

How Are Teachers' Roles and Competencies Evolving with the Rise of AI?

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Digital Bliss

AI can help to resolve issues such as:

- Life-saving for the displaced and vulnerable
- Lowering language barriers
- Education equity
- Reducing anxiety
- Young children's foreign language anxiety

Digital Trouble

The dark side of AI:

- Deep fakes
 - *How will the elderly be able to distinguish a deepfake from a real person?*
- Privacy and security
 - *Who owns AI data?*
- Overdependence
 - *What is a healthy division of labour between AI and humans?*



Knowledge alone is not power

- Used to be that individual teachers and professors had unique knowledge sets
- Now, anyone can search on Google/use LLM and find that same knowledge
- Memorisation is no longer necessary or advantageous
- The very process of teaching and learning must change

AI Natives

https://youtu.be/0KZlXNjBje0?si=tcZdKvEJ7brM_ZCPo

- An AI-Native refers to an individual who has grown up in an environment saturated with AI technologies.
- They are highly proficient in using AI tools, relying on them for various tasks and decisions in daily life.
- AI-Natives critically engage with AI systems, evaluating their accuracy, ethical implications, and potential biases, while also embracing new developments in AI.
- Their familiarity and mastery of AI make them adept at integrating AI into creative, productive, and ethically aware practices (Kiaer, 2023).



Human teachers vs AI

HUMAN

- Real life experience
- Empathy
- Authority and respect
- Nuances
- Can use different explanations
- Can motivate students
- Can differentiate between real life conversation and textbook conversation
- Knows students often make mistakes and can prevent it
- Can modify the way to teaching specific students according to their preferred study method

AI

- Available all the time
- Knows everything
- Has trouble understanding when you want to rephrase something but keep the meaning
- Let you study alongside a job/school – good when you're studying something as a hobby
- Limited on the technology available at the moment (you always need a PC/phone and Wi-Fi)

Homework and exams

- **AI signals the end of standard exams**
 - No need for memorisation, summaries, or analysis
 - Instead need to learn how to ask the right questions
 - Lesser need for spelling, grammar, and punctuation memorisation
- **Creativity will take on a new meaning**
 - AI is generative and not creative
 - Humans are needed to be creative beings
- **As such, AI bolsters our creativity, rather than hinders it**

Teacher Competencies in the AI Age

1. Balance

- Blend AI tools and physical teaching
- Decide when to use and when to step away

Teacher Competencies in the AI Age

2. Awareness

- Weigh **pros & cons** of AI use
- Recognise impact on **cognition & creativity**
- Spot risks of over-reliance

Teacher Competencies in the AI Age

3. Flexibility

- No black-and-white answers
- Adapt to **different ages, needs, contexts**
- Keep teaching **dynamic & learner-centred**

Why Care Must Lead

Care in education

- More than pastoral nicety
- Rigorous relational practice → learners feel safe, valued, motivated
- Enables risk-taking and deep learning
- Reduces anxiety, supports identity, builds resilience

Why Care Must Lead

Why it matters in the AI age

- **Human affect is non-automatable** → teachers hold ethical judgement & repair
- **Teachers calibrate anxiety** → balance scaffolding vs overwhelm, set cadence & detox
- **Agency & authorship** → protect reflection and ownership from passive AI reliance

AI Wellbeing: For Teachers and Learners

Teacher Wellbeing

- Manage workload with AI (support, not surveillance)
- Time for reflection, rest, and professional growth
- Avoid pressure for constant adoption

Learner Wellbeing

- Protect attention with AI detox & screen breaks
- Reduce anxiety through flexible modes (avatars, text, voice)
- Safeguard authorship, agency, and creativity

Shared Principle: Wellbeing is central; AI should enhance, not erode, human flourishing

From the “Wow”- Moment to Digital Boredom

Students were excited by LLM's at first,
but quickly became bored



Digital Detox

- My students were becoming overwhelmed by being engaged in online environments for long periods of time, so I implemented digital detoxes.
- I found that 45-50 minutes of using AI followed by a short break was most effective.



Anxiety

- Students do not always feel comfortable with their human teachers.
- Many feel anxious about speaking in a classroom setting, stemming from a fear of making mistakes.
- The good thing about AI bots like LLM is that no one feels anxious around them.
- By practising with LLM's, you can improve your communication skills without feeling burdened or anxious.

Teacher's Responses

Simply saying “AI is not my cup of tea” is not an option in this AI era.

Teachers must proactively take action and make AI the devil they know, rather than ignoring it.

We need to critically engage with AI and find the most suitable model that will make learning efficient, enjoyable and sustainable.

