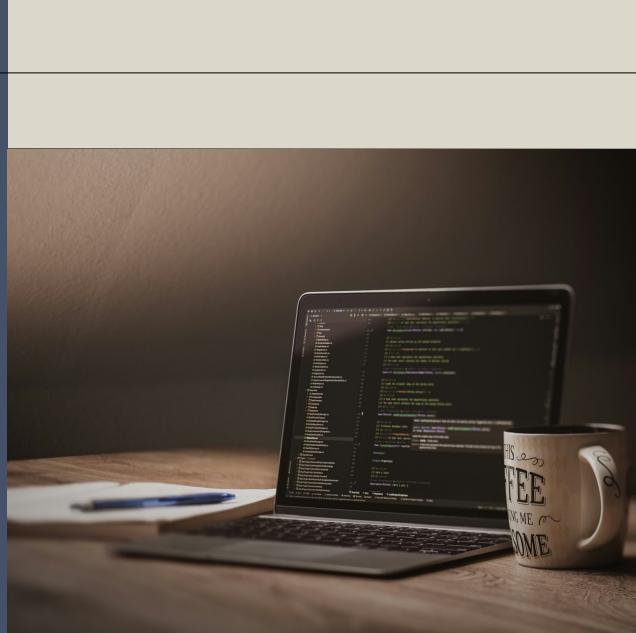


# Using AI Safely, Ethically, and Effectively in Schools

2025 Philippine Education Conference

04 DECEMBER 2025 (02:30 - 05:00 PM)  
SMX CONVENTION CENTER, PASAY CITY



JOHNNY C. GO SJ

1

AI  
OPTIMIST

## BOOSTER

AI  
PESSIMIST

## DOOMSTER

OPTIMISTIC  
ADVOCATE  
OF TECHNOLOGY  
EAGER TO REAP  
ITS BENEFITS

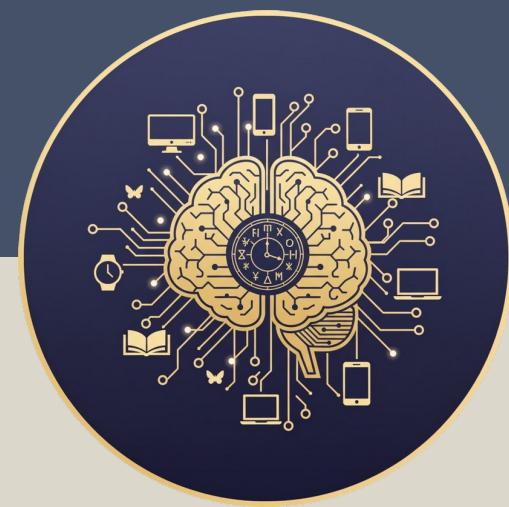
SUSPICIOUS CRITIC  
OF TECHNOLOGY  
ANXIOUS ABOUT RISKS  
& UNINTENDED  
CONSEQUENCES

**MEASURED ENTHUSIASM**  
**We ought to promote AI Literacy.**

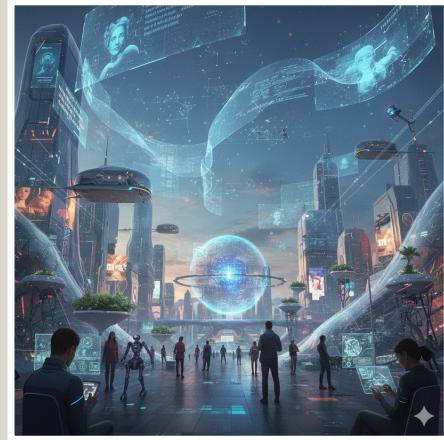
BIGUM & KENWAY (2005)

