Host

Introduction:

Being the superintendent of Wagor International School and the CEO of AIGC Innovation Academy, he is committed to promoting AIGC-related applications. With a focus on education trends and digital learning, he has authored several books on English language learning and offers free online courses on YouTube related to ChatGPT, actively advocating for innovation and AI in education. Additionally, he has earned nine national championships in Taiwan and one regional championship in Asia through Toastmasters International.

Experience:

- Executive Secretary for Taiwan's Open Education Consortium
- Leader for Toastmasters International Speakers Bureau
- TOEIC Propell Trainer in Taiwan
- TEDxSpeaker and TEDTranslator

https://www.meethaishuolee.com/
https://www.linkedin.com/in/haishuolee

Roy H.S. Lee

Superintendent,
Wagor International School /
CEO, AIGC Innovation Academy

Panelists

Nicole T. I Chan

Former Chairperson, National Communications Commission (NCC)/ Chairman, Artificial Intelligence Foundation (AIF)

Introduction:

Nicole has extensive interdisciplinary experience across the fields of law, technology, and culture and creativity. In 2013, she became the Director of Science & Technology Law Institute at the Institute for Information Industry III , and in 2016, she became the Chairperson of the National Communications Commission NCC ,where she helped to harmonize the positive interactions among the telecommunications, communications, and information industries. Currently, she is the Chairman of the Artificial Intelligence Foundation AIF , and is committed to promoting the application, standardization and production of AI, hoping to contribute to the overall transformation of the industry through the integration of experts from different fields, while actively building trust in the development of AI applications.

Experience:

- Vice Chair, ICANN ASO Address Supporting Organization
- Head of International Affairs Committee, Taiwan Network Information Center TWNIC
- Chairperson, Advancement Association for Digital Textile AADT
- Board Director, DotAsia Organization

https://nicole4532.medium.com/

Panelists

Introduction:

He has published more than 180 articles with other scholars in the field of information and artificial intelligence. Currently, he is the Director of the AI Research Group at the National Electronics and Computer Technology Center NECTEC and the Vice President of the AI Association of Thailand AIAT . NECTEC is a research and development organization under the Ministry of Higher Education, Science, Research and Innovation in Thailand focusing on advanced technologies in electronics, computing, and information technology. AIAT is the largest AI research non-profit organization in Thailand, dedicated to accelerating global and local progress in the innovation, implementation and development of new AI.

Experience:

- Director of AI Research Group, NECTEC
- Vice President, AI Association of Thailand

Dr. Thepchai Supnithi

Director of AI Research Group, NECTEC / Vice President,AI Association of Thailand

https://www.linkedin.com/in/thepchai-supnithi-3071431a/

•••

Educational Applications

☐ Explores how AI is transforming teaching methods, including the use of AI teaching assistants, personalized learning, and intelligent tutoring systems, **among** other applications.

1. What experiences have been shared regarding the application of AI technologies in the education sector?

2. What benefits do AI teaching assistants, personalized learning, and intelligent tutoring systems offer to teachers and educators?

3. What impact does AI technology have on teaching quality and learning outcomes, whether positive or negative?

數位發展部 數位產業署
Administration for Digital Industries, moda

Education - Reimagine

Cognition

Makers of Devin, the first AI software engineer. Learn more here.

We are an applied AI lab focused on reasoning, and code is just the beginning.

To hire Devin for engineering work, please join the waitlist.

