

HOW TO MAKE THE MOST OF ONLINE LEARNING

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What does online learning look like to you?



Image: <https://www.utep.edu/extendeduniversity/utepconnect/blog/november-2020/is-online-education-here-to-stay.html>

Like This...?



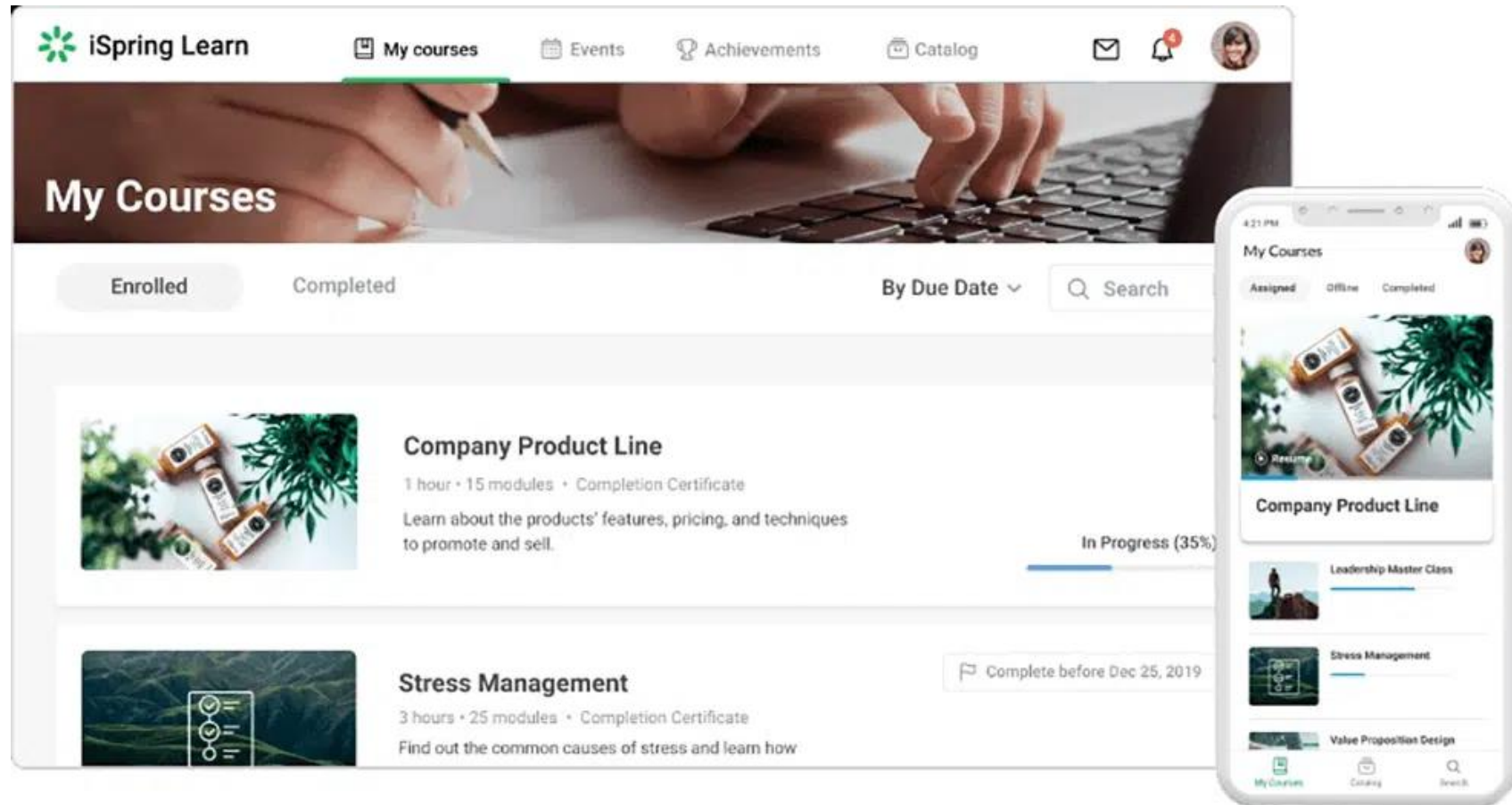
The world's most boring lecture

Like This....?



Taking notes with pen and paper while watching a teacher use a whiteboard

Like This...?



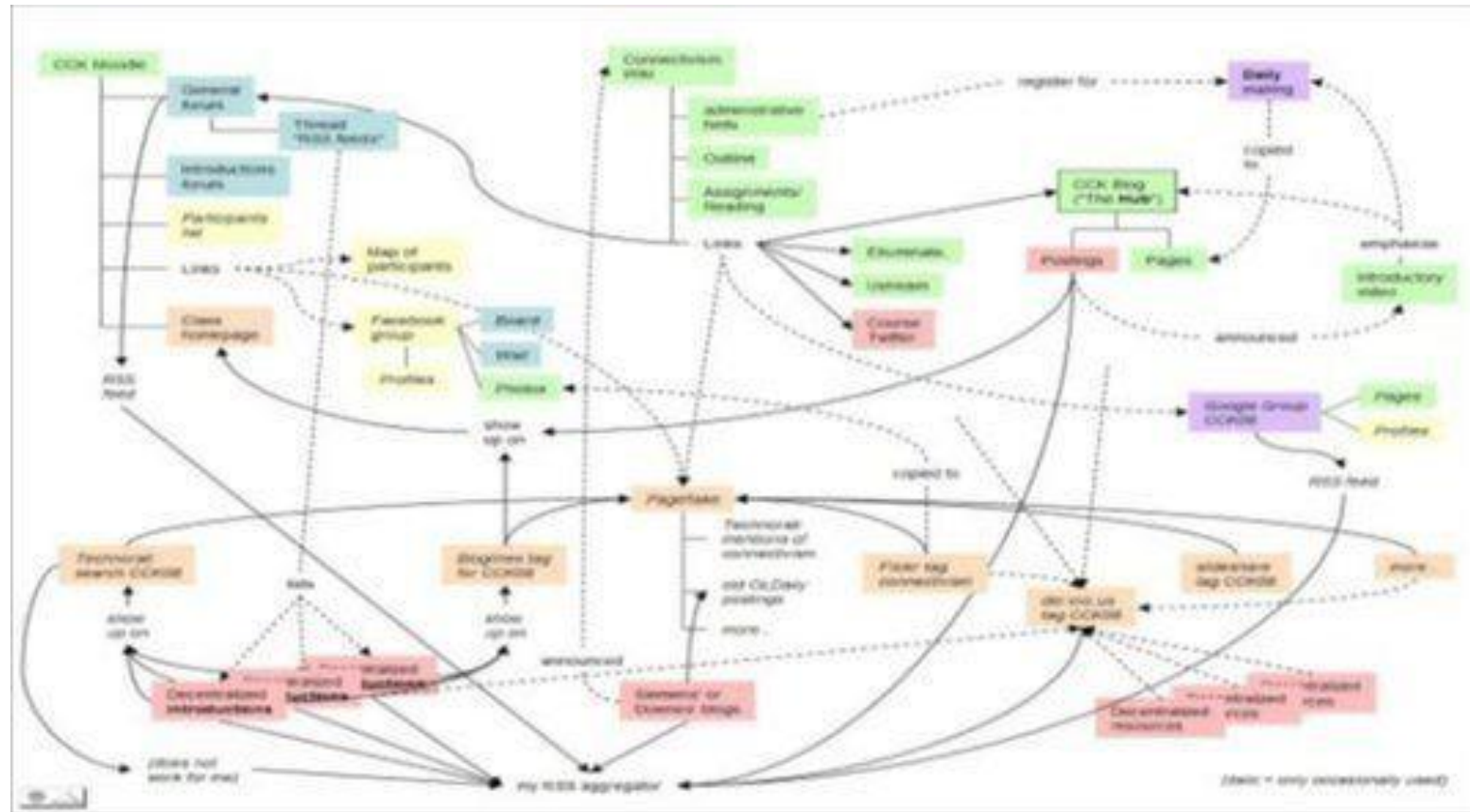
Some learning management system.

Like This...?