2

# An AI-SATURATED SOCIETY



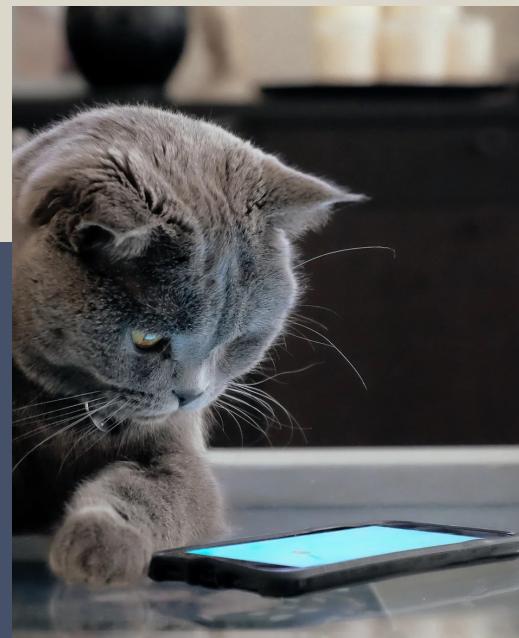
## An AI-DRIVEN WORLD



3

## AI PRAGMATIST

What should we begin doing today to cultivate a “measured enthusiasm” for technology?



4






**FAST CHANGING CONTEXT**

OUR MISSION  
OF EDUCATION  
CALLS FOR  
**RE-INTERPRETATION  
+ REINVENTION**

5



**HOW PEOPLE USE CHATGPT**  
(Chatterji et al, 2025)

**PRACTICAL GUIDANCE**

How-To Advice  
Creative Ideation  
Tutoring or Teaching  
Health, Fitness, Beauty, or Self-Care

**SEEKING INFORMATION**

Specific Information  
Purchasable Products  
Cooking and Recipes

**WRITING**

Edit or Critique Submitted Text  
Personal Writing or Communication  
Translation  
Argument or Summary Generation  
Write Fiction

6

3

## RESPONDENTS

280K EDUCATORS  
FROM 55 EDUCATION SYSTEMS  
Excluding the Philippines

- One in three teachers report having used AI in their work
- 75% of teachers in the United Arab Emirates & Singapore
- Fewer than 20% in France & Japan

- 68% of the teachers use AI to summarize a topic.
- 64% use it to generate lesson plans or activities, with most boosters in UAE & Vietnam (90%), and least in France (20%), Denmark & Finland (31%).
- Only 25% use it in reviewing data on student participation or performance.

**OECD TALIS 2024**  
TEACHING & LEARNING  
INTERNATIONAL SURVEY

7

TECHNOLOGY

**More than just an effective TOOL  
that can improve our work and lives**

**A powerful FORCE  
that shapes  
and  
transforms  
the way  
we work, live,  
think, and relate.**



8

# 3 STAGES OF DEVELOPMENT

## PERSONAL COMPUTER + BROADBAND INTERNET



World Wide Web  
(1989)  
High-Speed Internet  
(Early 2000s)

## SOCIAL MEDIA + SMARTPHONES



Facebook (2004) Instagram (2010)  
iPhone (2007) TikTok (2016)  
iPhone 4 (2010)

## GENERATIVE AI



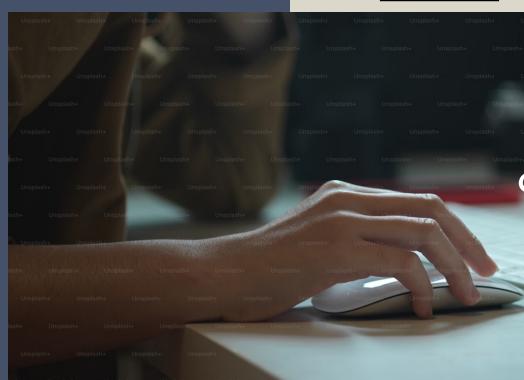
ChatGPT  
30 November 2022

9

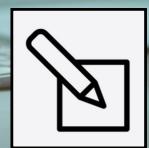
## Stage 1: PERSONAL COMPUTER & BROADBAND INTERNET



