

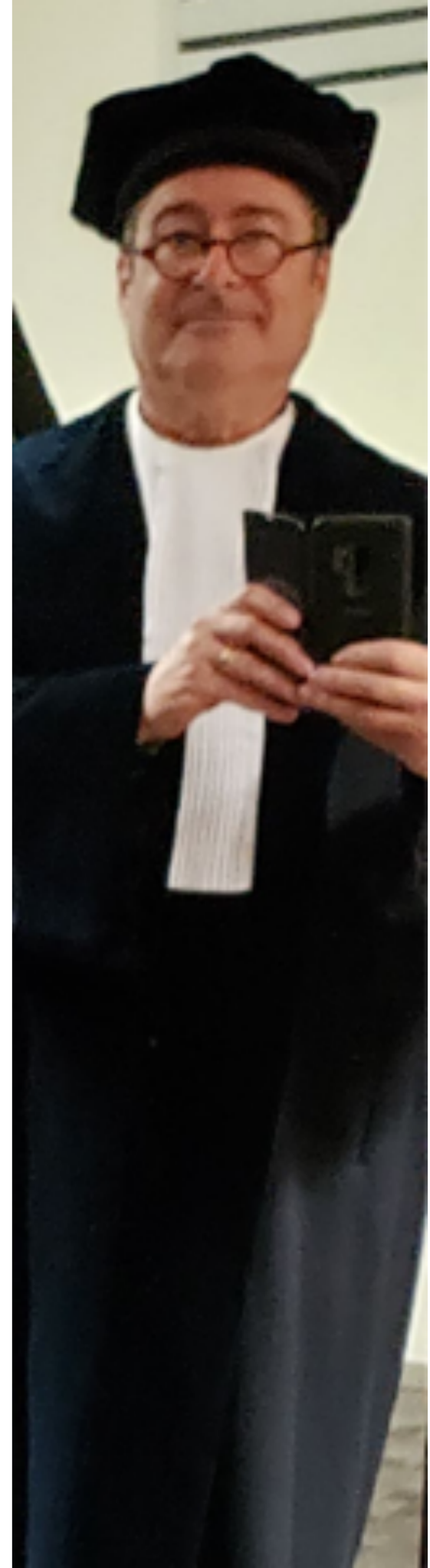


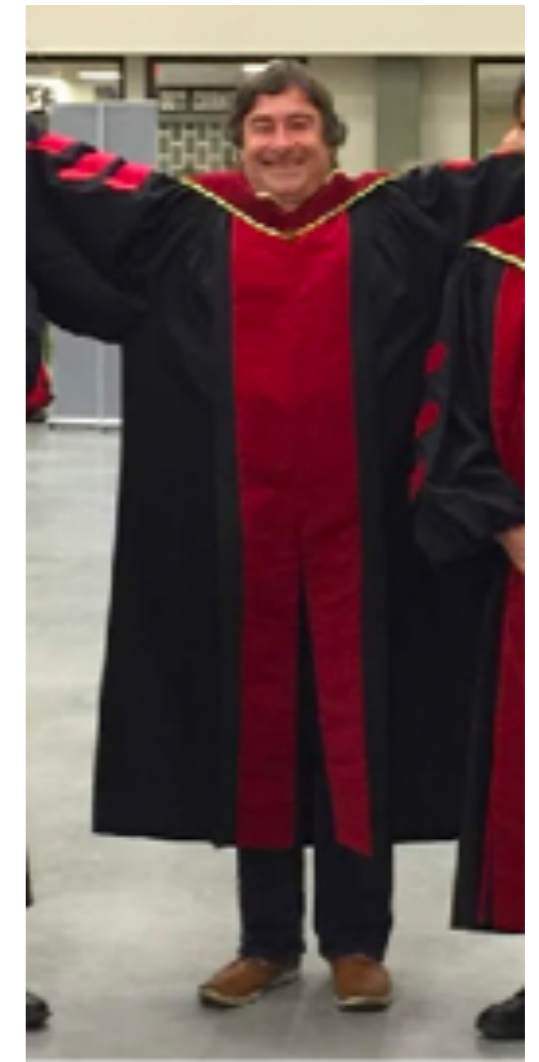
# Mediaeval Teaching in the Digital Age

Jon Dron, 26th May, 2021

<https://jondron.ca>

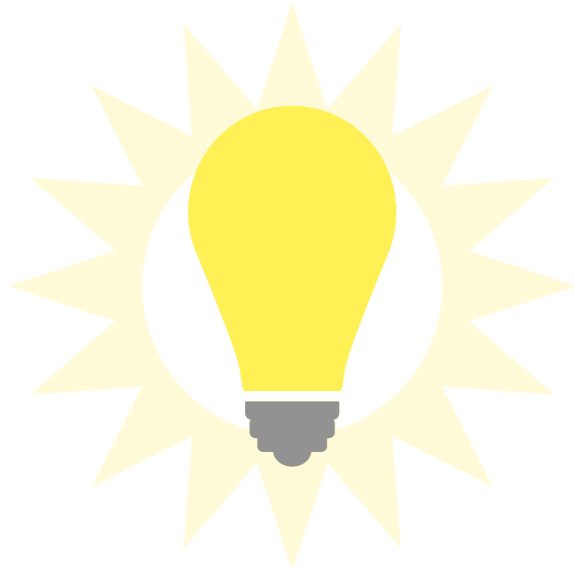
[jond@athabascau.ca](mailto:jond@athabascau.ca)