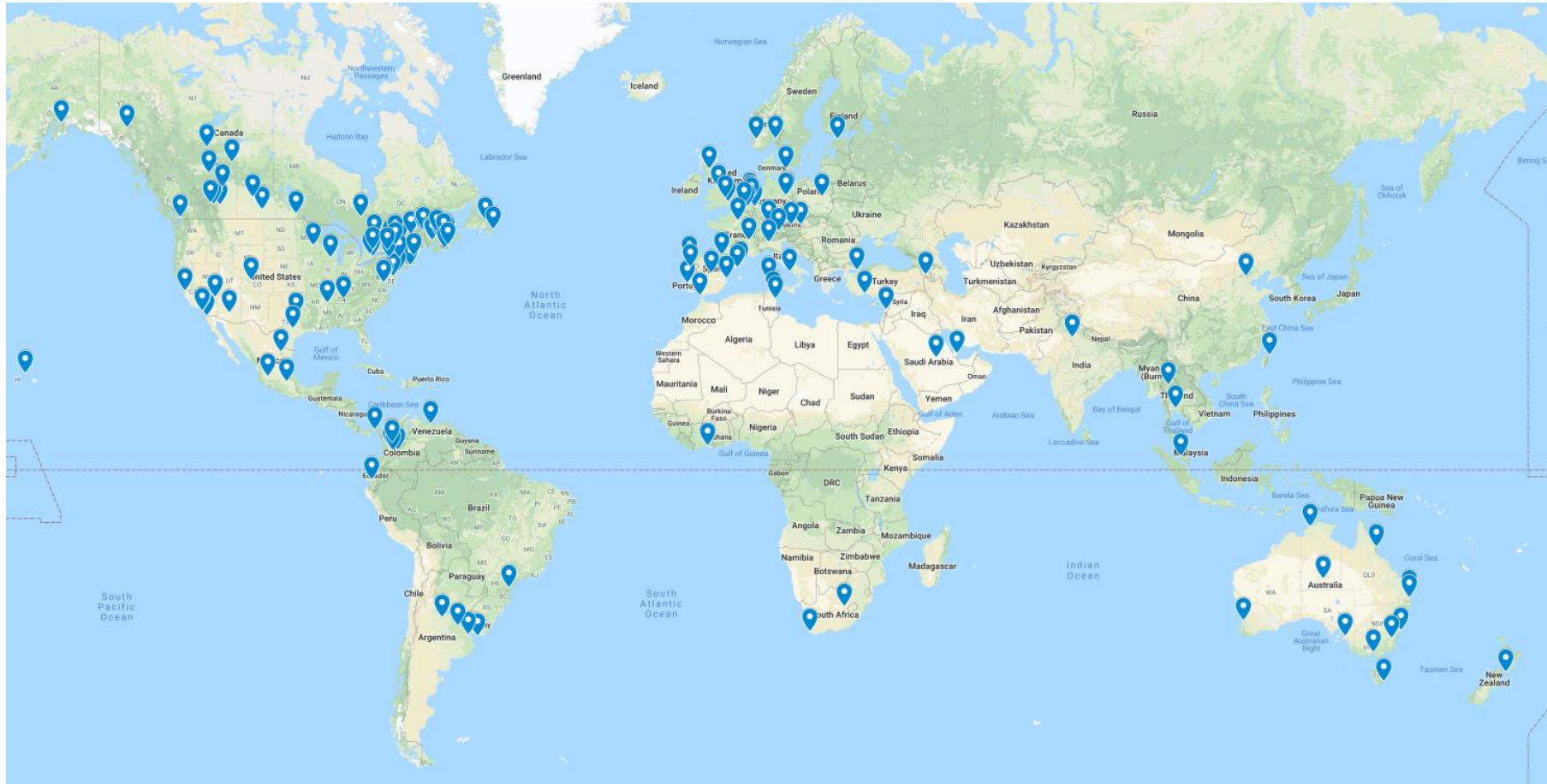
Los nueve eventos de instrucción de gagne

I have been learning online for 35 years...



... and *my learning* looks like this

Did it Work?

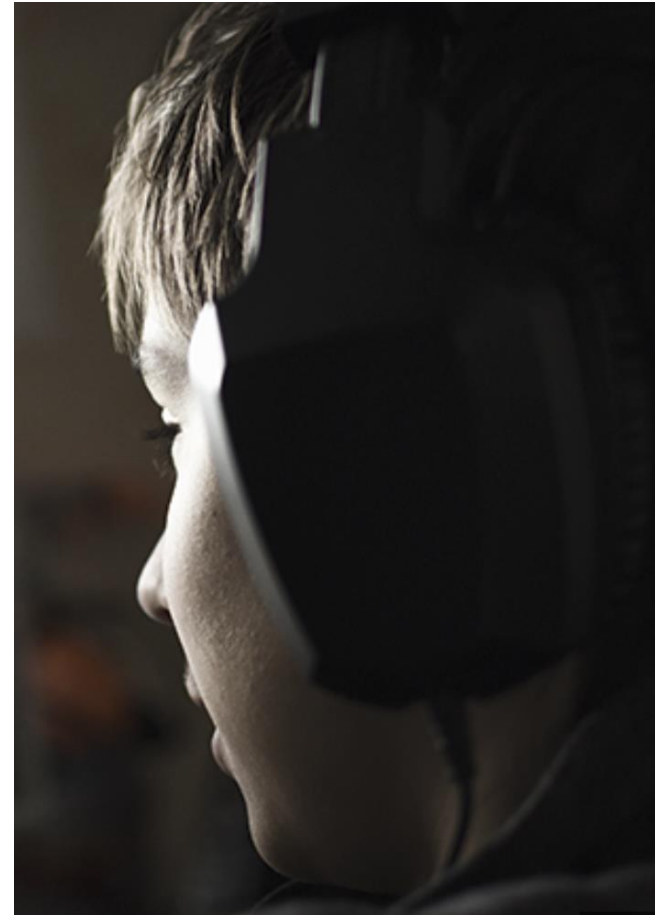


<https://www.downes.ca/presentations.htm>

Well, I'm here, right?

So What's Different?

1. Hacking my traditional schooling
2. It's about what I want to *do*!
3. Process, not content
4. Learning from experts
5. Finding my own voice



1. Hacking my traditional schooling



Image: <https://www.nbcnews.com/tech/security/parents-end-chain-ransomware-hit-rcna646>

Some things I did...

- Grade 5 – created my own newspaper
- Early teens – developed my own photographs
- High school – defined my own projects
- Grade 11 – overthrew the social sciences department
- University – worked on the student newspaper
- Grad – anti-government protests over school funding
- Teacher – accepted assignments in any medium
- Researcher – threw out the rulebook

Examples

- Hackschooling makes me happy | Logan LaPlante
<https://www.youtube.com/watch?v=h11u3vtcpaY&t=314s>



“Hackers are people who challenge and change the system, to make it work differently, to make it work better”

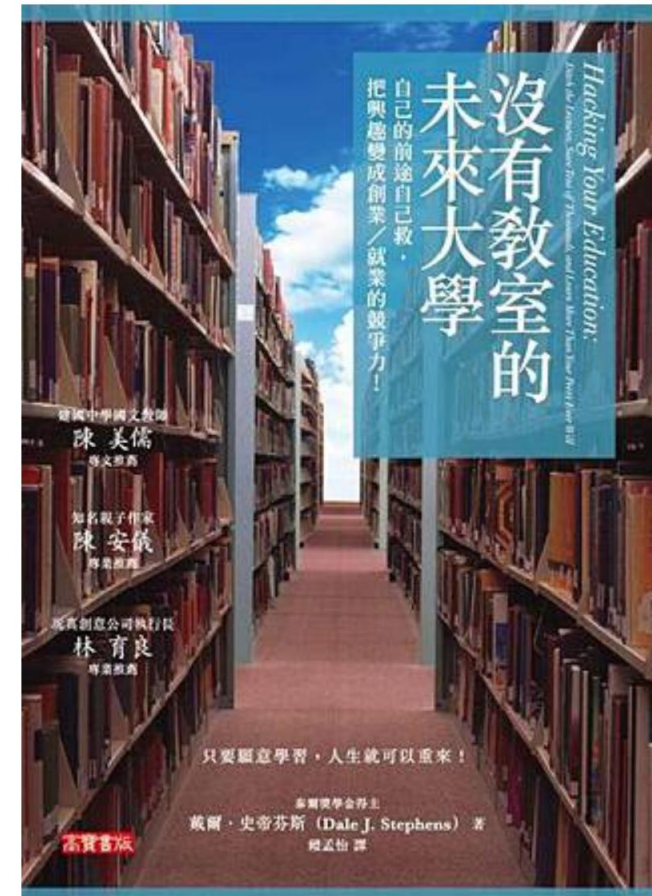
Start at 5:14

Examples

- The Next Generation of Students - “the economic downturn has bred a whole generation of ‘just-try-to-stop-me’ kids, determined to get the knowledge they need for success even if it comes from outside the traditional educational framework” Wired:

