

# Education & Employment Committee

January 17, 2024 1:00 PM Morris Hall (17 HOB)

**Meeting Packet** 

# Committee Meeting Notice HOUSE OF REPRESENTATIVES

#### **Education & Employment Committee**

Start Date and Time: Wednesday, January 17, 2024 01:00 pm

End Date and Time: Wednesday, January 17, 2024 03:00 pm

**Location:** Morris Hall (17 HOB)

**Duration:** 2.00 hrs

Presentation and Discussion on the Future of Artificial Intelligence (AI) in Education

To submit an electronic appearance form, and for information about attending or testifying at a committee meeting, please see the "Visiting the House" tab at www.myfloridahouse.gov.

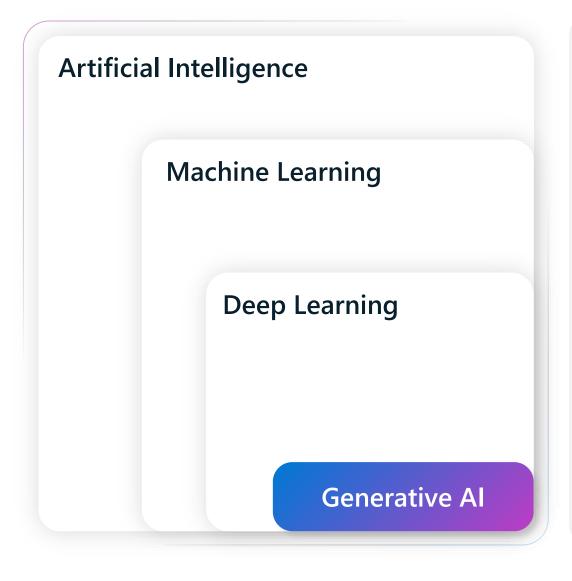
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The Potential of Al in Education



# The potential of Al in Education

# A brief history of Al



1950s

#### **Artificial Intelligence**

the field of computer science that seeks to create intelligent machines that can replicate or exceed human intelligence.

1959

#### **Machine Learning**

subset of AI that enables machines to learn from existing data and improve upon that data to make decisions or predictions.

2017

#### **Deep Learning**

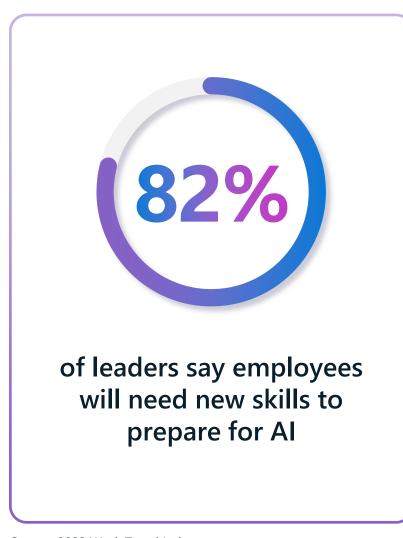
a machine learning technique in which layers of neural networks are used to process data and make decisions.

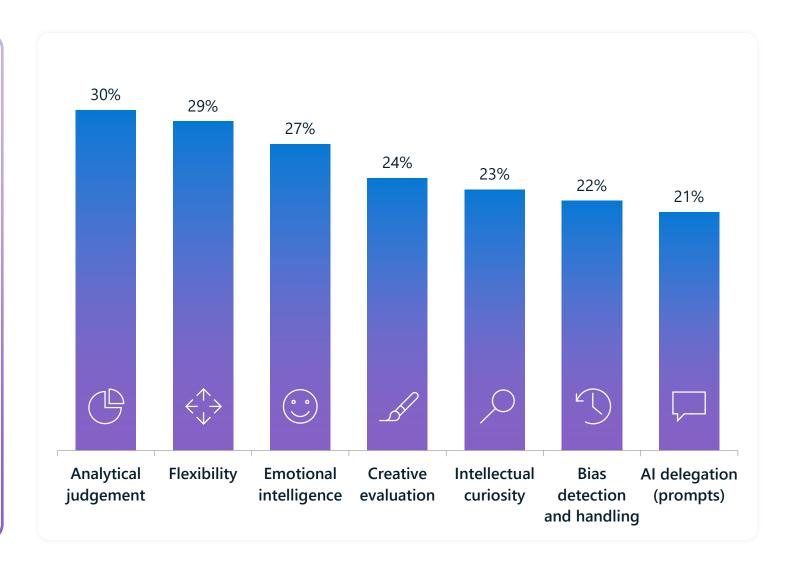
2021

#### **Generative Al**

create new written, visual, and auditory content given prompts or existing data.