**Mediaeval me**





# My proudest teaching moment

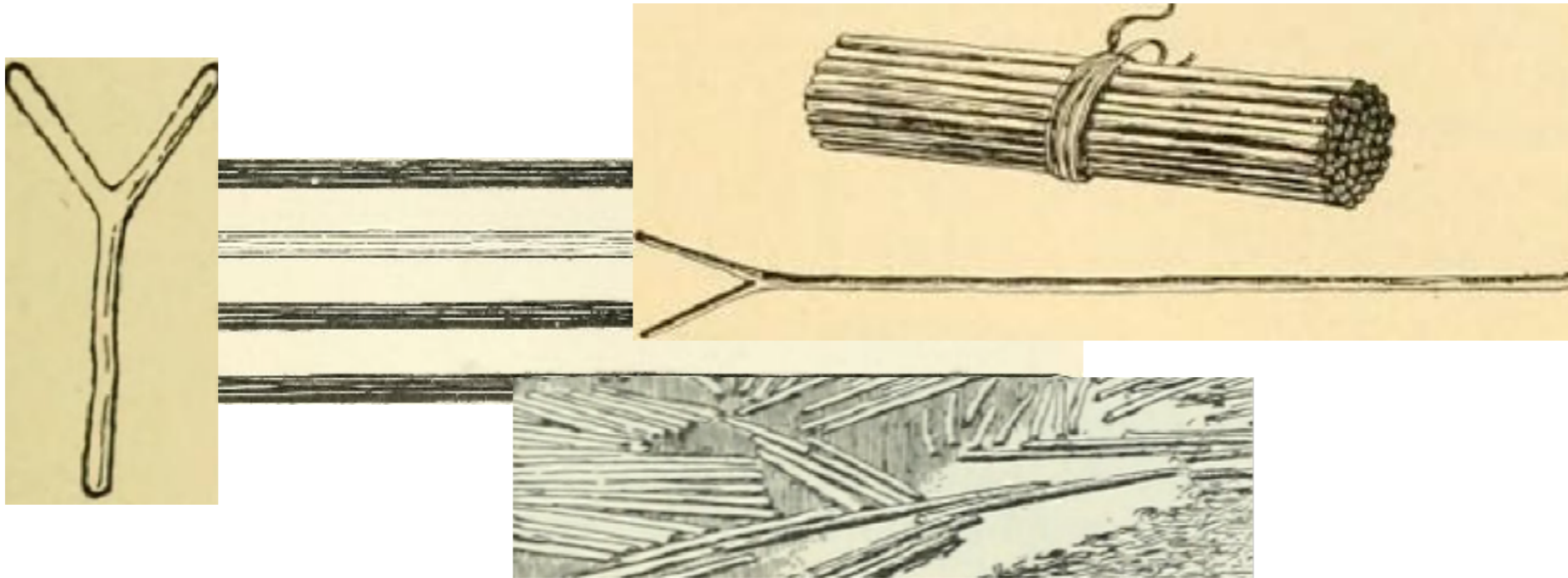


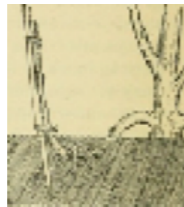
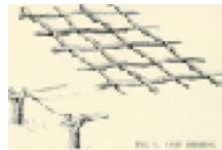
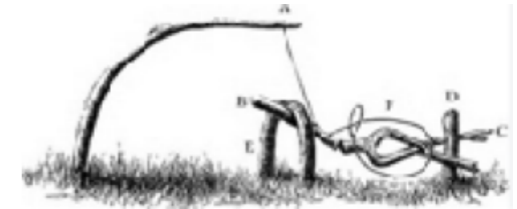
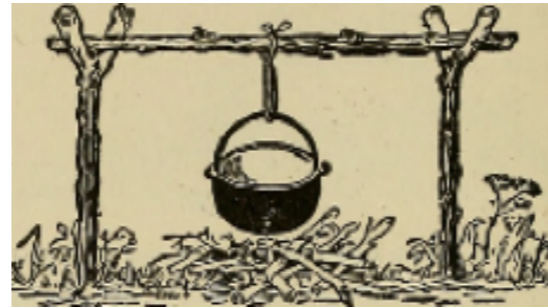
my student: (angrily) You're not teaching me anything!

me: *But are you learning anything?*

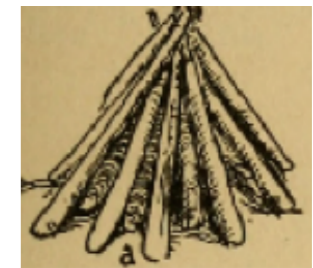
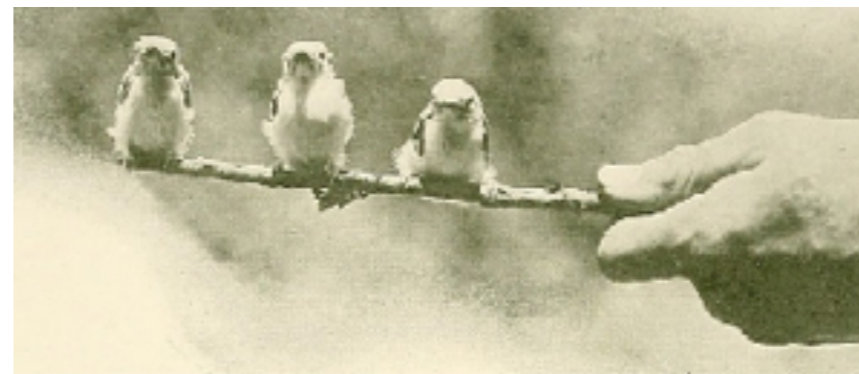
my student: Yes, more than on any other course I've ever taken. But I have to do it **all** myself. You're not *teaching* me anything.

# What are some educational uses for a stick?



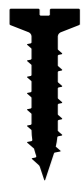


The stick becomes a technology when we add methods (and maybe other stuff)



All technologies work this way

# These are silly questions



*Does the use of screws in classrooms improve learning?*



*Does the use of computers in classrooms improve learning?*



*Does the use of <insert preferred teaching method here> in classrooms improve learning?*



## Does choice of technology matter?

Yes, **hugely**. Especially when the technology does things by itself. But:

1. **Methods** are technologies too;
2. The **assembly** matters more than its parts.

**and...**

Tain't what you  
do...