<https://www.wired.com/insights/2013/06/hacking-your-education-the-next-generation-of-students/>

Image: [https://z7852458.pixnet.net/blog/post/306458466-\[%E6%9B%B8%E7%B1%8D%E9%96%B1%E8%AE%80\]%E6%B2%92%E6%9C%89%E6%95%99%E5%AE%A4%E7%9A%84%E6%9C%AA%E4%BE%86%E5%A4%A7%E5%AD%B8\(hacking-your-educ](https://z7852458.pixnet.net/blog/post/306458466-[%E6%9B%B8%E7%B1%8D%E9%96%B1%E8%AE%80]%E6%B2%92%E6%9C%89%E6%95%99%E5%AE%A4%E7%9A%84%E6%9C%AA%E4%BE%86%E5%A4%A7%E5%AD%B8(hacking-your-educ)



Examples

- EduPunk - ¿Qué es el Edupunk?
- <https://escuelaplanob.com/que-es-el-edupunk/>



Only special people create their own learning

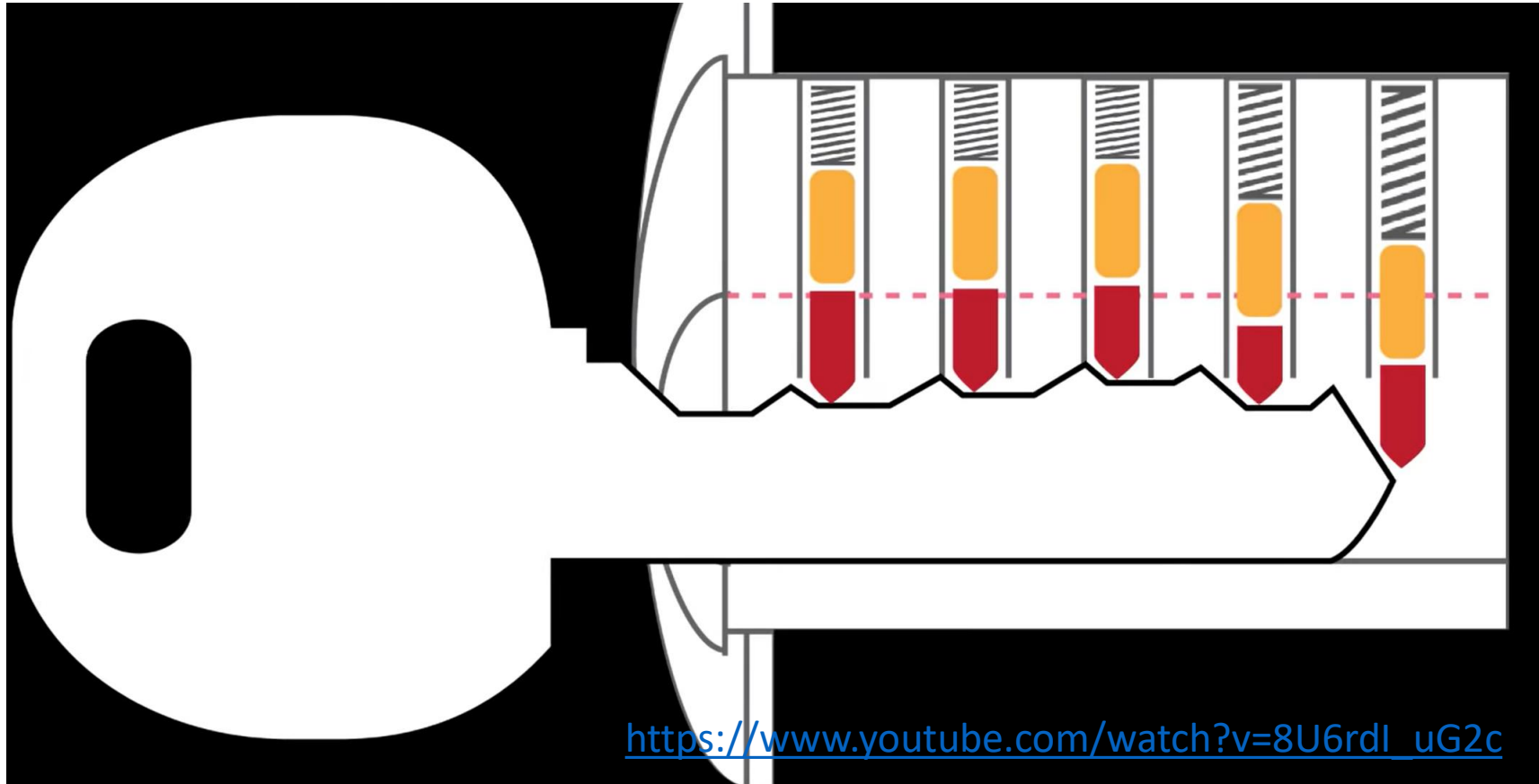
No!

As teachers, what do you value? What do you reward?

- Do you encourage creativity?
- Do you allow students to change the rules?
- Can students find their own resources?
- Do you respect your students' opinions?
- Do you model innovation and creativity?
- Do you recognize multiple points of view?
- Do your students want to be like you?



It takes just one key to open a door



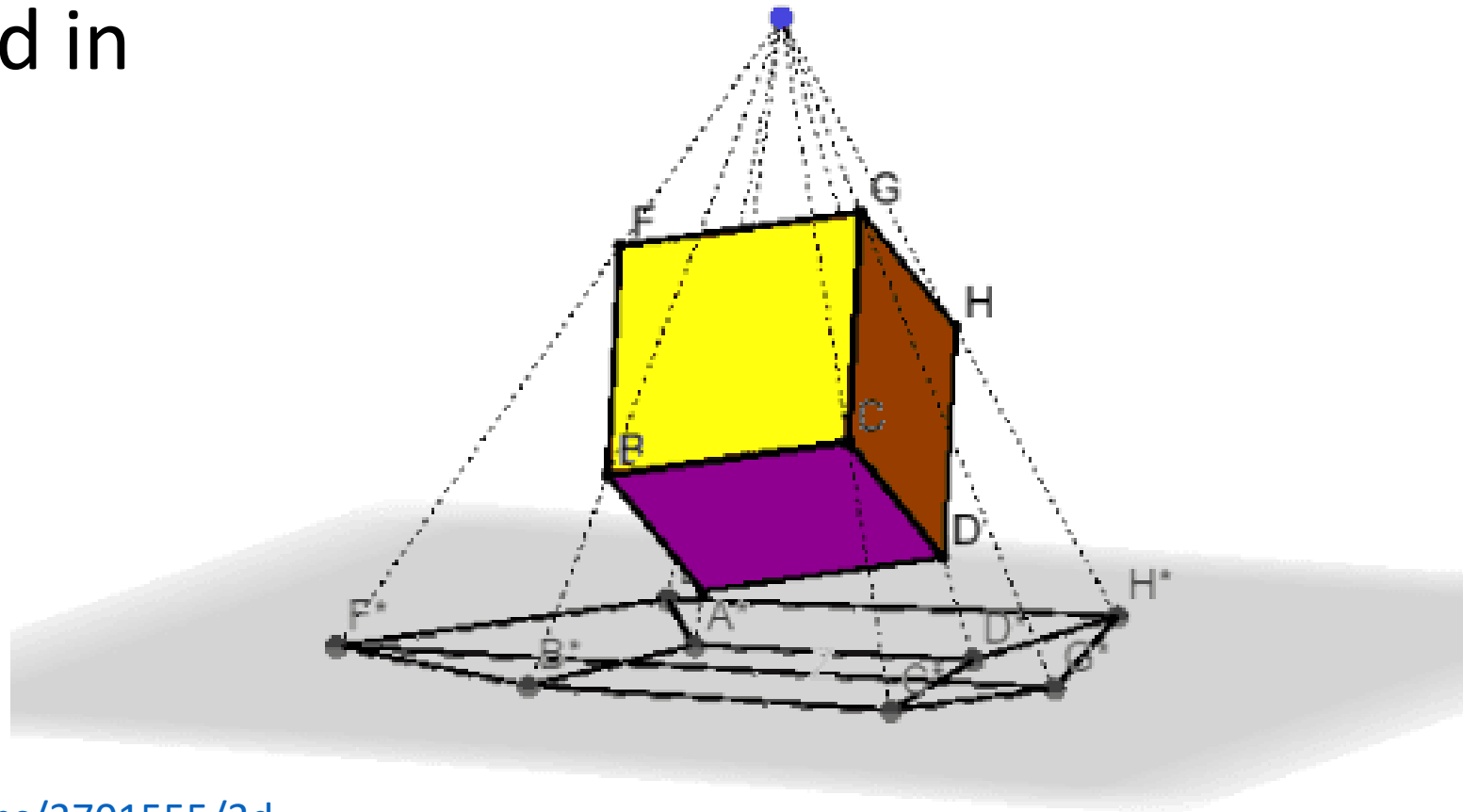
You can be that key, if you want

2. It's about what I want to *do*

I was never interested in learning *content*

For me, learning was always about what I wanted to do

Stack exchange: rotating a cube -
<https://math.stackexchange.com/questions/3701555/3d-trigonometry-rotating-a-cube>



