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# There is no such thing as online learning



## Why in-person teaching methods fail online, and what to do instead

Invited talk, Workshop on International Trends in Education 2022 Óbuda University

Jon Dron, June 11 2022







**Technology Enhanced** 

Knowledge Research Institute (TEKRI)

### Education is a technological system. Ways of teaching (pedagogical methods/ pedagogies) are technologies, too



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



# 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)



#### Often, the problems a technology solves are caused by other technologies

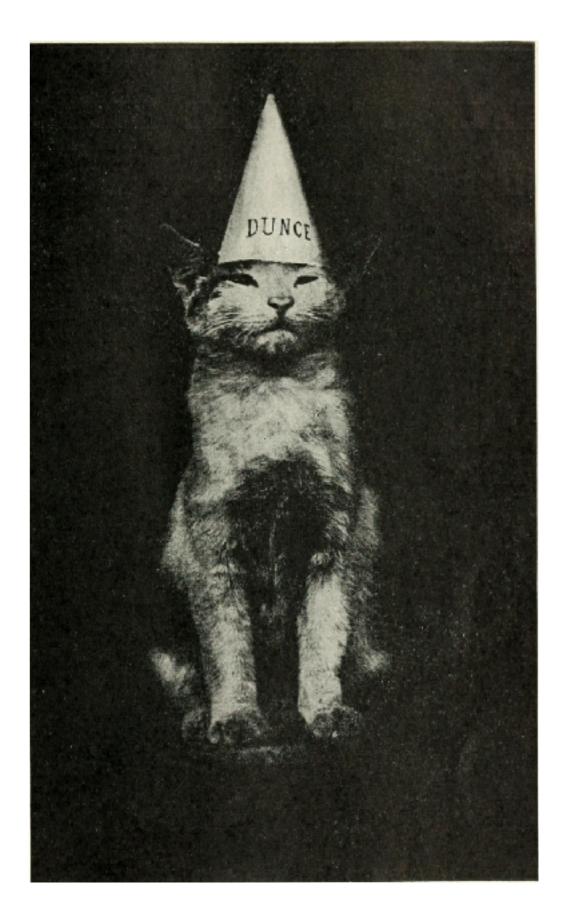


# Higher education has been around a long, long time



# a *lot* of its technologies are counter-technologies

# What are the problems that in-person education has solve?



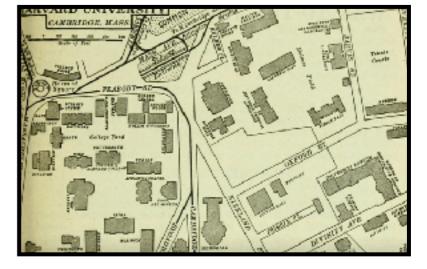
## The hard problems

Physical boundaries and scarce resources