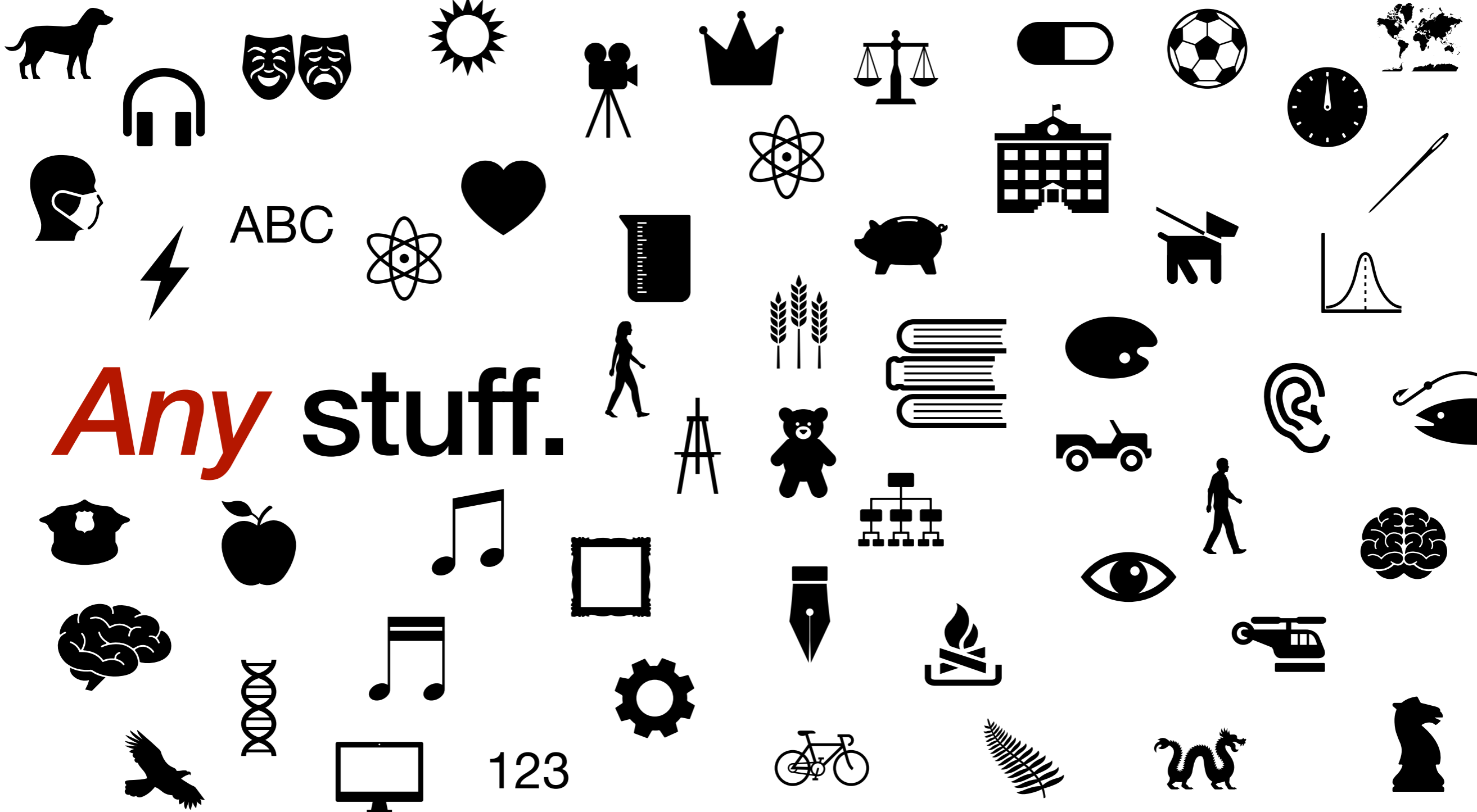


# Technology: The ways we organize stuff to do stuff

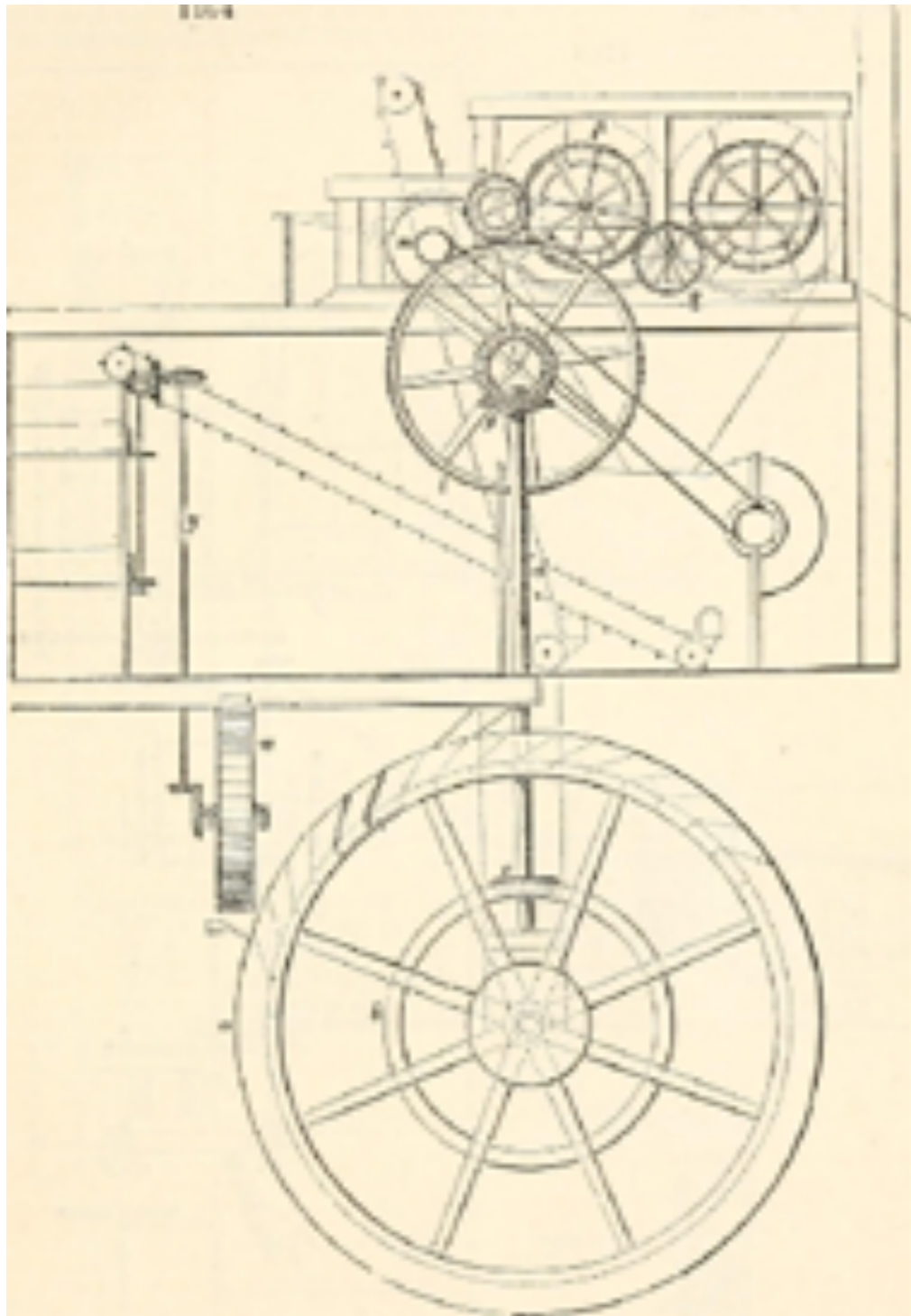
More formally, **the orchestration of phenomena to our use** (W.Brian Arthur)



*Any* stuff.



The stuff can be (and usually is) *other* technology



(as Brian Arthur puts it, technologies are *assemblies*)

**Is there a learning  
technology in this picture?**



**We don't just  
*use*  
technologies.**

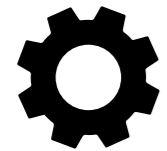
***We participate*  
in them.**



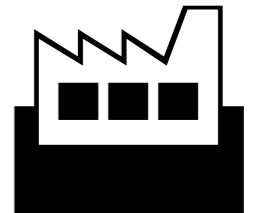
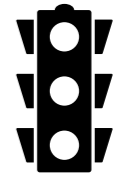
<https://flic.kr/p/2iCkb3V>



# Hard technologies



We are part of the orchestration



# Soft technologies



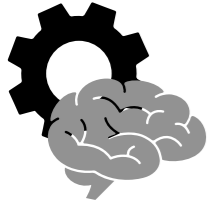
We are active orchestrators of phenomena



# Ways of teaching (pedagogical methods/pedagogies) are technologies, too



(so, learning technologies are those which include pedagogies in their assembly)

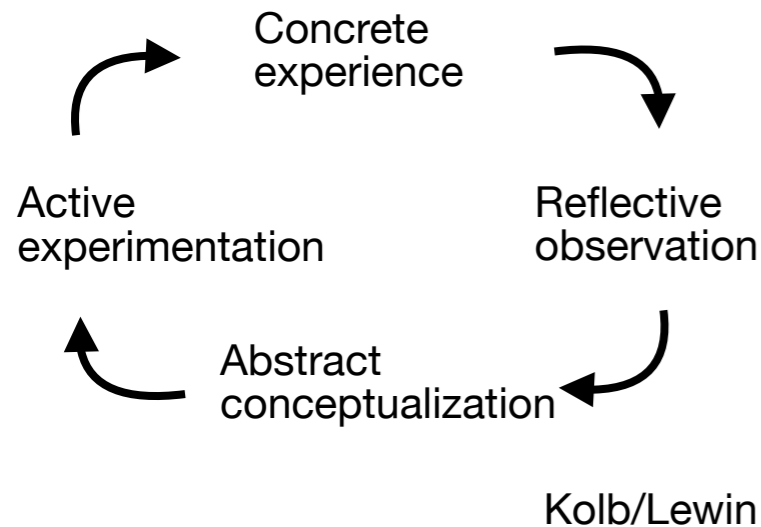


# Some pedagogical methods

Tell me and I forget, teach me and I may remember, involve me and I learn.  
Franklin

Criticize the work,  
not the student

The compliment  
sandwich



1. Encourage contact between students and faculty
2. Develop reciprocity and cooperation among students
3. Encourage active learning
4. Give prompt feedback
5. Emphasize time on task
6. Communicate high expectations
7. Respect diverse talents and ways of learning

Chickering and Gamson

1. Gaining attention
2. Informing participants of objectives
3. Stimulating recall of prior learning
4. Presenting the content
5. Providing learning guidance
6. Eliciting performance
7. Providing feedback
8. Assessing performance
9. Enhancing retention and transfer

Gagne

Don't punish or reward

Kohn

Tell 'em what you are going to tell 'em, tell 'em, tell 'em what you told 'em





**On the whole, the ‘stuff’  
technology does is to solve  
problems.**

**But, nearly always, a technology  
also *makes* problems**



“Developing counter technologies to correct the new kinds of damage constantly being created by technological innovations is a **policy of despair**” (Dubos, 1969)



As often as not, the problems a technology solves are *caused* by other technologies



# Higher education has been around a long, long time



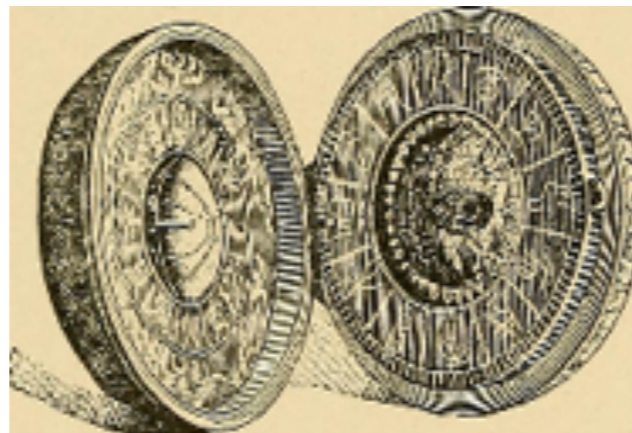
*a lot* of its technologies  
are counter-technologies