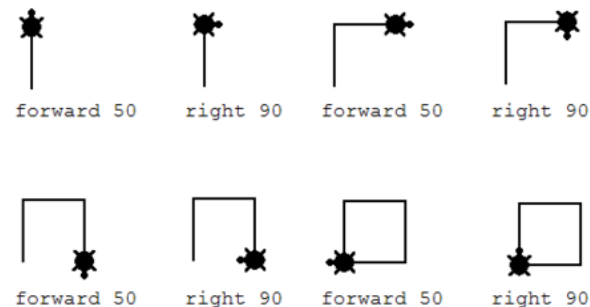
<https://www.geogebra.org/m/b2ay9zww>

Constructionism

1.2.5. A Pragmatic Model: Lego-Logo

We use here as an example of our recent work in the constructionist direction a project called Lego-Logo. This project encapsulates key elements of our theoretical approach, and it also represents the style of relationship we are attempting to build with the world of schools, with the world of informal education, with the education industry and with the general public interested in education.

The idea of working with Lego construction materials developed out of two interests. Work with Sherry Turkle had deepened our understanding of and interest in the role in learning of intense relationships children form with objects, and construction sets seemed to be a very good context in which to pursue these interests. At the same time (1983/4) the idea of developing motion as a major theme of study in K-12 was taking



© 2000 Logo Foundation



Peter H. Reynolds

<http://dailypapert.com/constructionism-a-new-opportunity-for-elementary-science-education-2/>

<https://dailypapert.com/wp-content/uploads/2021/02/Constructionism-NSF-Proposal.pdf>

Making

Imagine asking a prospective student not, “What do you want to major in?” but rather, “What would you like to be able to make?”

“I would like to make a porcelain cup. I would like to make a cure for cancer. I would like to make someone feel less anxious and alone. I would like to make a computer game. I would like to make a solution to homelessness in my town.”



Nathan Heller

<https://www.newyorker.com/magazine/2023/03/06/the-end-of-the-english-major>

What I do



My work, learning and research are inseparable from my making

Today, I made a presentation, combining words and images

What I do



My work, learning
and research are
inseparable from
my making

*Yesterday, I made
a collection of
photographs
about Madrid*

*It's the same thing
to me*

Wait, isn't this a talk about online learning?

Take a picture
Make a presentation
Write a blog post
Design a game
Write an application
Share a calendar
Start a newspaper
Found a club or society
Record a live video
Create a podcast
Describe how to open a lock
Rotate a cube in 3D
Teach a class
Share your opinions
Research cancer
Operate a robot
Make a decision
Follow your dreams

- *All* of this is about online learning
- It's about what we can *do* online



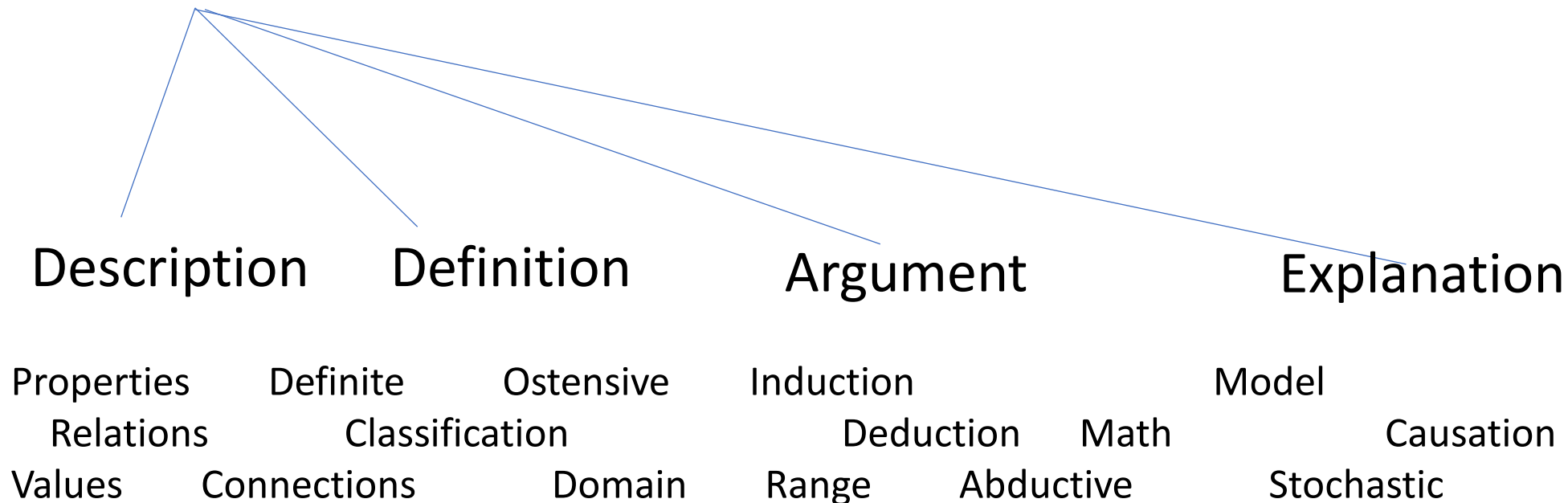
← It doesn't really matter what!

