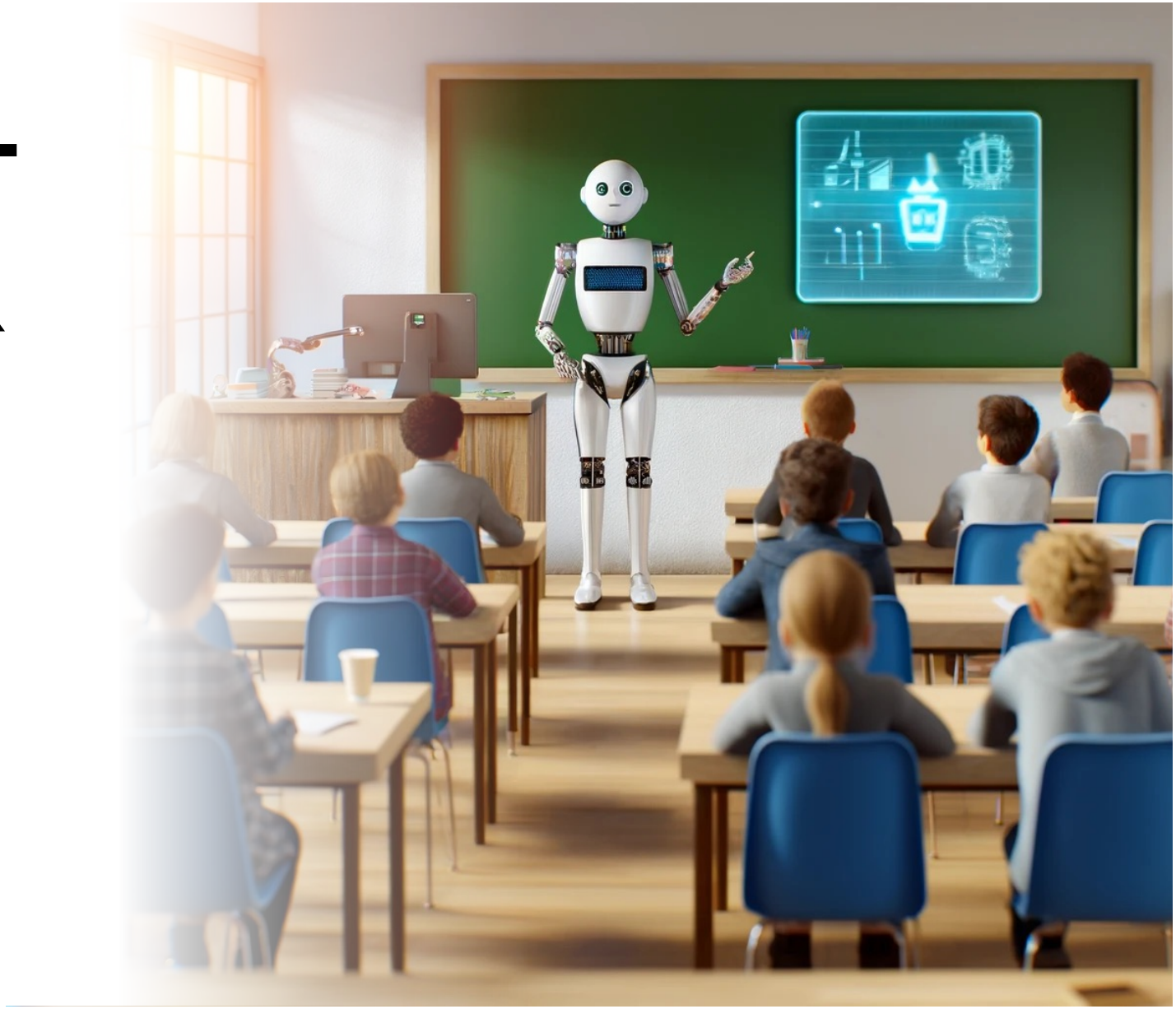
THE SILENT TAKEOVER

AI's Dramatic Role in Redefining Academic Norms

Prof. Alexiei Dingli

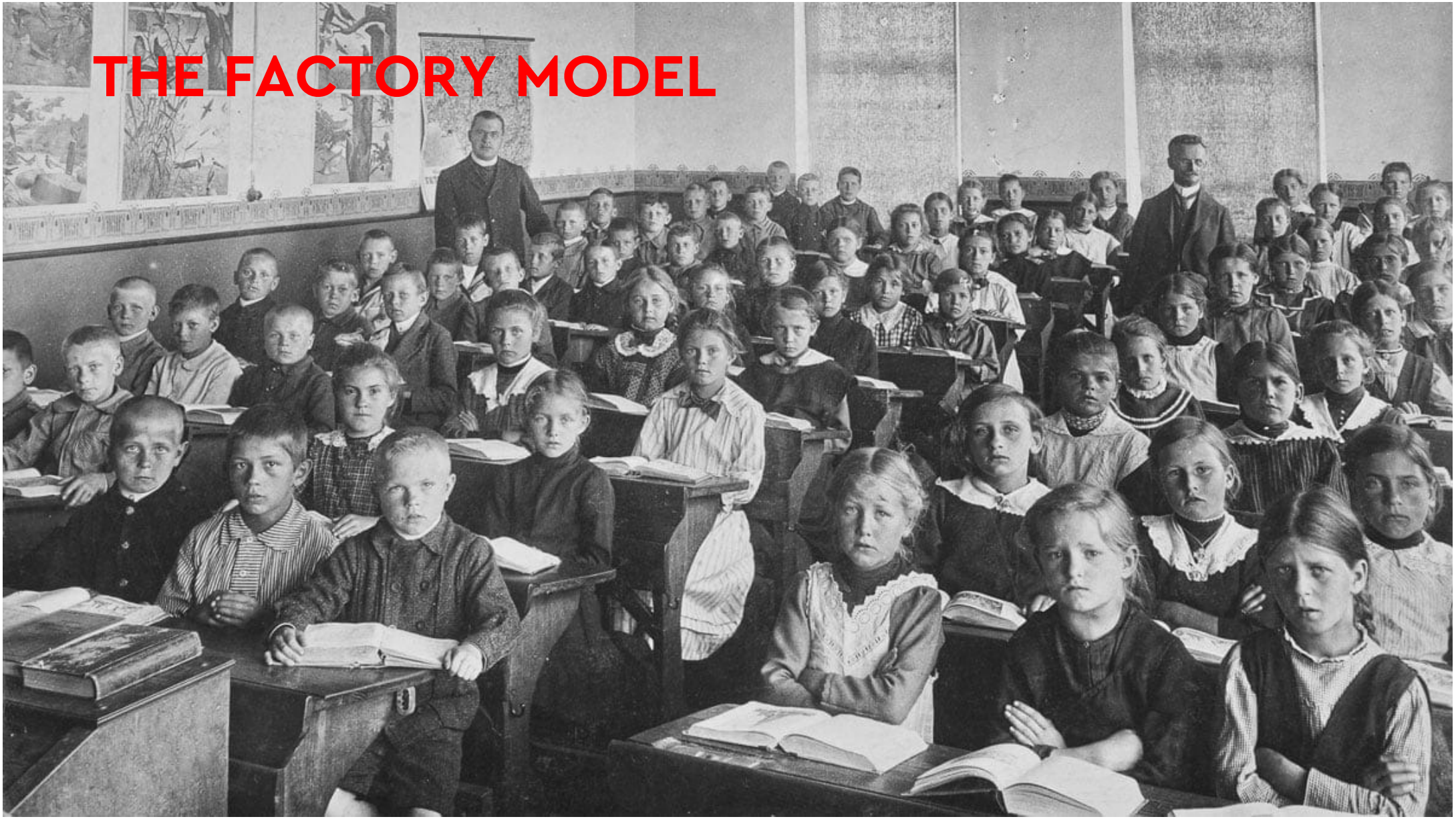


THE
BOX
METAPHOR

THE
AGE-OLD
DILEMMA

PLANT
THE
LOVE
FOR
KNOWLEDGE