**What are the problems  
that pedagogies are  
meant to solve?**



# The hard problems

Physical boundaries and scarce resources





# Good solutions



**lectures**

seminars

tutorials

**classes**

**classrooms**

workshops

schools

libraries

universities

labs

desks

textbooks

faculties

lecterns

blackboards

assignments

# What follows...

**rules & regulations**

tests

**courses**

**curricula**

**grades**

terms

**timetables**

**credentials**

semesters

programs

**exams**

convocations





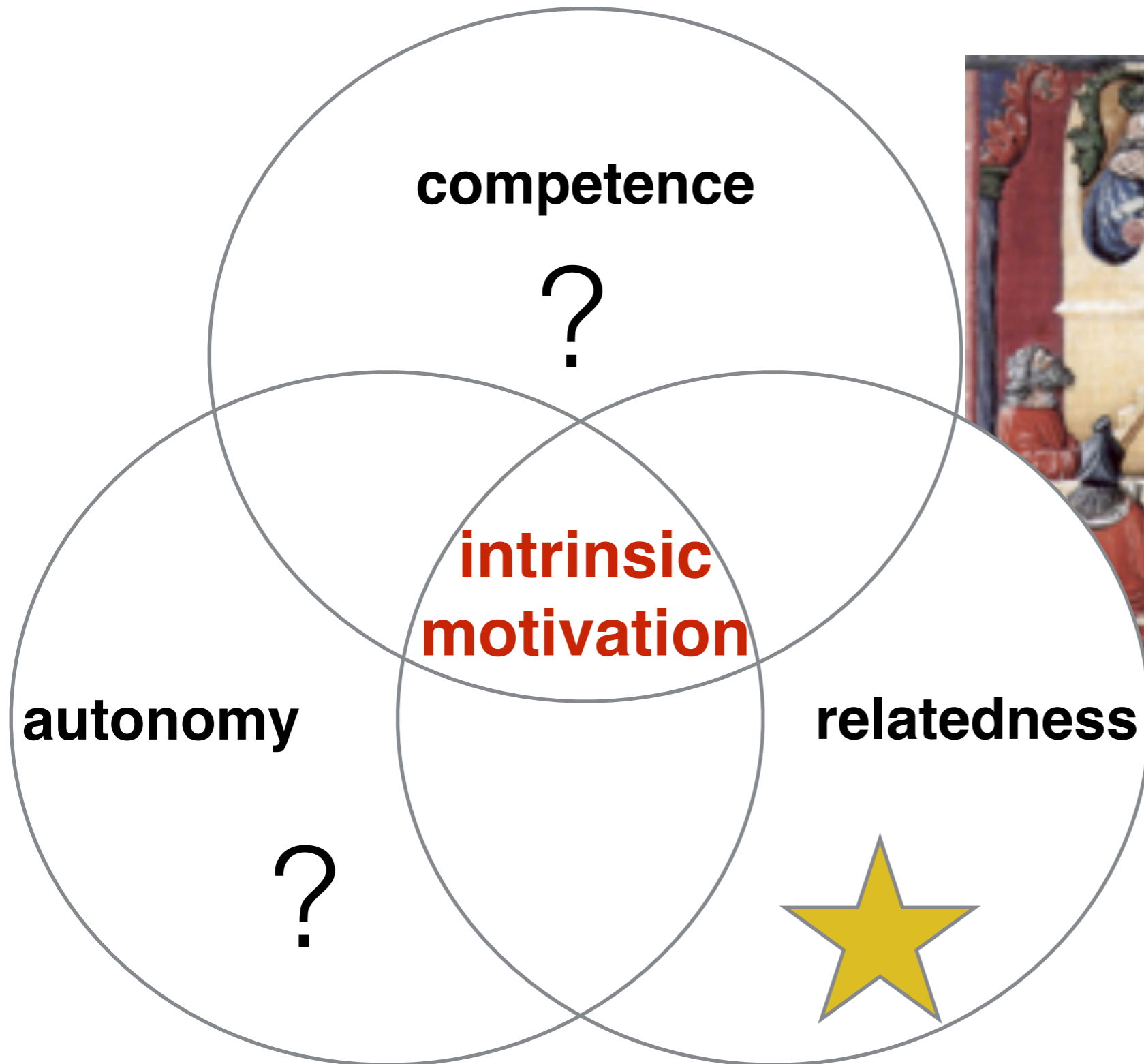
**and**

People who are not in control  
Confused people  
Bored people



People who would rather be somewhere else

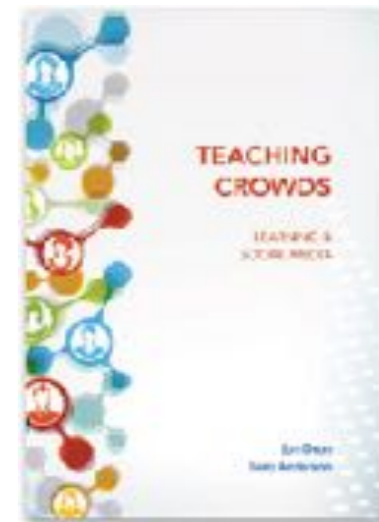
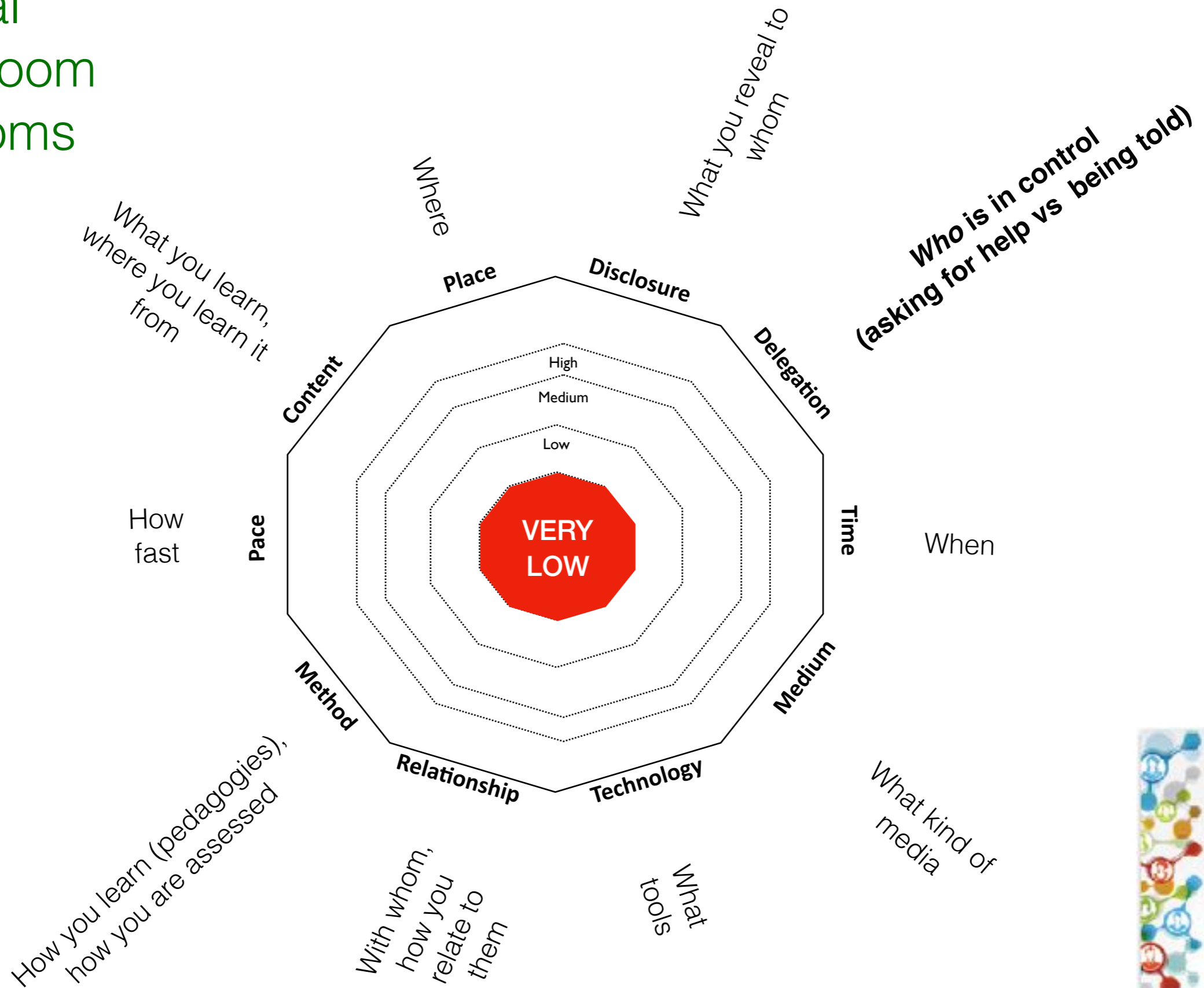
# Classroom motivation