# Students need key skills required for the AI era





Source: 2023 Work Trend Index

# Education professionals can benefit from Al

64%

Employees lack time & energy to do their job

3.5X

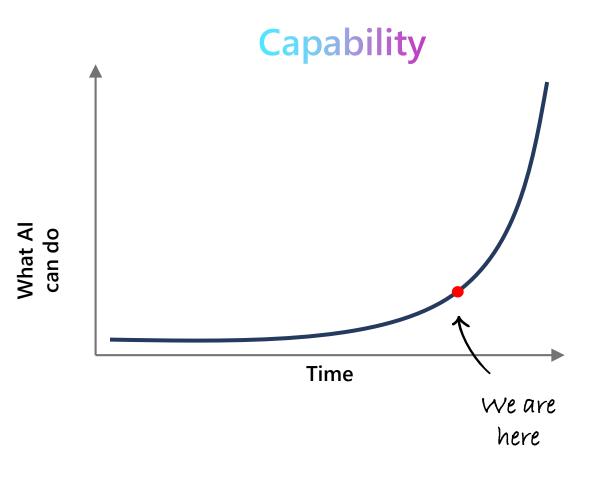
More likely to struggle with strategic thinking

70%

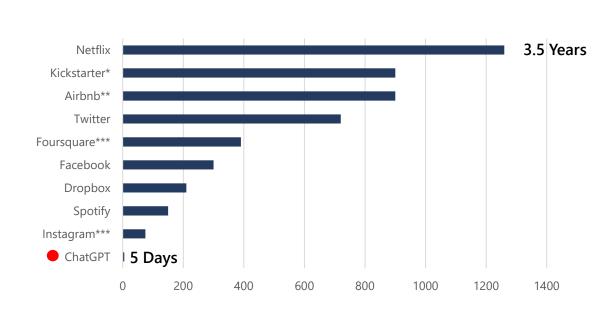
Employees willing to delegate work to Al

Source: 2023 Work Trends Index

# Both AI capability & adoption are growing at an unprecedented rate



### Days to reach 1M users



# **Opportunities for AI in Education**

 Personalize learning based on individual student needs with tailored content and targeted coaching to support improvement

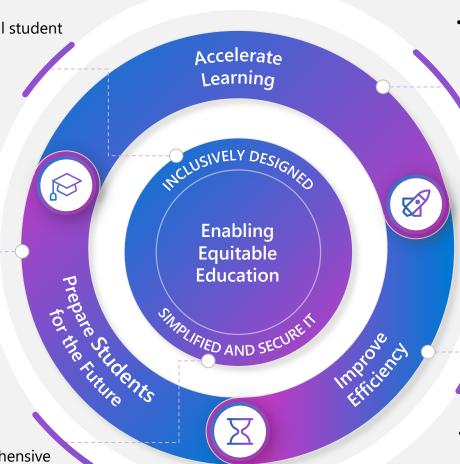
 Improve accessibility with translation, captioning, read-aloud, and voice input

- Build Al literacy among staff, educators, and students to encourage responsible usage and effectively advance learning
- Equip students with the skills they'll need to thrive in the future of work
- Defend at machine speed with gains in quality detection, speed of response, and ability to strengthen security posture
  - **Protect your data** with the most comprehensive compliance and security controls in the industry

• **Engage learners** by providing interactive experiences, a jump-start to creative processes, and real-time feedback

 Analyze data efficiently and deliver actionable insights from unstructured data across diverse sources of information

- Create and customize content for lesson plans, quizzes, rubrics and more for any topic, in any language, for any level
- Enhance support services with the ability to answer FAQs, recommend resources, and provide personalized information
- **Unlock productivity** and save staff time spent writing, searching, editing, and analyzing
- **Automate processes** for administrative or repetitive tasks such as managing IT helpdesk tickets, course scheduling, and more



# Maximize the value of your data

Connect data sources and develop insights across the student journey

Al can reinvent Education

**Explore ways to accelerate learning** 

Deliver personalized, engaging learning experiences and prepare students for the future

Identify opportunities to improve efficiency

Enhance support services and automate processes for administrative or repetitive tasks

Empower your faculty and staff

Save time spent writing, searching, editing, and analyzing to focus on what matters most

