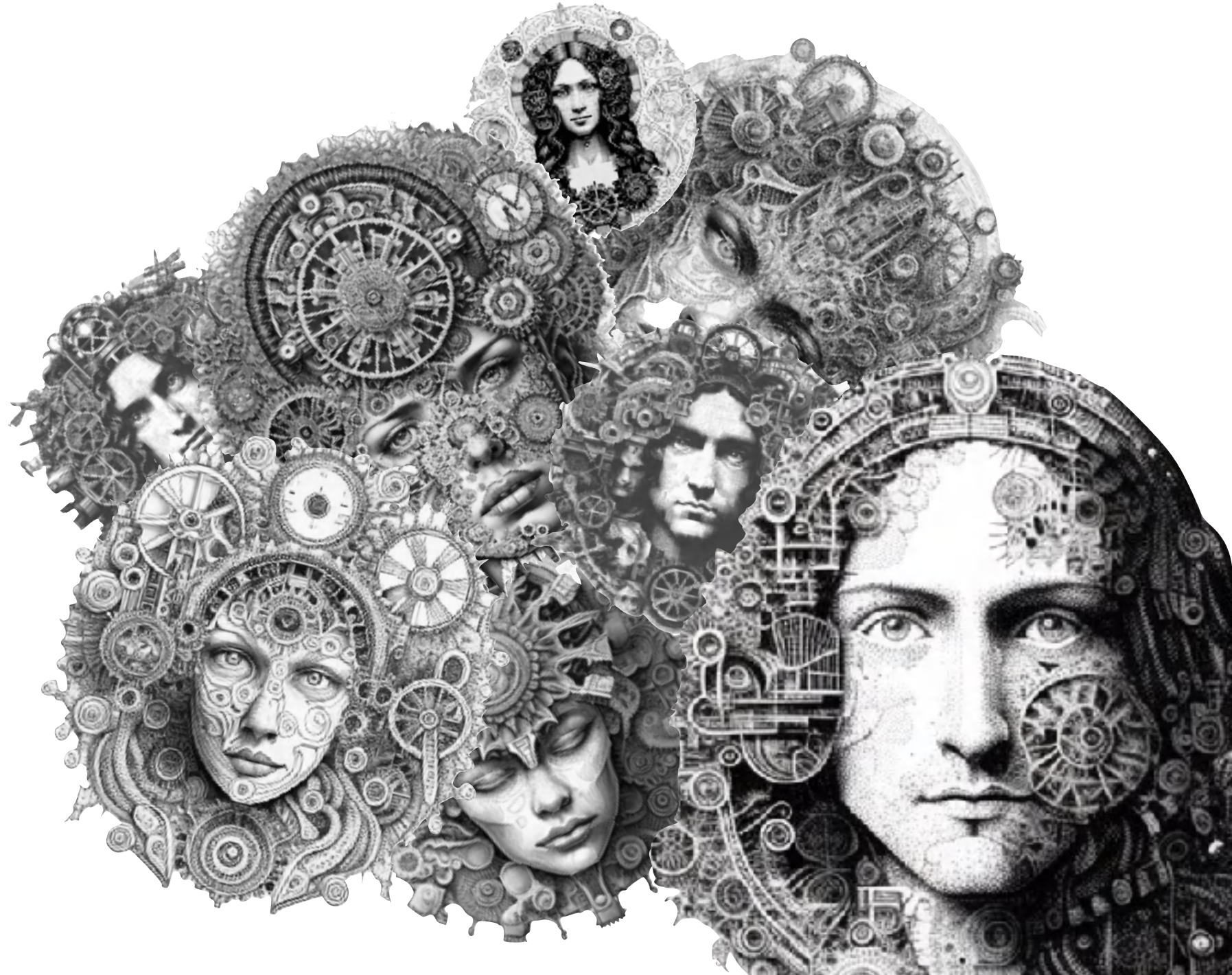


# Technological distance

## A new way of conceptualizing the “distance” in distance learning

Jon Dron, June 2, 2023



# Many concepts of distance

**physical distance:** in-person <-> not

**transactional distance:** high structure <-> high dialogue

## Community of Inquiry

teaching presence <-> teaching distance

cognitive presence <-> cognitive distance

social presence <-> social distance

emotional presence <-> emotional distance

agency presence <-> agency distance

**temporal distance:** synchronous <-> asynchronous





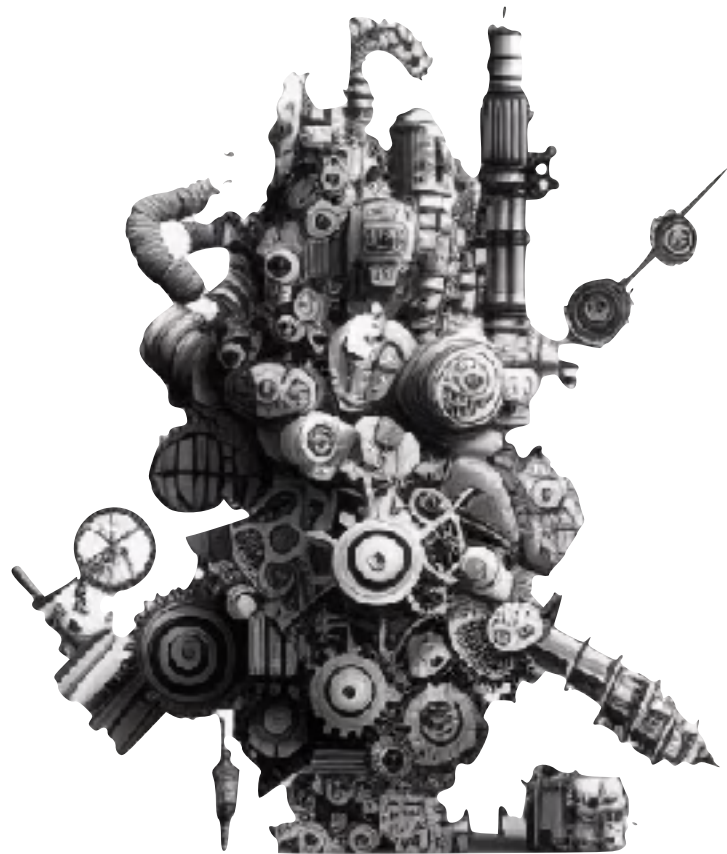
**“Distance”** in its conventional sense, as a gap between learners and their teachers and/or fellow learners, is rarely a useful concept. There are too many distances.





