

Adult Learning Xchange (ALX) 2025

Achieving Competency-based Learning with LLMs



A/P Ben Leong

Director, AI Centre for Educational Technologies




Prof Ben



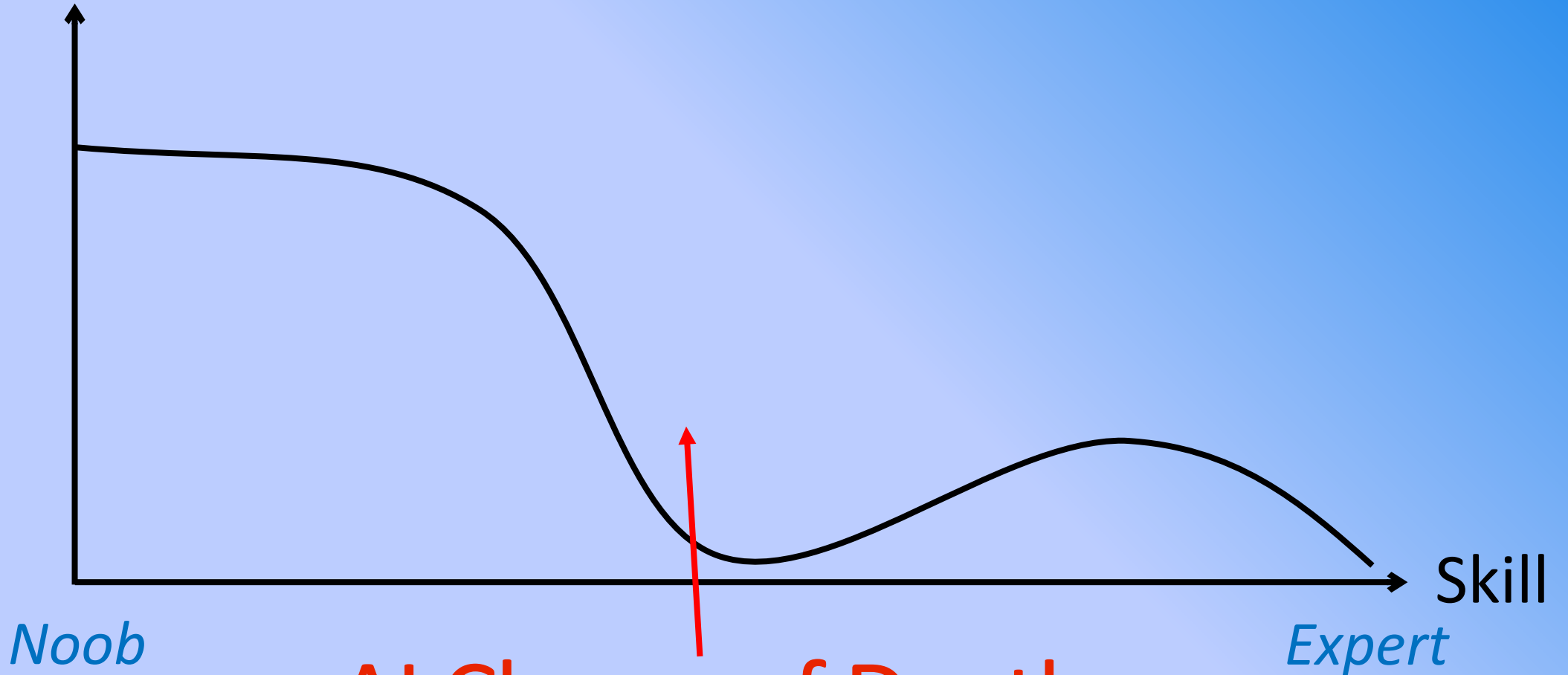
Do you use
ChatGPT in
your work?



Should we use
ChatGPT in our
work? 



