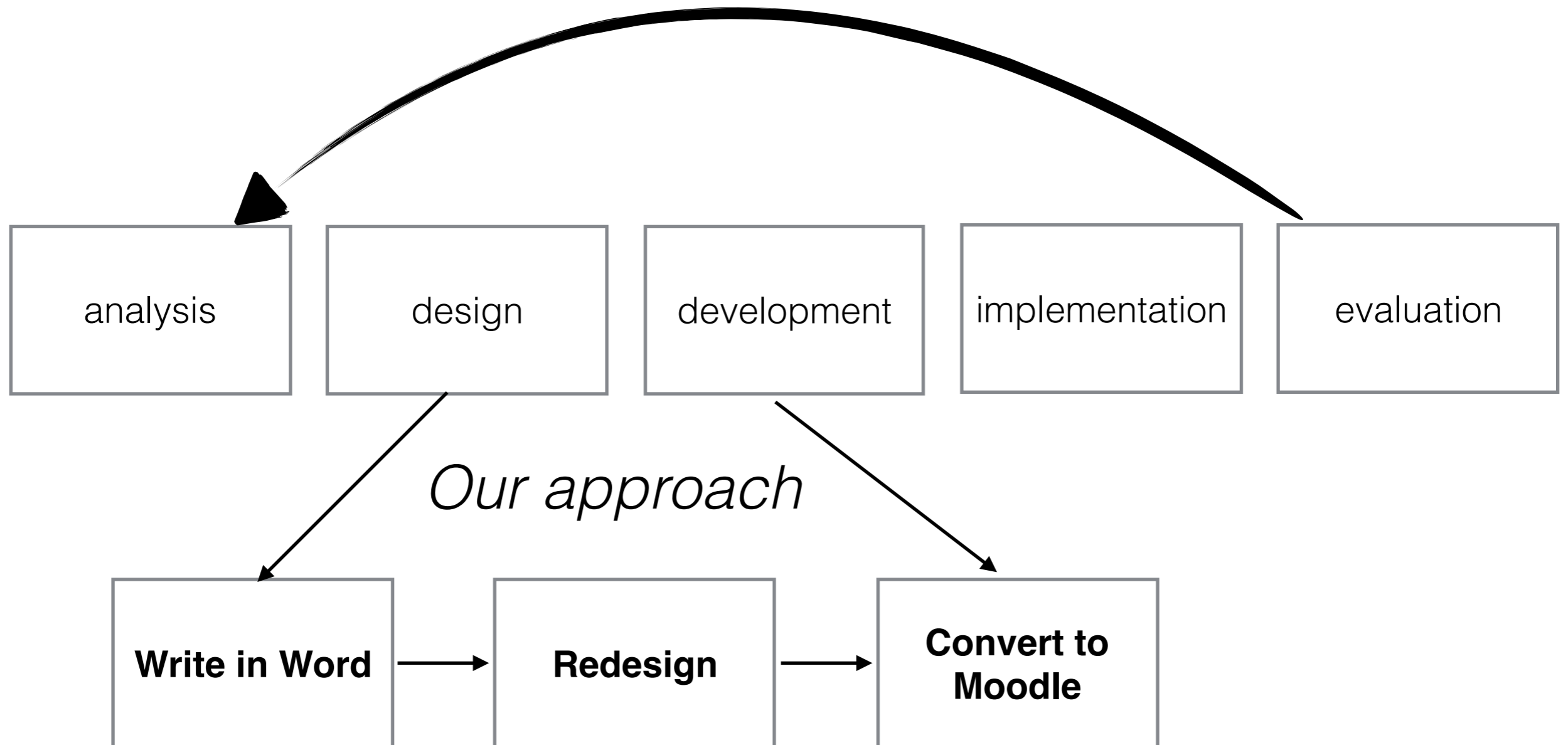


Instructional Bricolage

FST Workshop on Online Teaching, February 2015
Jon Dron



Traditional instructional design