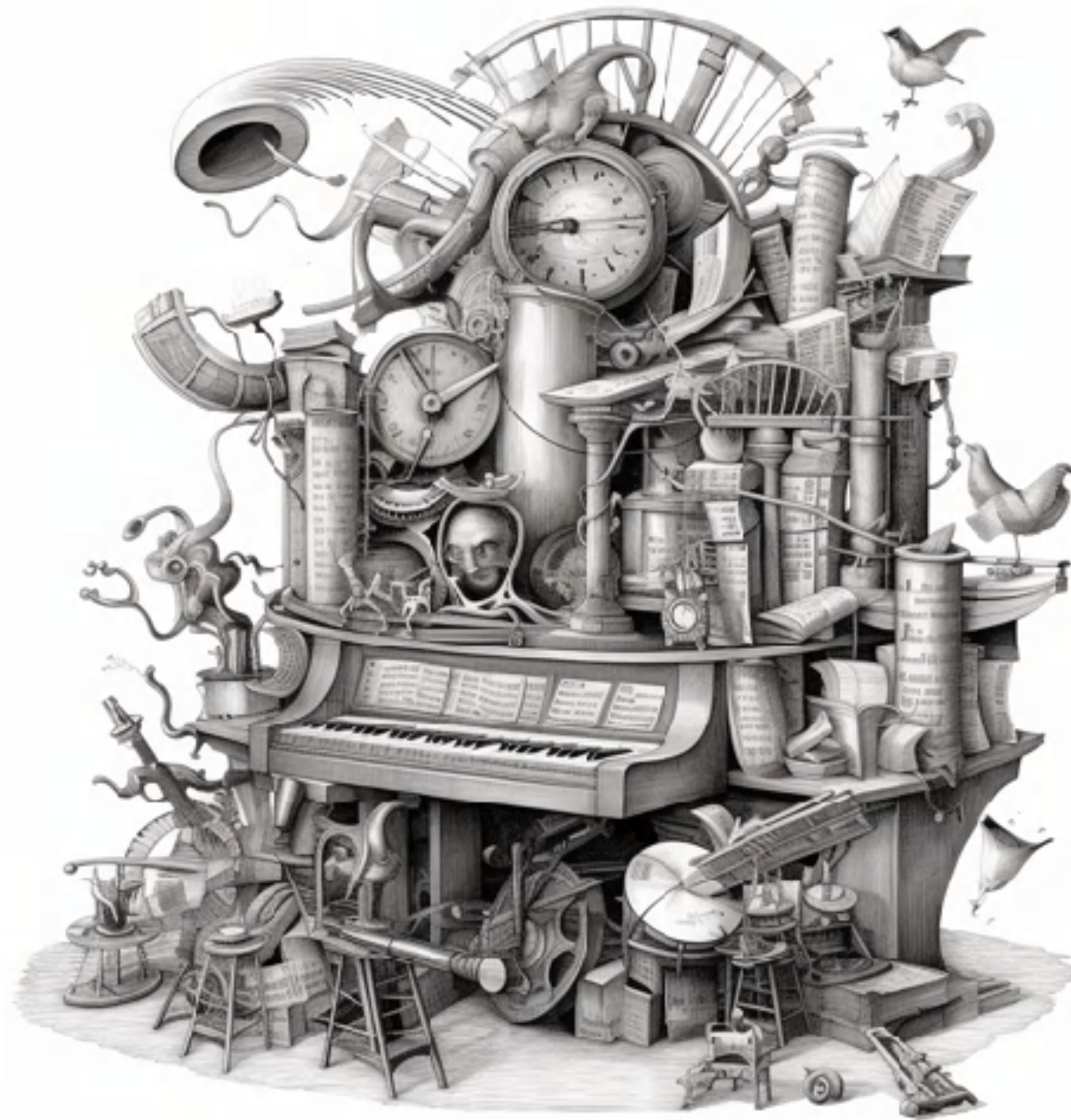
# ***Technology***

***The organization of stuff to do stuff.