#People



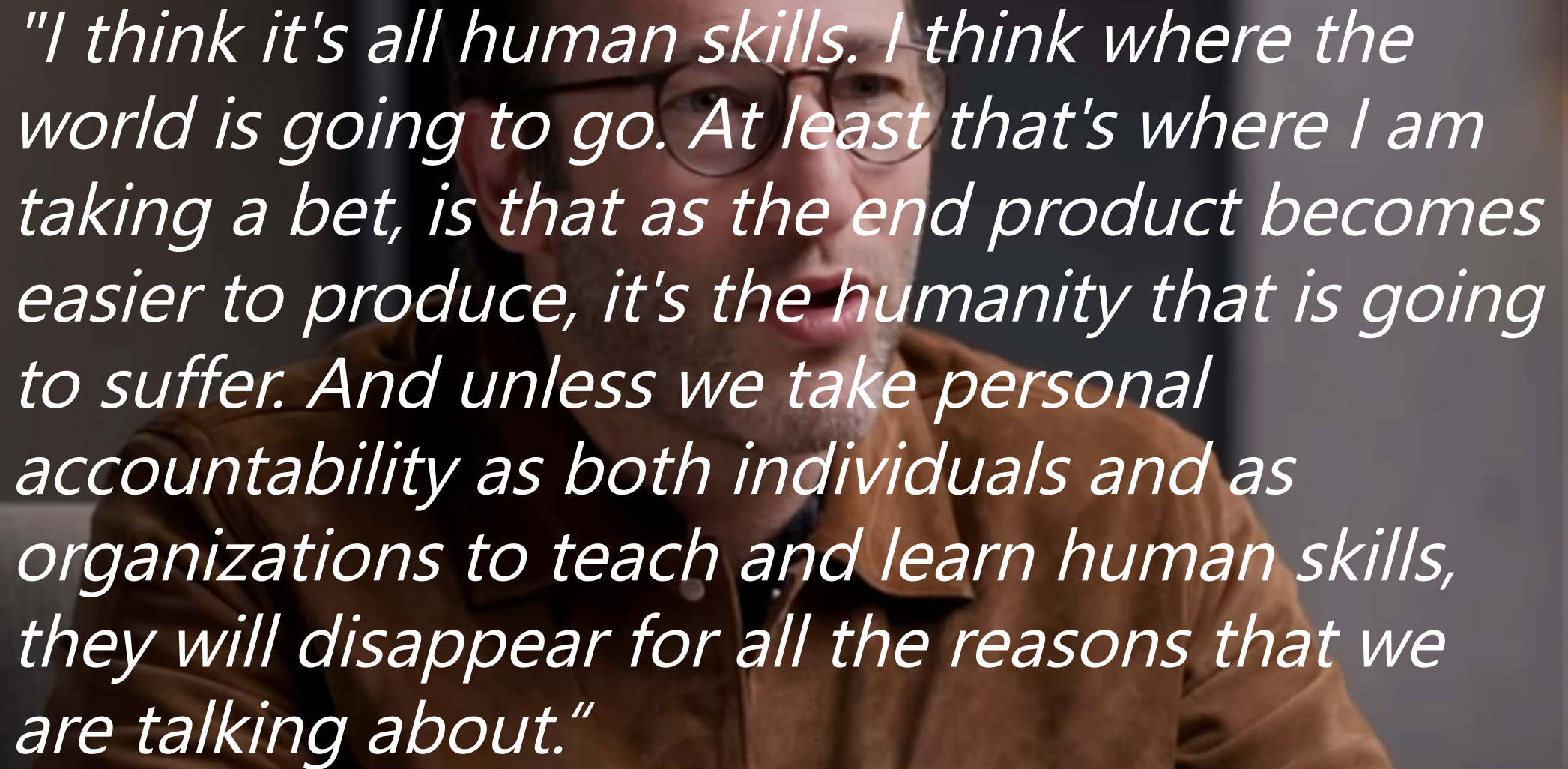
AI Chasm of Death

Do you actually
need to learn how
to do it?

Use GPT/GenAI to do what
you **don't want to do**

Not what you
cannot do

Will we still have
jobs?? 😞

A man with glasses and a brown jacket is speaking. The background is blurred, suggesting an indoor setting.

"I think it's all human skills. I think where the world is going to go. At least that's where I am taking a bet, is that as the end product becomes easier to produce, it's the humanity that is going to suffer. And unless we take personal accountability as both individuals and as organizations to teach and learn human skills, they will disappear for all the reasons that we are talking about."

- Simon Sinek

As we move into an AI-Driven Future, “human skills” will become critical!