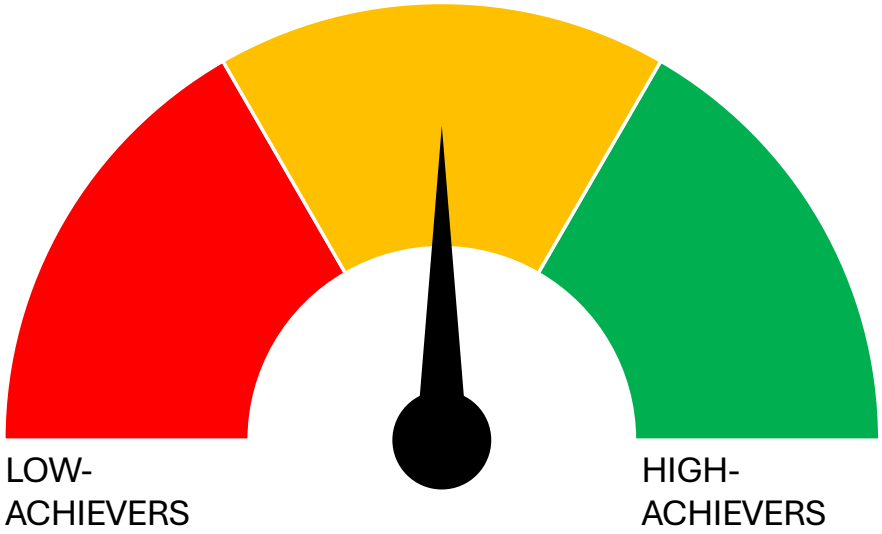
THE FACTORY MODEL

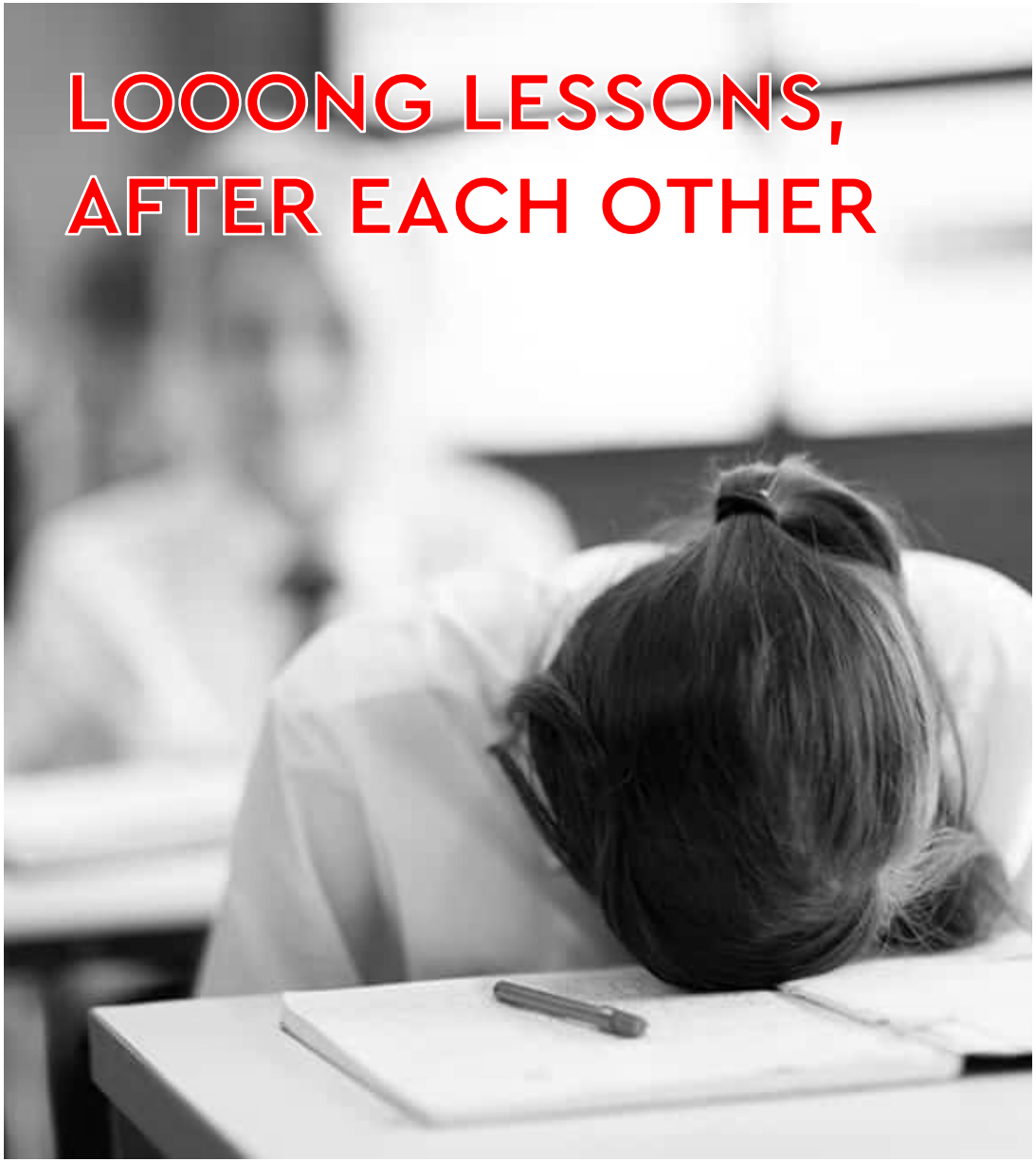


CHOOSE YOUR SIDE

Everybody is a Genius. But If You Judge a Fish by Its Ability to Climb a Tree, It Will Live Its Whole Life Believing that It is Stupid