***



***Any stuff***

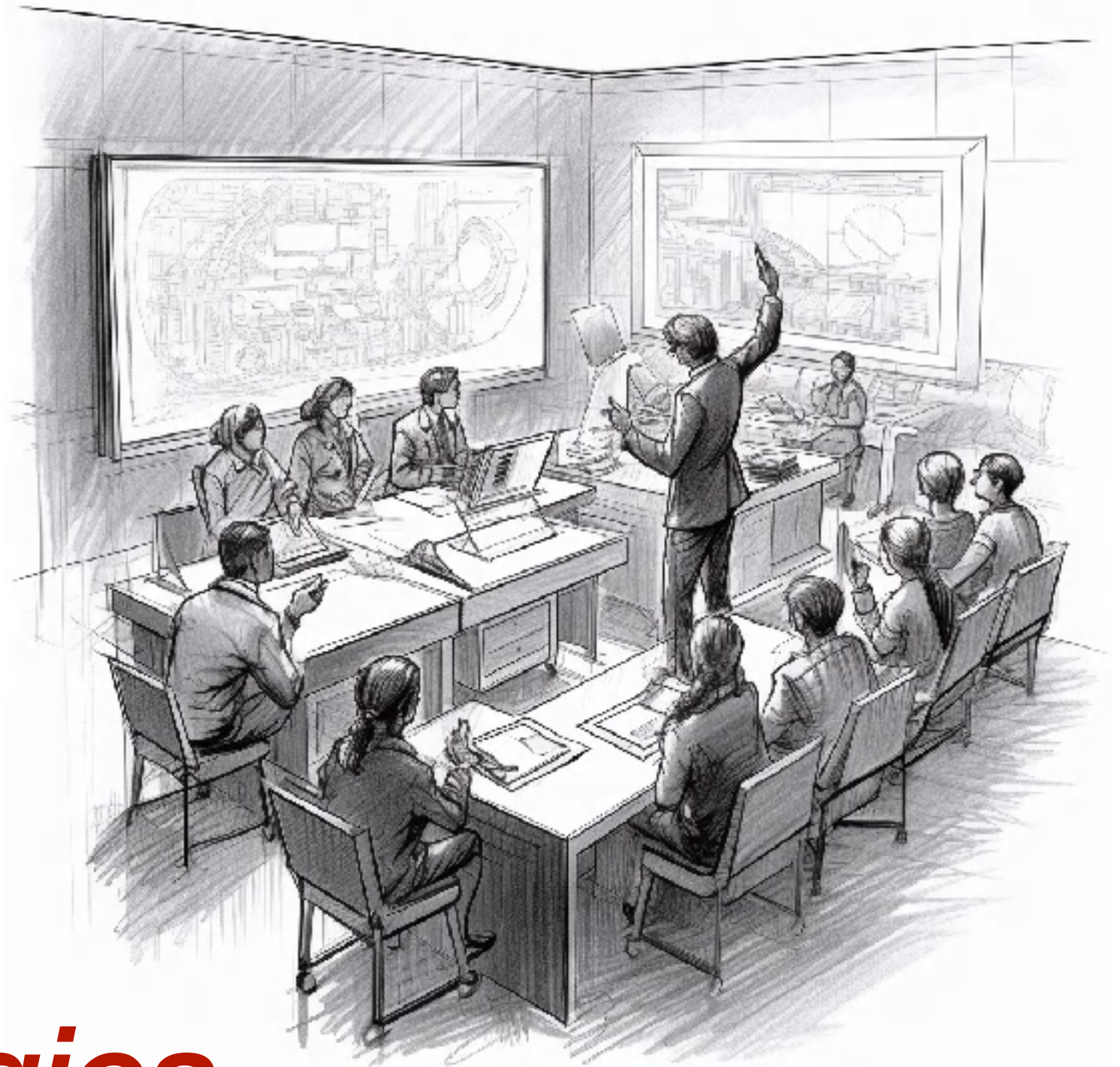
***Including other stuff that is organized to do stuff***