3. Process, not content

The secret weapons of the online learner are
logic and **language**

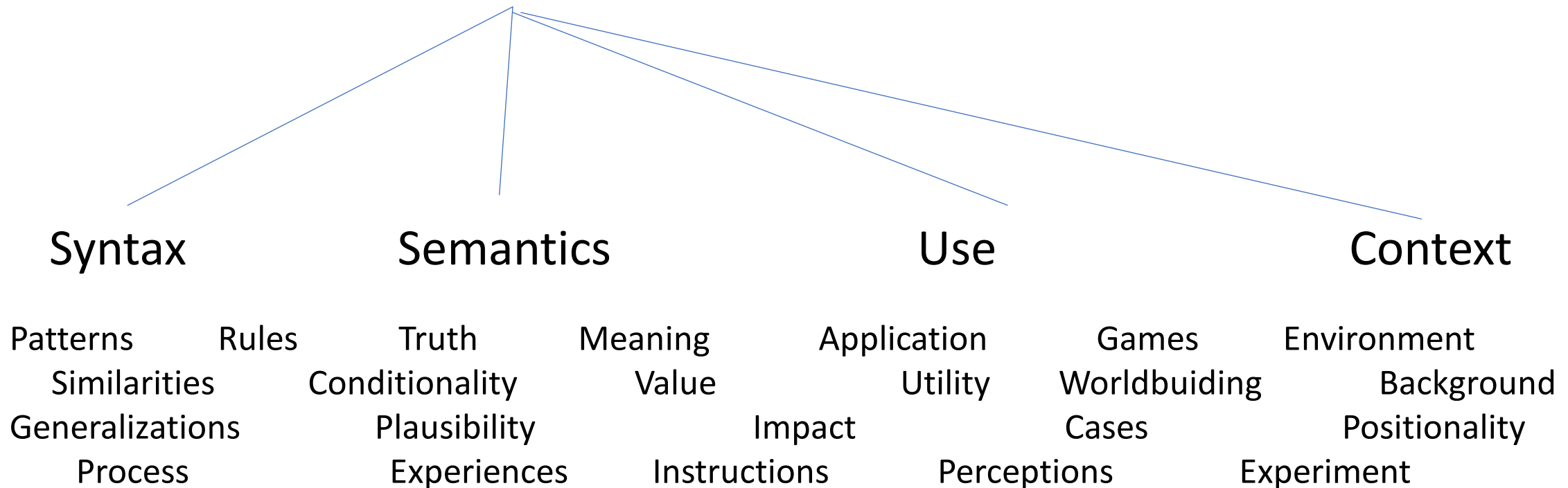
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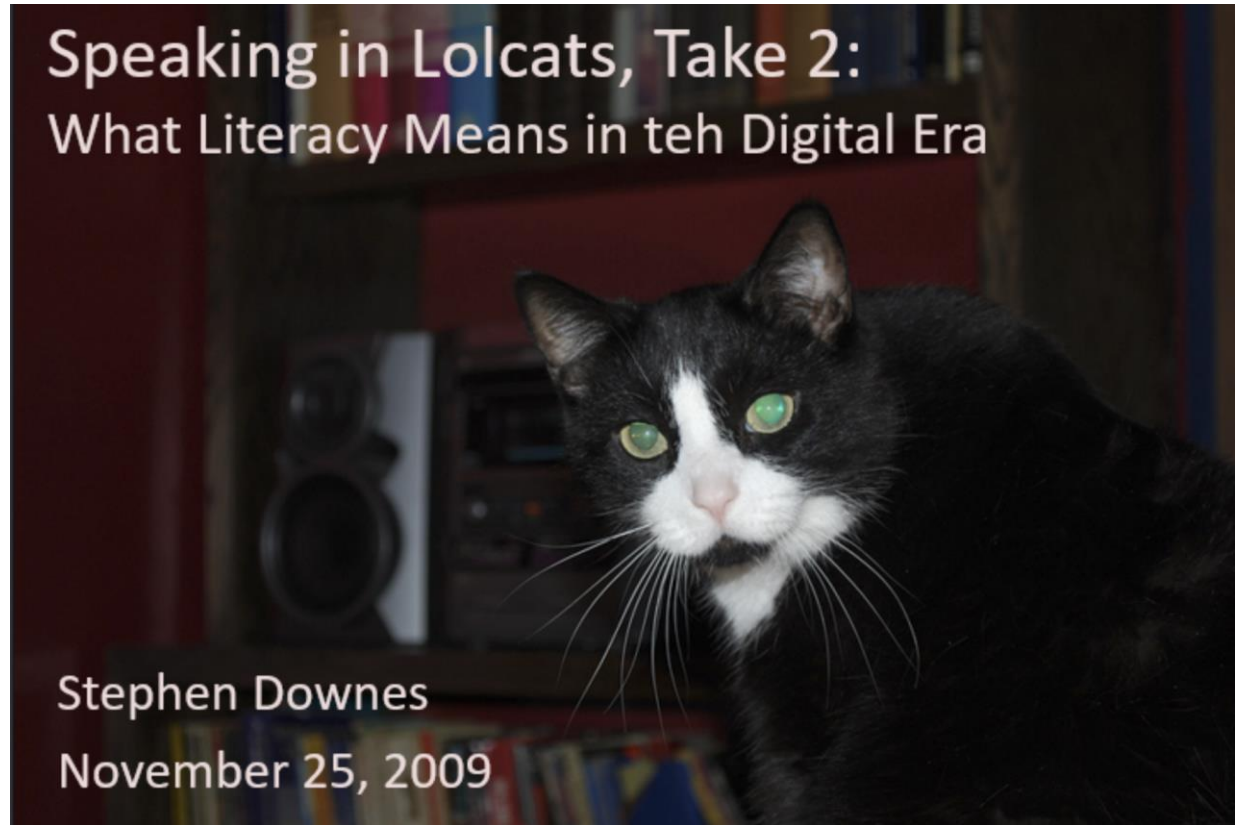
3. Process, not content

The secret weapons of the online learner are
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When you look for these online, you will find them *everywhere*

What do you think is happening on Facebook, Twitter, Imgur, TikTok and the rest of them?



<https://www.downes.ca/presentation/233>

How to speak LOLcat: <https://www.youtube.com/watch?v=490QL-LEQoQ>

These are also the tools of learning when the content does not matter



... oh, and science and research too

Wait! The content doesn't matter?

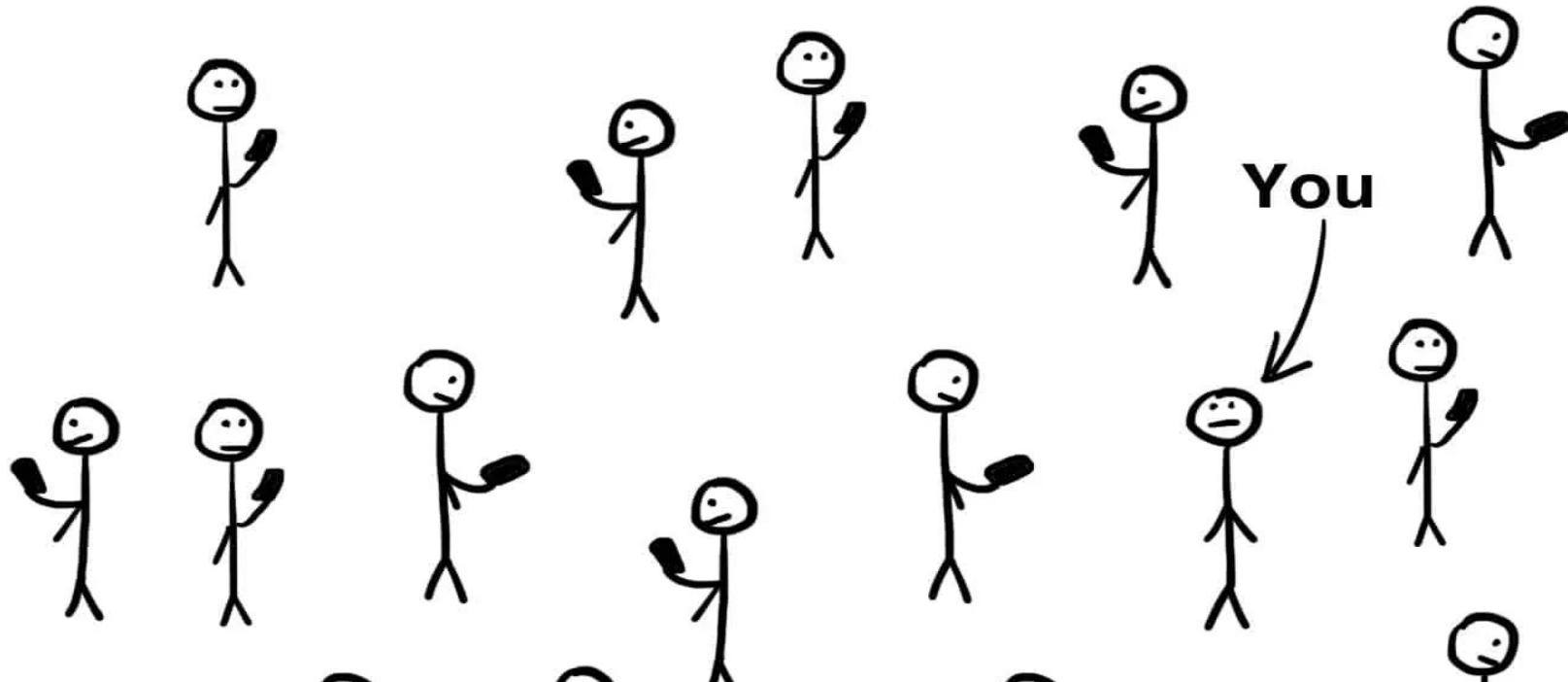
- Well, the content matters *to some degree*
- But the content is changing all the time
- It doesn't matter *which content* you use
- The rules of logic and language still apply
- And *that's* what you want to learn online



p.s. learned how to remove an image background in about 30 seconds at <https://www.remove.bg/>