DIFFERENTIATED LEARNING




LOOONG LESSONS,
AFTER EACH OTHER

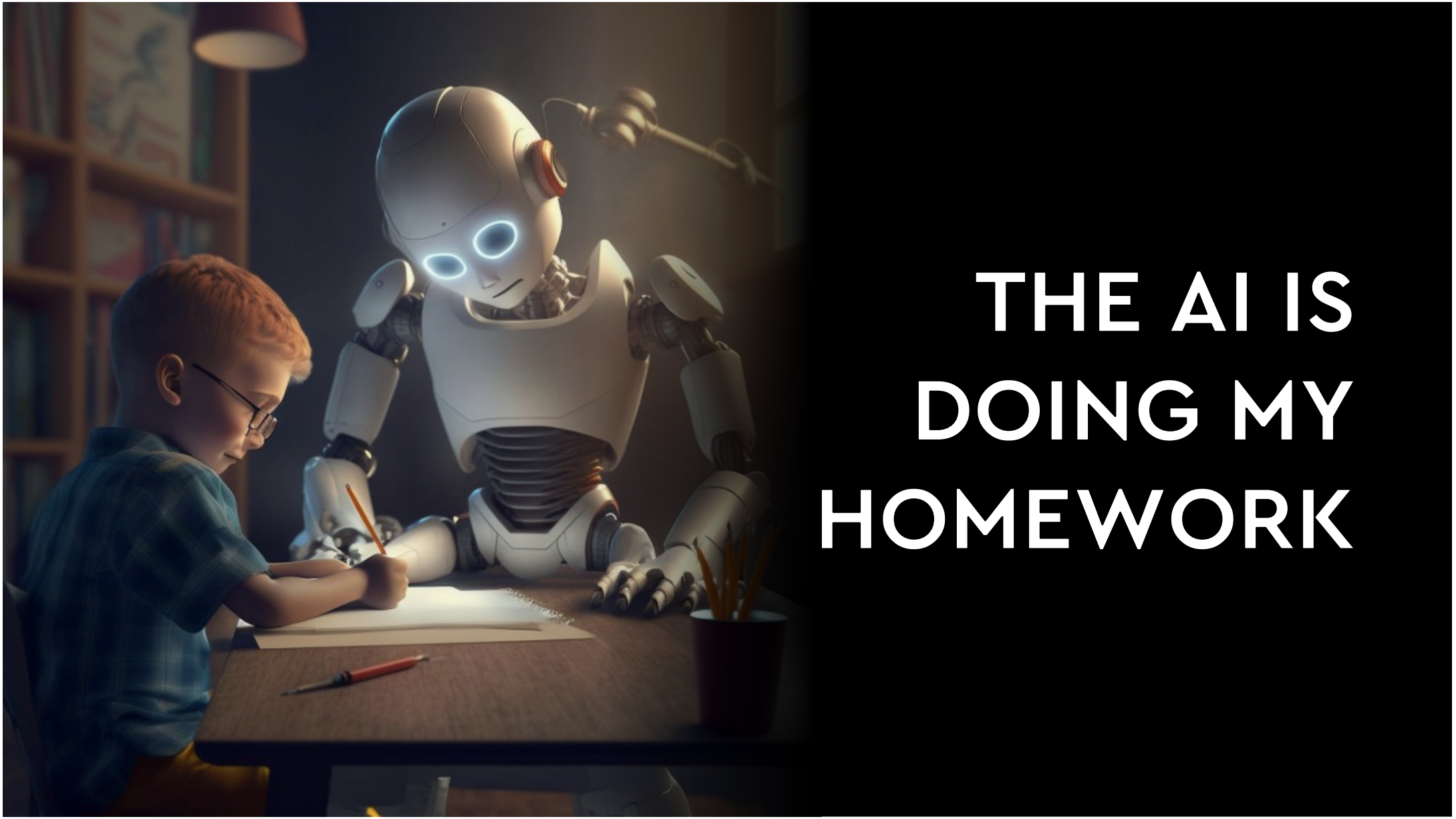
MICRO
LEARNING
snien
snin

DIGITAL DISTRACTIONS

ROBBING US FROM
LIVINING THE MOMENT

LEARNING
RUBBISH

HOME
ALONE


THE AI IS
DOING MY
HOMEWORK

SCHOOLS OF TOMORROW

EXPECT
MORE

BLOOM'S TAXONOMY

KNOWLEDGE

List | Define
Recall | Arrange
State | Order
Label | Repeat
Memorize
Name | Select
Record

COMPREHENSION

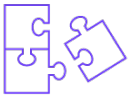
Translate
Paraphrase
Discuss | Report
Locate | Explain
Restate | Describe
Express | Identify
Generalize
Recognize | Classify
Summarize

APPLICATION

Operate | Apply
Use | Solve
Demonstrate
Prepare | Choose
Show | Sketch
Employ | Practice
Dramatize
Interpret
Illustrate
Produce
Schedule

ANALYSIS

Analyze | Question
Differentiate
Experiment
Examine | Test
Categorize
Distinguish
Calculate | Inspect
Contrast | Outline
Infer | Compare
Discriminate
Appraise | Criticize
Diagram | Debate
Inventory | Relate



SYNTHESIS

Create | Compose
Argue | Design
Plan | Support
Arrange | Collect
Revise
Formulate
Propose
Construct
Set up
Organize
Manage
Prepare
Assemble
Rearrange
Develop

EVALUATION

Rate | Evaluate
Assess | Judge
Value | Revise
Justify
Recommend
Conclude
Defend
Interpret
Predict
Estimate
Appraise
Compare
Score
Select
Choose
Measure