<http://selfdeterminationtheory.org>

Deci, E.L., & Ryan, R.M. (2000). The “What” and “Why” of goal pursuits: Human needs and the self-determination of behaviour. *Psychological Inquiry*, 11, 227-268

# Typical classroom freedoms





**Ineffective** solutions  
use punishments  
and rewards



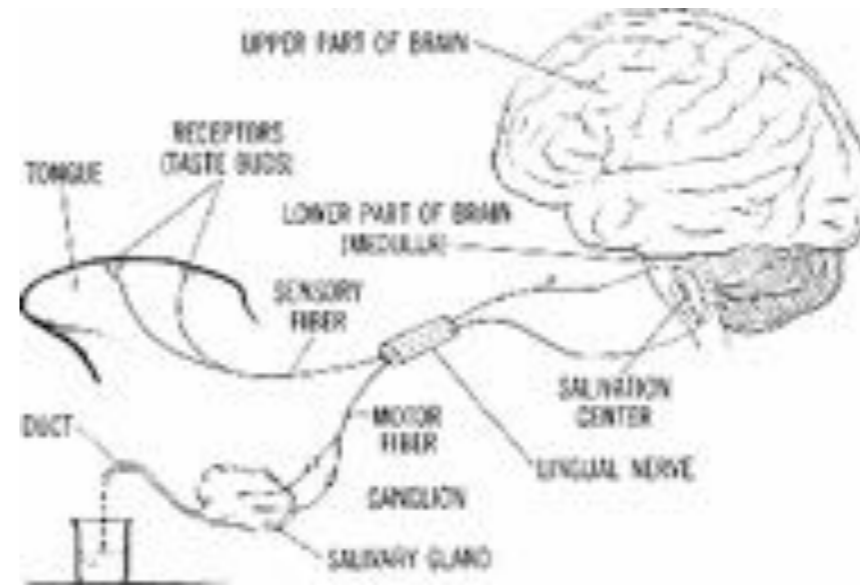
(yes, that  
includes  
grades)



<https://alfiekohn.org>

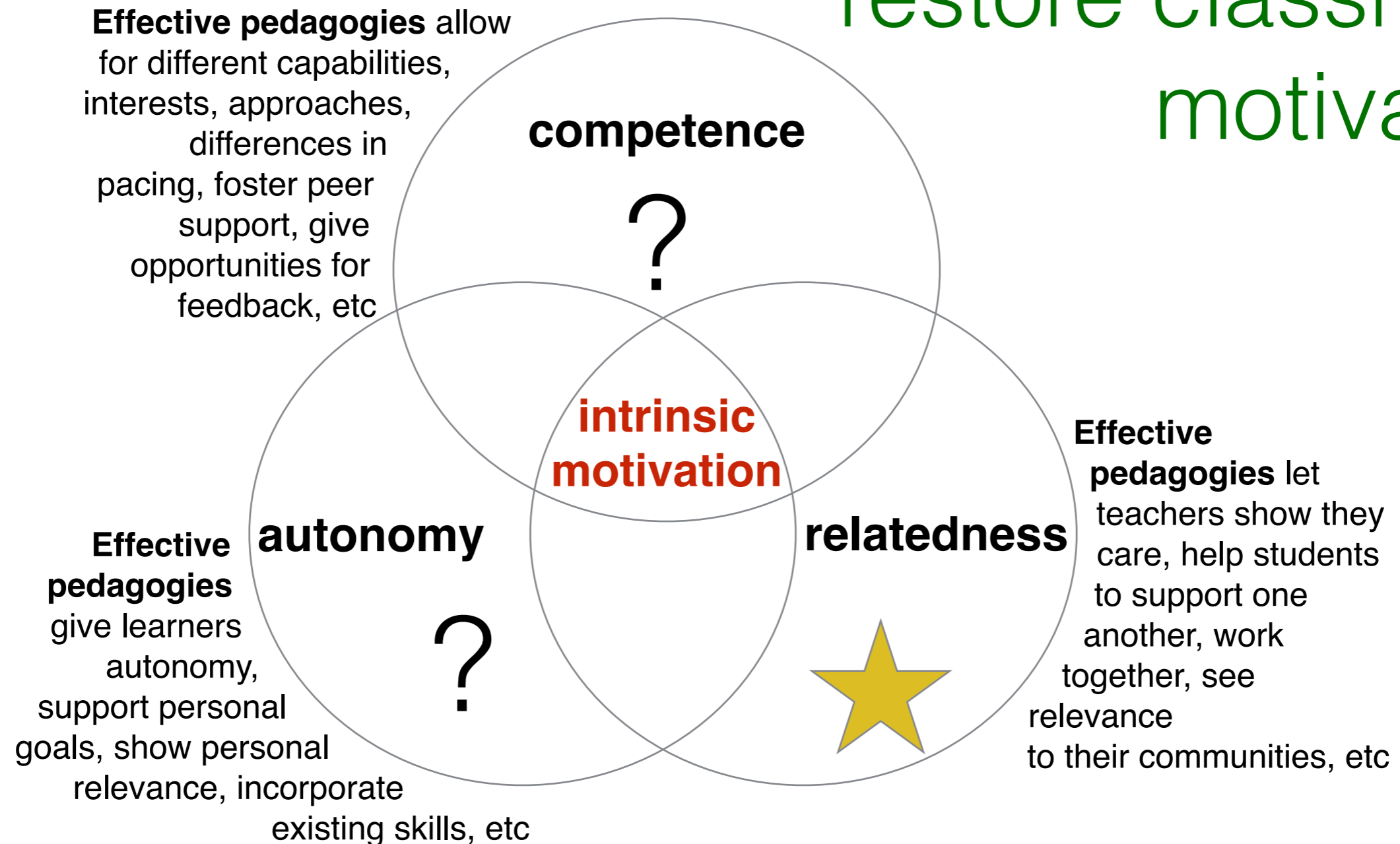
Kohn, A. (1999). *Punished by rewards: The trouble with gold stars, incentive plans, A's, praise, and other bribes* (Kindle ed.). Mariner Books.

# Extrinsic motivation crowds out Intrinsic motivation.



**The reward, or avoidance of  
punishment, becomes the purpose  
(and *stays* that way)**

# Counter technologies to restore classroom motivation

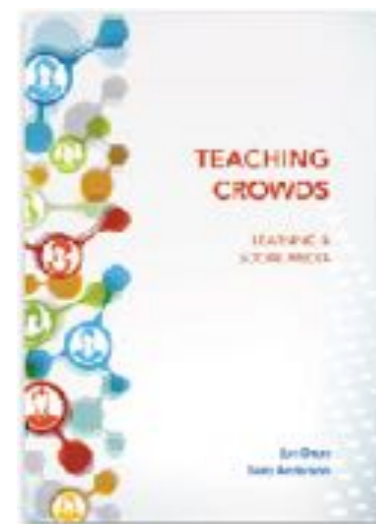


<http://selfdeterminationtheory.org>

It's not the same online



# Online teachers are not in control unless they reward or punish





and yet....

**Course categories**

- Undergraduate (66)
- Graduate (2)
- Winter 2015 (10)
- Fall 2014 (10)
- Individualized Study - Graduate Courses (2)
- Spring 2014 (8)
- Undergraduate - Archived Courses (28)
- Graduate - Archived Courses
- Spring 2012 (1)
- Winter 2014 (10)
- Fall 2013 (10)
- Winter 2013 (10)
- Spring 2013 (10)
- Fall 2012 (10)

**studentcentral**

Home Community Online Library

Welcome, Jon

**Tools**

- Calendar
- User Directory
- Student email
- Staff email
- Tasks
- Address Book
- Personal settings
- MS Office Viewers

**Life Support**

- Careers & Part-time Jobs
- Childcare
- Computing, Libraries & Media
- Counselling
- Disability & Dyslexia
- Health & Wellbeing
- International
- Living here
- Money
- Partner Colleges
- Religious Life
- Restaurants, Cafes & Shops
- Rights & Responsibilities
- Safety & Security
- Sport, Brighton
- Student Handbook

**My Study Areas**

Expand All

**My Teaching**

- my course: Staff Area
- my course: MScIS - Masters in Information Systems
- my course: EdSc in eSystems Design & Technology
- my programme: Computing Undergraduate Programmes
- my programme: EdSc Computing & HND Computing
- CRM05 - Reflective Uses of Information and Communication Technologies
- C1105 - Computing in Context
- C1106/181/182 - Professional practice
- C301 - The Individual Project
- C302 - Informative Individual Project
- C307 - Adaptive Interactive Systems
- C326 - Developments in Learning Technologies
- C331 - Network Management
- C333 - Web Mastery
- C5394/5394 - The Individual Project
- C2104 - Foundation for Professional practice
- C2107 - Group Project
- C2174 - Conduct of IT Projects
- C2270 - Web Application Development

**My Announcements**

No new system announcements have been posted today.