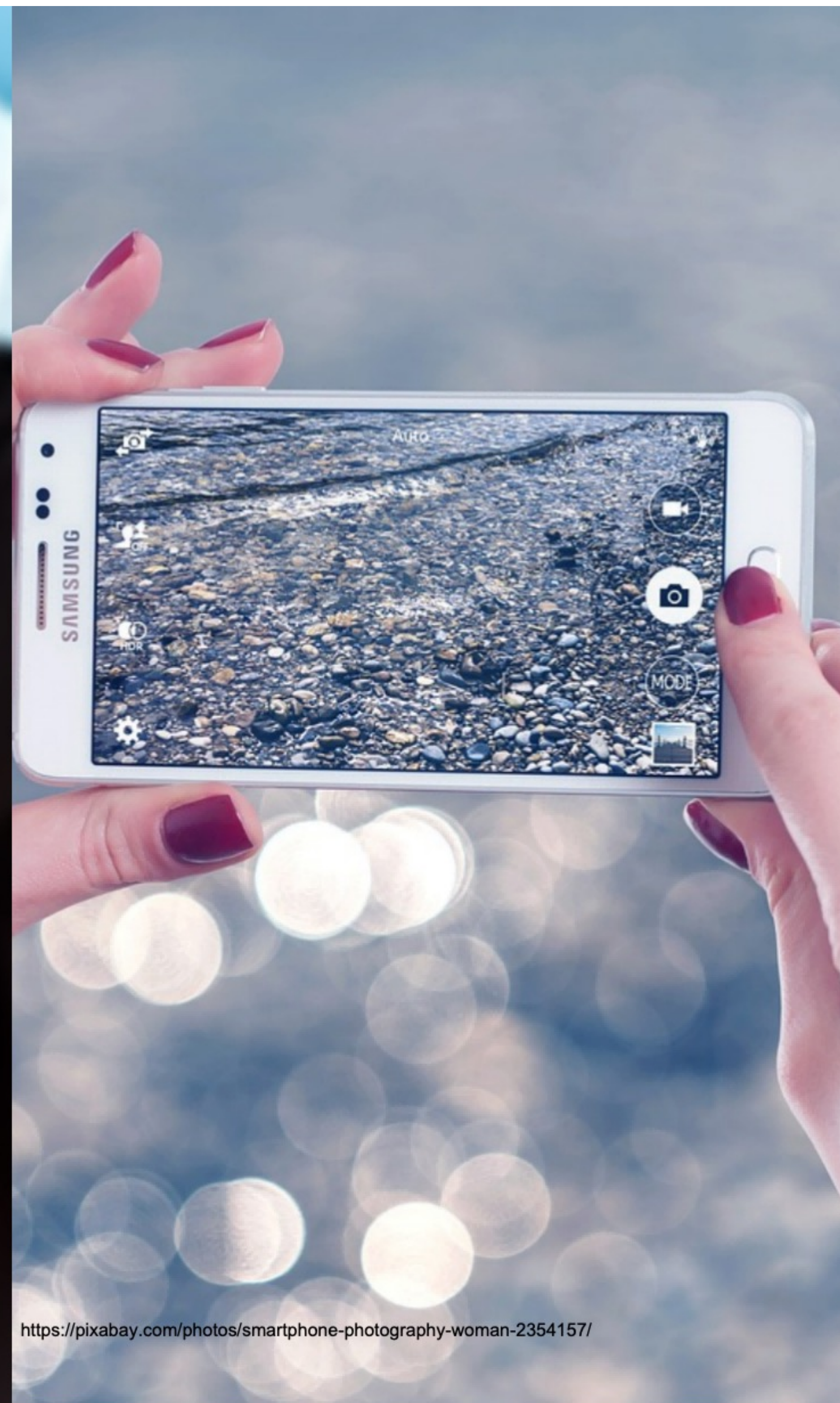We're a small team based in New York and the San Francisco Bay Area. Come work with us.