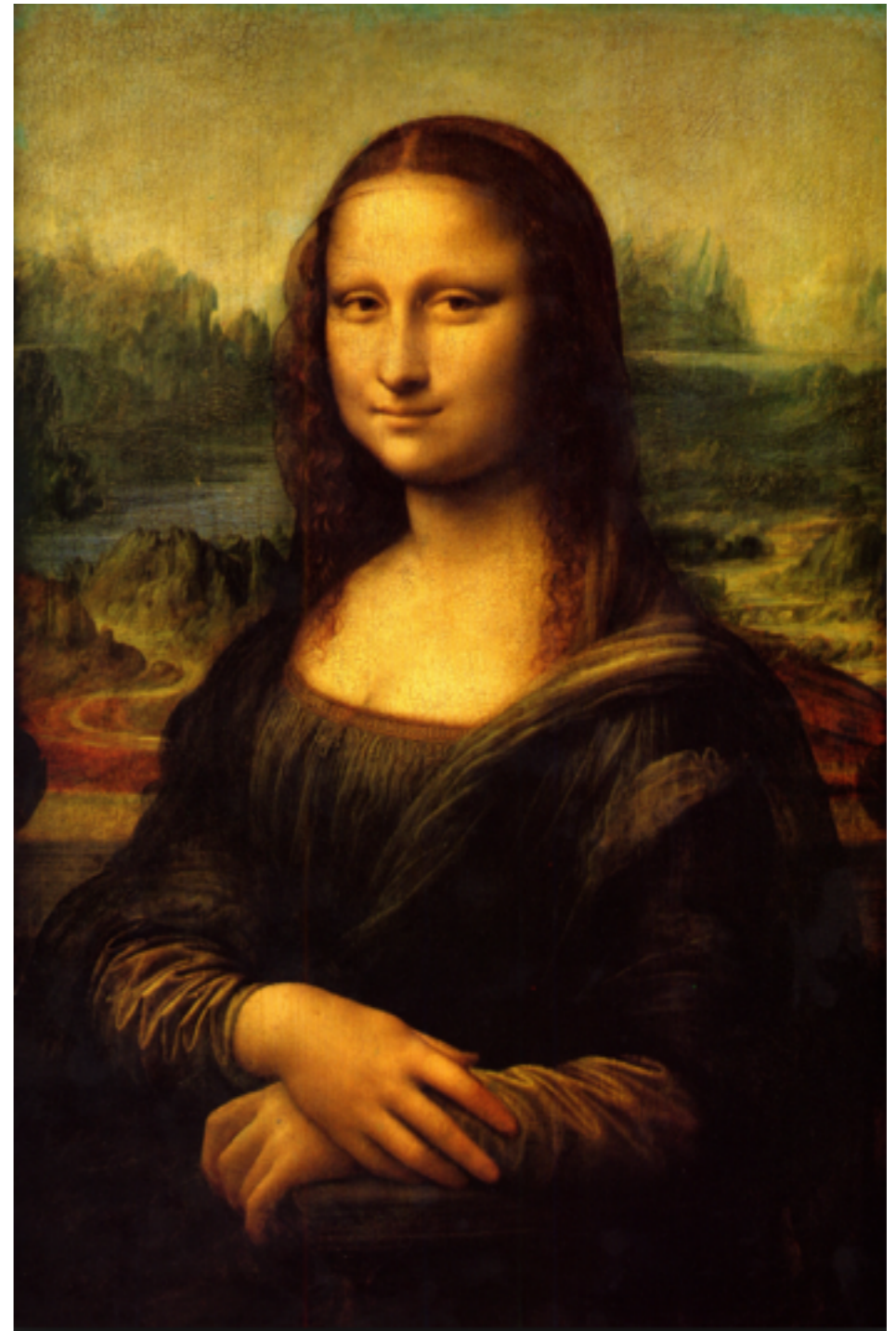
Why would you write a painting?



Well...



My Version



Leonardo's version

More like collage...



