



THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學



Department of English
and Communication
英文及傳意學系

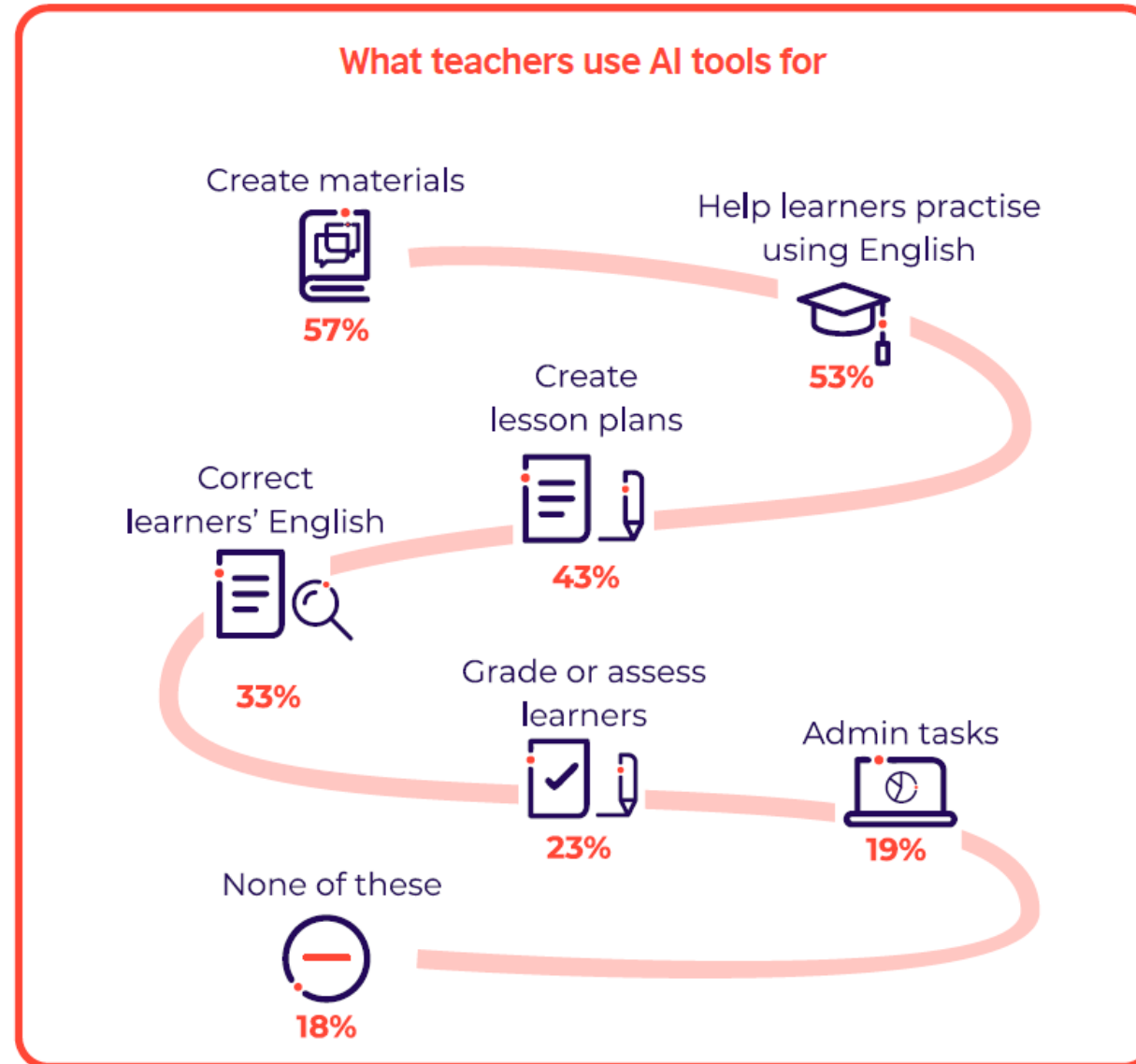
Technology & Language Teaching In the Age of AI

Eric Friginal with Jenifer Ho

eric.friginal@polyu.edu.hk

Opening Minds • Shaping the Future
啟迪思維 • 成就未來

Why should you care about GenAI and language education?