RELATED EXPERTISE: PUBLIC SECTOR, PEOPLE STRATEGY, TALENT DEVELOPMENT
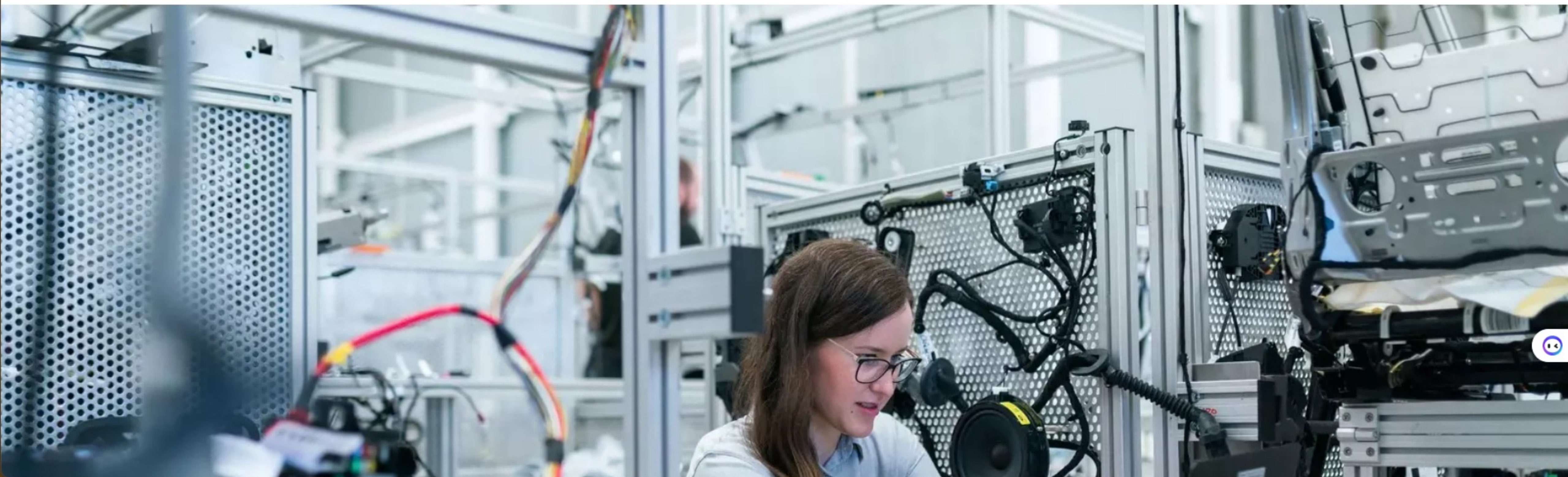
The Future of Jobs in the Era of AI

MARCH 18, 2021

By Rainer Strack, Miguel Carrasco, Philipp Kolo, Nicholas Nouri, Michael Priddis, and Richard George

Soft Skills
Reskilling Upskilling

數位發展部 數位產業署
Administration for Digital Industries, moda

DAVOS AGENDA

We often hear that AI will take our jobs. But what jobs will it create?

Sep 18, 2023

Abilities and Competences for AI Era

數位發展部 數位產業署
Administration for Digital Industries, moda

O*NET OnLine

electrician | Go

Help ▾ Find Occupations ▾ Advanced Searches ▾ O*NET Data ▾ Crosswalks ▾

Share ▾ Sites ▾

O*NET OnLine features

More career sites & resources

📋 Introduction ⌄

🔍 Occupation Keyword Search ⌃

🔍 dental assistant

Examples: 25-1011.00, dental assistant

Search O*NET-SOC occupations ➔

👤 "I want to be a..."

Start the career you've dreamed about, or find one you never imagined. Discover your interests with the O*NET Interest Profiler and find more exploration options at My Next Move.

Find your career at My Next Move ➔

⭐ ATTN: VETERANS

Software Developers

15-1252.00

> A subset of this occupation's profile is available. Data collection is currently underway to populate other parts of the profile.

Research, design, and develop computer and network software or specialized utility programs. Analyze user needs and develop software solutions, applying principles and techniques of computer science, engineering, and mathematical analysis. Update software or enhance existing software capabilities. May work with computer hardware engineers to integrate hardware and software systems, and develop specifications and performance requirements. May maintain databases within an application area, working individually or coordinating database development as part of a team.

Sample of reported job titles: Application Developer, Application Integration Engineer, Developer, Infrastructure Engineer, Network Engineer, Software Architect, Software Developer, Software Development Engineer, Software Engineer, Systems Engineer

Summary | Details | Custom | ⚡ Easy Read | ⚡ Veterans | ⚡ Español

📘 Contents ▾

Occupation-Specific Information

Tasks

⌄ 5 of 19 displayed

➕ Analyze information to determine, recommend, and plan installation of a new system or modification of an existing system.

➕ Analyze user needs and software requirements to determine feasibility of design within time and cost constraints.