Or sometimes



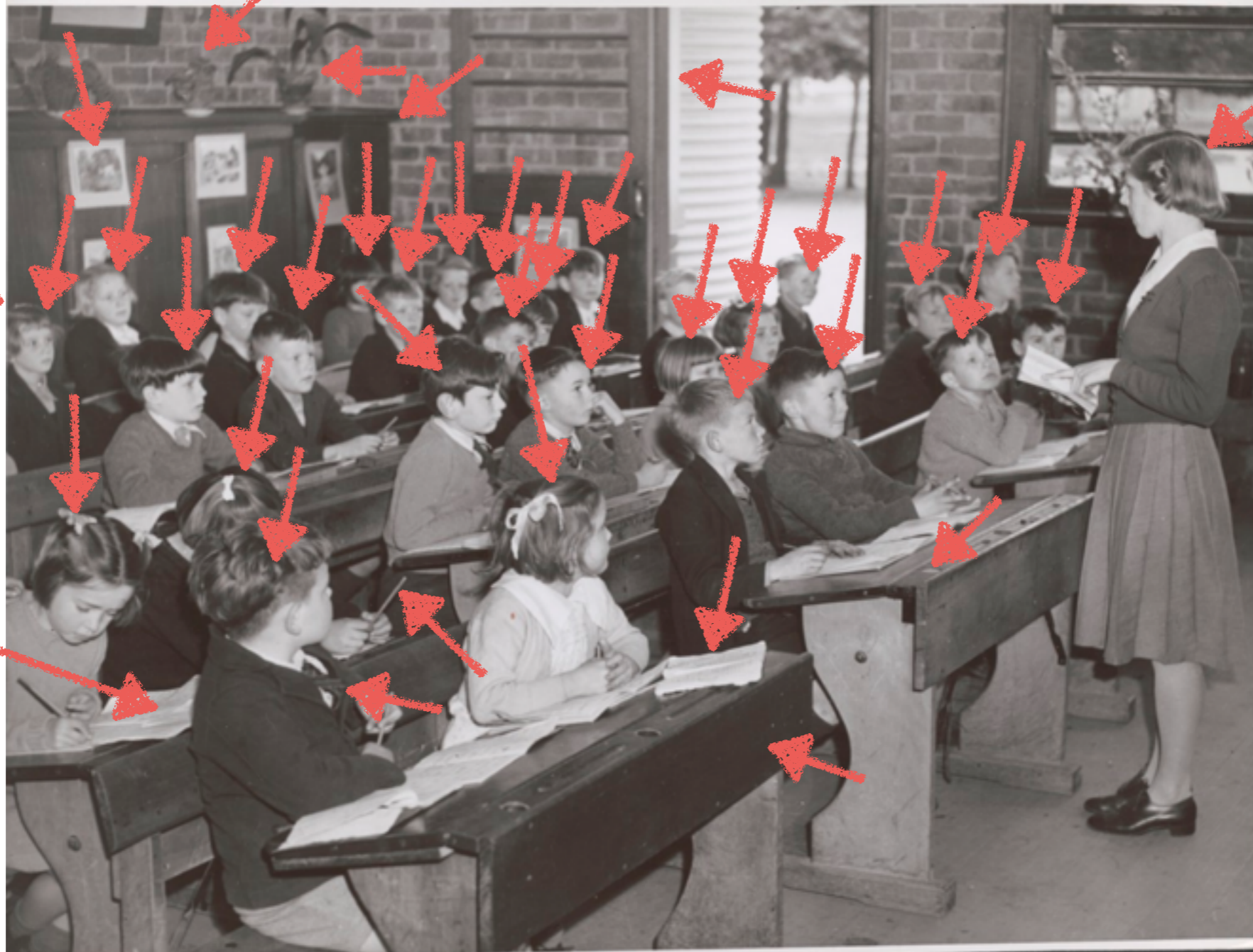
Planned outcomes



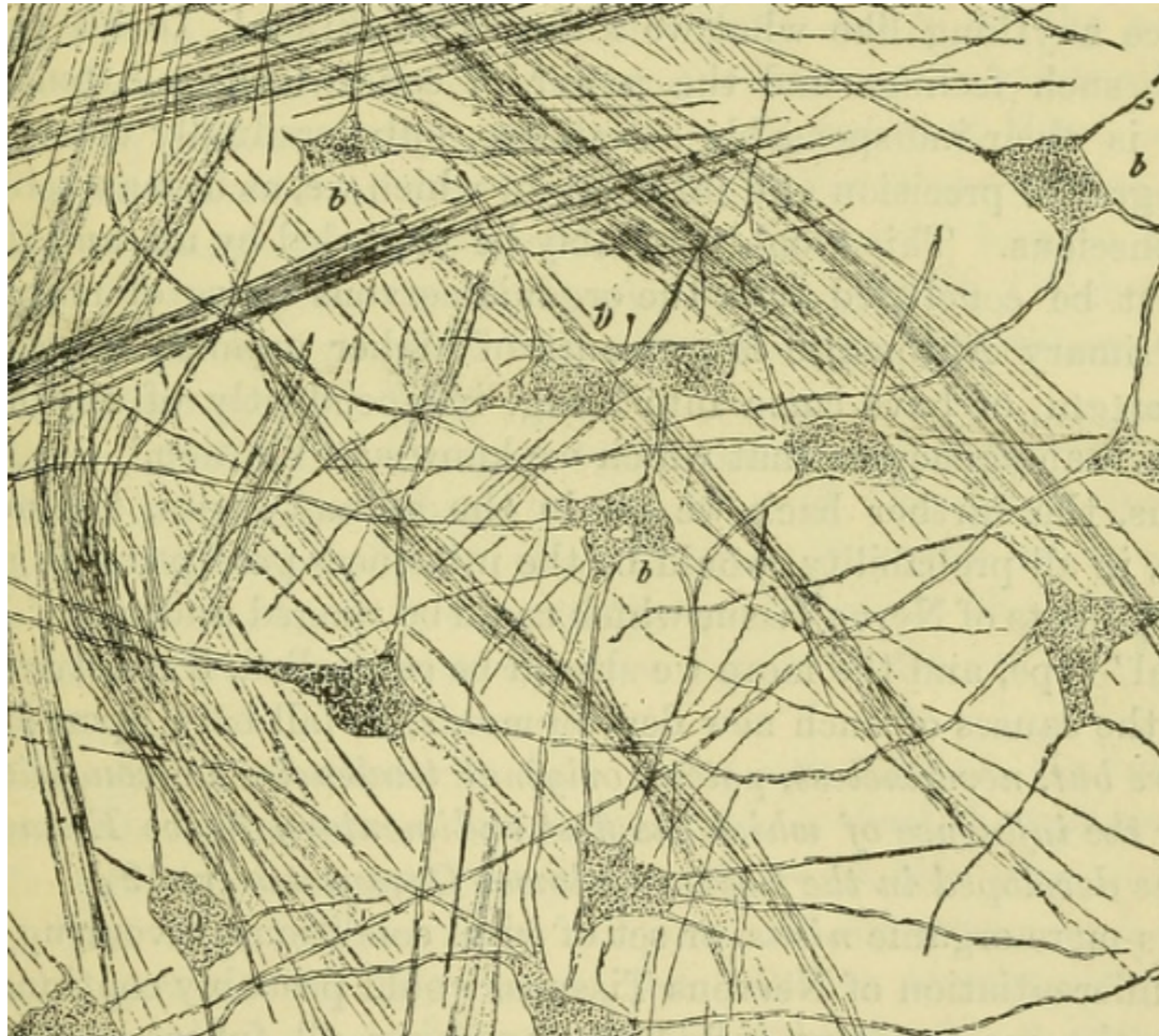
How many teachers are there
in this picture?



How many teachers are there
in this picture?



Learning is about much more than what we intentionally design



**Traditional formal
education is about...**

the stuff we are taught



the learning community