**But how do we teach
“human skills?”**

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Teaching Practical Skills with LLMs



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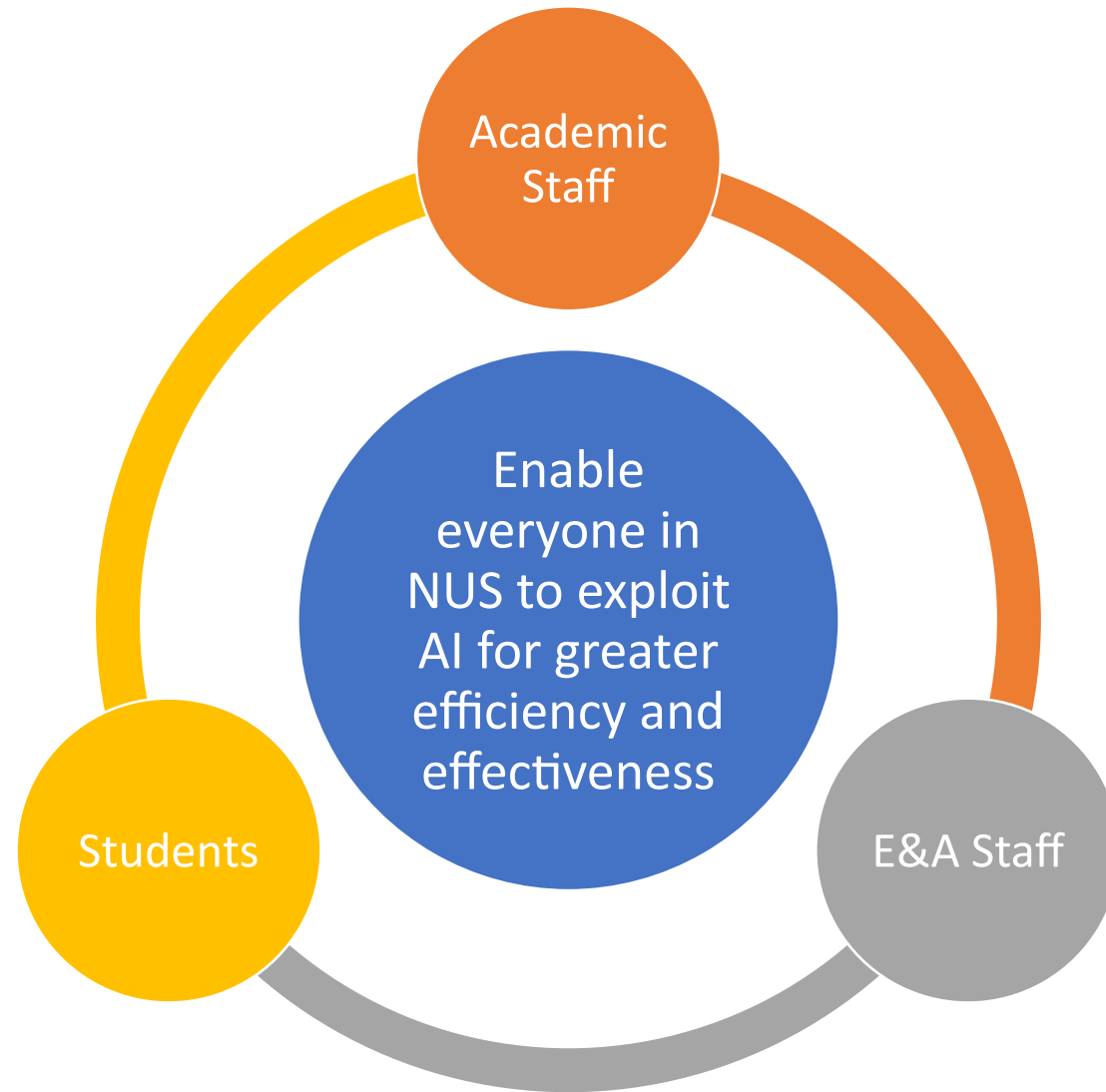
2021 – 2025