LOWER ORDER THINKING SKILLS

HIGHER ORDER THINKING SKILLS

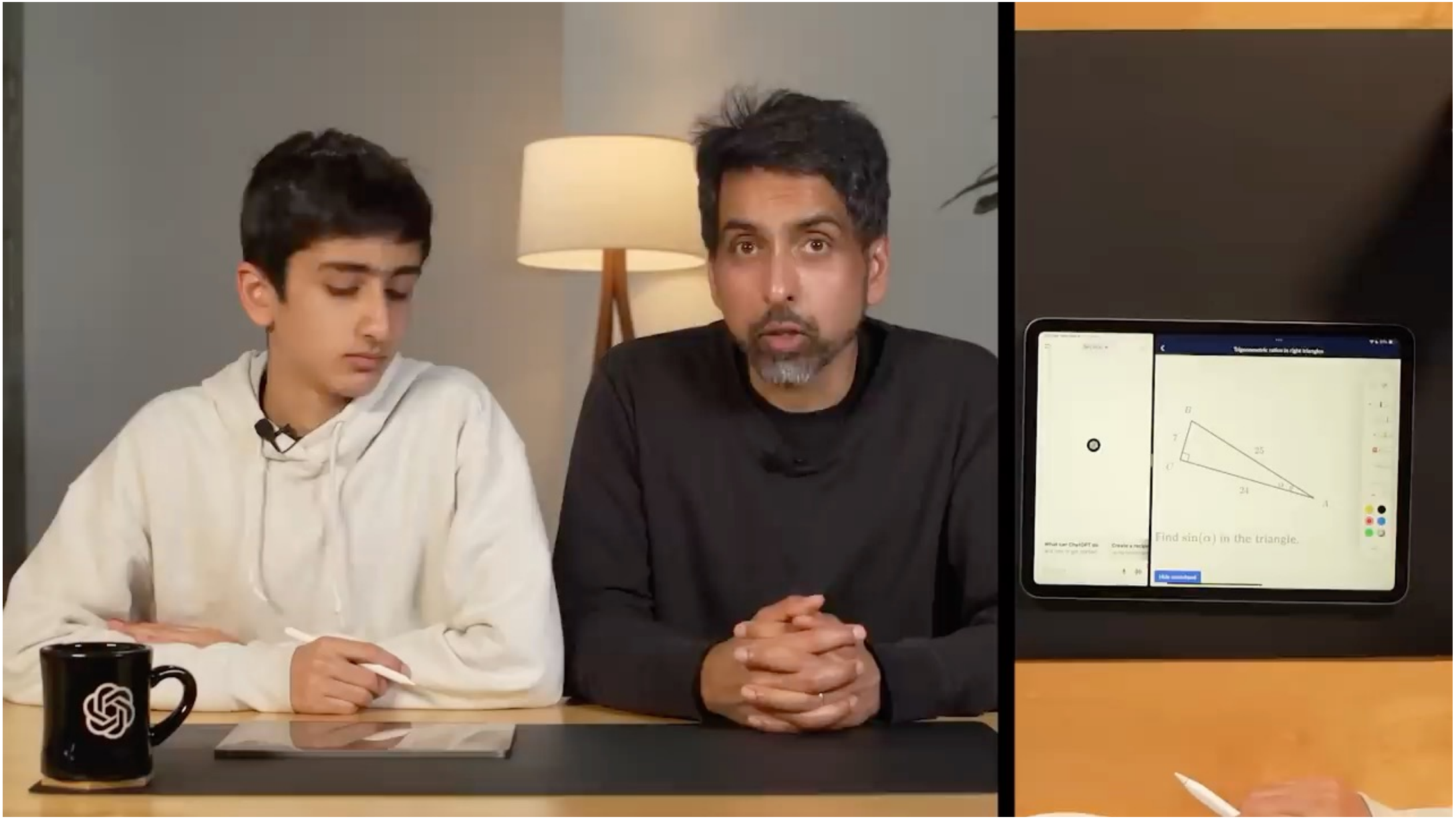
FLIPPED
CLASSROOM

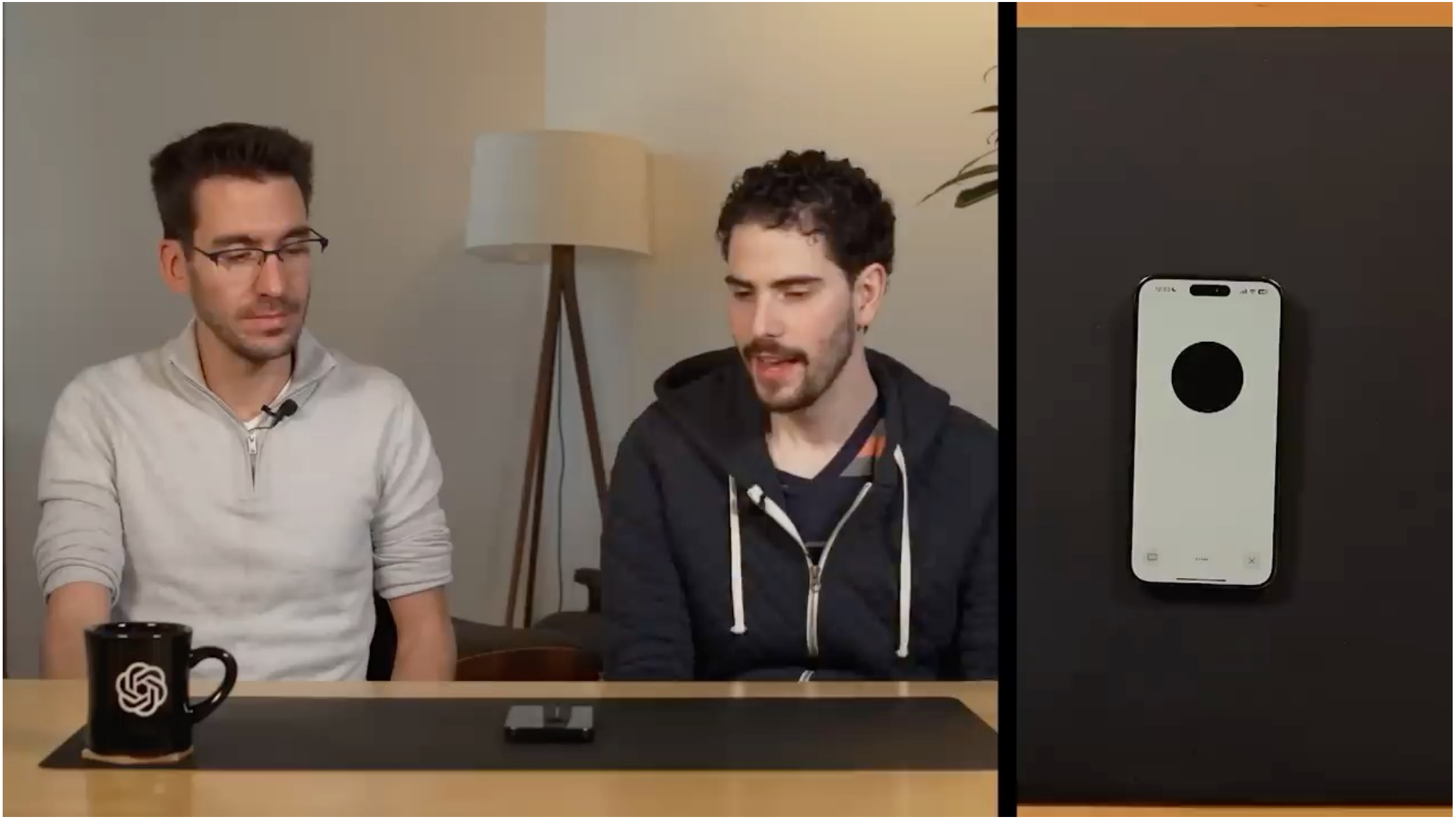
AI GIVES YOU SUPERPOWERS

- Generating **prompts** in a literature class or drama
- **Answering student queries** in a history class
- **Providing initial feedback** on student essays in an English class
- Curating **educational resources** for a biology class
- Creating **personalised learning paths** in a math class
- **Acting as a tutor** for a chemistry class
- Providing instant **translation** in a foreign language class
- Suggesting **colour combinations** in an art class
- **Generating coding challenges** in a computer science class
- **Role-playing** historical figures in a social studies class