LLM Teaching Assistant

Can help in classrooms with many students

Can answer a student's simpler questions

Can provide personalised learning activities to meet students' abilities

LLM's cannot replace teachers



Students cannot empathize with or build relationships with AI

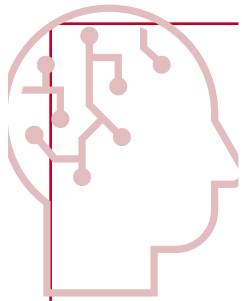


AI cannot be an inspiring presence

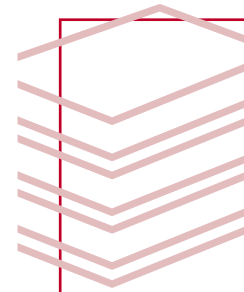


Human teachers are still needed to engage and motivate students

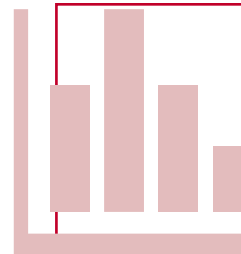
No facts, analysis, or summaries



We must separate
knowledge memorisation
and knowledge application



Students do not need to
memorise facts



They need to know how to
use knowledge and data

Less emphasis on skill training

- Spelling, grammar, and punctuation are the foundation of education
- AI makes students question why they need to learn SPAG
- We now have the opportunity to shift the focus away from SPAG

Case Study: Findings

Time-saving benefits: *“Our students prefer the metaverse because of transport and travel time. Many have to take the bus to reach the centre of the city. Sometimes language learning is just a hobby, so time is important.”*

Psychological comfort: *“We have a student who will never give an answer in physical class, but on the metaverse he has more confidence because he knows he doesn't need to have his camera on or use his voice. He can put his answer in the chat box. Some students have a bad relationship with teachers who have said to them, “What is the answer? Get it right!” The metaverse reduces that pressure. I want them to enjoy it. They won't learn properly if they're not enjoying it.”*

Sense of presence through visual engagement: *“As a teacher, I feel more comfortable with the avatars. With Zoom, having your camera off and mic muted is very impersonal, but with avatars, it feels like my students are still there. This keeps the teacher's motivation up. This is especially useful for sign up talks where you don't know who anyone is, and you don't know who will turn up. Talking to a list of names can feel like talking to robots. The metaverse provides a physical representation of how full that room would be in real life.”*

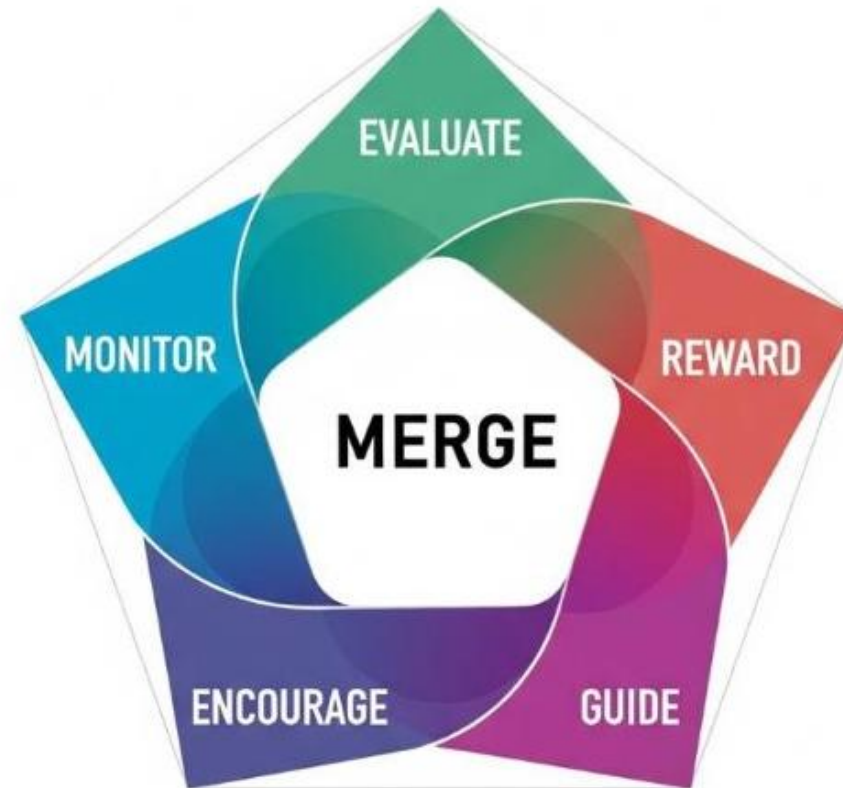
Case Study: Findings

Less anxiety, more fun and engagement: *“I felt more confident in expressing my ideas in English in the metaverse. I was less stressed. Because I was staying in a room where only my group members could hear me, that made me feel less anxious to speak up. Besides, the whole setting, such as the characters and the venue, is cute which makes me relax and feel more engaged.”*

More expressive: *“I felt more confident in expressing my ideas in English in the metaverse. I was less stressed. Because I was staying in a room where only my group members could hear me, that made me feel less anxious to speak up. Besides, the whole setting, such as the characters and the venue, is cute which makes me relax and feel more engaged.”*

More to follow-up on: *“The metaverse is better suited for interaction in small groups rather than large ones. While it allows us to meet, speaking to an unknown avatar initially felt a bit daunting.”*

Merge Model (Kiaer & Jeon, 2024)



Conclusion

The future of education depends on merging AI innovation with the human power of care.

Technology should enhance, not replace, the relational aspects of teaching.

Thank you for your attention

Prof Jieun Kiaer