AI Centre for Educational Technologies

2021 – 2025

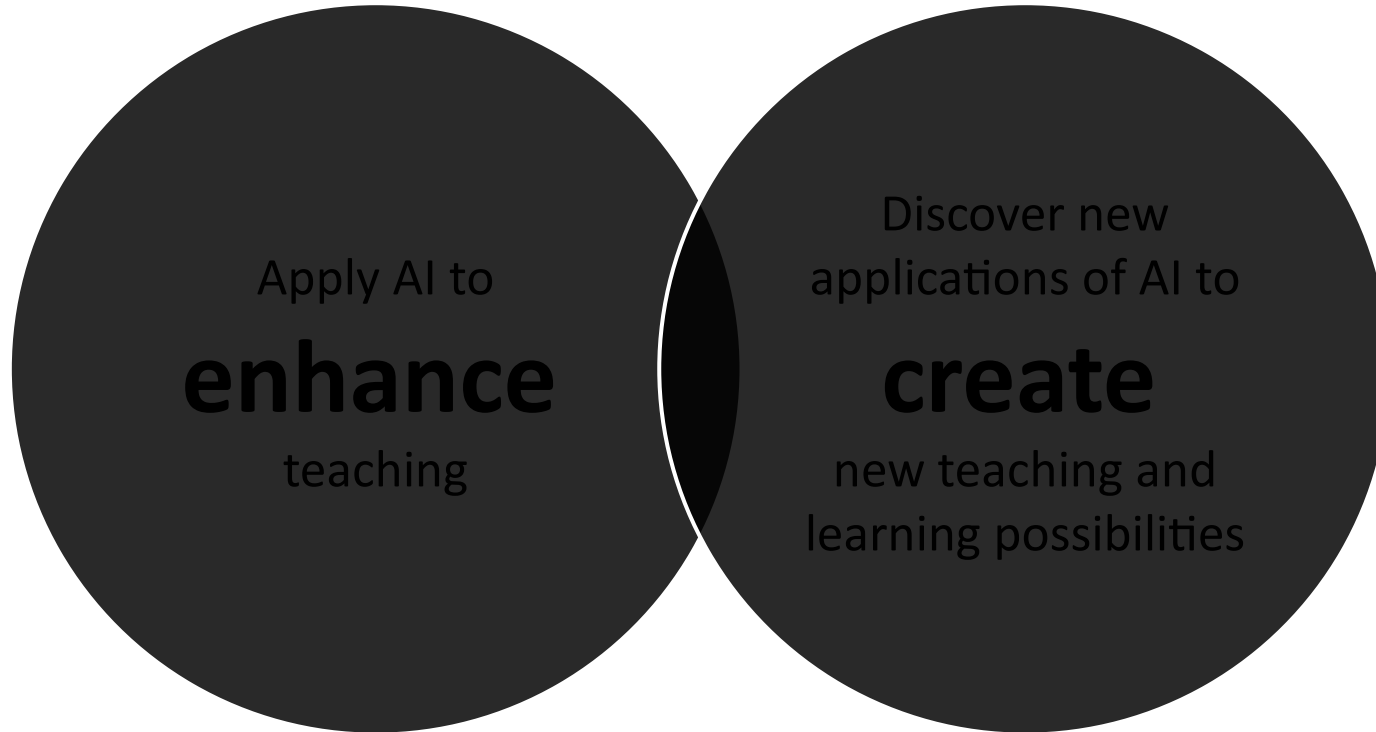
\$10 million

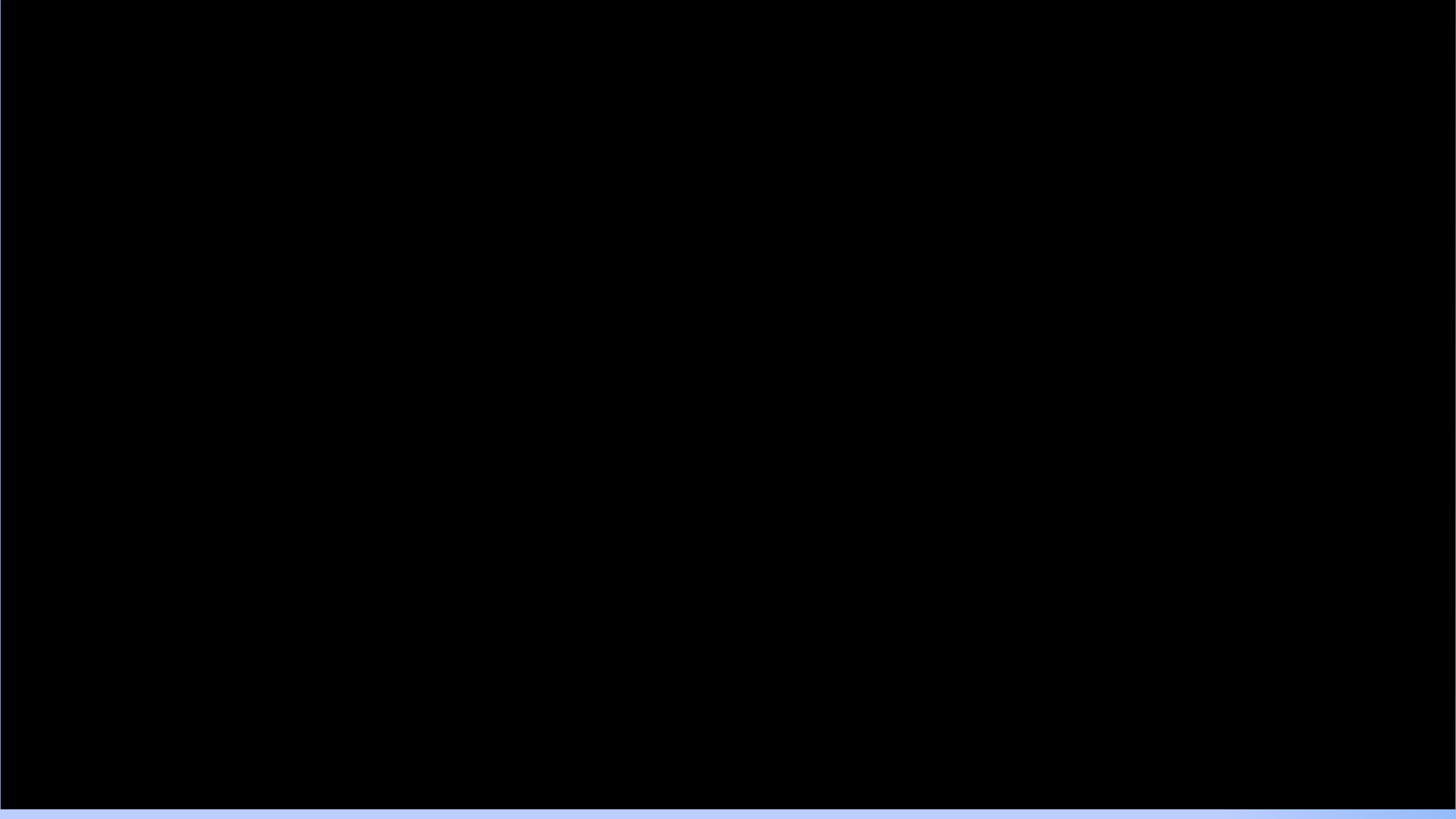
NUS AI Strategy



Effective AI adoption is a
people problem,
not a tech problem.

AICET Consulting





NUS Implementation: 4 Use Cases



Social Work

Objective:

To teach values and skills for helping relationships (case management)

Impact:

- 2 instructors; 18 students
- 7 chatbots used approximately 14 times per academic year