Contents ▾

Skills

Save Table: 📄 XLSX 📄 CSV

⌄ 10 of 35 displayed

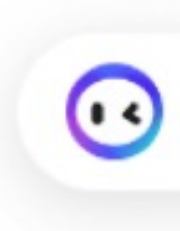| Importance ⬍	Skill ⬍
69 ▬▬▬	⊕ **Instructing** — Teaching others how to do something.
63 ▬▬	⊕ **Learning Strategies** — Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.
63 ▬▬	⊕ **Speaking** — Talking to others to convey information effectively.
60 ▬▬	⊕ **Critical Thinking** — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.
56 ▬▬	⊕ **Active Learning** — Understanding the implications of new information for both current and future problem-solving and decision-making.
53 ▬▬	⊕ **Active Listening** — Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
53 ▬▬	⊕ **Judgment and Decision Making** — Considering the relative costs and benefits of potential actions to choose the most appropriate one.
53 ▬▬	⊕ **Monitoring** — Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.
50 ▬▬	⊕ **Complex Problem Solving** — Identifying complex problems and reviewing related information to develop and evaluate

Statistical Results for All Professions (n=1016)

Skill	Importance
Active Listening	55914
Speaking	54700
Critical Thinking	54203
Reading Comprehension	53237
Monitoring	49713
Judgment and Decision Making	48632
Complex Problem Solving	47704
Writing	47034
Social Perceptiveness	46780
Coordination	45754

However, statistics for all professions may be misleading because many occupations are in decline.

Word Processors and Typists

43-9022.00

Use word processor, computer, or typewriter to type letters, reports, forms, or other material from rough draft, corrected copy, or voice recording. May perform other clerical duties as assigned.

Sample of reported job titles: Clerk Specialist, Clerk Typist, Keyboard Specialist, Office Technician, Stenographer, Typist, Word Processor

Summary | Details | Custom | ⚡ Easy Read | ⚡ Veterans | ⚡ Español

📖 Contents ▾

Occupation-Specific Information

Tasks

⌄ 5 of 20 displayed

- ⊕ Perform other clerical duties, such as answering telephone, sorting and distributing mail, running errands or sending faxes.
- ⊕ Check completed work for spelling, grammar, punctuation, and format.
- ⊕ File and store completed documents on computer hard drive or disk, or maintain a computer filing system to store, retrieve, update, and delete documents.
- ⊕ Print and make copies of work.
- ⊕ Transmit work electronically to other locations.

O*Net also provides many other categories. Here, we specifically focus on two pieces of information: Bright Outlook and STEM.

Browse Bright Outlook Occupations

Bright Outlook occupations are expected to grow rapidly in the next several years, will have large numbers of job openin occupations.

✓ Rapid Growth

Numerous Job Openings

New and Emerging

All Bright Outlook Occupations

Go

Help ▲   Find Occupations ▲   Advanced Searches ▲   O*NET Data ▲   Crosswalks ▲

Was this page helpful? 👍 👎

Share: f 𝕏 in 🔴 ✉

Follow us:

Job Seeker Help • Contact Us

Link to Us • Cite this Page

About

License

Site

It's important to note that within the categories of Bright Outlook (n=386) and STEM (n=288), there is almost a complete overlap between STEM and Bright Outlook.

If we specifically examine the skills associated with Bright Outlook and STEM, the statistical results would be as follows:

| STEM	Bright Outlook
Reading Comprehension	Active Listening
Active Listening	Speaking
Critical Thinking	Critical Thinking
Speaking	Reading Comprehension
Writing	Judgment and Decision Making
Complex Problem Solving	Writing
Judgment and Decision Making	Monitoring
Active Learning	Complex Problem Solving
Monitoring	Social Perceptiveness
Social Perceptiveness	Active Learning

AI Tutor - Does it Really Work?

The 2 Sigma Problem: The Search for Methods of Group Instruction as Effective as One-to-One Tutoring

BENJAMIN S. BLOOM
University of Chicago and Northwestern University

FIGURE 1. Achievement distribution for students under conventional, mastery learning, and tutorial instruction.