**Sport Brighton**

- Cockcroft Sports Centre Holiday Closing Times

**News Flash**

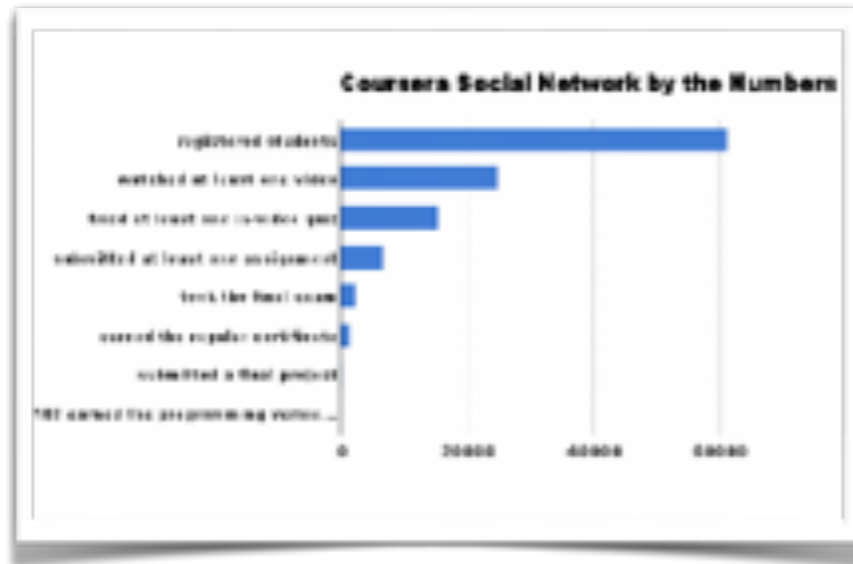
- Exercise Tolerance Symposium
- Student E-mail Unavailable 3/4/07
- Costa Cafe Bar closed 2-4 March
- Community Downline and Composition - Reminder
- Cockcroft Sports Centre Holiday Closing Times

**Clubs and Societies**

Organizations in which you are participating:

- Student Chat

# What happens when you take away the power of the teacher and keep the same controlling pedagogies?



<http://cogdogblog.com/2012/11/27/owning-massive/>

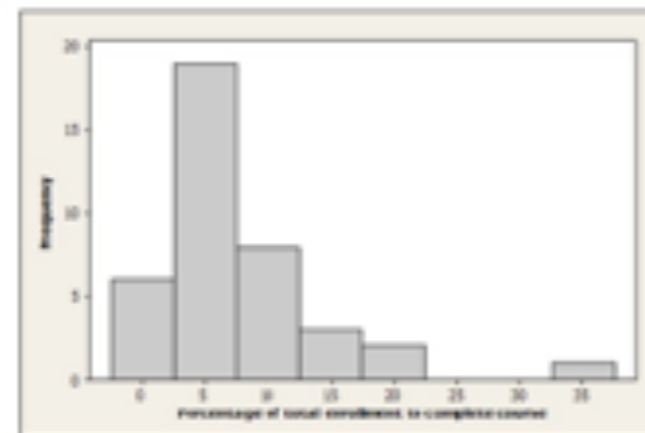


Figure 4 Histogram of completion rates for the sampled courses (n = 29).

“Completion rates range from 0.9% to 36.1%, with a median value of 6.5%”

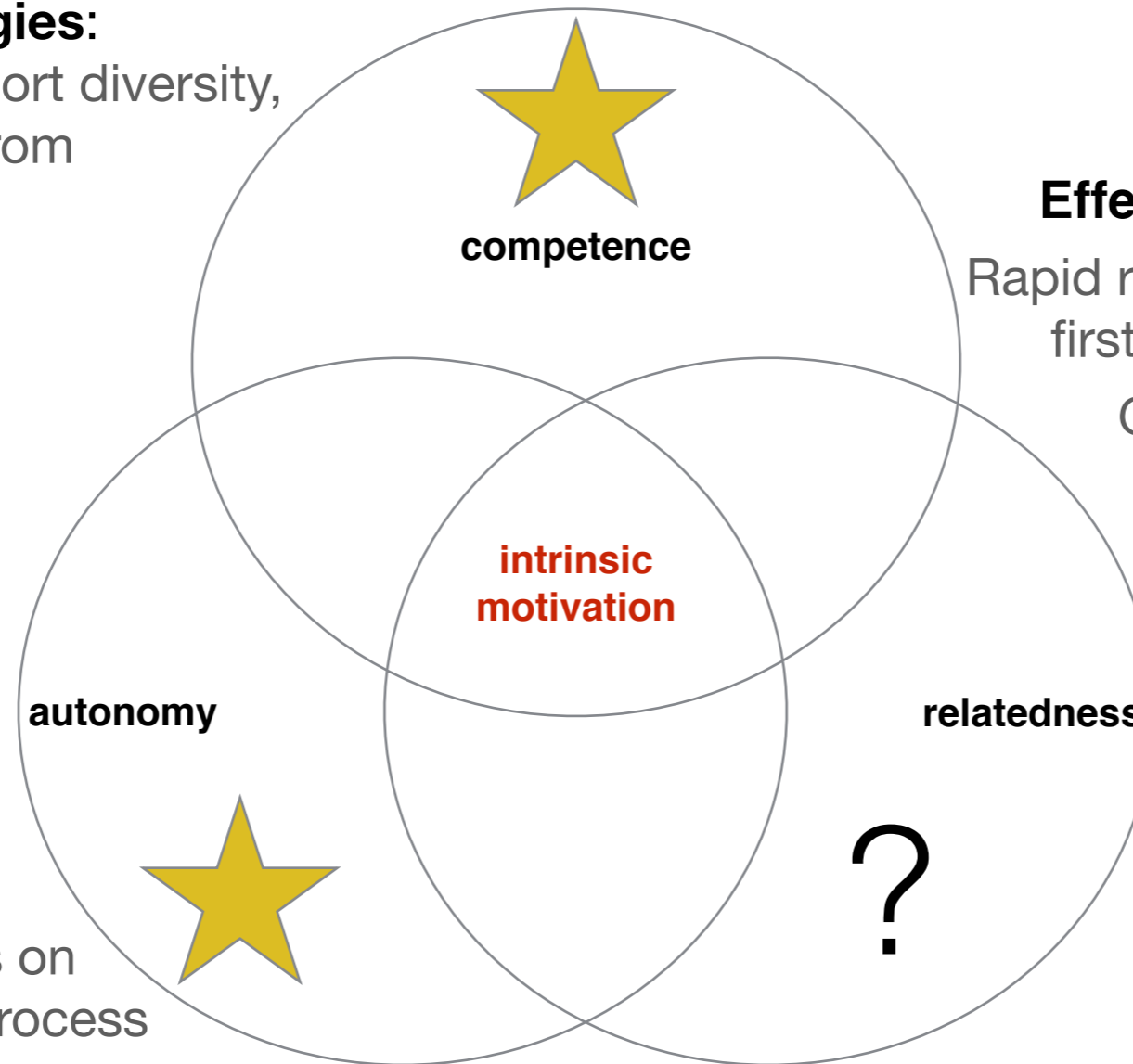
# Online motivation

## Effective pedagogies:

give choices, support diversity, curate resources from different sources

## Effective pedagogies:

let learners use their interests and environments, allow students to help define goals, respect diversity, focus on outcomes more than process



## Effective pedagogies:

Rapid response times (especially the first time)

Giving (time, attention, praise for work, responsibility)