language, poetry, and **pedagogies** (methods of teaching) are technologies, too



**Let's play**  
***Spot the***  
***Technologies***





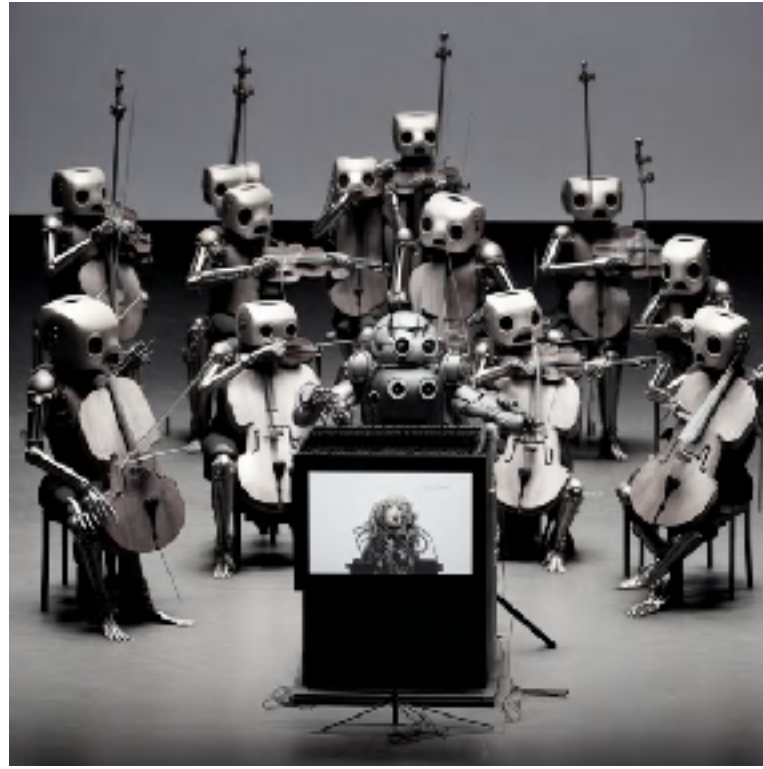
# cognitive gadgets

**Some technologies are parts of us**

# techniques

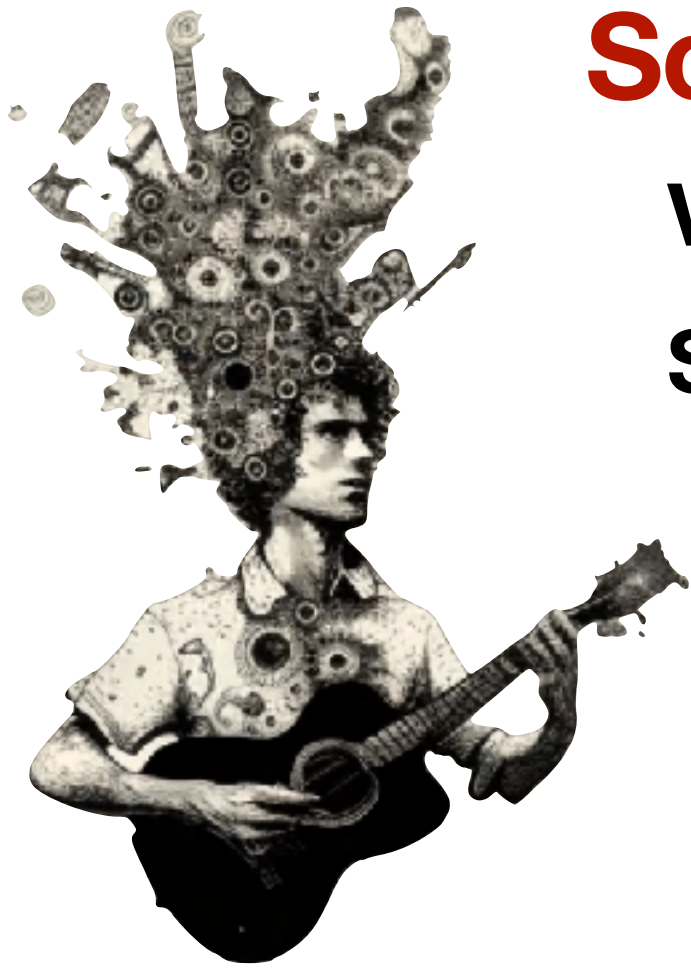
**We are parts of most technologies**





**Techniques are technologies  
enacted by people**





## **Soft technique**

we organize the  
stuff

## **Hard technique**

we play our part  
correctly in the stuff  
that is organized



# collective intelligence



**Through technologies,  
we participate in the  
minds of others**

**Through education we learn to participate in the technologies of our culture**





## Hard learning

the act of organizing the stuff; of assembling new techniques with those we possess to make new cognitive gadgets