World Wide Web  
(1989)  
High-Speed Internet  
(Early 2000s)



FROM  
**CONSUMER**  
TO  
**CREATOR**  
& **CURATOR**



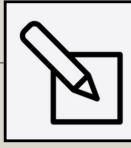
10



## FROM CONSUMER TO CREATOR



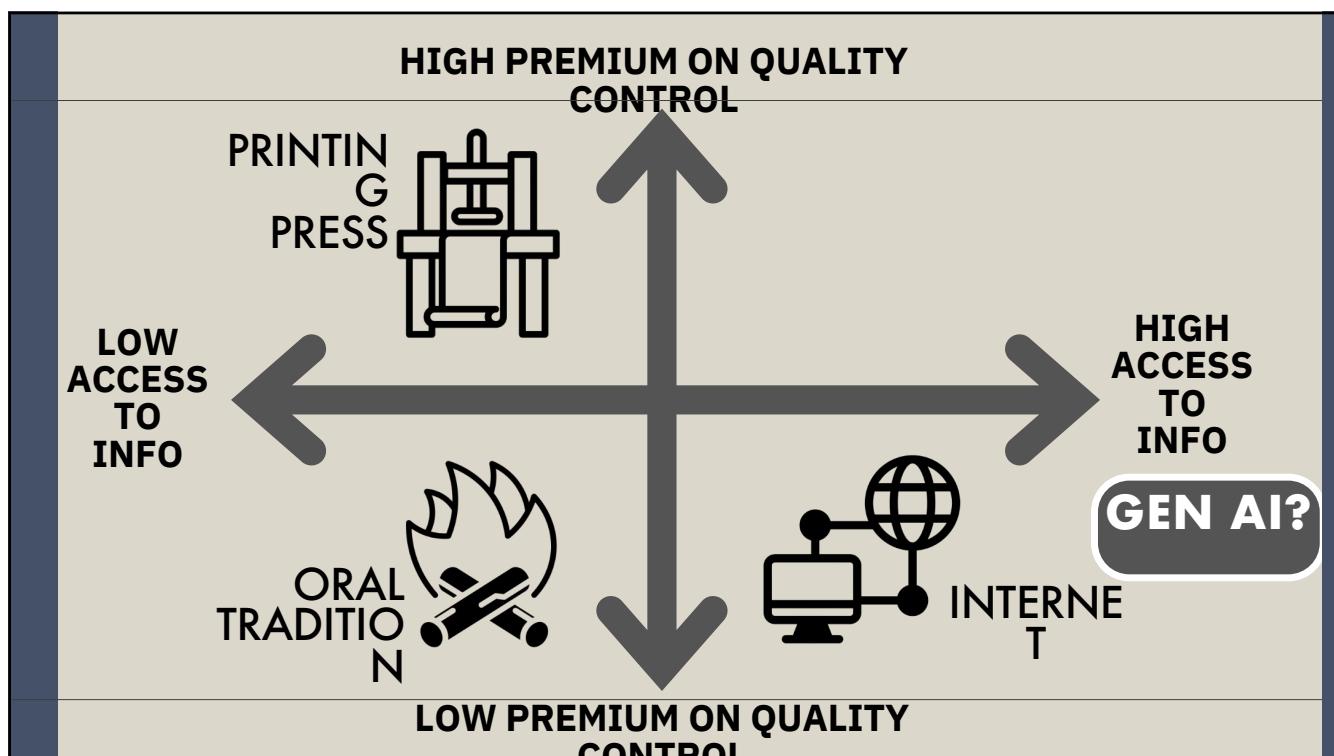
THE AGE OF INFORMATION



## ONLINE CONTENT POSTED PER SECOND

**6** new websites  
**46** Spotify tracks  
**270** TikTok videos  
**500** minutes of YouTube video  
**1,099** Instagram posts  
**4,050** Facebook photos  
**5,878** Tweets

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12



**THE WAY WE CONSUME**

**SKIMMING**

NOT DEEP  
READING OR  
THINKING

It's still possible  
but it's not our  
natural tendency.