The pragmatic *pièce de résistance*

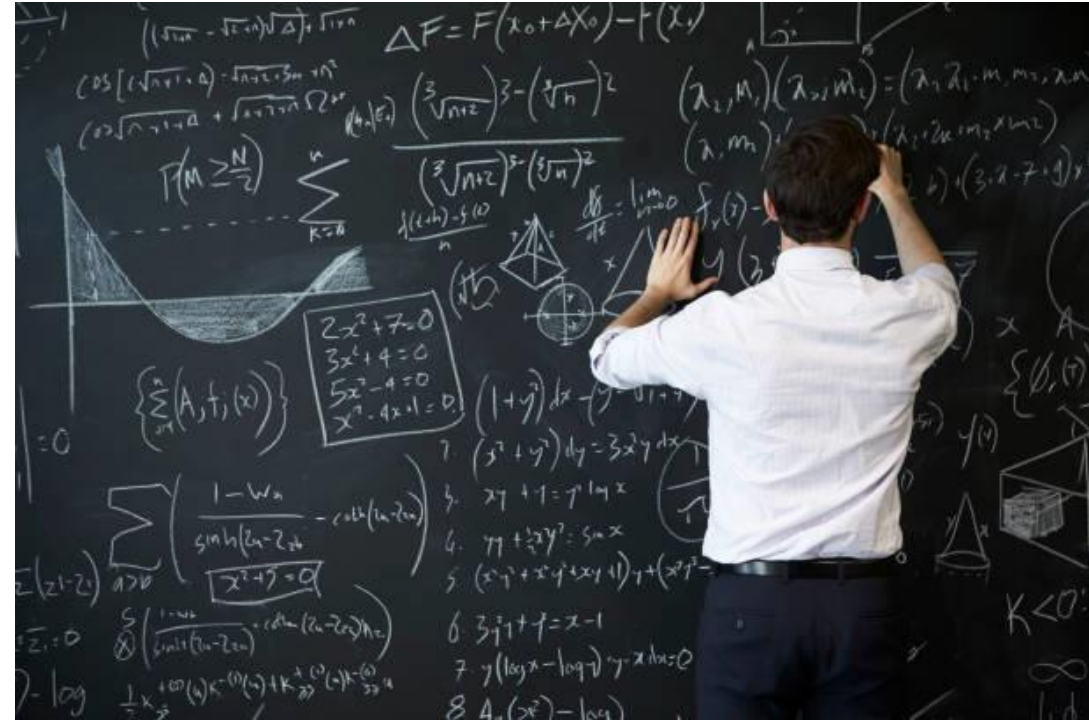
- Nobody cares about what you know
- They care about what you can *do*
- (And to a lesser extent, what you *did*)



4. Learning from experts

- Experts are often terrible teachers
- They don't even speak your language
- And they don't want to teach you

Tony Bates: teach the experts to be good teachers...



So what are experts good for?

- Experts are *models* of best practice
- Most of their knowledge cannot be found in a book (Michael Polanyi, 'tacit knowledge' or 'personal knowledge')
https://en.wikipedia.org/wiki/Tacit_knowledge
- Experts participate in *communities of practice* where they share their knowledge and collaborate with their peers (Etienne Wenger, CoP)
<https://www.communityofpractice.ca/background/what-is-a-community-of-practice/>

(You can tell this is an important slide because there are no pictures)

Models for learning by doing

- Labs or workshops
- Apprenticeship, internship
- Simulations and games
- Real-world projects



Tony Bates: <https://www.tonybates.ca/2014/08/06/models-for-teaching-by-doing-labs-apprenticeship-etc/>

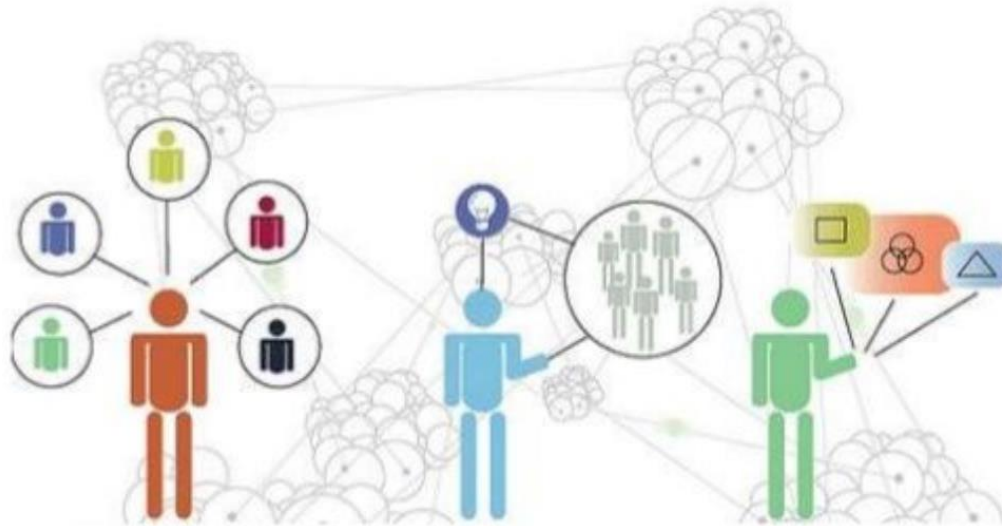
Professional communities



Something I made (with my friend George Siemens)

Connectivism Learning Theory

George Siemens (2005) and Stephen Downes (2005)



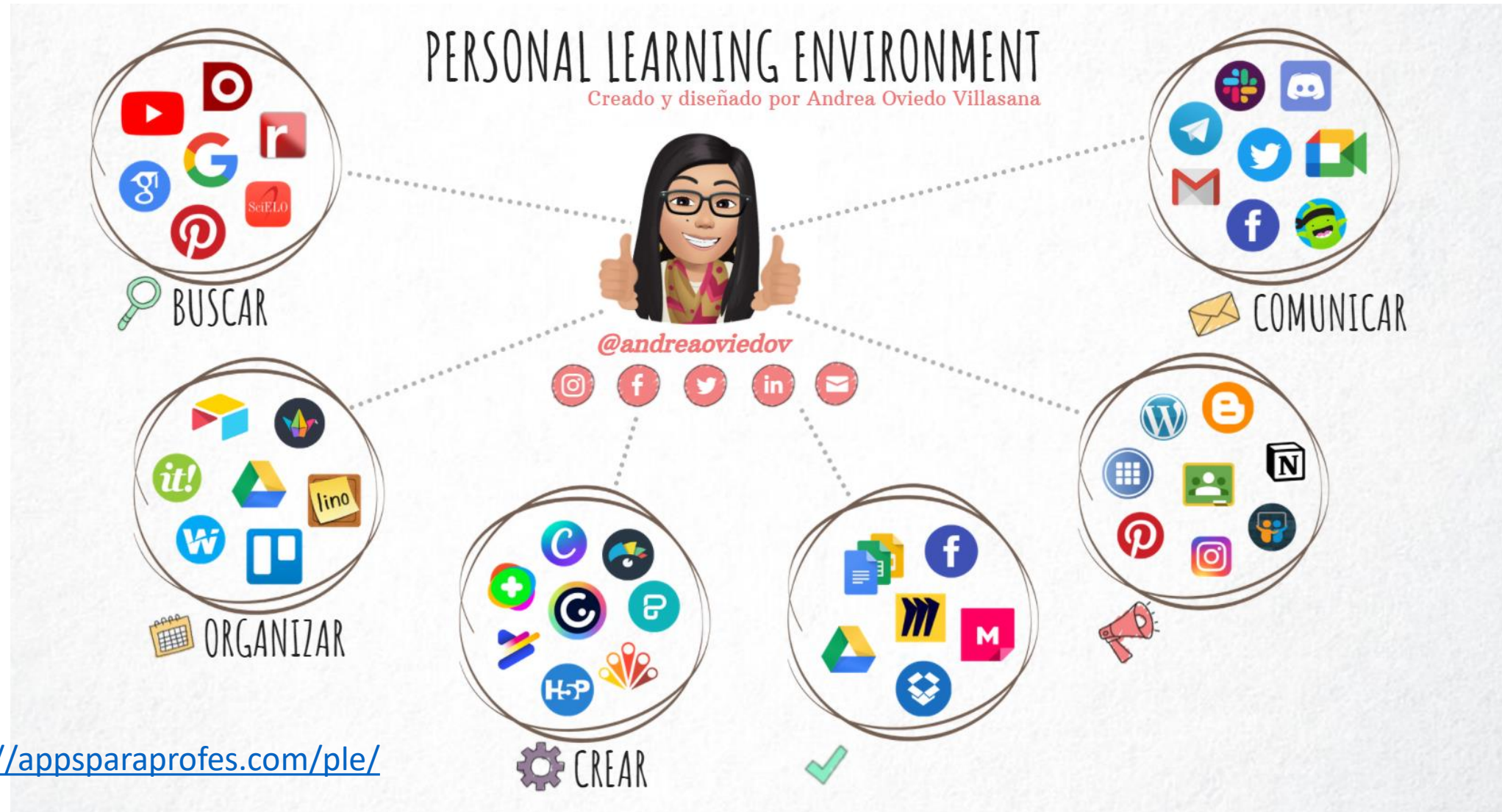
A.Austen, P.C.Chen, V. Darlington, D.Daylamani-Zad, S.De'Cage, C.Farrant