Designs that valorize sharing

Designs that make observation easier

Shared activities

Online discussions

Trust building

Personal profiles

Active online presence

Proactive engagement

# Pedagogical patterns

## Controlling

## Liberating

---

Creating content	→	Curating content
Telling, directing	→	Listening, observing
Fixed curriculum	→	Flexible paths
Timetables	→	Chunks, self-pacing
Rewarding, punishing	→	Supporting, caring
Leading, demanding	→	Role modelling, connecting
Collaboration	→	Cooperation
Fixed deadlines	→	Negotiable deadlines
Teacher-dictated challenges	→	Personal challenges
Fixed outcomes	→	Negotiable outcomes
Assignments and tests	→	Portfolios, problems, and projects
Assessing whether outcomes are met	→	Assessing evidence of learning

The easiest path in-person

The easiest path online



**We don't just *participate* in learning technologies.**

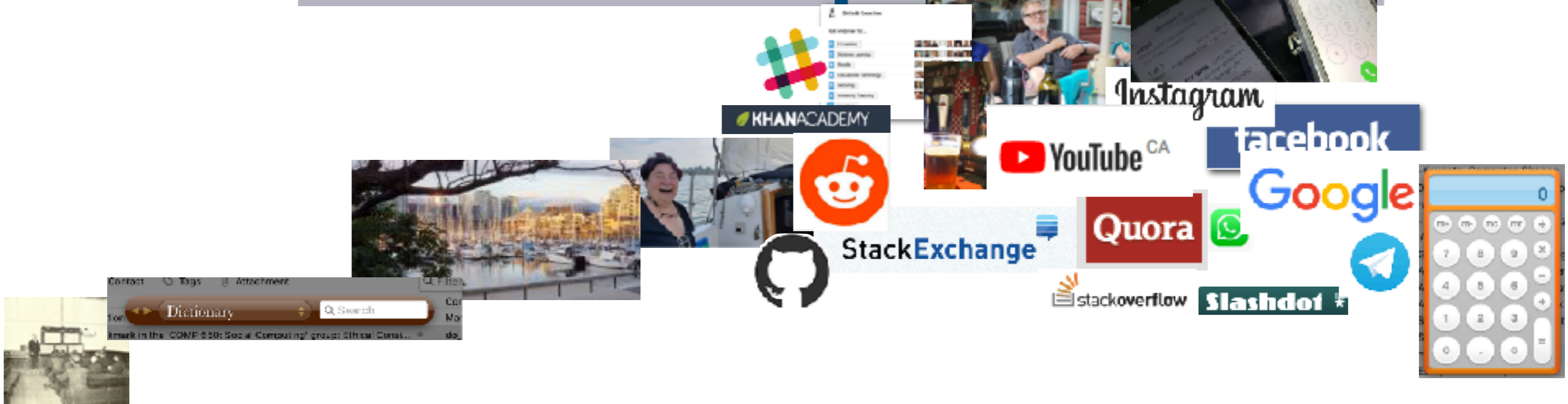
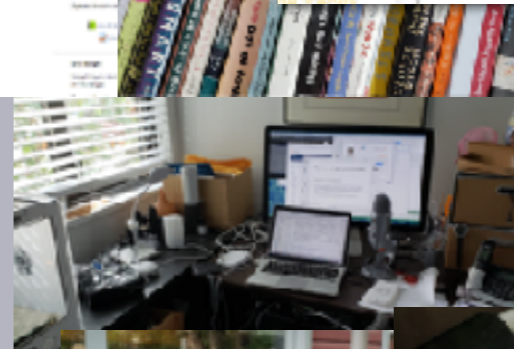
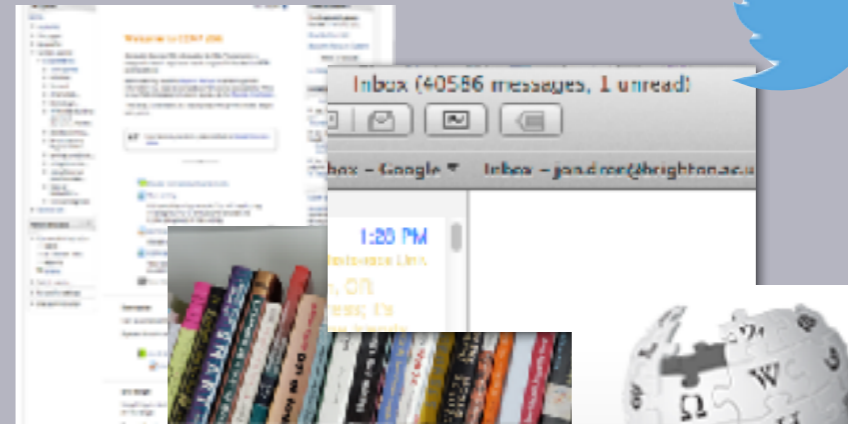
**We co-participate.**