CARR

13

**WE USED TO BE  
OF PERSONAL  
KNOWLEDGE.**



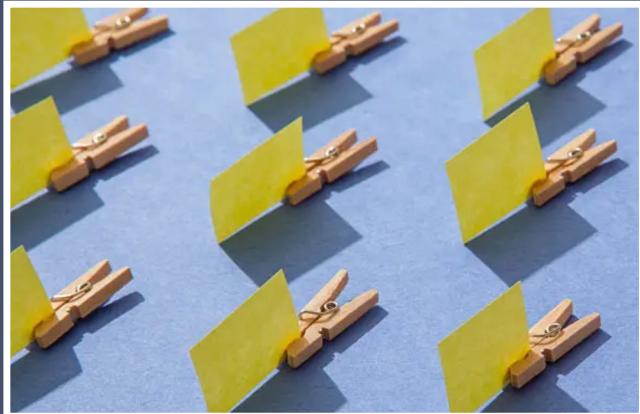
**CULTIVATORS**

- We patiently spent time and energy developing our knowledge.
- We critiqued and pruned unwanted or incorrect ideas.
- Our efforts did not always bear fruit.

CARR (2011)

14

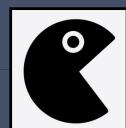
## TODAY MANY OF US HAVE LAPSED INTO HUNTERS & GATHERERS OF INFORMATION IN THE DIGITAL FOREST.



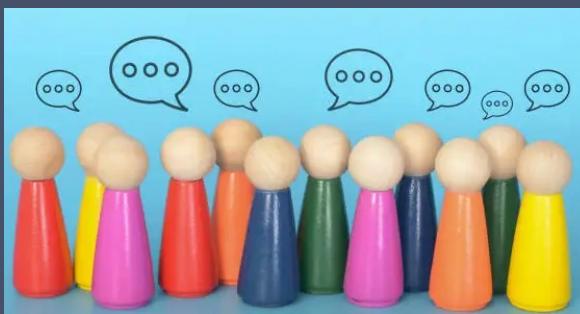
- “Copy-and-paste” culture
- The tendency NOT to read or think deeply—or to critique ideas.
- The premium on **PRODUCTIVITY**: “The faster and easier, the better!”

CARR (2011)

15



## FROM CONSUMER TO CREATOR



THE AGE OF  
PLURALISM



UNPRECEDENTED SENSE OF  
**UNCERTAINTY**

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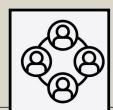
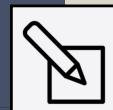
## Stage 2: SOCIAL MEDIA + SMARTPHONES



Facebook (2004) Instagram (2010)  
iPhone (2007) TikTok (2016)  
iPhone 4 (2010)

FROM  
**CONSUMER, CREATOR & CURATOR**  
TO  
**COMMUNITY**

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**FROM CONSUMER, CREATOR, & CURATOR TO COMMUNITY**



**TRIBALISM & POLARIZATION**

Algorithmic feeds that create digital silos.



**DISPOSABLE & LOW-COMMITMENT COMMUNITIES**

18



19

## An Environment of Constant Distraction & Disruption

Year	Average No. of Seconds per Screen
2004	150 sec
2012	75 sec
2023	40 sec

**The need to exert a constant effort just to hold a single train of thought**

20

10



**THE GOAL OF FACEBOOK**

**“...to consume as much of your time and conscious attention as possible.”**

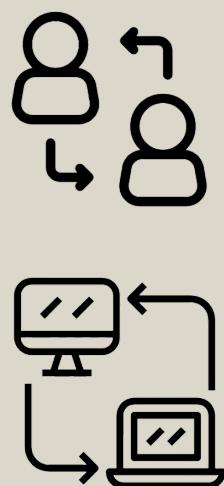
**- Sean Parker, 2004**  
First Facebook President

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**Stage 3: GENERATIVE AI**



ChatGPT  
30 November 2022



FROM  
**HUMAN** CONSUMER,  
CREATOR/CURATOR,  
& COMMUNITY  
TO  
**AI** CONSUMER,  
CREATOR/CURATOR,  
& COMMUNITY

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## AI AS CONSUMER

THE WAY AI LEARNS IS CALLED **MACHINE LEARNING**.