- Creating **economic simulations** in an economics class
- **Processing large datasets** in a statistics class
- **Answering questions** about stress management in a health class
- **Creating narratives** for virtual field trips in a geography class
- **Creating dialogues** for historical reenactments in a history class
- **Generating ethical dilemmas** in a philosophy class
- **Generating melodies** for music composition in a music class

HYPERPERSONALISATION

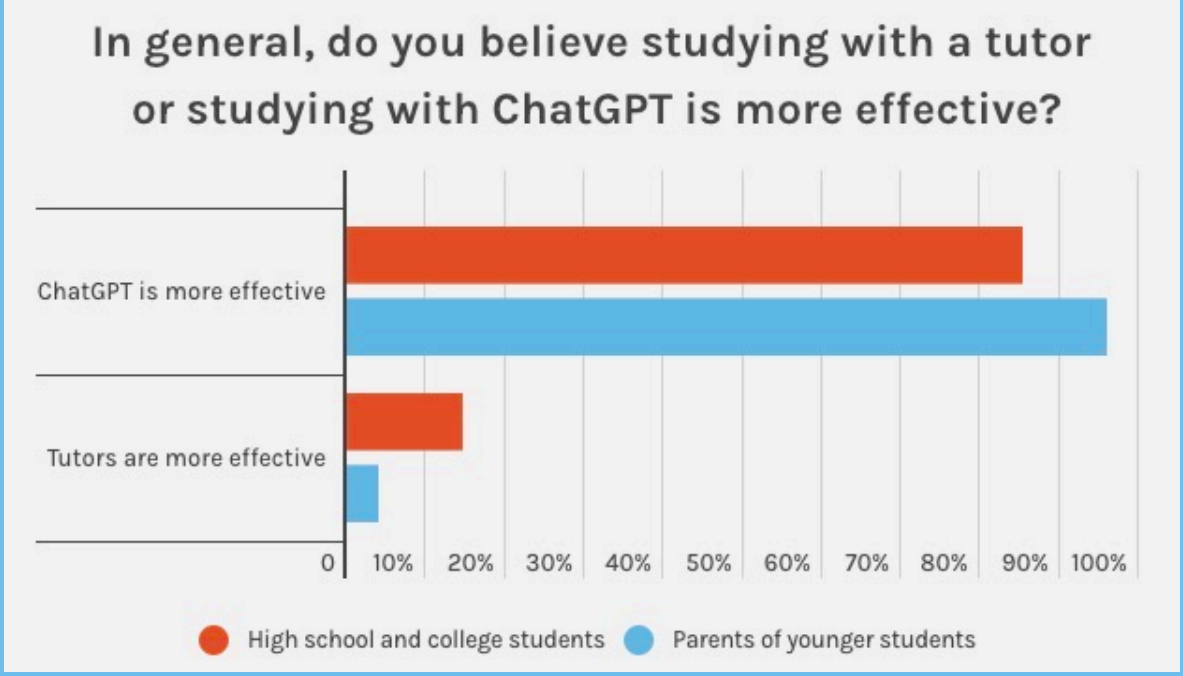
FAE
Start


Trigonometric ratios in right triangles
B
7
25
C
24
A
Find sin(α) in the triangle.
Hide annotated



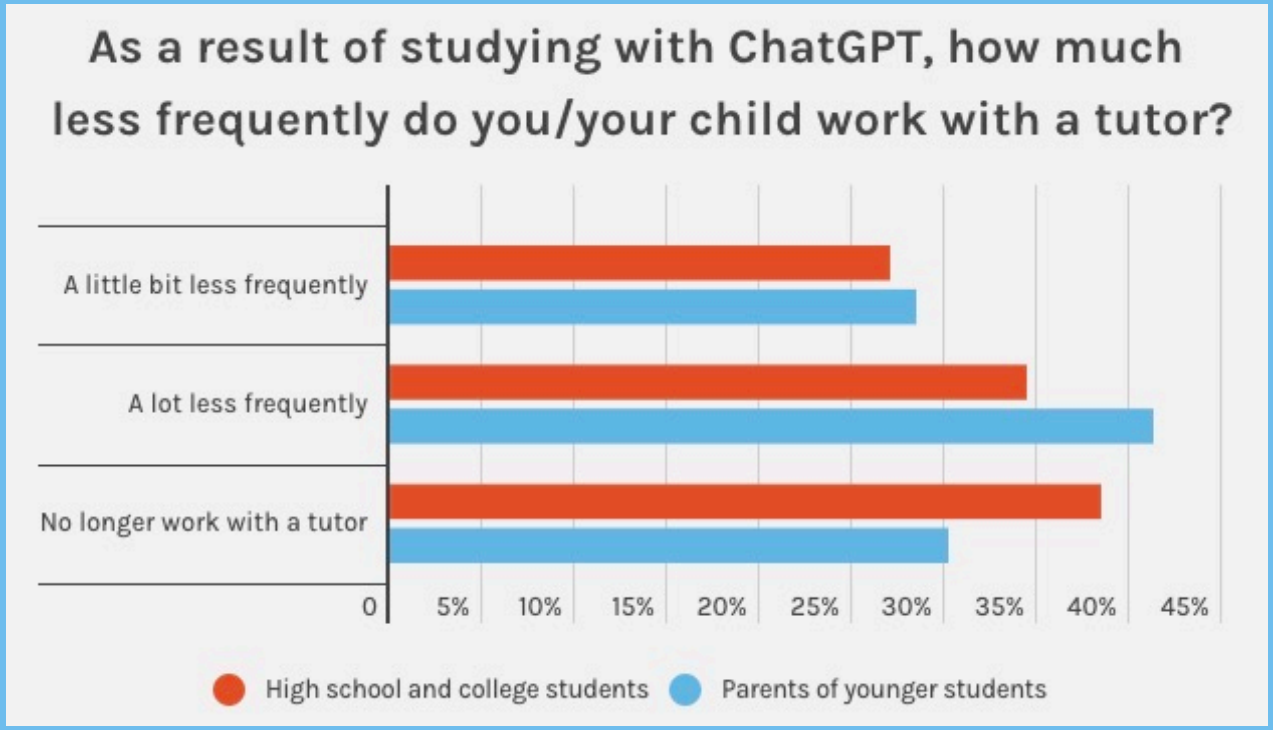
Computer use for automating operations

IS AI REPLACING EDUCATORS (1)?



