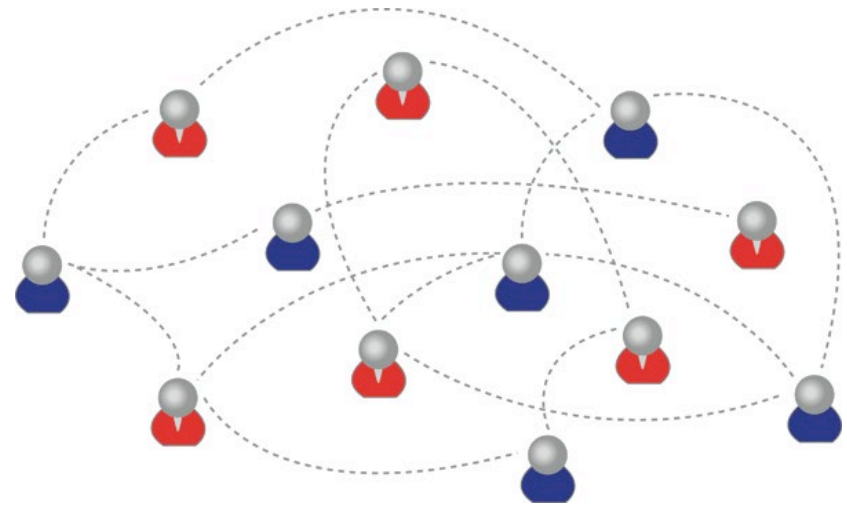


Figure 1. Biological Neuron



We recognize this

By performance in this

There are not specific bits of knowledge or competencies, but rather, personal capacities





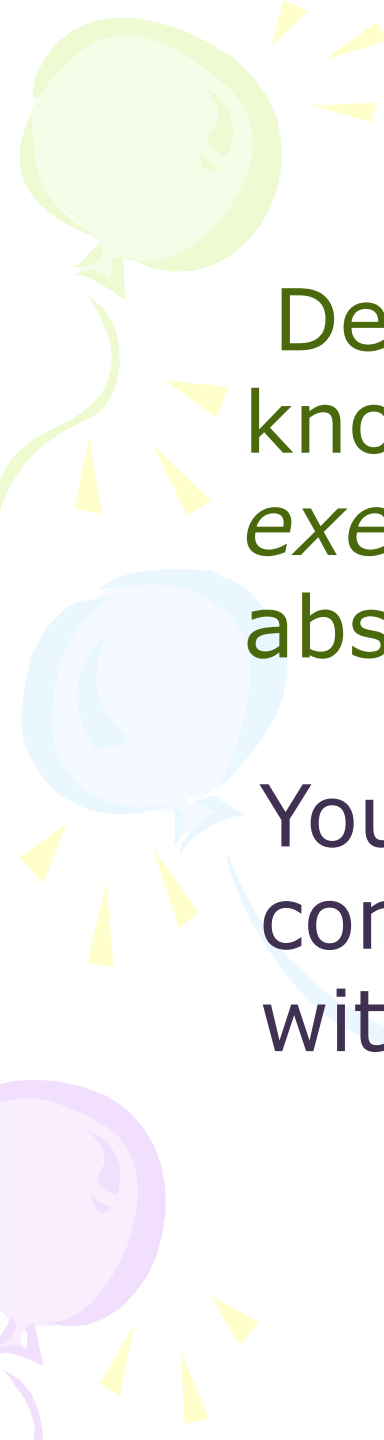


# PLE as Exercise Machine

- A PLE is a tool intended to *immerse yourself* into the workings of a community
- Once immersed, you then *practice* being one of the people characteristic of the community

▶ For example, you would learn philosophy by practicing 'being a philosopher' in a philosophical community



A decorative graphic on the left side of the slide features three balloons in shades of green, blue, and purple, with yellow streamers and triangular flags trailing from them.