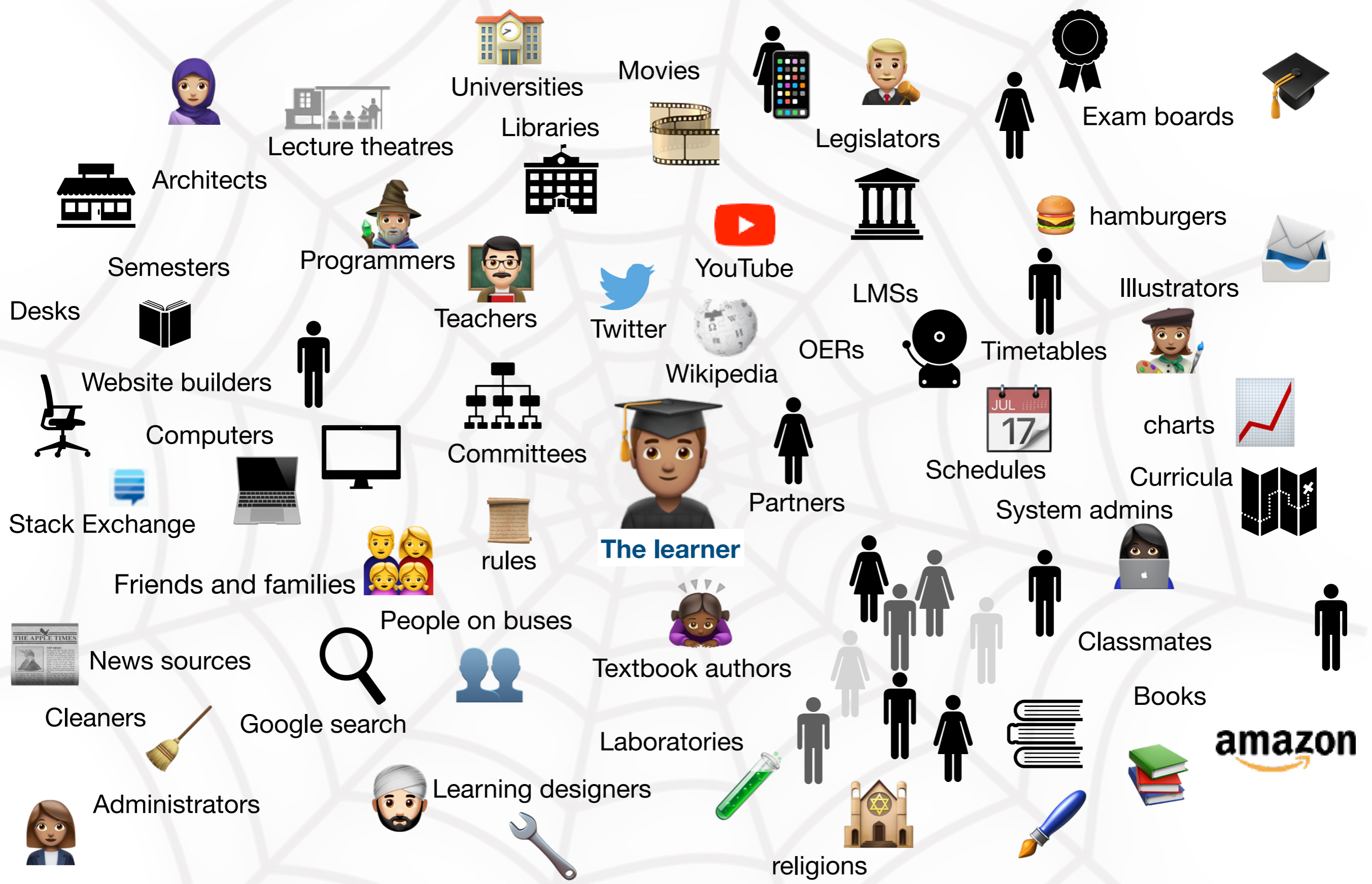
# You are not the only teacher

The online *teaching* environment

The online *learning* environment

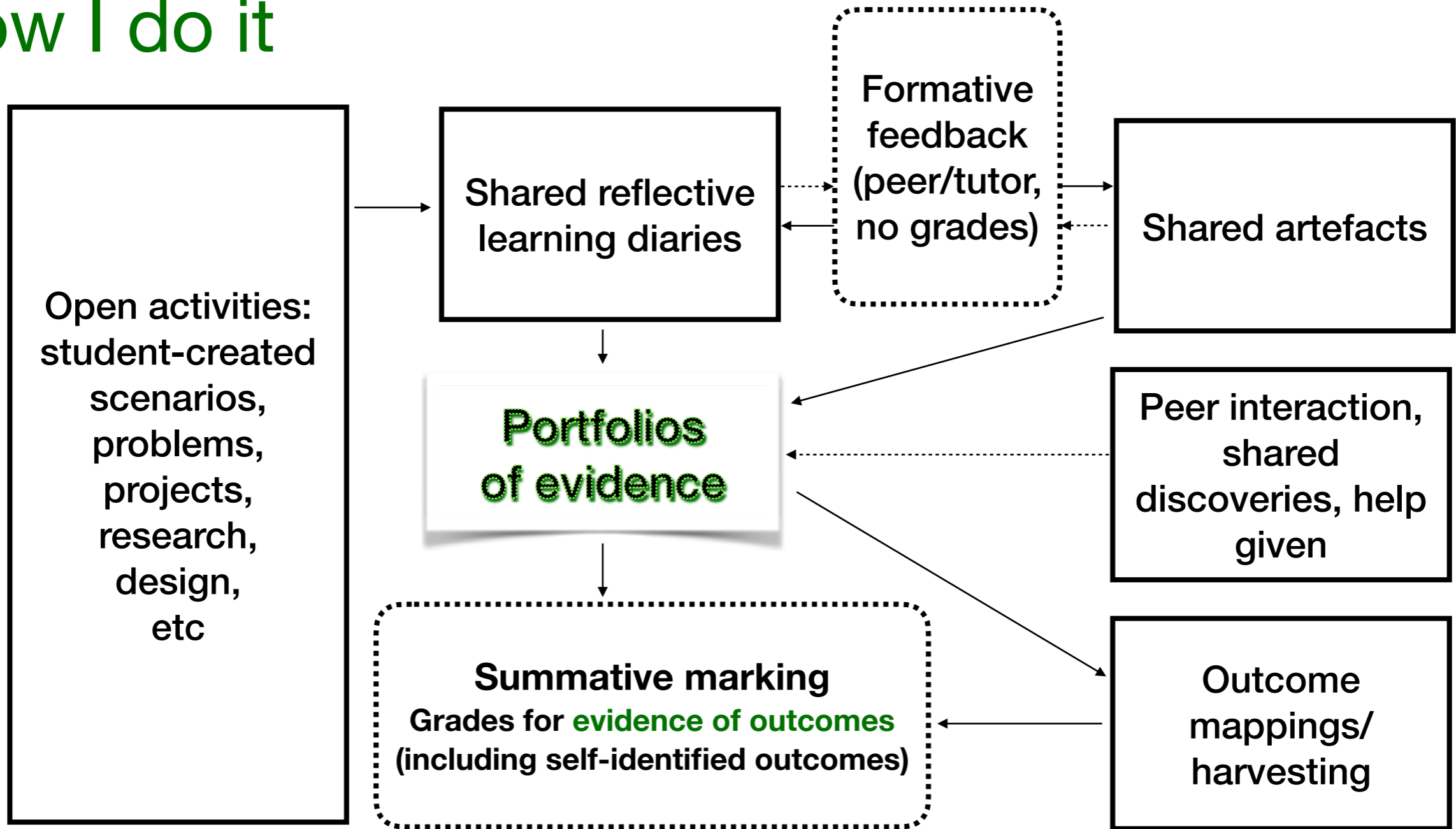


# Understanding the distributed teacher

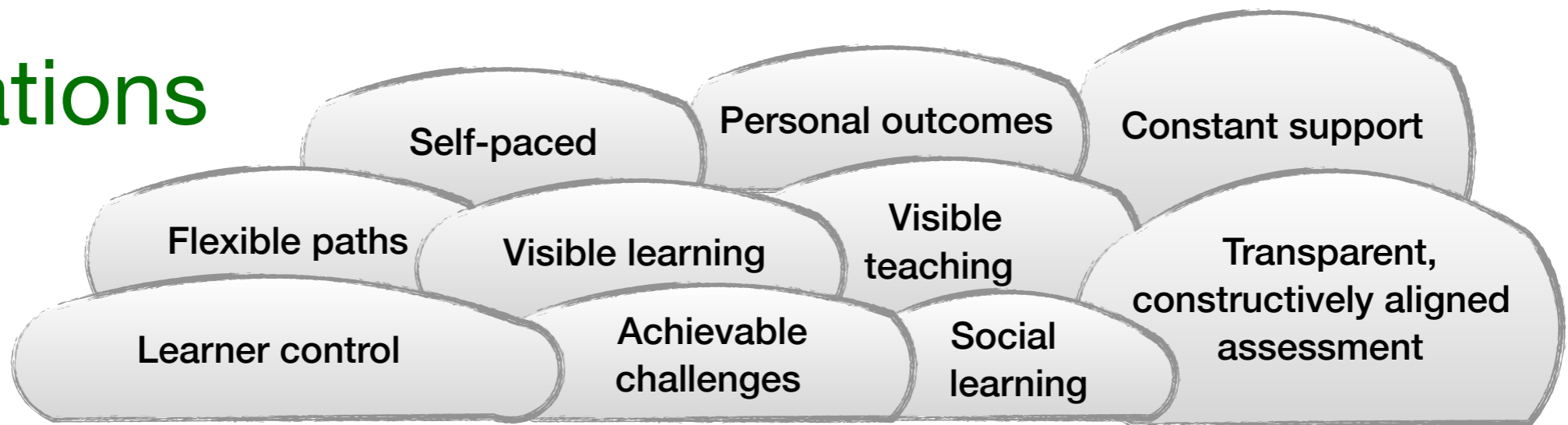


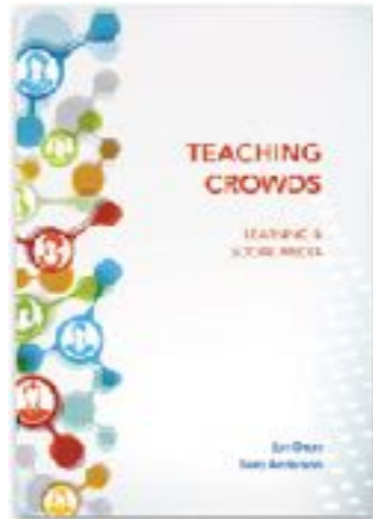
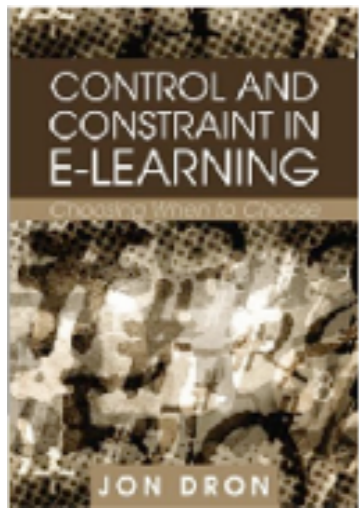


# How I do it



# Foundations





# Thank you

✉ [jond@athabascau.ca](mailto:jond@athabascau.ca)

🐦 [@jondron](https://twitter.com/jondron)

🌐 <https://jondron.ca/>

