Al for Good: Nurturing critical and positive uses of GenAl in language learning

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The flow of our talk today

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Learning despite

AI – Empowering

human potential in
the age of
automation

02

Learning with AI – Harnessing AI for enhanced learning experiences 03

Learning about AI

– Becoming critical

'users, consumers
and citizens' in an
AI enhanced-world

04

Learning for AI – Equipping learners to work and live with AI

Empowering human potential in the age of automation

Which of the following can you do:

- a. build a fire?
- b. navigate using the stars?
- c. hurt wild boar?
- d. ride a horse?
- e. wield a sword in combat?
- f. All of the above
- g. None of the above
- What drives humans to learn?
- What drives humans to learn language?
- How does technology influence our drive to learn and what we need / want to learn?

 Technology often removes the 'need' to learn skills our ancestors or previous generations needed to 'survive' and 'thrive'. Instead, we need new skills and reasons to learn.

So, will there be a **need** to learn language in the future to 'survive' and 'thrive'?

Maybe not?

So, we need to focus on the want to learn languages...

- The desire for self-improvement
- the belief that these skills will add to who we are
- the enrichment learning language brings to our lives

What might this look like in our practices?

Curriculum

- Take a holistic and long-term approach to language learning that sees the process of learning as for self-improvement rather than instrumental
- Focus on the cognitive gains of being bilingual and multilingual
- Promote enjoyment of language and literature
- Develop learners' communicative competence

Learning activities

 Create tasks that students value doing, are achievable, reflect their personal experiences, and reward their effort and process and not just the accuracy of the product

Assessments

• See assessment as helping the learner move towards their language learning goals

Learning with Al

Harnessing AI for enhanced learning experiences

Learning with Al

Al offers potential to assist language teachers with their language teaching, and language learners with their language learning.

- Knowledge resource and developer
- Preparation and planning
- Personalized learning
- Assessment and feedback

Learning with Al

Knowledge resource and developer

LLMs can provide information on various topics, methodologies, and languages.

Research students' L1s and cultures

Explore methodologies

Get information on topics, genres ...

Knowledge resource and developer

what challenges would Cantonese learners of english face when learning vocabulary related to family relationships

GPT-4.5-Preview Poe

Cantonese learners of English commonly face several challenges when learning vocabulary related to family relationships, primarily due to significant linguistic and cultural differences between English and Cantonese. Here are some key challenges:

1. Differences in Specificity and Granularity

- Issue: Cantonese has highly specific and detailed terms differentiating relatives by factors like age, gender, maternal/paternal side, and birth order. English uses broader, more general terms.
- Example: Cantonese has distinct terms such as 姨媽 (ji4 maa1; maternal aunt), 姑媽 (gu1 maa1; paternal aunt), 舅父 (kau5 fu2; maternal uncle), and 叔叔 (suk1 suk1; paternal younger uncle). English generally employs broader terms like "aunt" and "uncle." which encompass multiple relationships.
- Impact on Learners: Learners may struggle to internalize the broader English categories, leading to confusion or inaccuracies when describing family members.

2. Absence of Direct Equivalents

- Issue: Certain English terms, such as "cousin," don't have direct equivalents in Cantonese. Instead, Cantonese has specific words indicating gender, age relative to the speaker, and the side of the family (maternal or paternal).
- Example: Cantonese distinguishes clearly among 表哥 (*biu2 go1*, older male cousin on the mother's side), 堂妹 (*tong4 mui6*, younger ♣male cousin on the father's side), etc. English lumps these under one umbrella term: "cousin."
- Impact on Learners: Learners might feel uncertain about the ambiguity, making it difficult to accurately express the precise relationship in English.

3. Cultural Expectations and Importance

 Researching differences and challenges of learning English for specific L1 speakers.

 Prompt: What challenges would Cantonese learners of English face learning vocabulary related to family relationships

Knowledge resource and developer

For 8-year-old learners, festivals that are visually engaging, culturally interesting, interactive, and fun are typically the most appealing. Here are some from the previous list that would especially interest children:

• La Tomatina (Spain):

- Fun, messy tomato-throwing event.
- Opportunity to learn about Spanish culture in a playful way.

• Carnival of Venice (Italy):

- · Colorful masks and costumes.
- · Creative mask-making activities and storytelling.