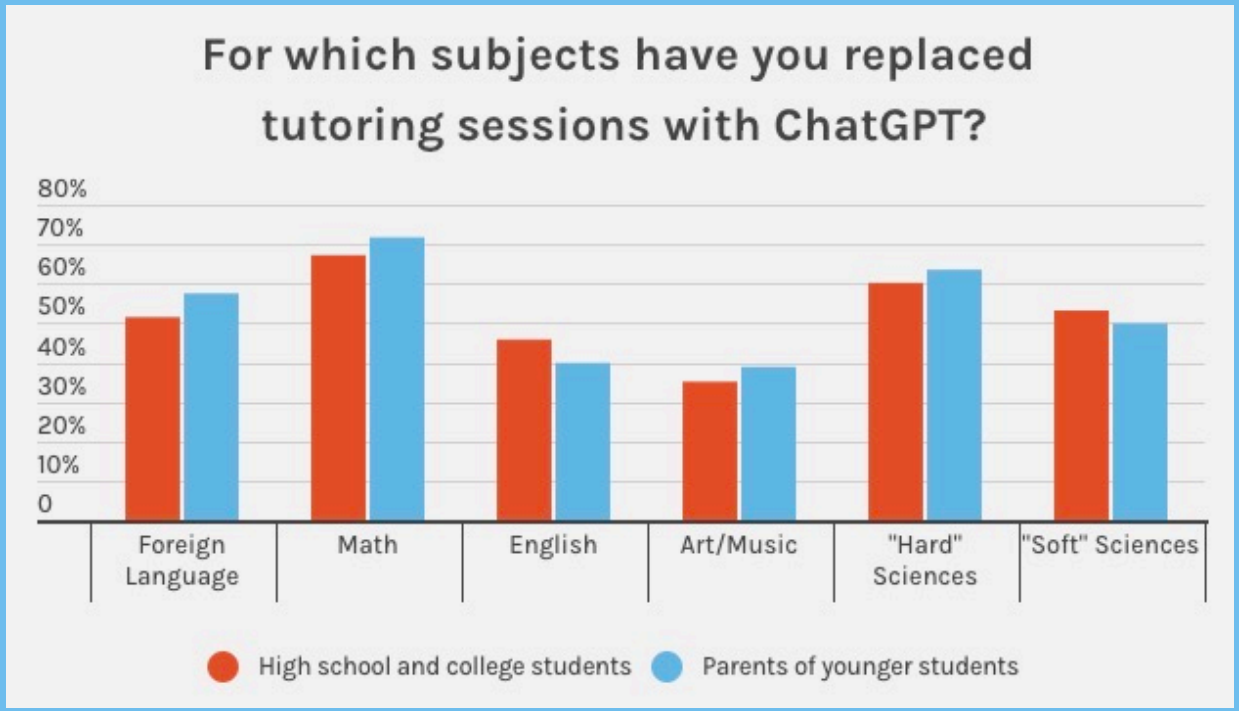
*Source: https://www.intelligent.com/new-survey-finds-students-are-replacing-human-tutors-with-chatgpt/ (May 2023)

IS AI REPLACING EDUCATORS (2)?



*Source: https://www.intelligent.com/new-survey-finds-students-are-replacing-human-tutors-with-chatgpt/ (May 2023)

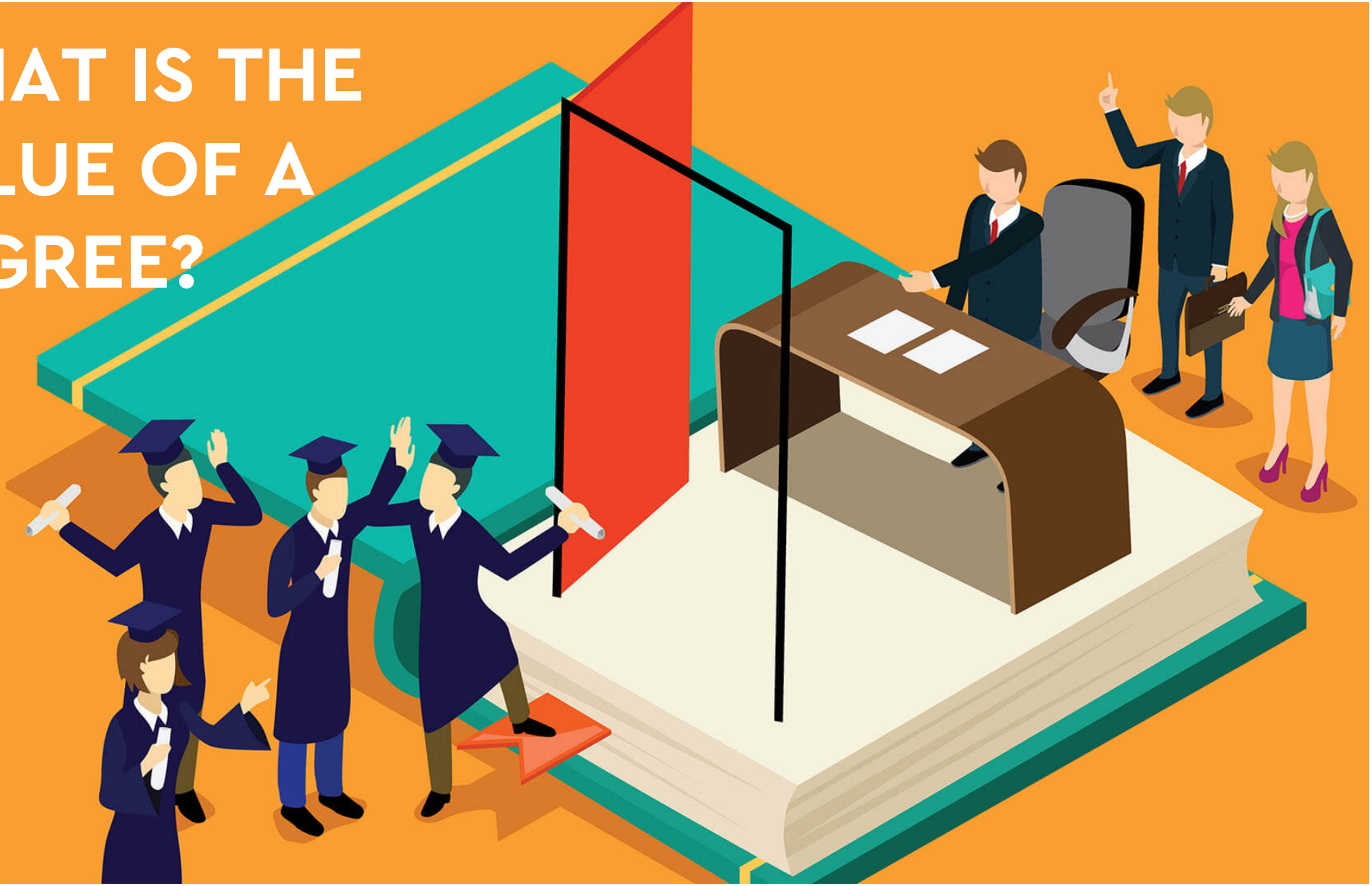
IS AI REPLACING EDUCATORS (3)?