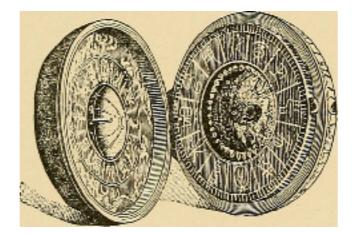


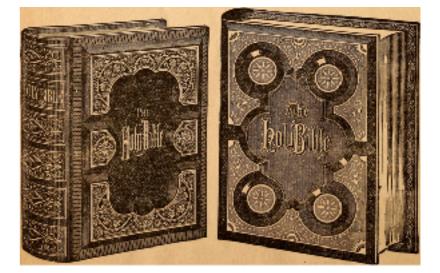
















# Good solutions (for mediaeval times)





lecture	seminars	tutorials	S		
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libraries	universitie	s <sup>labs</sup> de	esks		
textbo	ooks faculties		lecterns	ecterns	
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	courses cur	ricula	grades	exams	
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	semesters <b>tim</b>			ocations	
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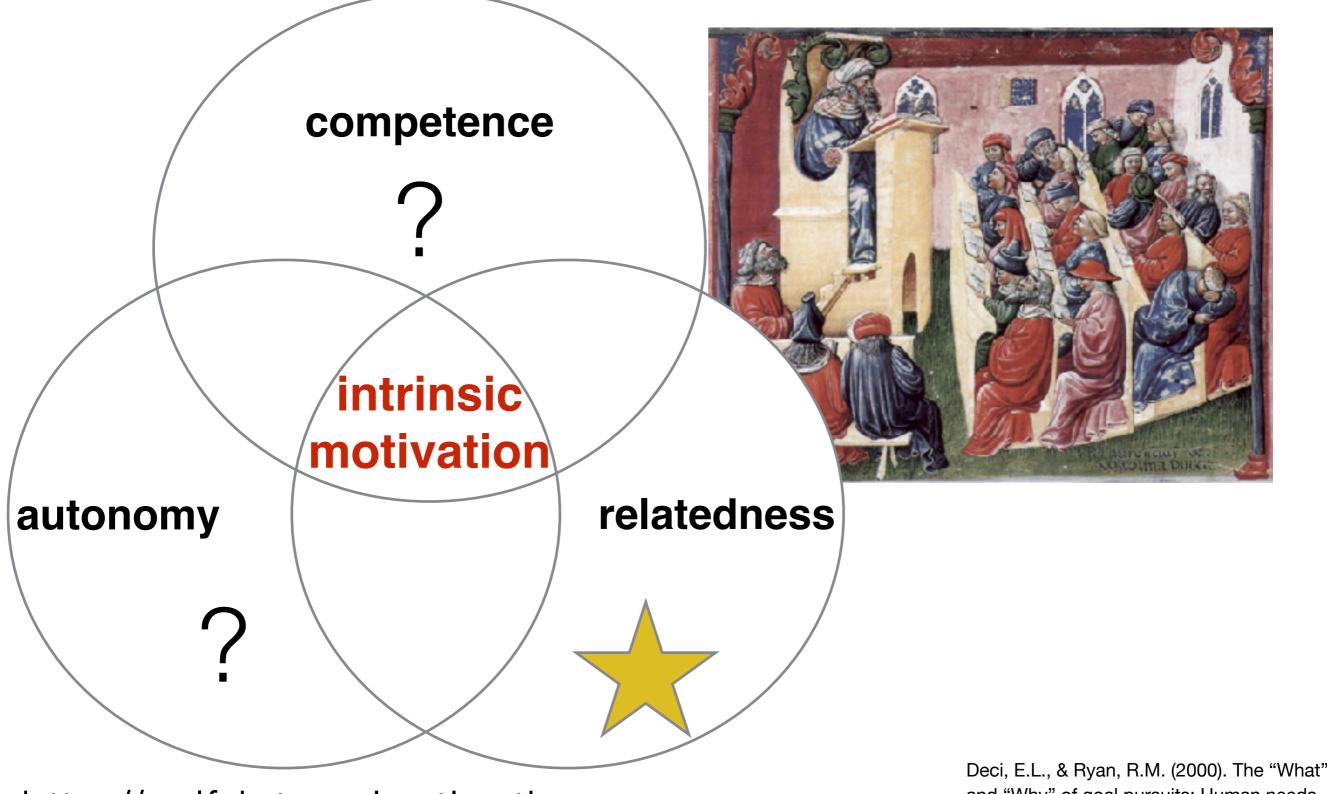


#### People who are not in control Confused people Bored people



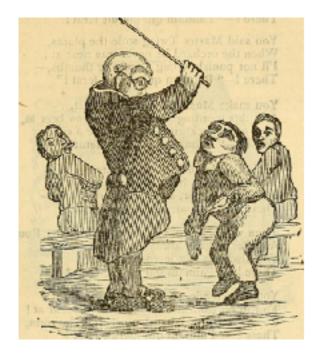
People who would rather be somewhere else

### 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



### Ineffective solutions use punishments and rewards



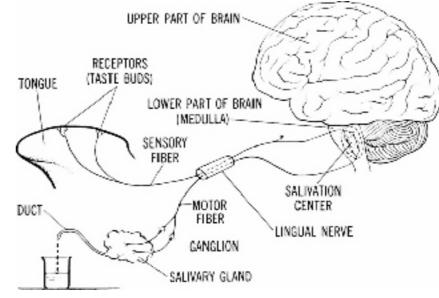
# (that includes grades)



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.