## Soft learning

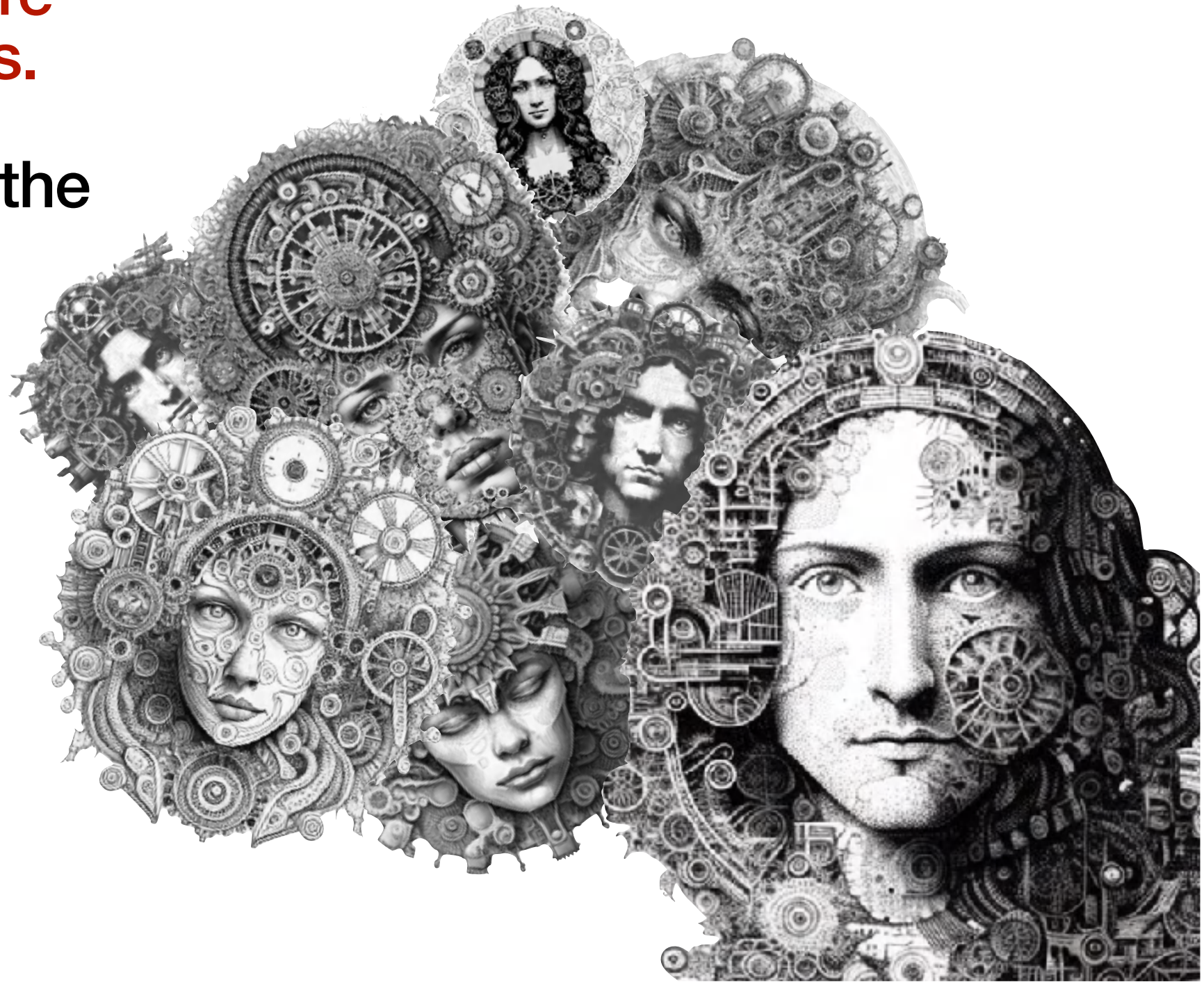
what we do with those cognitive gadgets; the idiosyncratic stuff; the stuff that really matters



# the collective teacher

**Designated teachers are  
never the only teachers.**

**They are seldom even the  
most important ones.**





**designated  
teachers**

**regulations**

**admin processes**

**pedagogical models**

**architecture**

**software**

**computers**

**other  
learners**

**professional bodies**

**classrooms**

**timetables**

**textbooks**

**web sites**



**The Learner**

quizzes  
boards of governors  
funders  
Stack Exchange  
instruction manuals  
whiteboards  
conversations  
bookshelves  
news stories  
pens  
interaction designs  
legislation  
essays  
cleaners  
papers  
radios and radio shows  
exams  
learning designers  
syllabi

boats  
email servers  
Google Search

cafes and bars  
corridors  
libraries  
support staff  
common rooms  
Wikipedia  
whiteboards  
past teachers  
letters  
signs and notices  
gardens  
chairs