• King's Day (Netherlands):

- Bright orange clothing and street parties.
- Child-friendly activities like flea markets, games, and face painting.

• Saint Patrick's Day (Ireland):

- Parades, shamrock symbols, leprechauns, and storytelling.
- Engaging Irish myths and folklore.

• Las Fallas (Spain):

- Giant sculptures ("fallas"), fireworks, and bonfires.
- Visually exciting and interactive for children.

• Notting Hill Carnival (United Kingdom):

- Colorful costumes, music, dancing, and parades.
- Child-friendly events focused on Caribbean culture.

• Krampusnacht (Austria and Germany) (with caution):

- Folklore-based event featuring mythical creatures.
- Opportunity for storytelling and introduction to European folklore. (Note: May be somewhat scary, so careful guidance is advised.)

 Researching interesting topics for language lessons

 Prompt: What European Festivals would be interesting for 8year-old learners?

Preparation and planning

- Brainstorming different ways to teach language
- Create tailored differentiated texts and materials
- Create interactive quizzes
- Create audio texts, reading tasks and basically any kinds of materials you need!

Differentiated materials

Prompt: Can you create three reading passages about a trip to Hong Kong Disneyland for three different proficiency levels. PM benchmark 7, 10 and 14. Please keep the text short at 100 words each and include the following words: exciting, boring, thrilling, interesting, scary, tiring

PM Benchmark 7 (Early Readers)

I went to Hong Kong Disneyland. It was so exciting! I saw Mickey Mouse and other characters. I went on a small train. It was not scary. We watched a show, and it was very interesting. Then we ate lunch. The food was yummy. After lunch, I went on a big ride. It was fast and thrilling! I felt a little scared, but it was fun. At the end of the day, I was tired. My feet hurt, but I was happy. Disneyland is never boring. I want to go again soon!

PM Benchmark 10 (Developing Readers)

My family went to Hong Kong Disneyland. It was so exciting! We saw Mickey Mouse and took lots of pictures. The rides were amazing. Some were thrilling and made me scream. One ride was very scary, but I liked it. We watched a show about princesses. It was so interesting to see the costumes and dancing. After that, we ate ice cream, which was delicious. Walking around the park all day was tiring, but I didn't mind. Disneyland was never boring. There was always something fun to do. I hope we can visit again someday!

PM Benchmark 14 (Fluent Readers)

• Our trip to Hong Kong Disneyland was unforgettable. Everything about the park was exciting. The thrilling roller coasters were my favorite, even though some were a bit scary. I loved how interesting the shows were, especially the one about pirates. The costumes and special effects were amazing! We also explored the themed lands, which were fun and not boring at all. However, the long walks and waiting in lines made the day tiring. By the evening, I could barely keep my eyes open, but I didn't care. Disneyland was magical, and I would go back in a heartbeat!

Analysing the linguistic differences

PM Benchmark 7 (Early Readers)

I went to Hong Kong Disneyland. It was so **exciting!** I saw Mickey Mouse and other characters. I went on a small train. It was not **scary**. We watched a show, and it was very **interesting**. Then we ate lunch. The food was yummy. After lunch, I went on a big ride. It was fast and **thrilling!** I felt a little scared, but it was fun. At the end of the day, I was tired. My feet hurt, but I was happy. Disneyland is never **boring**. I want to go again soon!

- Vocabulary: Basic (e.g., "exciting," "scary," "tired").
- Sentence Structure: Short and simple sentences (e.g., "I went on a small train. It was not scary.").
- **Detail**: Minimal (e.g., "The food was yummy.").
- Connectors: Basic connectors like "and." "then."
- Tone: Focused on concrete actions (e.g., "I saw Mickey Mouse.").

PM Benchmark 10 (Developing Readers)

My family went to Hong Kong Disneyland. It was so **exciting!** We saw Mickey Mouse and took lots of pictures. The rides were **amazing**. Some were **thrilling** and made me scream. One ride was very **scary**, but I liked it. We watched a show about princesses. It was so **interesting** to see the costumes and dancing. After that, we ate ice cream, which was delicious. Walking around the park all day was **tiring**, but I didn't mind. Disneyland was never **boring**. There was always something fun to do. I hope we can visit again someday!