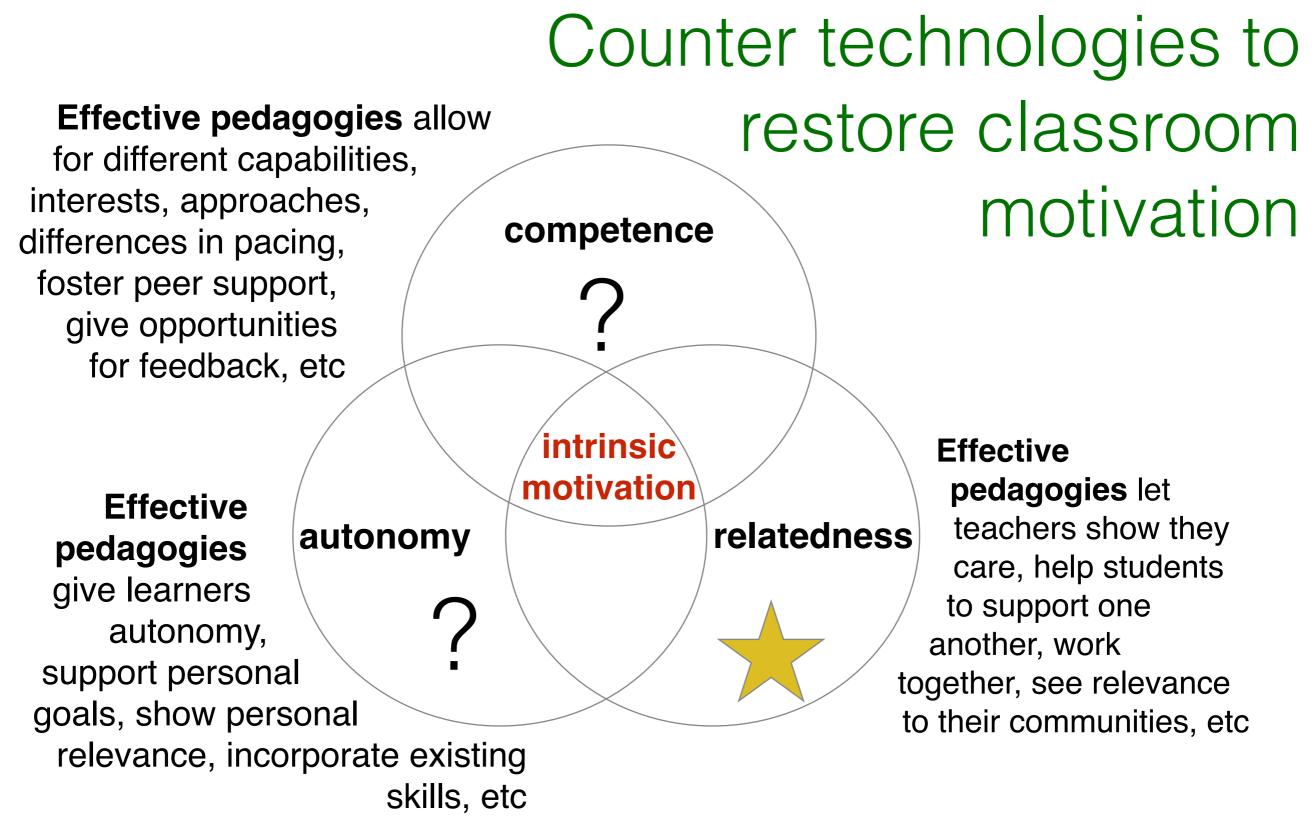
### Extrinsic motivation crowds out Intrinsic motivation.



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

http://selfdeterminationtheory.org/

http://alfiekohn.org/



#### 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



# But in-person institutions (not just their teachers) teach, too



### So you can teach terribly inperson, and students still learn



(in fact, they sometimes still learn if you fail to turn up at all)



### It's not the same online

A virtual learning environment is not a learning environment

It is **part** of the learner's environment



nc mr

#### The online *teaching* environment

#### The online *learning* environment

Dictionary

Q Search



You can't control this, or monitor this







#### coursera



#### **Course categories**

Undergraduate (66)

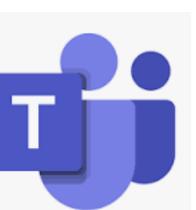
Graduate (z)

Winter 2015 (10) Fall 2014 (12) Individualized Study - Graduate Courses (3) Spring 2014 (3) Undergraduate - Archived Courses (29)