AI IS FED A HUGE AMOUNT OF DATA ("**TRAINING DATA**") AND LEARNS TO RECOGNIZE PATTERNS ON ITS OWN.

ONLY BY **CONSUMING** DATA CAN AI LEARN AND IMPROVE ITSELF.

If AI "learns from the world," problems will arise if the training data fed to it is...

**PRIVATE, BIASED,**  
or **INTENTIONALLY FALSE/HARMFUL.**

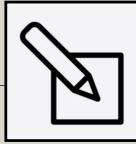
SECURITY

UNFAIRNESS

COPYRIGHT

OTHER RISKS

23



## AI AS CREATOR

# AI-CREATED FRANCIS

gloria.perricone 1d

imagine 🙏 ❤️

The most beautiful video ever created with AI

Credits: twai

#popefrancis #papafrancisco #papafrancesco  
#vaticano #ai [See original](#)

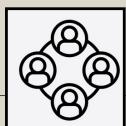


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**“AI?  
Just another tool!”**

25



## GEN AI

**“Not just a tool,  
but an **agent**.”**

YUVAL NOAH HARRARI

 OpenAI

26



Next Breakthrough

**AUTONOMY +  
PROACTIVITY**

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**Replika**

AI COMPANION APPS

**ARTIFICIAL  
INTIMACY**

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# THREE VERSIONS OF AN AI APOCALYSE

## IN THE WRONG HANDS



## AI TAKEOVER



## AI DEPENDENCY



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# S.E.E. : 3 ISSUES IN AI USE

## SAFE



## ETHICAL



## EFFECTIVE



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# THE EFFECTIVE USE OF A.I.

## HOW WE USE GEN AI WILL TELL US WHO IS DOING THE LEARNING OR THINKING: OURSELVES OR THE MACHINE?

31

# THE MATRIX THEORY OF THE MIND

**DOWNLOADING**  
Knowledge + Skills  
as fast and  
as efficiently  
as you can

MAXIMUM  
Productivity  
but  
MINIMUM  
User Effort



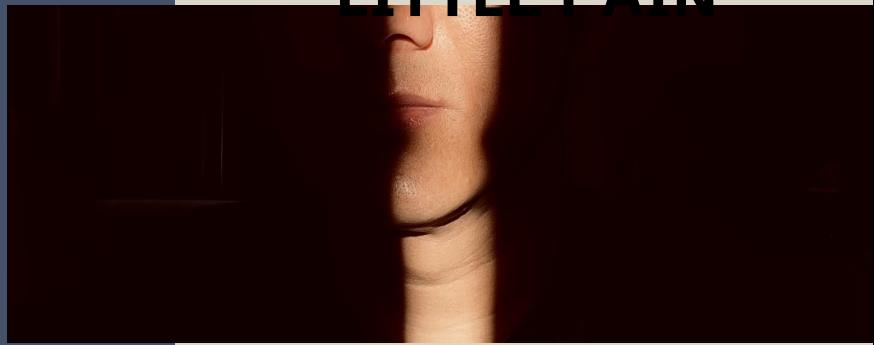
EZRA KLEIN

32

## THE TEMPTATION TO OUTSOURCE THE WORK ENTIRELY

But what happens  
to the process  
of thinking  
and learning?