- Vocabulary: More descriptive (e.g., "amazing," "delicious").
- Sentence Structure: Longer and includes compound forms (e.g., "Some were thrilling and made me scream.").
- Detail: Moderate detail added (e.g., "It was so interesting to see the costumes and dancing.").
- Connectors: Improved variety, such as "but" and "after that."
- Tone: Adds personal opinions and emotions (e.g., "Walking around the park all day was tiring, but I didn't mind.").

PM Benchmark 14 (Fluent Readers)

Our trip to Hong Kong Disneyland was **unforgettable**. Everything about the park was **exciting**. The **thrilling** roller coasters were my favorite, even though some were a bit **scary**. I loved how **interesting** the shows were, especially the one about pirates. The costumes and special effects were amazing! We also **explored** the themed lands, which were fun and not **boring** at all. However, the long walks and waiting in lines made the day **tiring**. By the evening, I could barely keep my eyes open, but I didn't care. Disneyland was **magical**, and I would go back in a heartbeat!

- Vocabulary: Advanced and varied (e.g., "unforgettable," "explored," "magical").
- Sentence Structure: Complex, with modifiers and dependent clauses (e.g., "even though some were a bit scary").
- Detail: Rich and specific (e.g., "The costumes and special effects were amazing!").
- Connectors: Advanced, like "however," "even though," and "especially."
- Tone: Reflective and emotional (e.g., "By the evening, I could barely keep my eyes open, but I didn't care.").

Highlighted Progression

- Basic to Advanced Vocabulary: Words like "yummy" (PM 7) progress to "delicious" (PM 10) and then "unforgettable" (PM 14).
- Sentence Complexity: Sentences grow longer and include more descriptive elements and dependent clauses by PM 14.
- Details: The amount and specificity of details increase significantly from PM 7 to PM 14.
- Connectors: Transition words evolve from basic ("and," "then") to more advanced ("however," "even though").
- Tone: Moves from simple descriptions of actions and feelings to reflective and personal narratives.

Interactive materials

Getting LLMs to create quizzes using coding

 Prompt: Create a matching game for the following vocabulary exciting, interesting, scary, boring, thrilling. Match the words with examples of use

Personalized learning

Student-Al interactions

• 24/7 language practice, explaining language concepts and rules (in different languages), checking the accuracy of their language production, and suggesting study plans.

Personalized learning

Can you pretend to be Julia Donaldson and chat with me about your life and children's books

GPT-4o Poe

Of course, I'd be delighted to role-play as Julia Donaldson! Let's chat about my "life" and my beloved children's books. Ask away!

What was your first book?

GPT-40 Poe

Ah, my very first book was actually a songbook called *A Squash and a Squeeze*. You see, before I became a children's author, I wrote songs for children's television. One day, a publisher heard one of my songs and suggested I turn it into a book. So, in 1993, *A Squash and a Squeeze* became my first published children's book, illustrated by the wonderful Axel Scheffler.

It's about a little old lady who feels her house is too small, so a wise old man advises her to bring in all sorts of animals—one by one. It's a story with a lot of humor and a lovely lesson about appreciating what you have.

That book started my partnership with Axel, and we've worked together on so many books since then. Do you have a favorite of mine? Or perhaps another question?

How many books have you written?

GPT-4o Poe

Ah, that's a great question! Over the years, I've written more than 200 books. That number includes not only the picture books like *The Gruffalo* and *Room on the Broom* but also plays, early readers, and educational books. Not all of them are widely available, though—some were written specifically for schools and classrooms.

If we're just talking about my picture books, there are over 20, and many of them are illustrated by Axel Scheffler. Of course, I've also worked with other amazing illustrators like Lydia Monks (What the Ladybird Heard), David Roberts (Tyrannosaurus Drip), and Emily Gravett (Cave Baby).

It's been such a joy to create these stories over the years. Do you have a favorite of my books, or would you like to know more about one of them?