TUTORIAL
1-1*

MASTERY LEARNING
1-30*

CONVENTIONAL
1-30*

Summative Achievement Scores

5
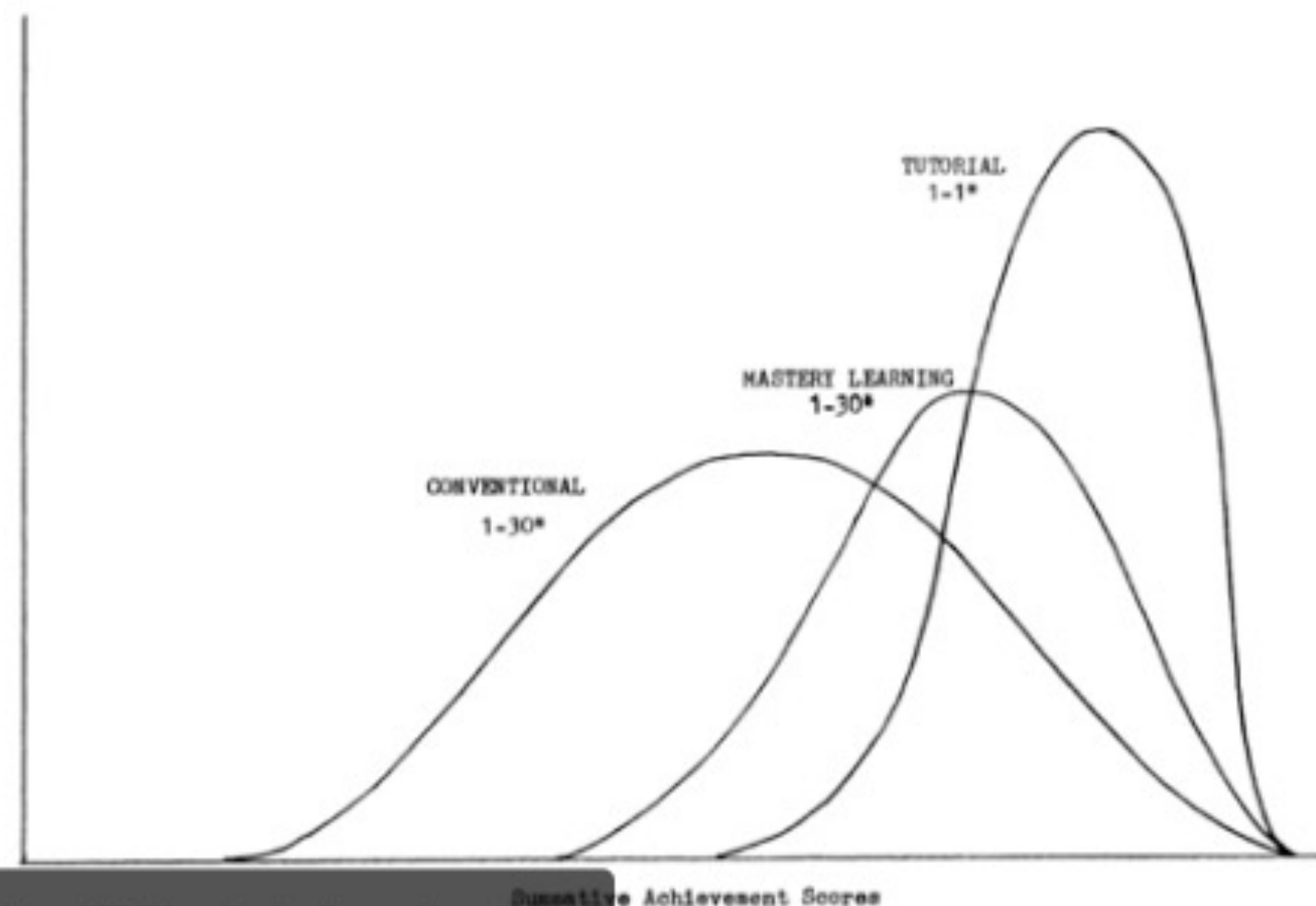
right in the middle, that's how the world kind of sorts itself out,

How AI could save (not destroy) education

2,906,712 views | Sal Khan | TED2023 • April 2023

Share   Save   Like

Read transcript

Sal Khan, the founder and CEO of Khan Academy, thinks artificial intelligence could spark the greatest positive transformation education has ever seen. He shares the opportunities he sees for students and educators to collaborate with AI tools -- including the potential of a personal AI tutor for every student and an AI teaching assistant for every teacher -- and demos some exciting new features for their educational chatbot, Khanmigo.