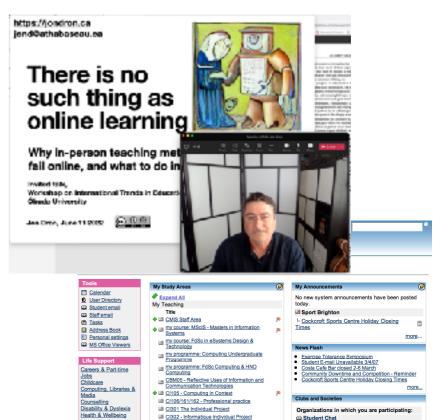
**Graduate - Archived Courses** 

Spring 2012 (1) Winter 2014 (10) Fall 2013(1 Winter 201 Spring 2013

Fall 2012 (1







CI301 The Individual Project

International Living here

Rights &

Safety & Security

port Brighton

Cl302 - Informatique Individual Project
Cl307 - Adaptive Interactive Systems

CS394/IS394 - The Individual Project
CZ104 - Foundation for Professional practice

Cl326 - Developments in Learning <u>Cl331 - Network Management</u> CI333 - Web Mastery

E CZ107 - Group Project

CZ174 - Conduct of IT Projects

CZ270 - Web Application Developm

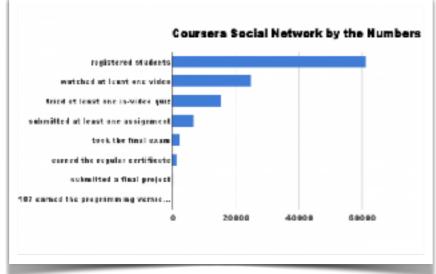
Organizations in which you are participating

C 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/

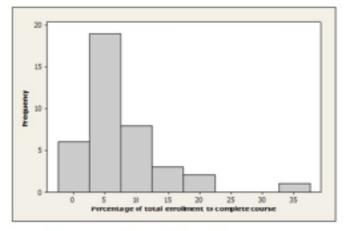
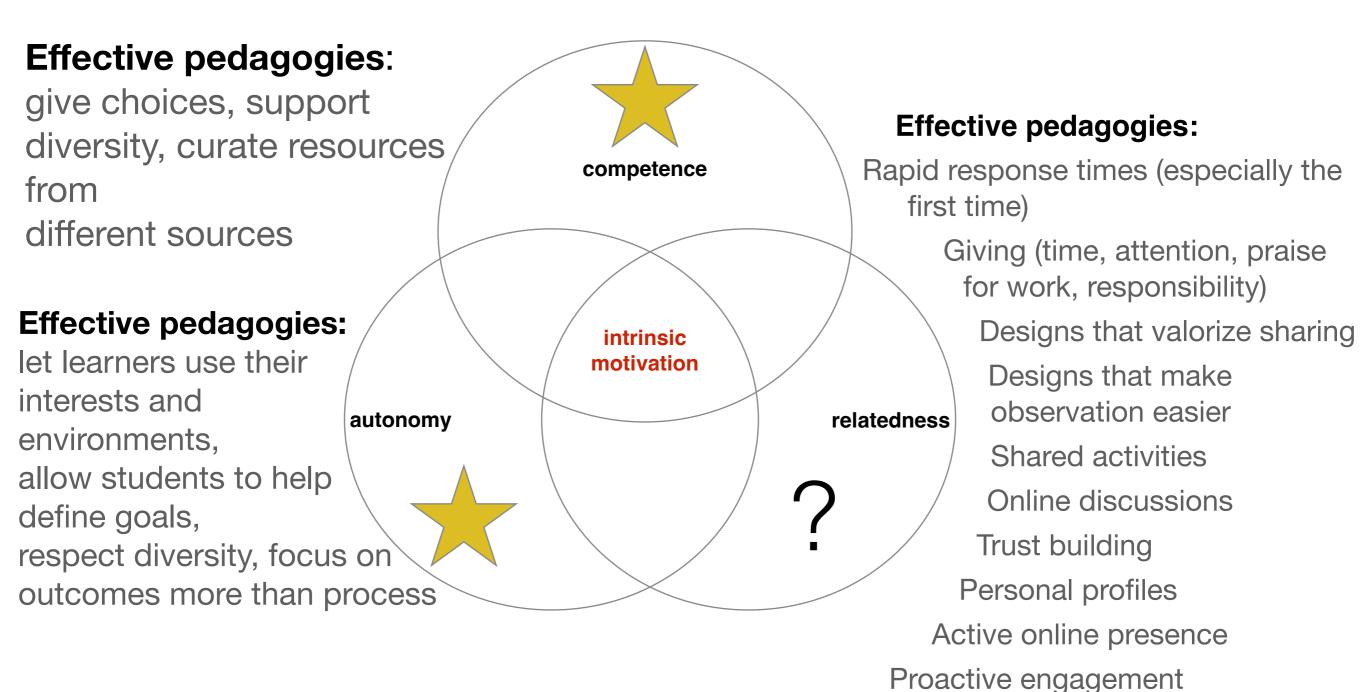


Figure 4. Histogram of completion rates for the sampled courses (n = 39).