people we learn with and from



a culture of learning



exposure to ideas



challenging beliefs



**building
relationships
and
connections**



being
inspired

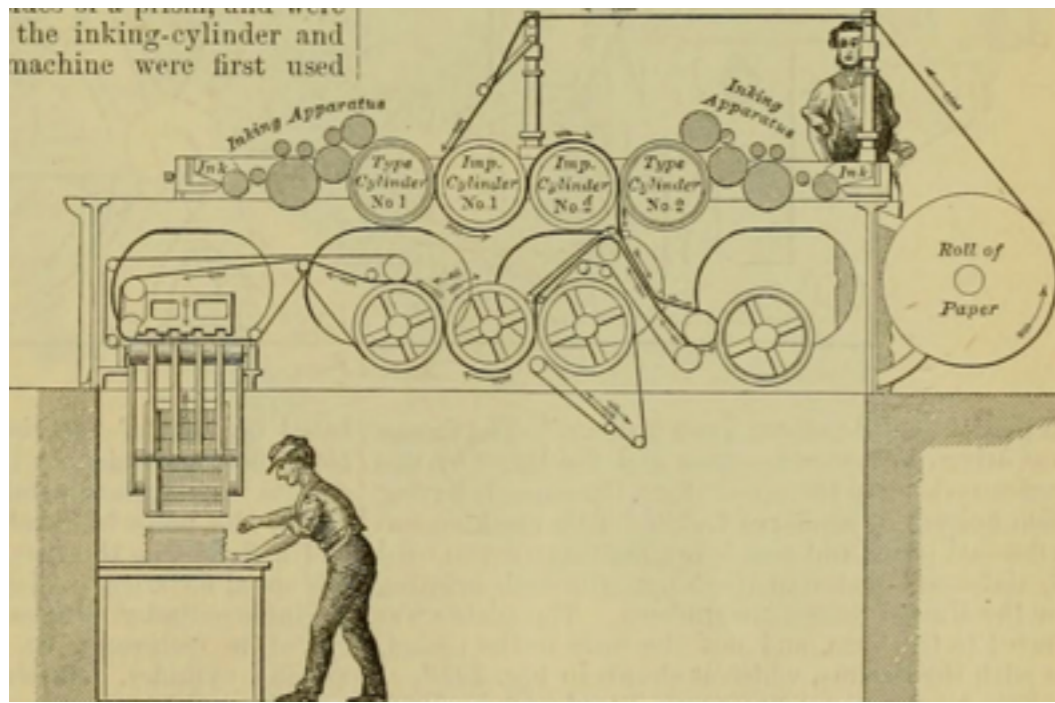




**Open, social ,unpredictable,
emergent**



**Another way of
thinking about designing**



Engineering vs bricolage





technology

“the orchestration of phenomena for some use”