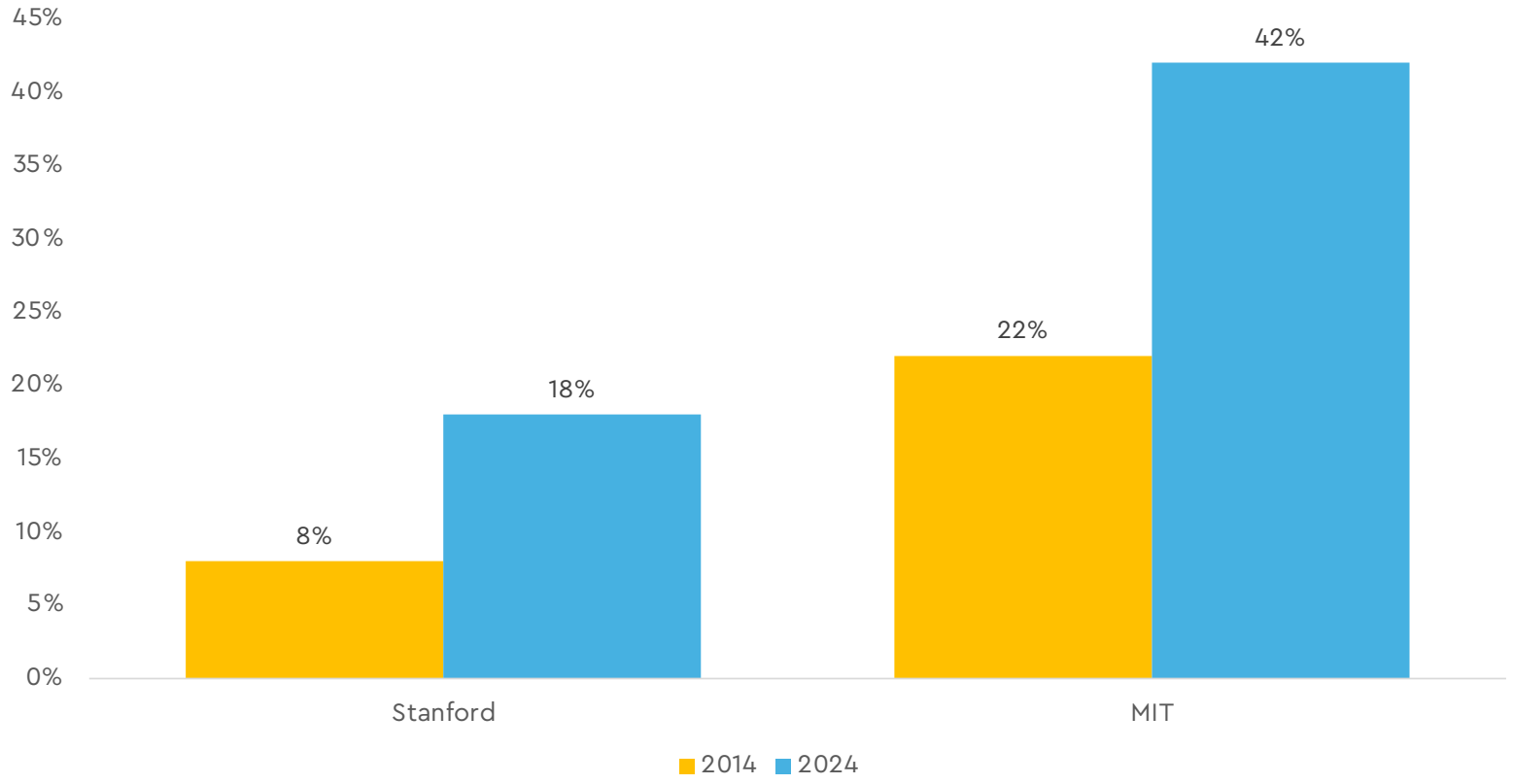
*Source: https://www.intelligent.com/new-survey-finds-students-are-replacing-human-tutors-with-chatgpt/ (May 20

CONTENT VS SKILLS

WHAT IS THE VALUE OF A DEGREE?