Technology, Education, AI, Teaching, Kids

Teachers   Learners   Parents

Supercharge your teaching experience with Khanmigo

Meet Khanmigo, your go-to AI tool for learning and teaching. Now just $4/month.*

Get Khanmigo

Can you help me create a 6th grade geometry lesson plan?

B *I* H₁ H₂ 99   🔗 ☰ ☰   ↺ ↻   Share   Print

Solving for X using Graphs: Olympic Runners

Warm-up

If two Olympic runners are racing each other, how can we determine who wins using a graph?

Practice Questions

Khanmigo

What topic would you like to explore in your lesson plan? Try something like "Add fractions with common denominators"

Amazing, I'd like to includes topics that cover surface area word problems

Cornell University

We gratefully acknowledge support from the Simons Foundation, member institutions, and all contributors. Donate

Search... | All fields ⌄ | Search

Help | Advanced Search

Computer Science > Human-Computer Interaction

[Submitted on 15 Feb 2024]

Effective and Scalable Math Support: Evidence on the Impact of an AI- Tutor on Math Achievement in Ghana

Owen Henkel, Hannah Horne-Robinson, Nessie Kozhakhmetova, Amanda Lee

This study evaluates the impact of Rori, an AI powered conversational math tutor accessible via WhatsApp, on the math performance of approximately 1,000 students in grades 3-9 across 11 schools in Ghana. Each school was assigned to a treatment group or control group; the students in the control group continued their regular math instruction, while students in the treatment group engaged with Rori, for two 30-minute sessions per week over 8 months in addition to regular math instruction. We find that the math growth scores were substantially higher for the treatment group with an effect size of 0.37, and that the results were statistically significant (p < 0.001). The fact that Rori works with basic mobile devices on low-bandwidth data networks gives the intervention strong potential to support personalized learning on other low-and-middle-income countries (LMICs), where laptop ownership and high-speed internet - prerequisite for many video-centered learning platforms - remain extremely limited. While the results should be interpreted judiciously, as they only report on year 1 of the intervention, and future research is necessary to better understand which conditions are necessary for successful implementation, they do suggest that chat-based tutoring solutions leveraging artificial intelligence could offer a costeffective approach to enhancing learning outcomes for millions of students globally.

Subjects: **Human-Computer Interaction (cs.HC)**
Cite as: arXiv:2402.09809 **[cs.HC]**
(or arXiv:2402.09809v1 **[cs.HC]** for this version)
https://doi.org/10.48550/arXiv.2402.09809 🛈

Submission history
From: Owen Henkel [view email]
[v1] Thu, 15 Feb 2024 09:15:09 UTC (3,582 KB)

Access Paper:

- Download PDF
- TeX Source
- Other Formats

Current browse context:
cs.HC
< prev | next >
new | recent | 2402

Change to browse by:
cs

References & Citations

- NASA ADS
- Google Scholar
- Semantic Scholar

Export BibTeX Citation

Bookmark

| Bibliographic Tools | Code, Data, Media | Demos | Related Papers | About arXivLabs |

Bibliographic and Citation Tools

Bibliographic Explorer (What is the Explorer?)

Litmaps (What is Litmaps?)

scite Smart Citations (What are Smart Citations?)

Get citation

Which authors of this paper are endorsers? | Disable MathJax (What is MathJax?)