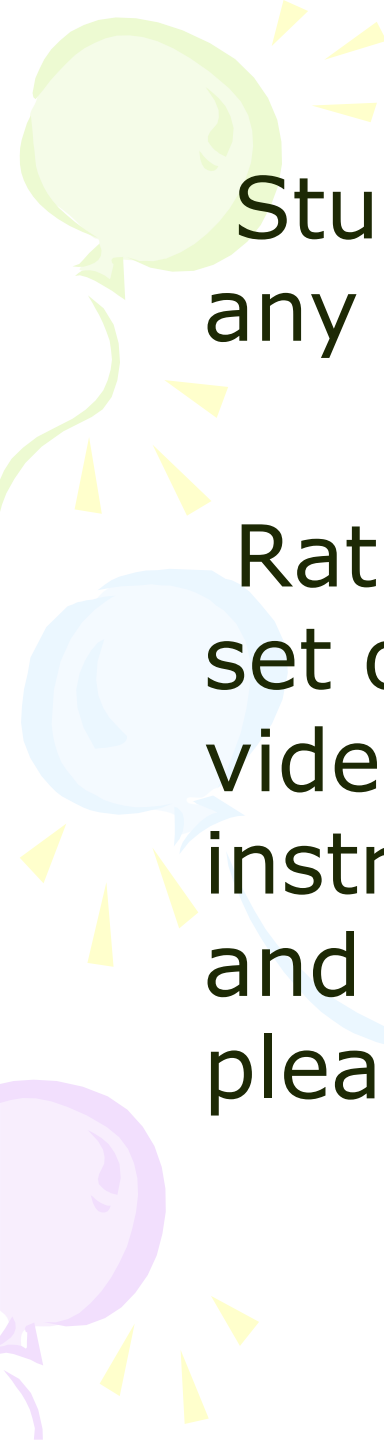
Developing personal knowledge is more like *exercising* than like inputting, absorbing or remembering

Your personal growth develops as a consequence of the interactions with that community



# The Connectivist Course

Information is not 'taught' in a course offered using a personal learning environment. In the connectivist model of learning, course 'content' is created by the course participants themselves.

A decorative graphic on the left side of the slide features three balloons in light green, light blue, and light purple, each with a yellow streamer. Small yellow triangular shapes are scattered around the balloons, resembling confetti or streamer pieces.

Students are not asked to perform any task in particular.


Rather, they are presented with a set of resources (readings, audio or video, email postings) from the instructors and other participants, and may do with these what they please.





## Typically, a student in a connectivist course will:

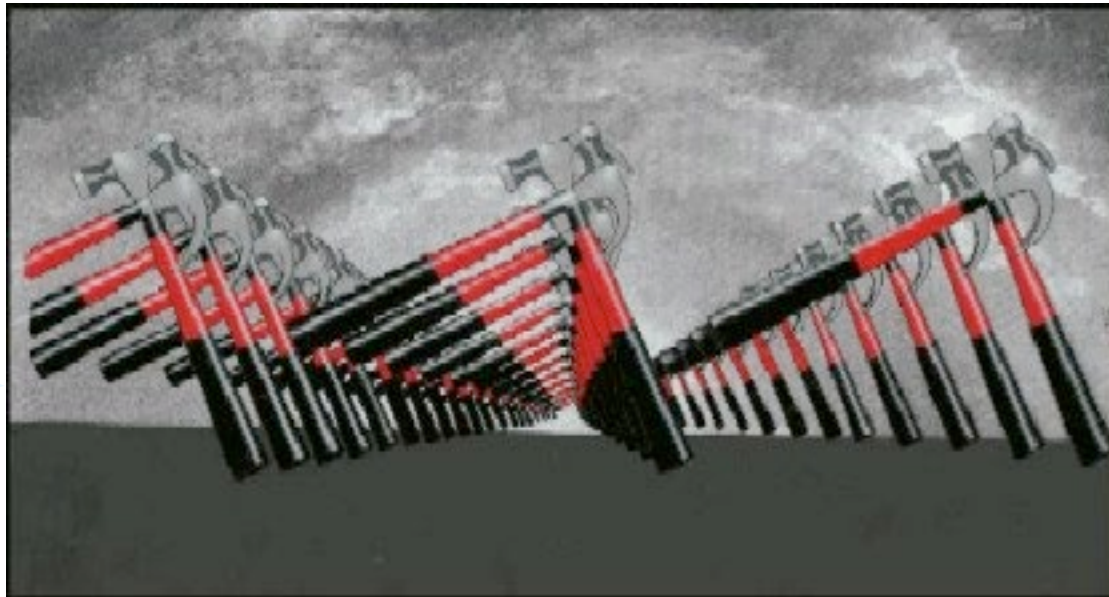
- read (some of) the readings and listen to or watch some of the recordings
- post comments in threaded discussion forums
- create a blog and post comments and responses
- contribute content to the course wiki