Nursing

Objective:

To cultivate empathetic communication skills

Impact:

- 3 instructors; 200 students
- 1 chatbot used approximately 6 times per academic year



Centre for Teaching and Learning Technologies

Objective:

Develop instructional competencies in Teaching Assistants

Impact:

- 2 instructors; 160 students
- 1 chatbot used approximately 6 times per academic year



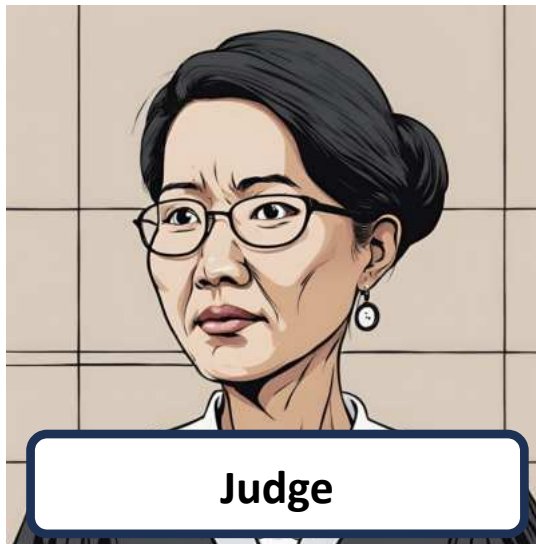
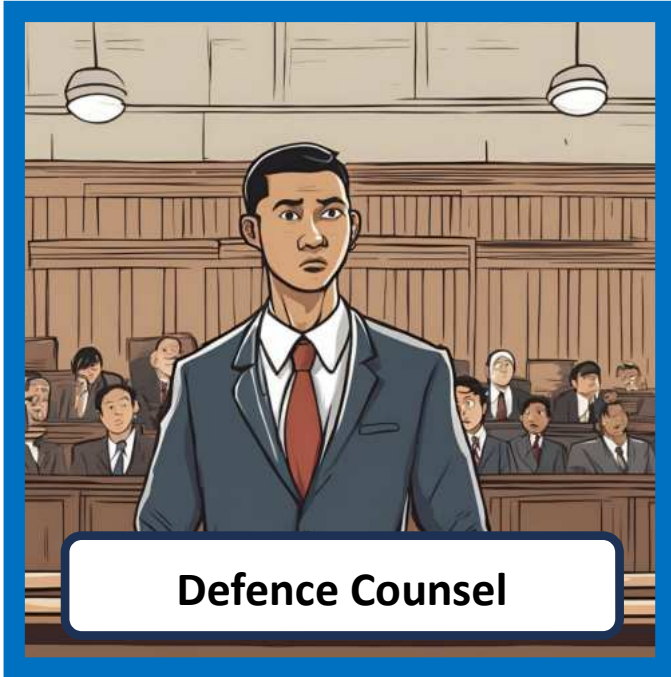
Law