Few more things to note

The Korea Times

North Korea   National   Business   Finance   Lifestyle   Entertainment & Art   Opinion   Sports   World   Video   Photos | Subscribe   Login ▾

National

AI digital textbooks to be introduced in schools from 2025

Posted : 2023-06-08 17:08
Updated : 2023-06-08 17:08

A visitor looks at displays, including an electronic textbook, at Education Korea 2023 at an exhibition center in Seoul, Jan. 12. Yonhap

Most Read in National

1 Migrant workers, caregivers condemn BOK suggestion to exempt foreign nannies from minimum wage

2 Seoul, Gyeonggi in gridlock over public
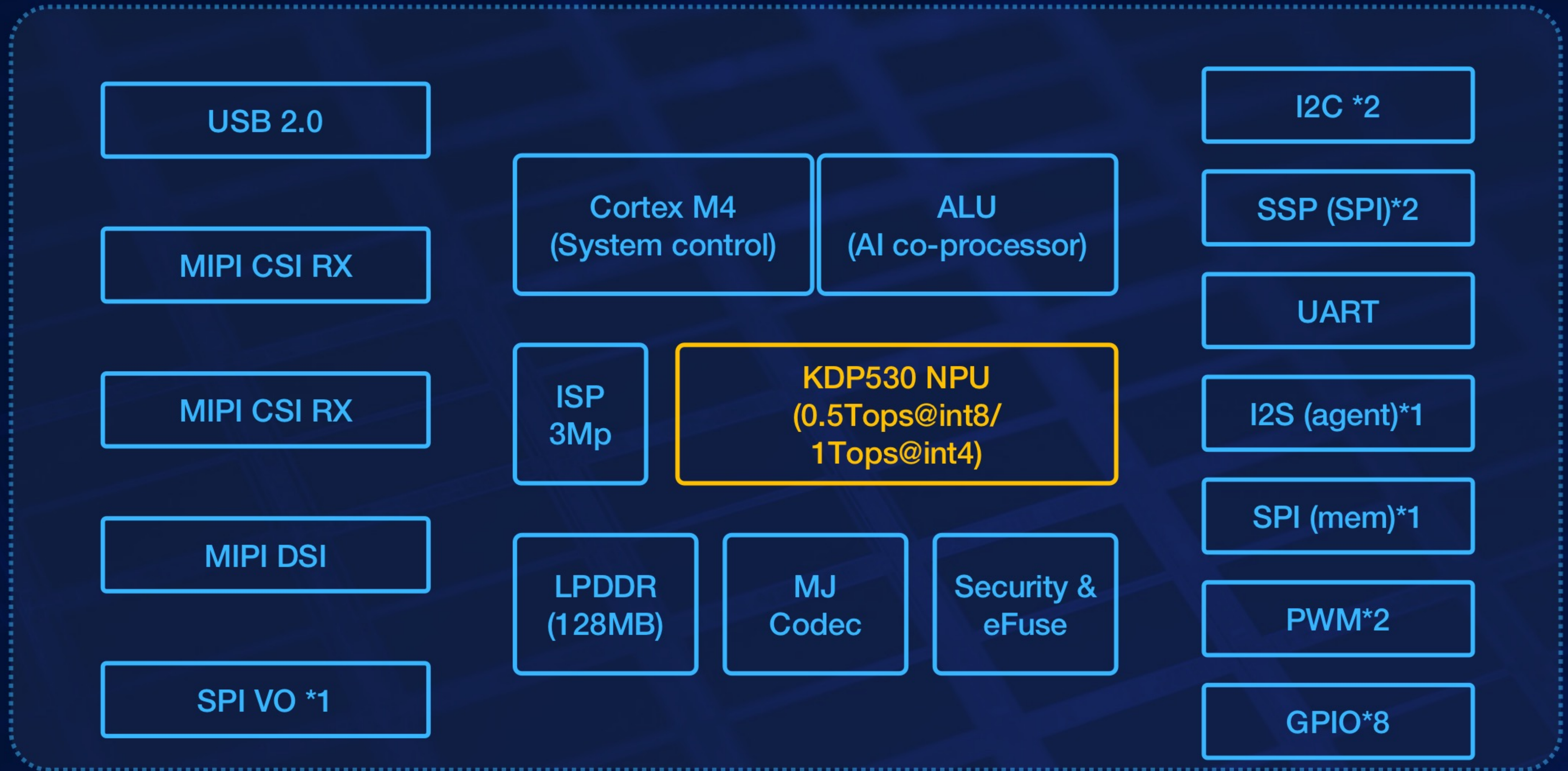
Bloom's Taxonomy Revisited

Use this table as a reference for evaluating and making changes to aligned course activities and assessments (or, where possible, learning outcomes) that account for generative Artificial Intelligence (AI) tool capabilities and distinctive human skills.