**QUICK CONTENT**  
**MAXIMUM**  
**PRODUCTIVITY**  
**MINIMUM TIME & EFFORT**  
**LITTLE PAIN**



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## COGNITIVE DEBT



The loss of  
critical thinking  
because **one forgoes**  
**the process of thinking**  
**in order to get answers**  
**without understanding**  
**why the answers are**  
**what they are.**

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# COGNITIVE STRUGGLE

**It is important.  
It grows the brain.  
Mistakes spark the brain.  
DON'T SKIP IT.**



**The most creative ideas are born through the process of cognitive struggle.**

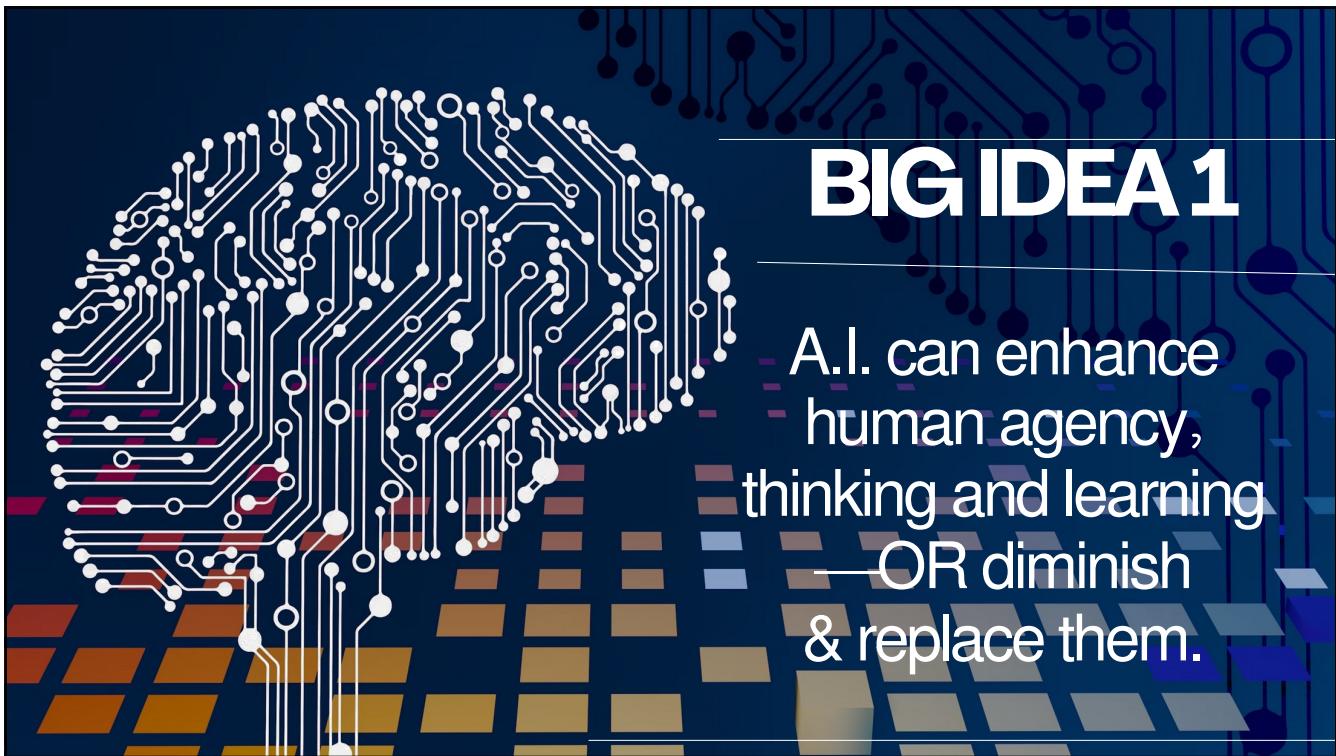
35

**Reflect on how you have been using technology, especially AI technology.**

**Is your use of AI ENHANCING your thinking?  
Or is it diminishing—or altogether replacing—it?**



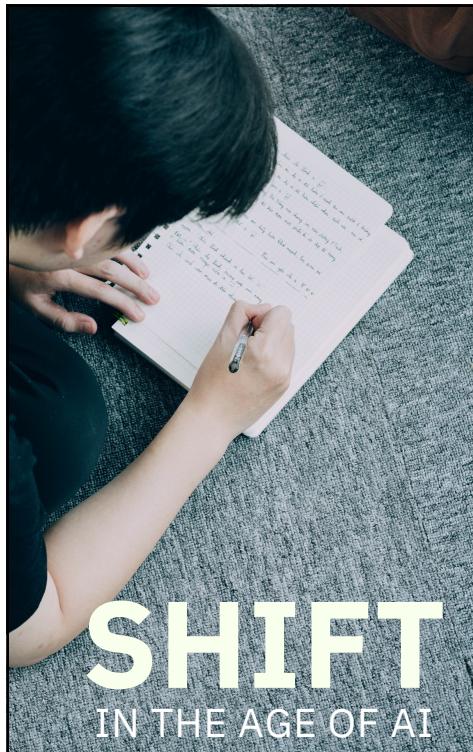
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TRANSMITTING  
THE  
**PRODUCTS**  
OF EDUCATION

DESIGNING THE  
**PROCESSE**  
**S**  
OF EDUCATION

CONTENT  
FACTS  
CONCEPTS  
KNOWLEDGE

THINKING  
LEARNING  
ANALYZING  
REFLECTING

## A NON-MATHEMATICAL CALCULATOR?



It is perfectly appropriate and desirable to use a calculator—*but if and only if* we have learned **the basic arithmetic operations**.

Likewise, what processes do we need to learn first in a discipline before we should avail of the shortcuts provided by AI?

# LEARNING THE WRITING PROCESS



- BRAINSTORMING
- OUTLINING
- WRITING A DRAFT
- REVISING

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**What PROCESSES  
do we consider  
essential that  
our students need to  
learn in our subjects?**

READING  
WRITING  
ANALYZING DATA  
GENERATING INSIGHT  
VERIFYING A HYPOTHESIS  
CREATING A HISTORICAL ACCOUNT



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## “DESIRABLE DIFFICULTIES”

**SCAFFOLDED** Deliberately designing challenges to slow down learning for the purpose of enhancing the thinking process and producing more durable & flexible learning.

R. A. BJORK (1994)



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## UNDESIRABLE DIFFICULTIES *to be minimized*