Objective:

To teach courtroom skills

Impact:

- 2 instructors; 130 students
- 2 chatbots used once per academic year





Welcome to the Mock Trial Roleplay!

The proceedings are about to begin. Mr. Ozwarren Zachary is on the witness stand, and your role is to conduct an Examination-in-Chief. The Judge will intervene if needed to guide the process.

When you're ready, begin questioning the witness.

Send a message to start a conversation.

+ Send a Message





Welcome to the Mock Trial Roleplay!

The proceedings are about to begin. Mr. Ozwarren Zachary is on the witness stand, and your role is to conduct an Examination-in-Chief. The Judge will intervene if needed to guide the process.

When you're ready, begin questioning the witness.

Please state your name and age for the court.

OI ChatGPT-4o

Witness: My name is Ozwarren Zachary, and I am 37 years old.

The lawyer has suggested an answer,
and the judge intervenes.

OI ChatGPT-4o

Witness: Yes, I know Mr. Ouyang Boh Sing. we were friends and bus , associates.

I believe he and you were close friends at one time, am I right? But not anymore. Why is that?

OI ChatGPT-4o

Judge: Counsel, that is a leading question. Please rephrase it.



OI ChatGPT-4o

Witness: Yes, I recall. When we arrived, we went to Mr. Ouyang's resort. It was quite a nice place, close to where the race was going to happen. I think I settled in first before heading out.

At this point, were you aware whether your stay would be free of charge?

OI ChatGPT-4o

Witness: I can't really remember. I might've thought there was a discount or something, but I'm not sure if it was free or if I paid anything. I don't recall what the concierge said either.

Take your time to remember. Can you recall whether the concierge asked for a deposit?

OI ChatGPT-4o

Witness: I'm sorry, that's unusual, but whether a deposit was asked for or not, I heard but I can't say.

The lawyer refers to evidence when dealing with an uncooperative witness.

Mr Zachary, could you please refer to document 3A in front of you. It is the hotel receipt from 26th February. Can you confirm whether you paid for your stay?

OI ChatGPT-4o

Witness: Ah, yes, I see the document now. It says here that the stay was marked as "complimentary" and that I was listed as a "Special Guest." I must've forgotten earlier—I didn't actually pay for the stay. Thank you for reminding me.

Witness: Yes... that's what I said. But the context was different this time. (shifts slightly) The circumstances had changed.

My client would have understood this as simply continuing your usual tradition, wouldn't he?

N

Prosecutor: Objection, Your Honour. The question calls for speculation about what was in the defendant's mind.

Judge: Counsel, how do you respond?

Your Honour, I am not asking the witness to speculate on my client's state of mind. I am establishing whether, based on the nature of their past interactions and the way the invitation was extended, there was anything to indicate that this trip was different from their usual friendly interactions.

N

Judge: Overruled. The witness may answer.

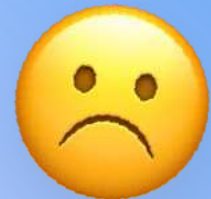
Witness: Well... (hesitates) I suppose based on our previous trips it might have seemed like just another race weekend, but I thought he would understand this was different because of the timing and... (trails off)

The counsel has to **justify** his or her **line of reasoning!**

Tech problems are easy.

Tech problems are easy.

The hard problems are the
people problems.



**Urgent need to figure
out how to teach
“human skills”**

We will get to keep
our jobs!

Thank you!

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