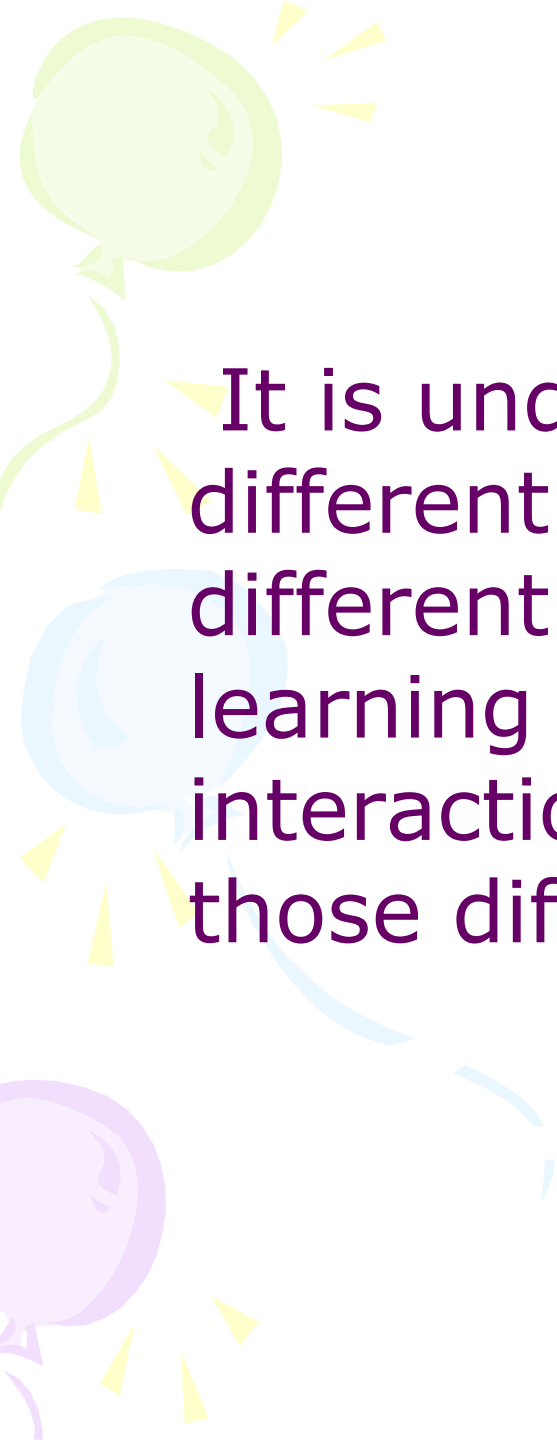


In practice, students have engaged in a wide range of (generally unexpected) activities, such as:

- create a map of course participants
- establish, design and host seminars in a Second Life environment
- create videos of discussions
- Create Google or Yahoo groups
- organize translations of course materials
- create concept maps of course structures
- host live online forums

A connectivist course does not consist of a single identifiable group of people stepping through the same activity.



A decorative graphic on the left side of the slide features three balloons: a light green one at the top, a light blue one in the middle, and a light purple one at the bottom. Each balloon is attached to a thin, wavy streamer. Small, yellow, triangular shapes are scattered around the balloons, resembling confetti or light rays.


It is understood and expected that different students will undertake different activities, and that new learning will emerge through the interactions of students engaged in those different activities.



A Connectivist course therefore has two major modes:

1. a creation of an environment (and expectation) of great diversity, creating multiple points of view on an amorphous body of material, domain or discipline

2. creation of new and unexpected knowledge as a result of the interaction of participants from those different points of view



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



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