<https://www.wgu.edu/blog/connectivism-learning-theory2105.html#openSubscriberModal>

The big huge connectivism paper: <http://www.asianjde.com/ojs/index.php/AsianJDE/article/view/623>

How I make my own learning

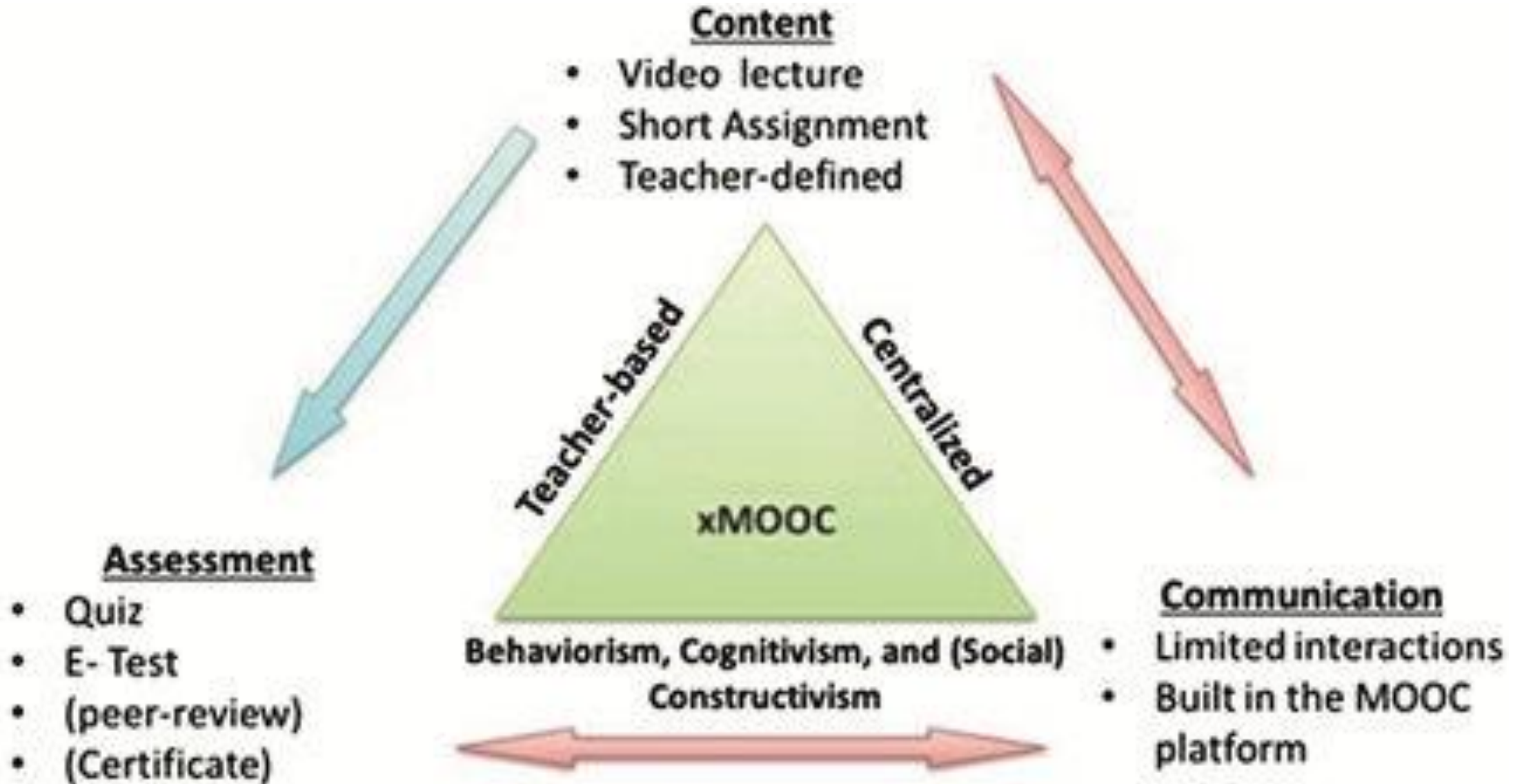


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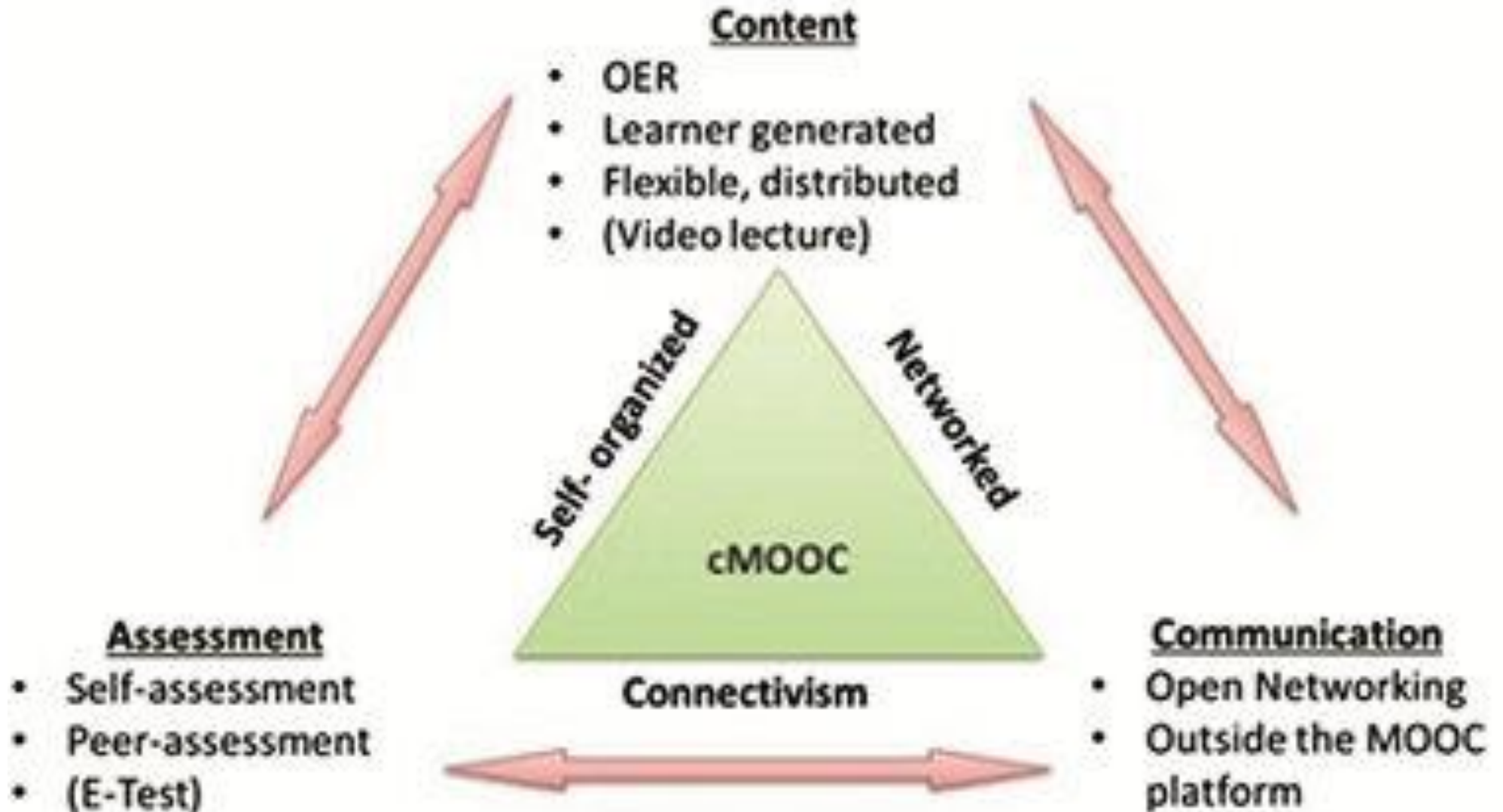
How communities can make their own learning
(or, another thing I made with George)