# The Responsible AI Standard's Goals at a Glance

#### **Accountability**

A1: Impact Assessment

A2: Oversight of significant adverse impacts

A3: Fit for purpose

A4: Data governance and

management

A5: Human oversight and

control

#### **Transparency**

T1: System intelligibility for decision making

T2: Communication to stakeholders

T3: Disclosure of Al interaction

#### **Fairness**

F1: Quality of service

F2: Allocation of resources and opportunities

F3: Minimization of stereotyping, demeaning, and erasing outputs

#### **Reliability & Safety**

RS1: Reliability and safety guidance

RS2: Failures and remediations

RS3: Ongoing monitoring, feedback, and evaluation

#### **Privacy & Security**

PS1: Privacy Standard compliance

PS2: Security Policy compliance

#### Inclusiveness

11: Accessibility Standards compliance



# Thank you!

Khan Academy



# Khan Academy Districts and Khanmigo

Sal Khan - CEO and founder of Khan Academy

Renee Venegas - Senior Southeast Regional Sales Manager

Jason Hovey - Director School Partnerships

### Khan Academy Mastery Courses

#### Math

**BEST-aligned courses:** grade 3 through Algebra 2

#### Get Ready for Grade-Level:

Grades 3-12 prerequisite skill practice, including AP Stats and AP Calculus

#### High School:

- Algebra 1 & 2
- Geometry
- Trigonometry
- Statistics and Probability
- Precalculus
- Integrated Math 1/2/3

#### Advanced Placement & Early College:

- Calculus AB
- Calculus BC
- Multivariable Calculus
- College Algebra
- Statistics

#### Science

#### Middle School:

- Physics
- Earth and Space
   Science
- Biology

#### High School:

- Biology
- Physics

#### Advanced Placement:

- Biology
- Physics 1
- Chemistry
- Environmental Science

#### **Test Prep**

Digital SAT

#### Life Skills

**Internet Safety** 

#### Humanities

#### Upper Elementary through High School:

Grammar

#### High School:

- US History
- US Government and Civics
- World History Origins to Present
- World History 1750 to Present

#### Advanced Placement:

- US History
- US Government and Politics
- World History (New for 23-24)

#### **Economics**

#### Advanced Placement:

- Macroeconomics
- Microeconomics

#### Computing

AP Computer Science Principles

Financial Literacy Coming for BTS 2023-24

### Khanmigo Rollout 2023-2024

- 40+ District partners across the country
- 60K+ Students and 4K Teachers
- Indiana State Level Grant
  - DOE and Secretary of Education issued grant to reimburse districts interested in AI based pilot for student support
  - 21 out of 24 approved districts participating
  - Roughly 25K students and 2K teachers

#### Ohio

o Intel funded \$300K for Khanmigo partnerships with Ohio school districts as part of their work with DOE

#### Research studies underway

- 70% of teacher respondents rated Khanmigo a "helpful" or "very helpful" teacher's assistant.
- Students described Khanmigo as "conversational, makes me feel understood, kind, respectful, patient, and clear." 77% of students who responded to the end of 2022-2023 school year Spring Pilot survey rated Khanmigo a 4 or 5 (on a 5-point scale) when asked "How much did Khanmigo feel like a good tutor?"
- O Saving an estimated minimum of 5 hours of teacher time per week based on partner district Milpitas Unified

### Khanmigo State Level Conversations

#### Indiana

• Expansion of DOE grant pilot across the state to fund district adoption

#### North Carolina

 Legislative committee in process of creating appropriations bill to fund Khanmigo for all students and teachers

#### New Hampshire

- Working on Spring pilot that would fund Khanmigo access to thousand of interested teachers for remainder of this year
- DOE and Commissioner wants to use ESSER funds to pay for teacher and student access for 2024-25

#### Idaho

 Meeting in February with head of education committee to work on possible legislative funding for Khanmigo access for all teachers and students

#### Washington

Working with Secretary of Education on funding for all students and teachers

## Khanmigo in Florida

#### Palm Beach County

- Just kicked off pilot for 21K high school students and 1300 teachers for remainder of school year
- Expanding to over 100K students in 6th 12th grade + adult education and 7000 teachers for 2024-2025 school year
- Partnership is being supported with local donor funding who is contributing \$2
   million to cover costs of rollout

#### Osceola County

- Khan Academy Partnership supports 21k high school students
- Khanmigo pilot at Liberty HS working with 1400 students & 75 teachers
- Khanmigo funded by federal grant