Customize a bot for your teaching needs

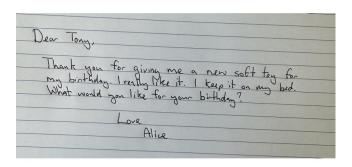
- Reduces the 'randomness'
- It can be tailored to your needs

Assessment and feedback

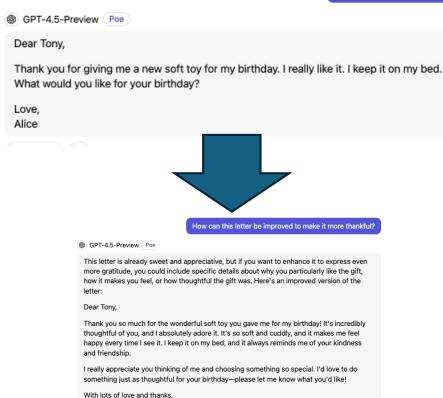
Design tailored assessment tasks, rubrics, and listening scripts etc.

Give personalized feedback on students' work

Analyze large groups of work and find common strengths and areas for improvement







What might this mean for our practices?

Curriculum

- Look for opportunities to integrate AI tools into different units
- Use AI to find ways to better align the curriculum with students' individual needs

Learning activities

- Use AI tools to create novel and engaging learning practice
- Create interactive activities
- Develop cross-language comparison activities and materials

Assessments

- Use AI to develop more tailored assessment tasks
- Use AI to analyze student performance
- Consider using AI to give feedback on students' production activities

Learning about Al

Becoming critical 'users, consumers and citizens' in an AI enhanced-world

Learning about Al

• When you watch the video, what does it make you think about users of AI?

Write three characteristics that come to your mind.

Learning about Al

- 1. Understanding: Building Foundational Knowledge
- 2. Accessing: Navigating the Technology
- 3. Prompting: Asking the Right Questions
- 4. Corroborating: Ensuring Accuracy and Credibility
- 5. Incorporating: Using AI Ethically and Effectively

Understanding: Building Foundational Knowledge

- How do GenAl tools work?
- What is a context window?
- What is training data?
- What is an algorithm?
- What is a token?
- Why do they create the responses I get?

Accessing: Navigating the Technology

- What do I want to do with AI?
- What is the right tool for me?
- What do I do if the tool doesn't work the way I want it to?

Prompting: Asking the Right Questions

- What do I need to include in a prompt to get what I want?
- How do I communicate with an AI tool?
- What do I do if it doesn't understand me?

Quality prompting:

- 1) Be specific: be as detailed as possible.
- 2) Include context information: provide background information and include as much data as possible.
- 3) Use simple language: write in clear and direct language.
- 4) Give steps: Break down complex tasks into steps.
- 5) Involve iterative and refinement processes: review responses from initial prompts and engage in 'back-and-forth' conversation until you get the desired content.

Moorhouse, 2024

Corroborating: Ensuring Accuracy and Credibility

- Does it make sense?
- 2. Do different AI tools give similar answers?
- 3. Are the sources cited real? Do they say what the AI says they say?
- 4. What do other 'traditional' sources say? Is it the same / different?

GPT-40 Poe

Here are the top three tourist attractions in Hong Kong:

1. Victoria Peak (The Peak)

- . Why visit?: Victoria Peak offers stunning panoramic views of Hong Kong's skyline, Victoria Harbour, and the surrounding islands. It's one of the most iconic and photographed spots in the city.
- · Highlights:
 - The Peak Tram: A historic funicular railway ride to the summit.
 - Sky Terrace 428: A viewing platform with breathtaking views.
 - Nature trails for a guieter experience.

2. Tsim Sha Tsui Promenade & Victoria Harbour

- . Why visit?: This area features mesmerizing views of the skyline, particularly at night during the Symphony of Lights, the world's largest permanent light and sound show.
- Highlights:
 - Avenue of Stars: A tribute to Hong Kong's film industry.
 - Star Ferry: A classic ferry ride with views of the harbor.
 - Cultural landmarks like the Hong Kong Space Museum and Hong Kong Cultural Centre.

3. Ngong Ping 360 & Tian Tan Buddha (Big Buddha)

- Why visit?: Located on Lantau Island, this serene site combines cultural heritage, spirituality, and stunning scenery.
- · Highlights:
 - Ngong Ping 360 Cable Car: A scenic ride with aerial views of the island.
 - Tian Tan Buddha: A massive bronze statue and one of Hong Kong's most famous landmarks.
 - Po Lin Monastery: A peaceful Buddhist temple nearby.