(W. Brian Arthur)

pedagogies are
technologies



learning
technologies



where pedagogy is
part of the
orchestrated
assembly



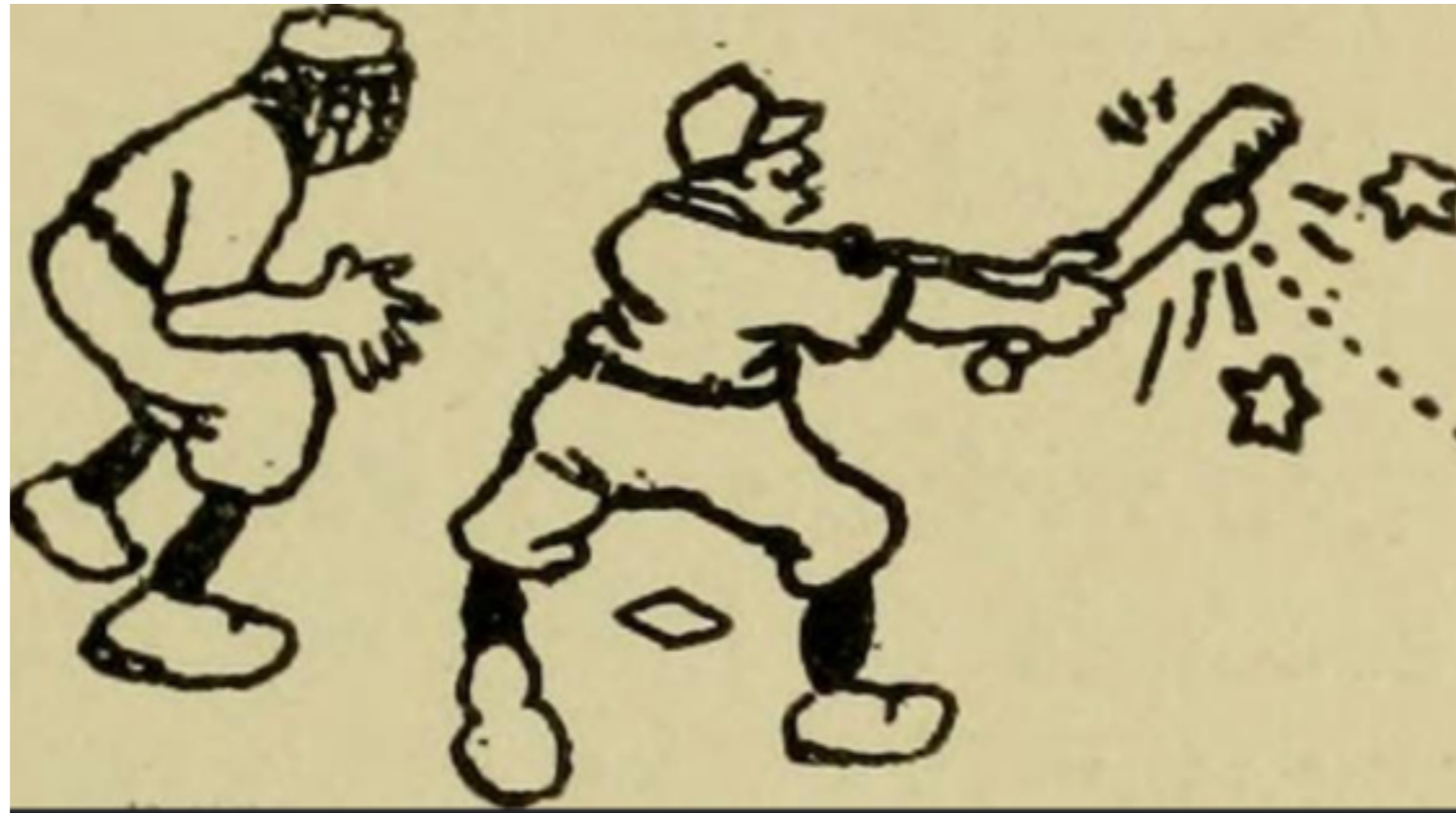


Surfing the adjacent
possible

Great exaptations



Reactive design



Ten
general
principles

1. Do not design - just build



http://commons.wikimedia.org/wiki/File:Lego_Color_Bricks.jpg
<http://creativecommons.org/licenses/by-sa/2.0/deed.en>