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

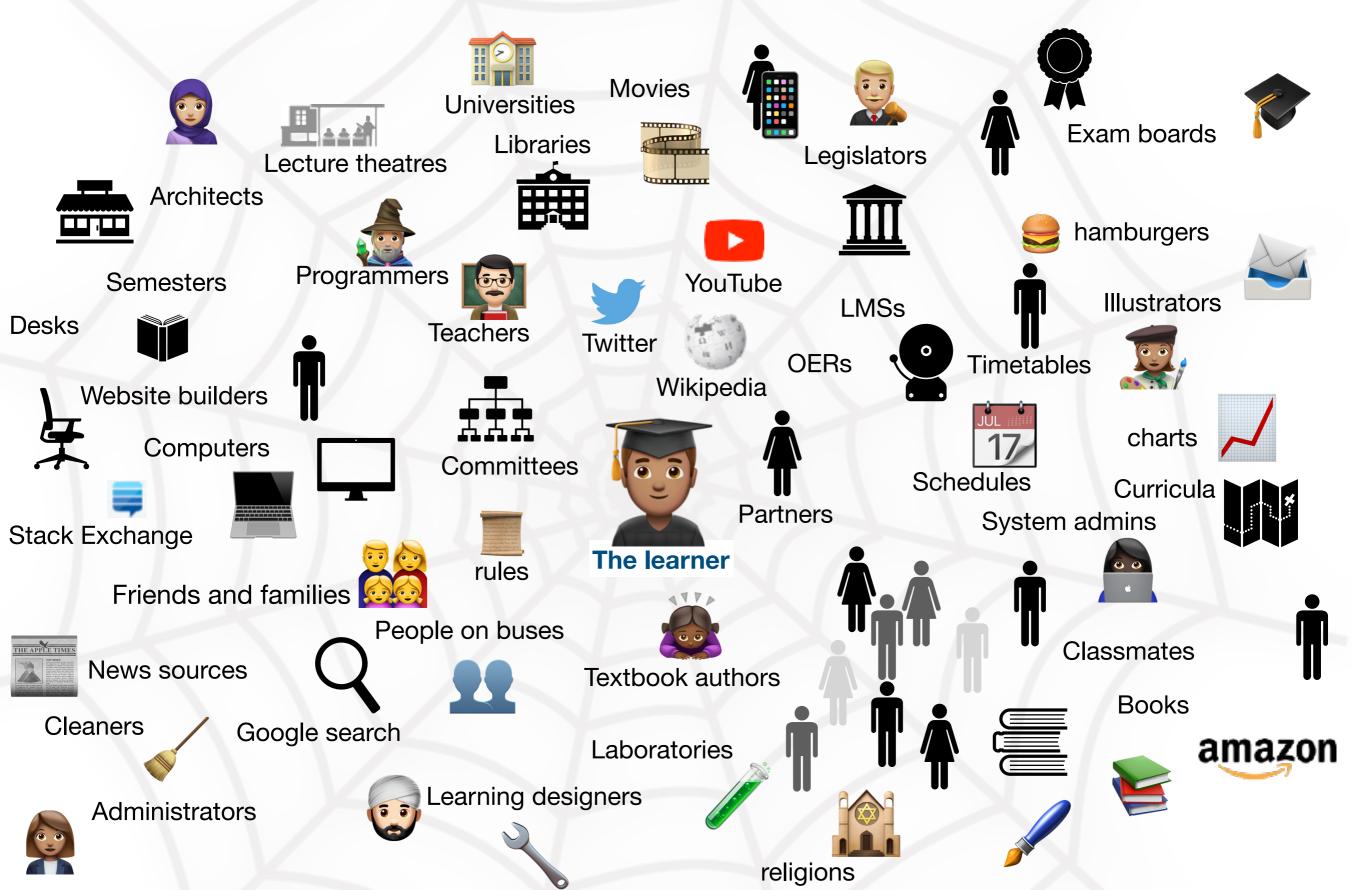
Katy Jordan, 2014: http://www.irrodl.org/index.php/irrodl/article/view/1651/2774