arguments  
curricula  
printers  
notebooks  
clothing

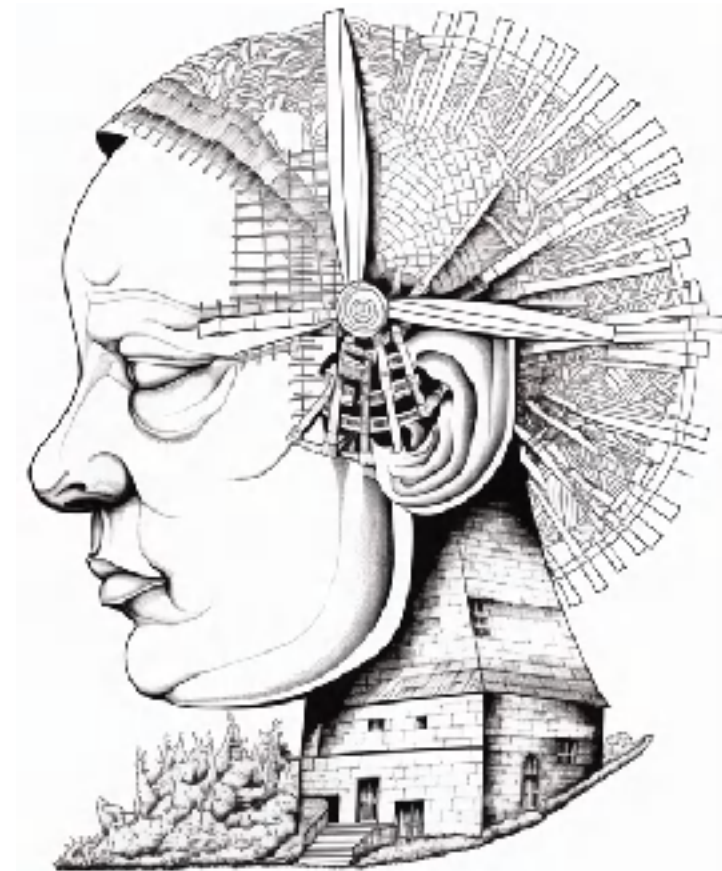


## Technological distance

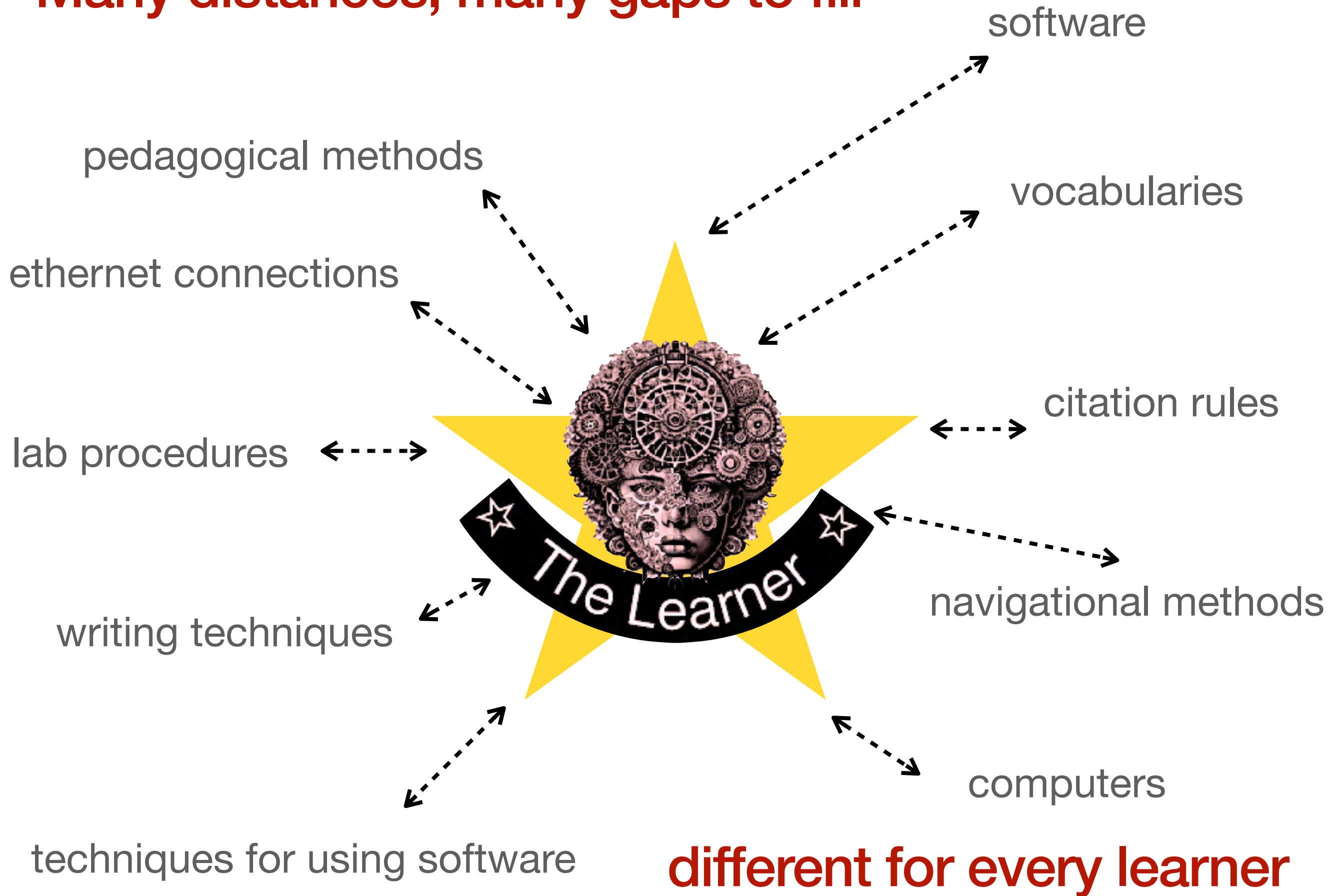
the sum of the gaps between the technologies we possess and those that we need in order to learn.