2. Start with pieces that are fully formed and useful

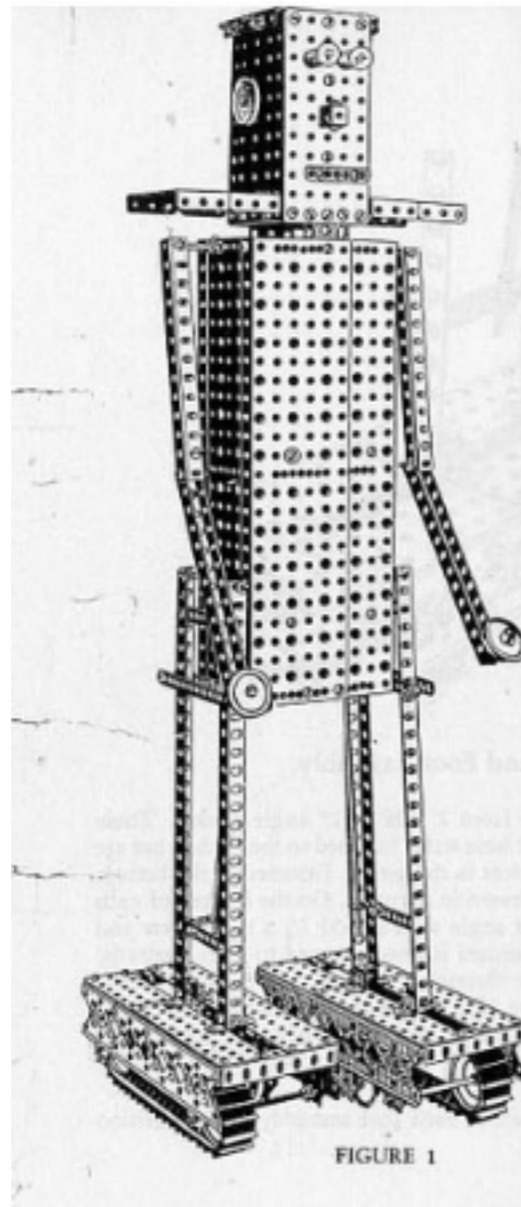


FIGURE 1

Models Built with No. 12-1/2 Erector

The Set that Builds the Mysterious Walking Robot

Instructions for Building The Mysterious Walking Robot Model

For many years, scientists all over the world have tried to build a robot or walking man. Now with your 12 1/2 Erector set or by purchasing enough additional parts to your smaller set, you can build a walking man.

Before starting to build the model you should become familiar with the various Erector parts and methods of assembly. The numbers (CH, AA, C, B, A, etc.,) referred to in this description and on the diagrams are called trade numbers. Trade numbers and pictures of the parts can be found in the index of your Erector manual.

Figure 1 shows the front view of the completed model. Figure 2 shows the rear view of the model. Study these, as well as all the other views very carefully.

As in all construction and model building it is best to start with small assemblies and build up to the final, completed model.

The first sub-assembly to build is shown in Figure 3.

THE A. C. GILBERT CO., NEW HAVEN, CONN., U.S.A.