## Online motivation



http://selfdeterminationtheory.org

### **Understanding the distributed teacher**



## 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

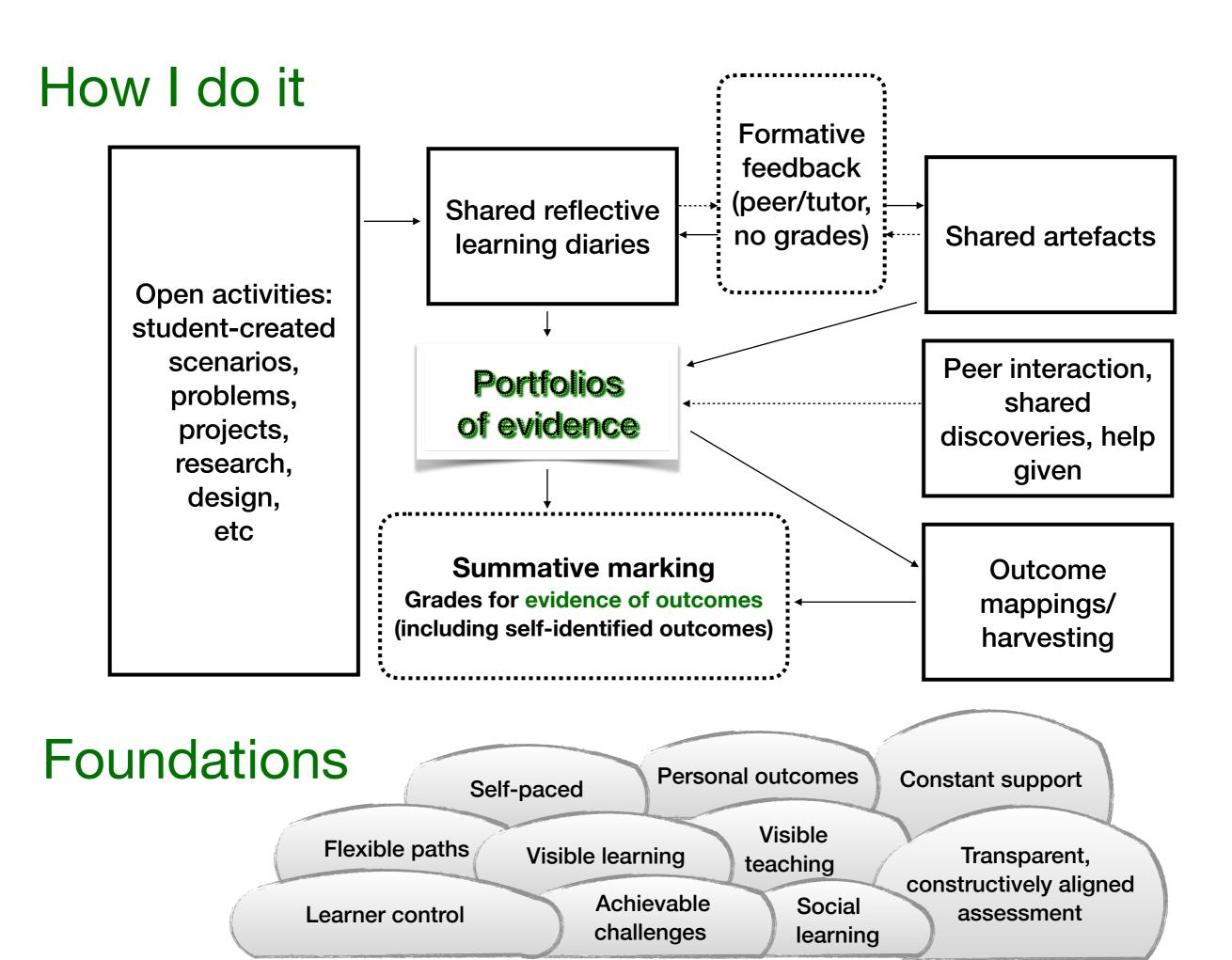
The easiest path online

### In brief:

### let go (but stay close)

# design the process, not the product

# make learning (not just its products) visible





Coming Spring 2023: How Education Works: Teaching, Technology, and Technique (AU Press)

### Thank you



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