*All* the technologies.

Not just the grist but the mill



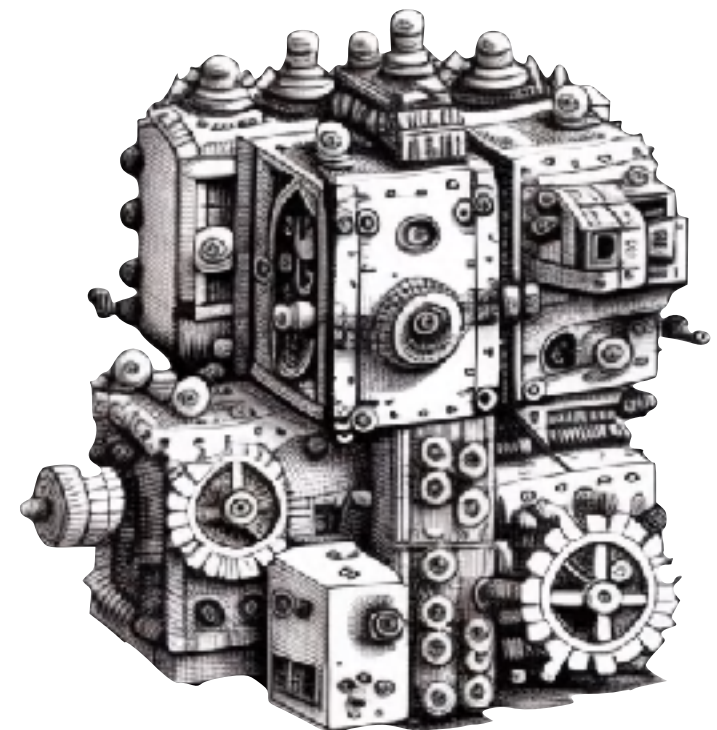
# Many distances, many gaps to fill



# Roles for teachers

## Teaching as technology

- reducing the technological distance where the technologies are *not* those we need to learn,
- making the technologies we *do* need easier to assemble/pre-assembling them
- creating opportunities to use them





# **BUT we are not the only teachers**

## **Basic principles for teachers**

**We cannot be in control: we must let go**

**We must understand the cognitive gadgets our students already have.**

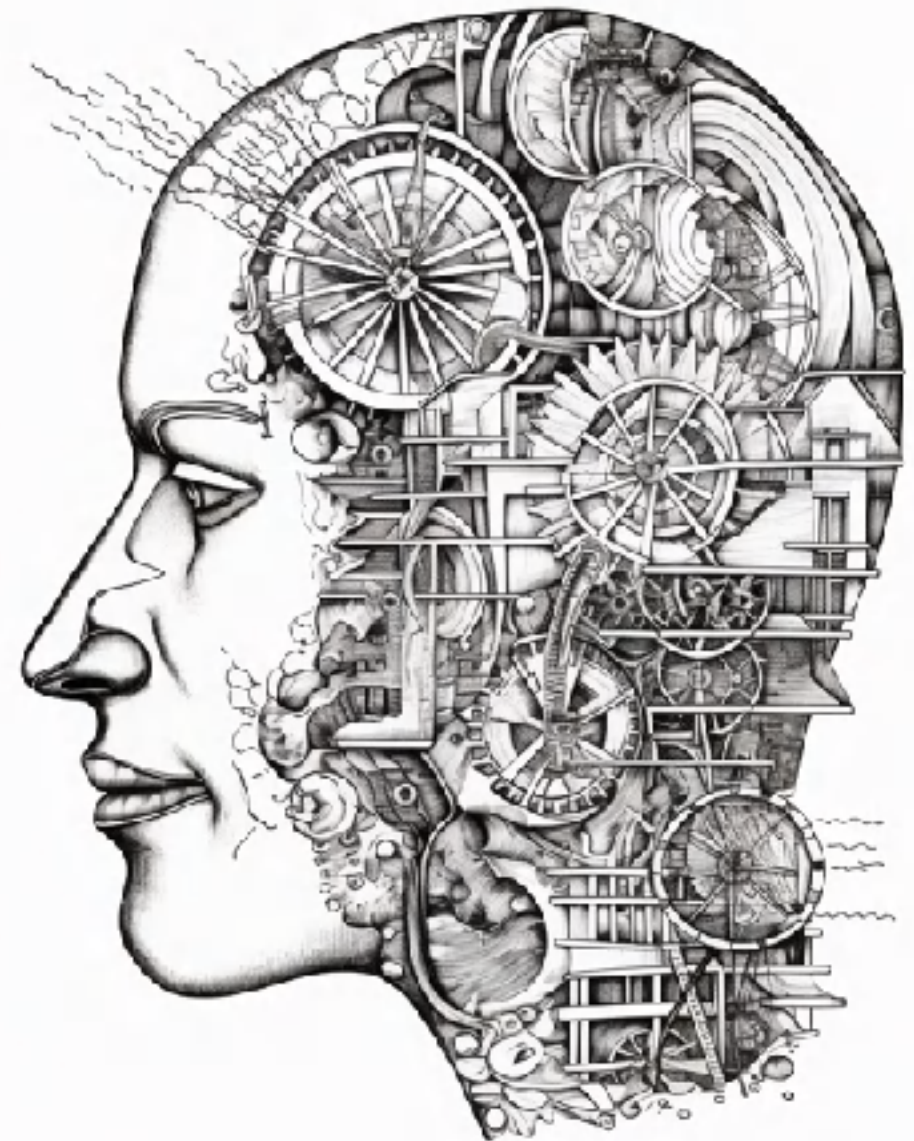
**We must understand how they are assembling new ones.**