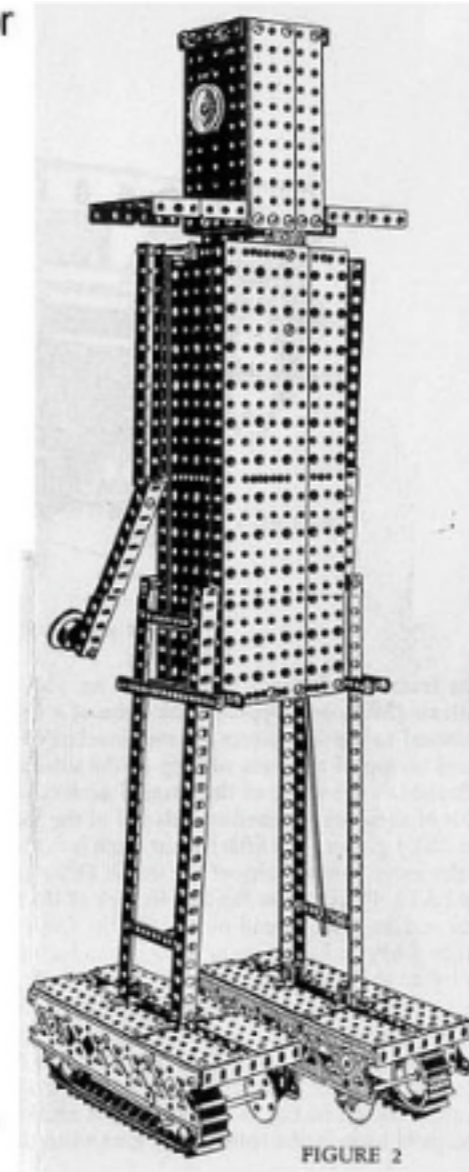


FIGURE 2

3. Surround yourself with quantity and diversity in tools, materials, methods, and perspectives



4. Dabble hard - gain skills, but be suspicious of expertise



5. Look for exaptations and surf the adjacent possible



6. Avoid schedules and goals, but make time and space for tinkering, and include time for daydreaming

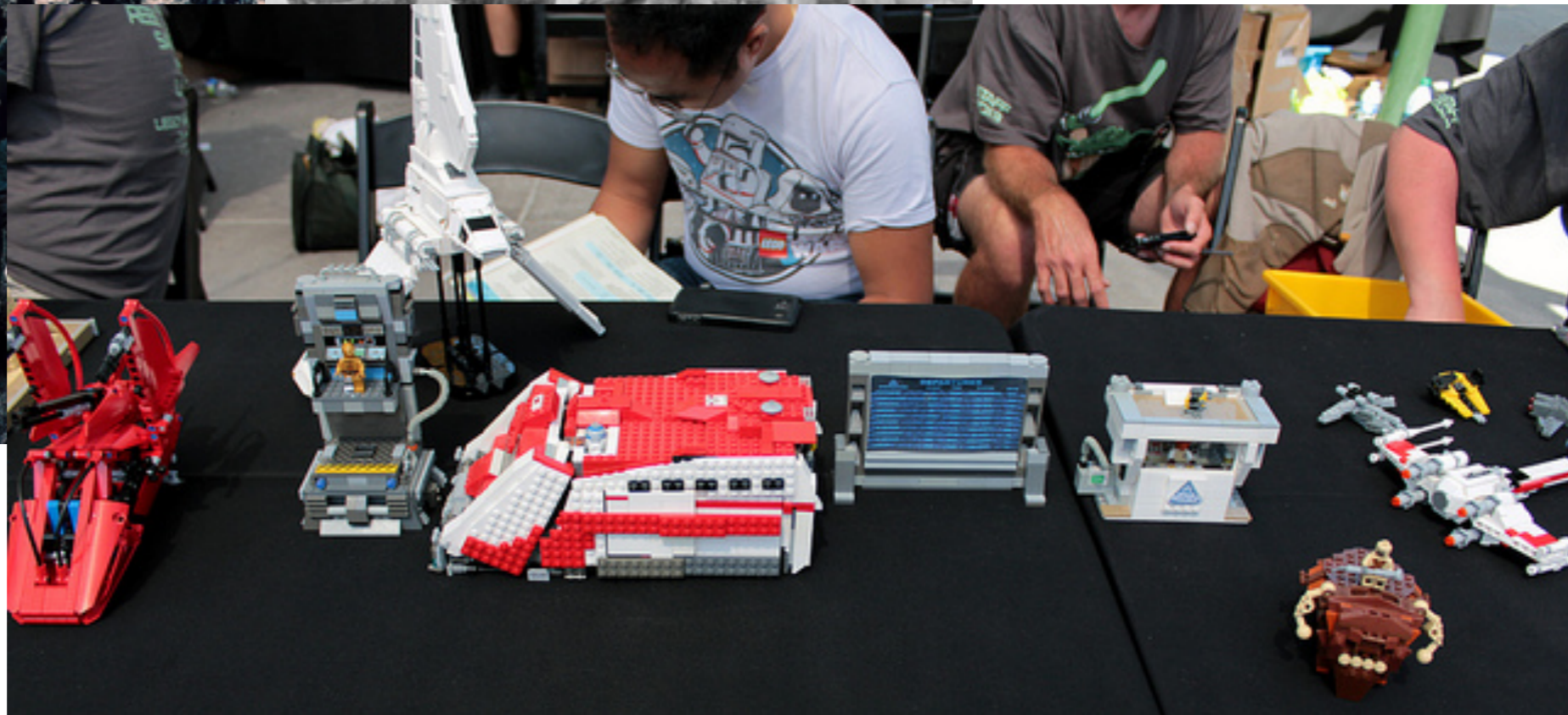
The image shows a vintage 'TIME TABLE 1974' for June 12. The table is divided into two sections: 'NORTH BOUND' and 'SOUTH BOUND'. Each section has columns for 'No.', 'ARRIVE', 'DEPART', and 'REMARKS'. The 'NORTH BOUND' section has one entry: No. 16, arriving at 6:15P and departing at 6:20P, with the remark 'PASSED 10:50'. The 'SOUTH BOUND' section has one entry: No. 15, arriving at 11:48AM and departing at 11:49AM, with the remark 'PASSED'. There are also some faint, partially legible entries in the 'REMARKS' column for both directions, including 'PASSED' and 'DUE'.