All course activities and assessments will benefit from **review** given the capabilities of AI tools; those at the **Remember** and **Analyze** levels may be more likely to need **amendment**.

	RECOMMENDATION	AI CAPABILITIES	DISTINCTIVE HUMAN SKILLS
CREATE	Review	Suggest a range of alternatives, enumerate potential drawbacks and advantages, describe successful real-world cases	Formulate original solutions incorporating human judgement, collaborate spontaneously
EVALUATE	Review	Identify pros and cons of various courses of action, develop rubrics	Engage in metacognitive reflection, holistically appraise ethical consequences of alternative courses of action
ANALYZE	Amend	Compare and contrast data, infer trends and themes, compute, predict	Critically think and reason within the cognitive and affective domains, interpret and relate to authentic problems, decisions, & choices
APPLY	Review	Make use of a process, model, or method to illustrate how to solve a quantitative inquiry	Operate, implement, conduct, execute, experiment, and test in the real world; apply creativity and imagination to idea & solution development
UNDERSTAND	Review	Describe a concept in different words, recognize a related example, translate	Contextualize answers within emotional, moral, or ethical considerations
REMEMBER	Amend	Recall factual information, list possible answers, define a term, construct a basic chronolgy	Recall information in situations where technology is not readily accessible

EDGE AI HARDWARE
KL530 DIAGRAM

USB 2.0

MIPI CSI RX

MIPI CSI RX

MIPI DSI

SPI VO *1

Cortex M4
(System control)

ALU
(AI co-processor)

ISP
3Mp

KDP530 NPU
(0.5Tops@int8/
1Tops@int4)

LPDDR
(128MB)

MJ
Codec

Security &
eFuse

I2C *2

SSP (SPI)*2

UART

I2S (agent)*1

SPI (mem)*1

PWM*2

GPIO*8

...

Educational Equity

☐ How can AI facilitate or provide equal learning opportunities, avoiding the widening gap in teaching or learning disparities?

1. In the current education system, how can AI technology be used to promote educational equity and prevent further expansion of the digital divide? Given the varying backgrounds and economic conditions of students, how can more students have access to relevant educational resources?

2. How can personalized teaching be achieved to help every student receive a learning experience that suits them?

3. In the process of promoting AI in education, how do we overcome potential differences in race, region, or economic background, ensuring every student benefits equally? Please share the approaches taken by Taiwan and Thailand in response.

4. How can we balance technological innovation and teaching methods to ensure the quality of teaching remains high?

數位發展部 數位產業署
Administration for Digital Industries, moda

...

Digital Transformation and Trust

☐ **What are the main challenges businesses face in the application of AI technology?**

☐ **How does AI technology facilitate digital transformation in businesses and effectively address potential security threats?**

1. While advancing AI technology development, how can personal privacy and data security be protected? What are some effective privacy protection measures?

2. In the face of growing data security threats, what measures should businesses take to effectively prevent and respond to potential security risks

3. Under the push for AI-driven digital transformation, organizations may face challenges related to organizational change and cultural impact. How can these be addressed?

4. During the digital transformation process, how can a trustworthy data ecosystem be established to promote the secure sharing and cooperation of data?

數位發展部 數位產業署
Administration for Digital Industries, moda

AI Education Summit "Sustainable AI Education for All" Pre-session Discussion

...

International Experiences and Cooperation Discussion

(Dialogue with Organizations and National Theme Development)

1. Could you share benchmark cases of AI technology application in the education sector from around the world? What insights and lessons can be learned from the experiences of other countries?

2. How can international exchange and cooperation in the field of AI education be promoted? What are some effective models or mechanisms for cooperation? (Considerations for cross- border cooperation, such as cultural differences, etc.)

3. How do differences in educational systems and cultures between countries affect the development of AI education? How should these differences be adapted to and resolved?

4. In the process of promoting sustainable development in AI education, how should countries work together to achieve a broader impact and mutual benefits?

5. How can countries collectively address the ethical and social issues that may arise from AI in education, ensuring the development of AI education aligns with ethical standards and societal values? (Issues of literacy)