**We must understand the whole.**

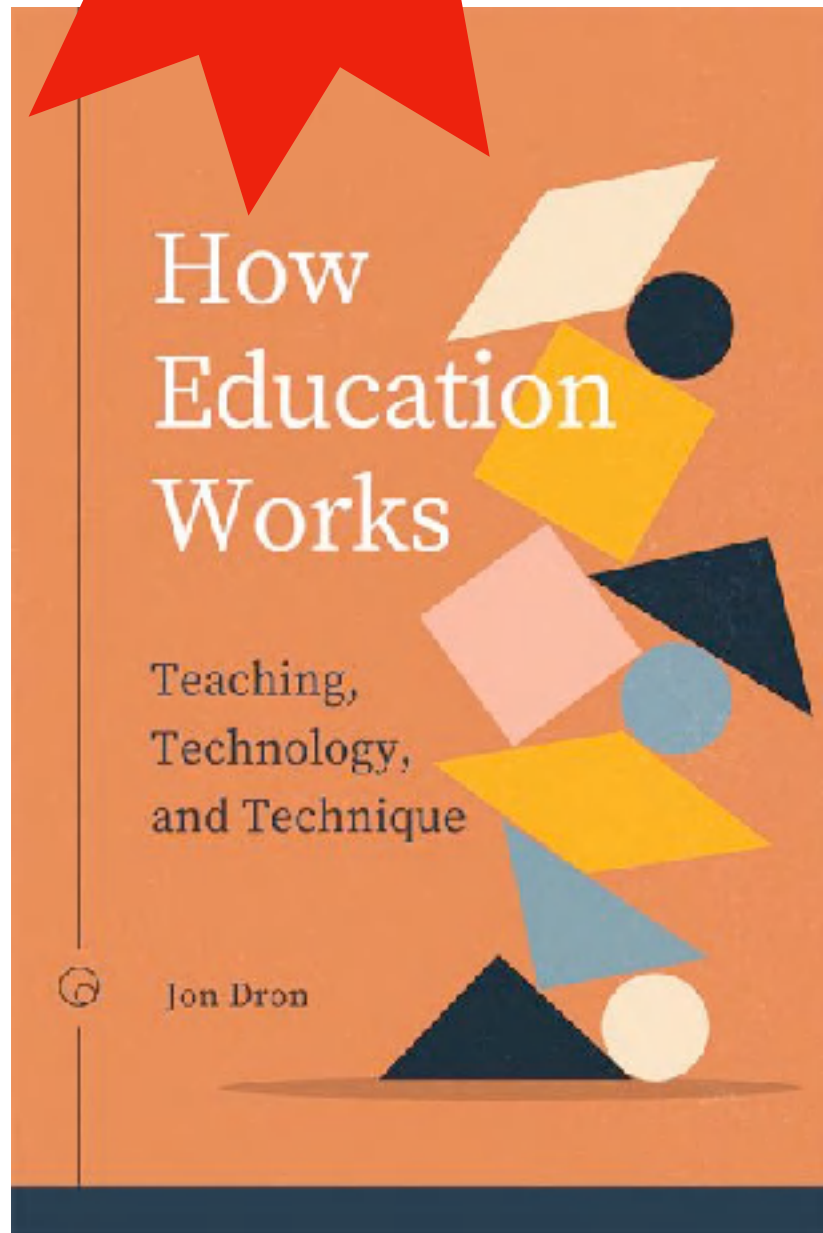
**But...**

**We cannot look inside their heads.**

**Learning itself, not just its products, must be visible.**



Due literally any  
day now!



# Thank you

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<https://howeducationworks.ca>