THE COMPUTER SCIENCE PROBLEM

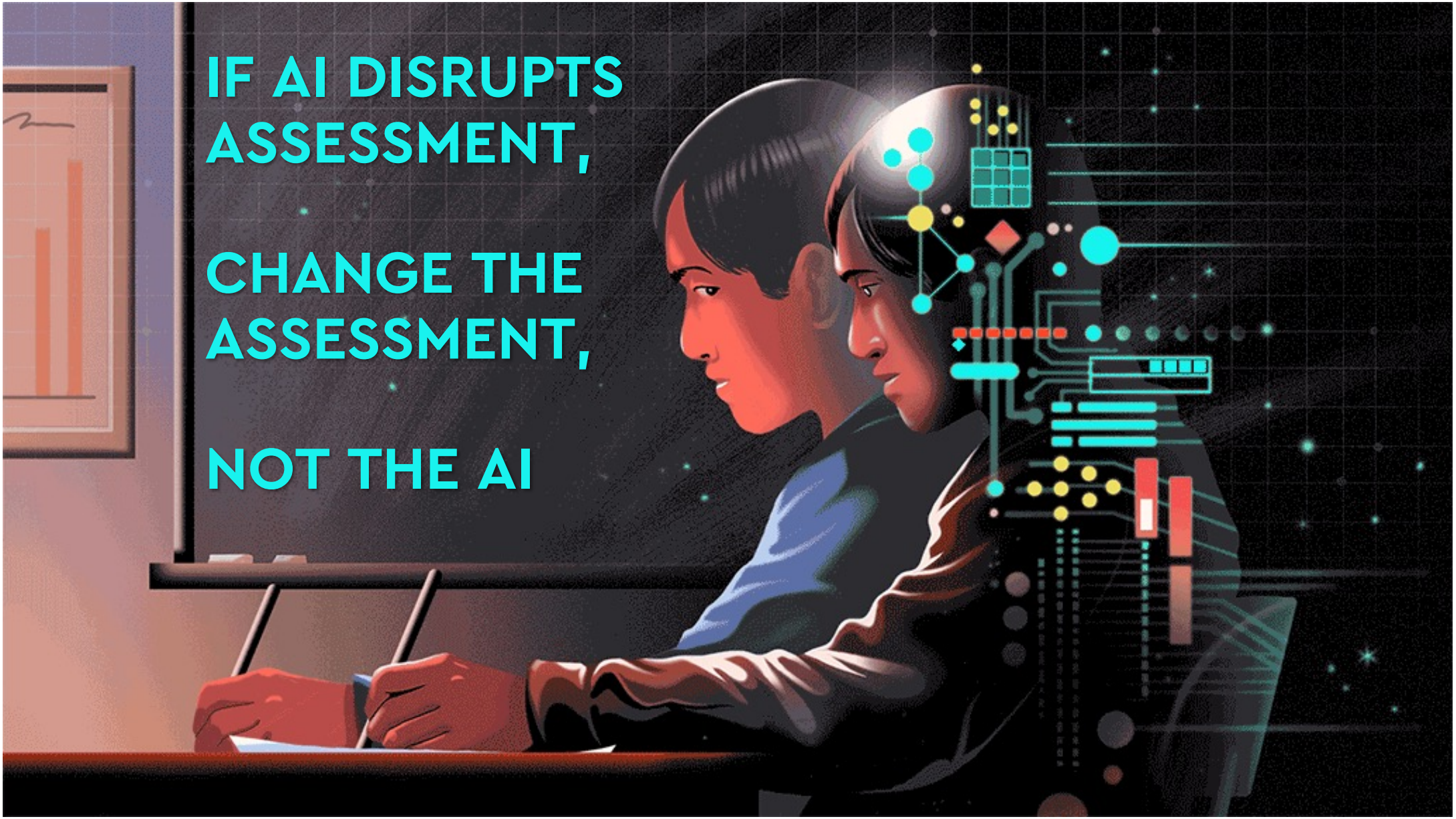


ETHICAL AI

- **Privacy**
  - Data Collection & Usage
  - Surveillance and Monitoring
- **Fairness**
  - Algorithmic Bias
  - Equity in Access
- **Transparency**
  - Algorithmic Transparency
  - Policies

BALANCING ACADEMIC INTEGRITY AND INNOVATION

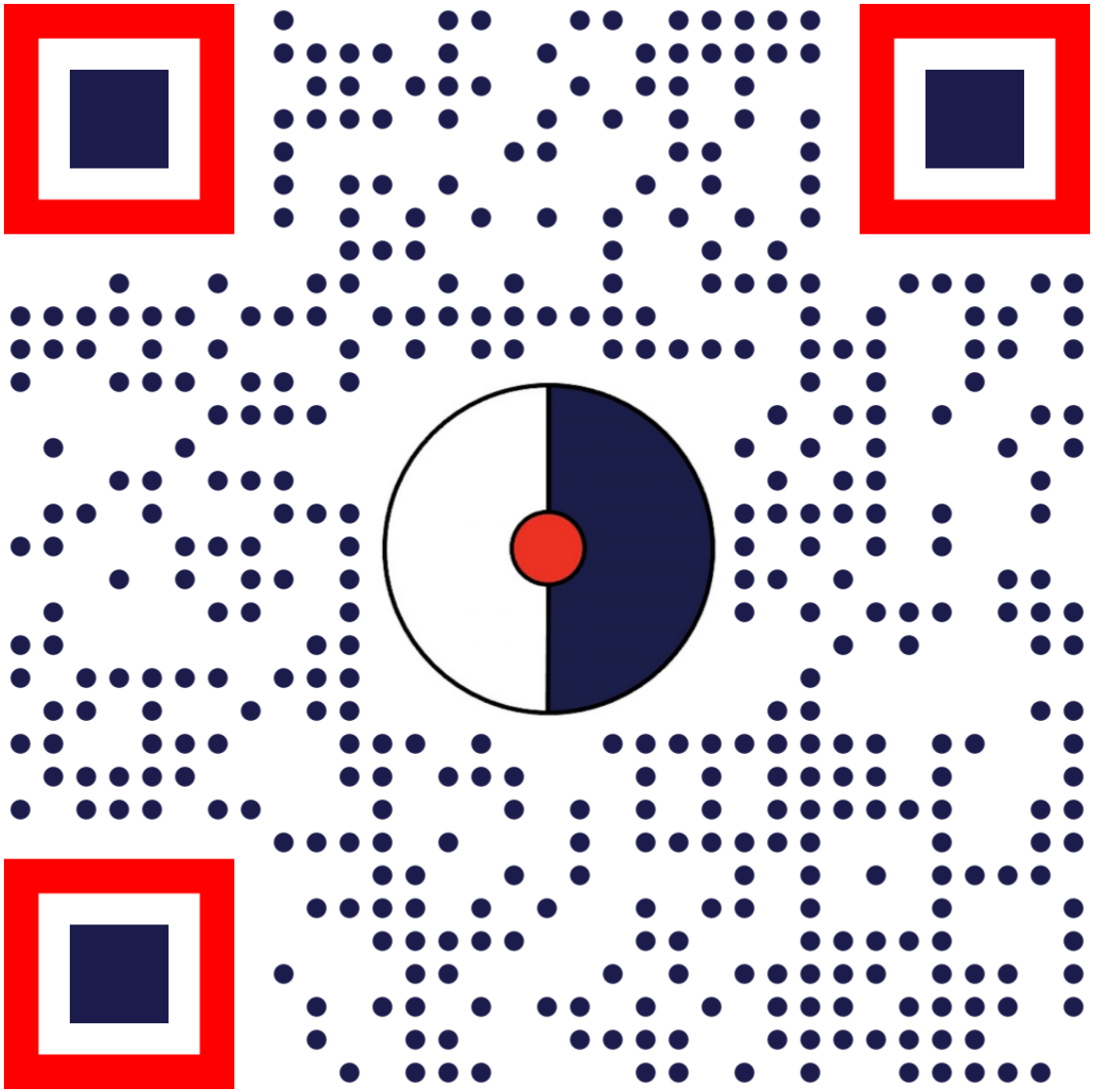
- AI-Powered Detection System
- Comprehensive Policies on Acceptable AI Use
- Training & Awareness
- Disclosure and Citation Requirements
- AI Integration in the Curriculum


IF AI DISRUPTS ASSESSMENT,
CHANGE THE ASSESSMENT,
NOT THE AI

TECHNOLOGY IS JUST A TOOL WHICH motivates kids and GETS them WORKING TOGETHER.

IN THE HANDS OF TEACHERS, IT CAN BE TRANSFORMATIONAL!

THANK YOU!

Questions?

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