NORTH BOUND				SOUTH BOUND			
No.	ARRIVE	DEPART	REMARKS	No.	ARRIVE	DEPART	REMARKS
16	6:15P	6:20P	PASSED 10:50	15	11:48AM	11:49AM	PASSED
			PASSED				PASSED
			DUE				DUE
			PASSED				PASSED
			DUE				DUE

7. Do not fear dismantling and starting afresh



8. Beware of teams, but cultivate networks: seek people, not processes



9. Talk with your creations and listen to what they have to say



10. Reflect, and tell stories about your reflections, especially to others



**Not for all
But maybe for some**

Precision

replicability

accuracy

speed

ease of use

hard

control

creativity

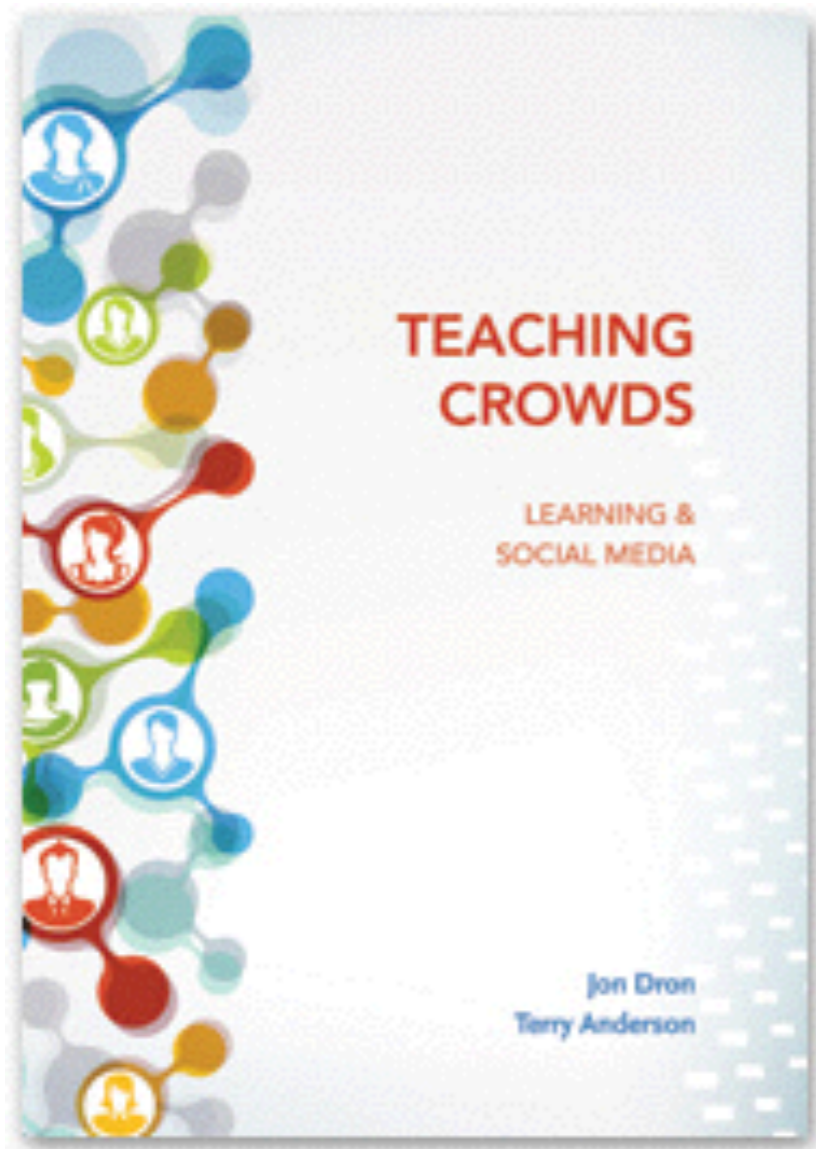
diversity

flexibility

resilience

easy

hard



✉ jond@athabascau.ca

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

g+ jondron@gmail.com

 <https://landing.athabascau.ca/profile/jond>

<http://teachingcrowds.ca>