Elements of an xMOOC (traditional learning)

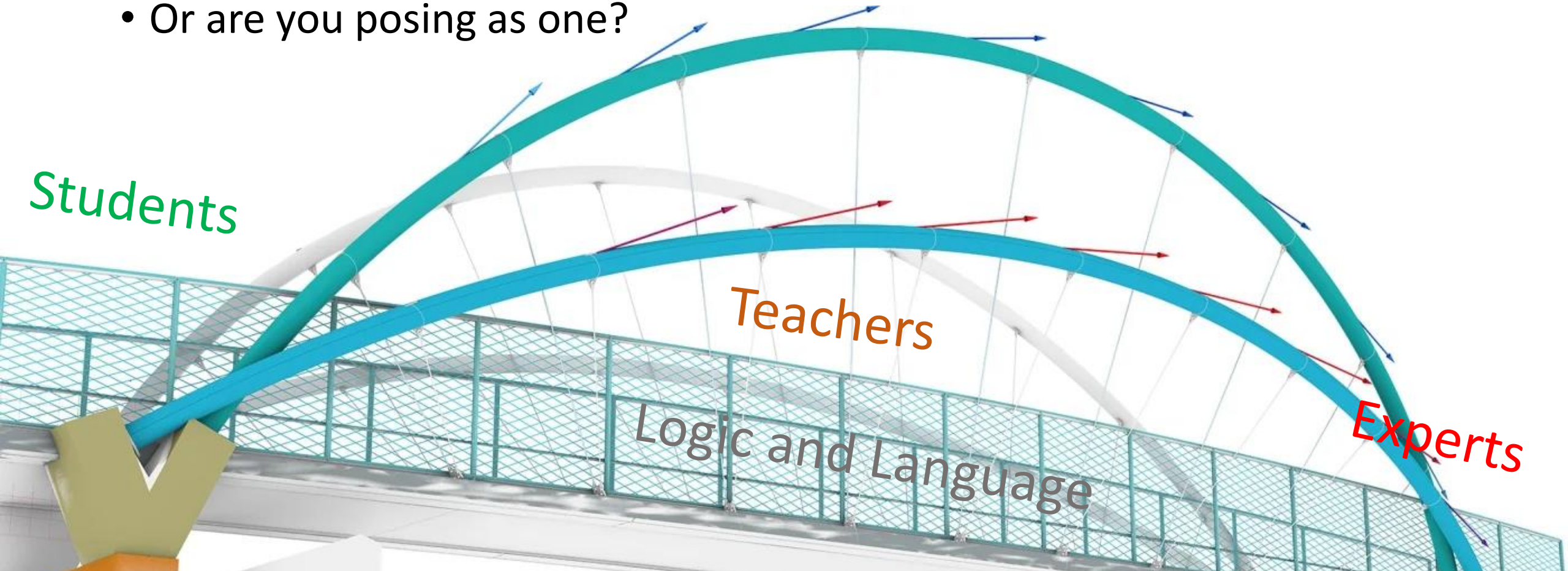


Elements of a cMOOC (online learning)



What model are you teaching your students?

- Are you offering a *bridge* to an expert?
- Or are you posing as one?

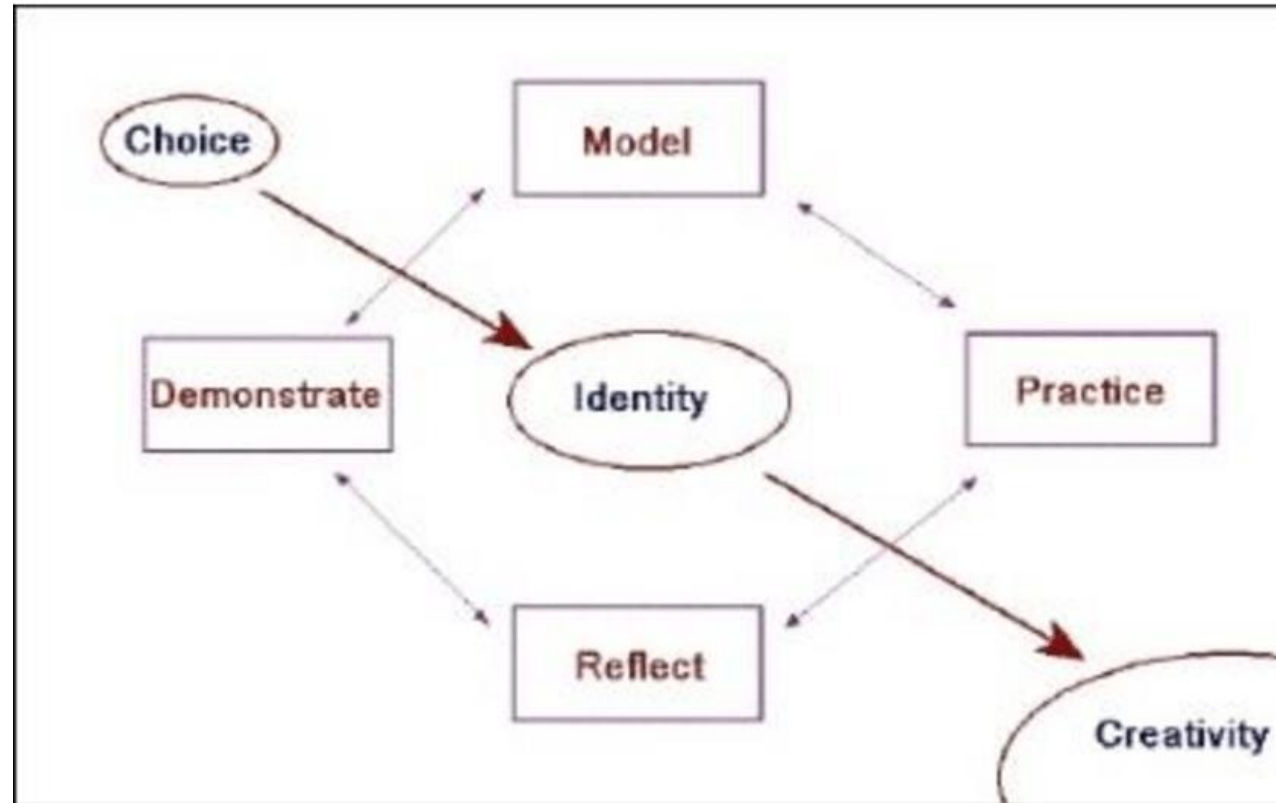


5. Finding my own voice

- The key to online learning isn't about finding courses or lessons or videos or whatever
- The key is to *use* all these (and whatever else you can find) to *create* your own learning online



To teach is to model and demonstrate...



To learn is to practice and reflect

Finding our community

- Create, find, or join online communities
 - Look for existing communities on sites like Facebook, Reddit
 - Search for events on sites like MeetUp - <https://www.meetup.com/>
 - Search for 'how do I...?' and find answers on discussion boards or Stack Overflow - <https://stackoverflow.com/>



Finding our community – Some Hints

- Key lesson: it's better to join an existing community than to start a new one on your own
- Look for people based on what they *do*, not what they know
- The more specific the search the better the match with a specific community (because the community is defined by *logic* and *language*)
 - e.g. don't search for bicycling, search for 'how to repair a derailleur'



Participation

- A four step model:
 - Read
 - Share
 - Ask
 - Build



Example: how to participate in a geocaching community:

<https://www.geocaching.com/help/index.php?pg=kb.printer.friendly&id=4>

(How did I find this example: I searched for 'local geocaching community' on Google – a precise search like this is better than a vague search for 'geocaching')

Instead of offering digital lessons, demonstrate how *you* learn about something online

- Even if you're not good at it.
Especially if you're not good at it
- And make it genuine learning
about something you don't know
- Take your time and model the full
process from newbie to 133t

Southland steam engine club, NZ:

<https://southlandsteamengineclub.co.nz/>



Still not sure?

- Search for 'how to join a community' on Google
 - Find a few things you like
 - Try it out – does the advice work for you?
 - If it does, maybe write a blog post about it
 - Don't know how? Search for 'How to create a blog post' on Google
- Etc.

The main message: *don't wait to be taught!* It's not in the curriculum. Online learning is all about discovering for yourself.

Thank you

- Stephen Downes
- <https://www.downes.ca> <https://mastodon.social/@Downes>