## DESIRABLE DIFFICULTIES

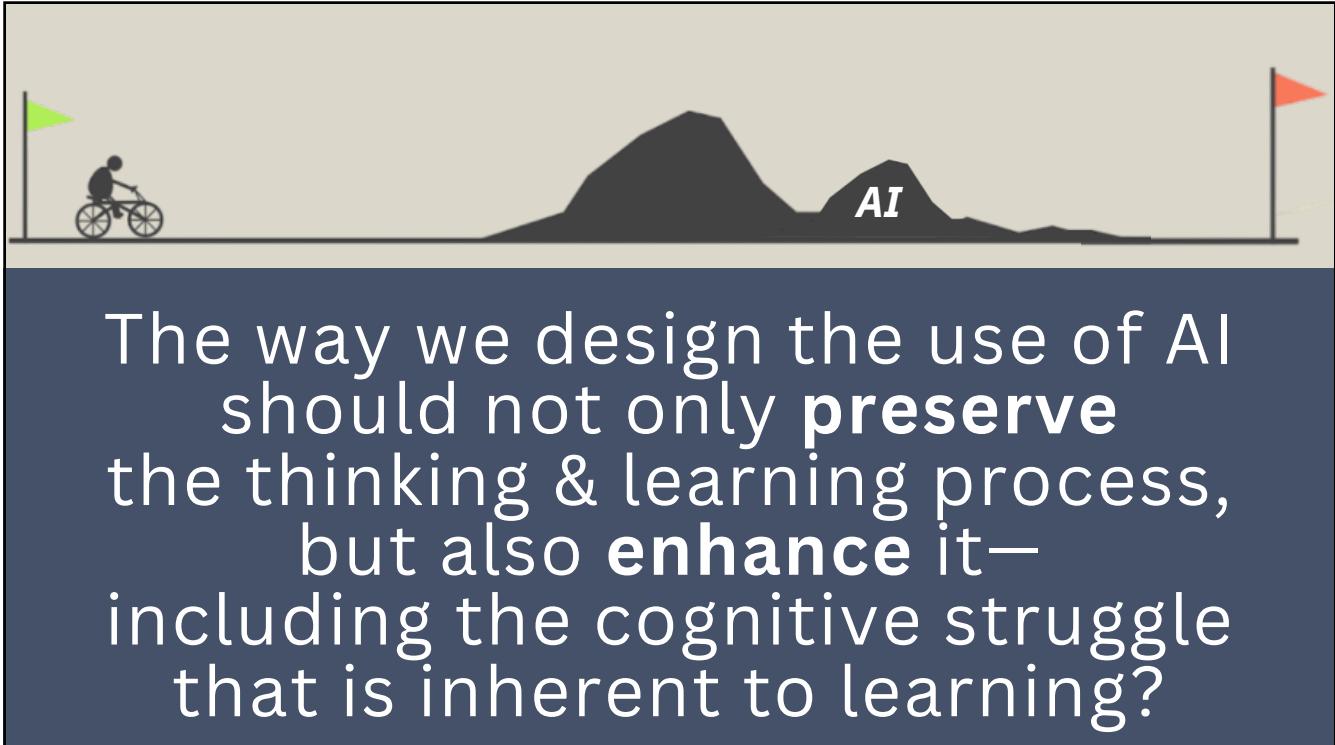
*to be designed*

Challenging tasks and experiences that entail effort, discomfort, and cognitive struggle, but when scaffolded properly can improve learning and student performance.

Bjork & Bjork (1992, 2020)



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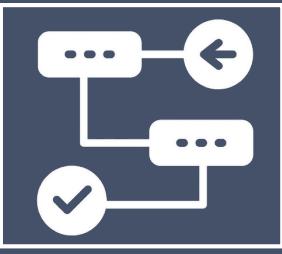
The way we design the use of AI should not only **preserve** the thinking & learning process, but also **enhance** it—including the cognitive struggle that is inherent to learning?

45

## TWO DESIGN QUESTIONS

1. **What processes do we consider essential in our disciplines (and IRL) that we ought to preserve and promote so that our students will learn them in our class?**
2. **Can we guide students to use AI in ways that can enhance these processes for our students?**

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AI PESSIMIST <b>DOOMSTER</b>	AI PRAGMATIST <b>DISCERNER</b>	AI OPTIMIST <b>BOOSTER</b>
DEFENSIVE	RESPONSIVE	FANATIC
 <p>PROHIBITION AI-Free</p>	 <p>DESIGN AI-Free, AI-Assisted OR AI-Integrated</p>	 <p>CITATION “Free for All”</p>

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NOT PROHIBITION  
NOT JUST CITATION  
**BUT DESIGN**

Which **learner tasks** or **assessments**, given these **learning outcomes**, & these **learning needs** should be **AI-FREE**, **AI-ASSISTED** (optional or mandated), or **AI-integrated**?

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# LEARNING IS AN ENDANGERED SPECIES.



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## OUR MISSION OF EDUCATION

Our aim is not to produce **second-rate AIs** who will never be able to keep up with GenAI in creating **PRODUCTS**.

Our mission is to form **first-class human persons** who embrace all the PROCESSES of being human —thinking, feeling, learning, creating, relating, loving, **even erring!**— in order to make a difference in the world.

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