These attractions showcase Hong Kong's unique blend of urban sophistication, natural beauty, and cultural richness.

Do different AI tools give similar answers?

Claude 3.7 Sonnet



The top three tourist attractions in Hong Kong are:

- Victoria Peak (The Peak) Offering spectacular panoramic views of Hong Kong's skyline, Victoria Harbour, and surrounding islands from the highest point on Hong Kong Island.
- Victoria Harbour Famous for its stunning cityscape, especially during the Symphony of Lights show, and popular for harbor cruises on traditional junk boats.
- Hong Kong Disneyland A magical theme park featuring classic Disney attractions, shows, and characters with unique Asian elements.

• Grok-2

x1 Grok-2 Poe

Hong Kong is a vibrant city with a mix of modern and traditional attractions. Here are the top three tourist attractions in Hong Kong:

1. Victoria Peak:

 Victoria Peak is the highest point on Hong Kong Island, offering breathtaking panoramic views of the city skyline and Victoria Harbour. The Peak Tram, a historic funicular railway, is a popular way to reach the top. Once there, visitors can enjoy various dining options and explore the Peak Tower and Peak Galleria.

2. Tsim Sha Tsui Promenade and Avenue of Stars:

Located along the southern edge of the Kowloon Peninsula, the Tsim Sha Tsui
Promenade is a scenic spot to enjoy the stunning views of Victoria Harbour. The
adjacent Avenue of Stars pays tribute to Hong Kong's film industry, featuring
handprints and statues of famous actors and filmmakers. The promenade is also a
prime location to watch the Symphony of Lights, a spectacular light and sound
show projected onto the skyscrapers across the harbour.

3. Hong Kong Disneyland:

 Hong Kong Disneyland is a magical destination for families and Disney enthusiasts. The park features seven themed lands, including Main Street, U.S.A., Fantasyland, Adventureland, Tomorrowland, Grizzly Gulch, Mystic Point, and Toy Story Land. Visitors can enjoy a variety of rides, shows, and meet-and-greet opportunities with beloved Disney characters.

These attractions showcase the diverse experiences Hong Kong has to offer, from natural beauty and cultural landmarks to world-class entertainment.

Incorporating: Using AI Ethically and Effectively

- What are the ethical and safe ways to use these tools?
- What should I think about before using a tool? Copyright? Bias? Accuracy? Privacy? Environment?
- Should I and how should I report my use of AI?

What might this mean for our practices?

Curriculum

- Integrate AI literacy development into the curriculum (e.g., prompt writing)
- Select texts and topics that build learner AI critical awareness

Learning activities

- Model good Al practices (e.g., prompting, corroborating, ethical use)
- Integrate reflection tasks after using AI tools

Assessment

Monitor and observe students' use of Al

Equipping learners to work and live with Al

- How do we prepare our learners to live with AI?
- What knowledge and skills will they need?
- How do they stand out from the crowd?

The ability to do what AI can do will not be enough

All needs to be seen as a way to augment human intelligence and abilities.

Oxford University Careers Service emphasises the central importance of eight key employability skills:

- Business Awareness
- Communication
- Creativity
- Initiative
- Leadership
- Planning
- Self-Management
- Teamwork

Those who master and 'command' the technologies of the day are those who 'thrive' and prosper.

What might this mean for our practices?

Curriculum

- Focus on human-centric skills
- Develop learners' communication skills, including communicative competence, multimodality and presentation skills
- Promote creative thinking and metacognitive reflection

Learning activities

- Integrate more spontaneous communication tasks into language lessons
- Develop digital multimodal composing projects
- Provide more learner choice and agency in language tasks
- Integrate human-AI collaboration into language activities

Assessments

- Reward creative, innovative and risk-taking in assessment tasks
- Prioritise open-ended assessment tasks that integrate skills
- Match genres / discourses with current kinds of texts (What do people need to read and write today?)

In summary...

Learning

Learning despite AI – Empowering human potential in the age of automation

Learning

Learning with AI – Harnessing AI for enhanced learning experiences

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Learning about AI – Becoming critical 'users, consumers and citizens' in an AI enhanced-world

Learning

Learning for AI – Equipping learners to work and live with AI

Thank you for listening

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