(Edmett et al., 2023, p.24)

Figure 2B Teacher survey results: The tasks teachers use AI tools for

Are you prepared?



Statement 8:
I have received enough training to
incorporate AI into my teaching.

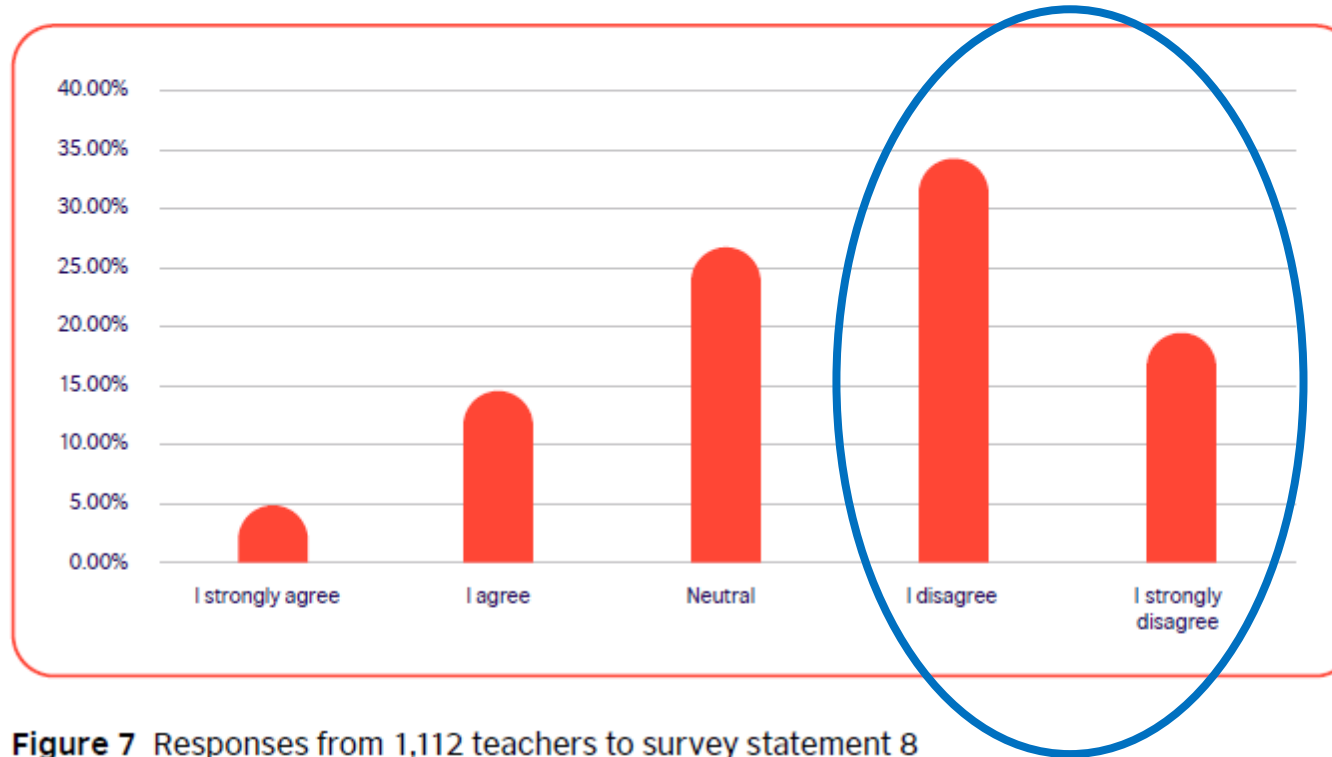


Figure 7 Responses from 1,112 teachers to survey statement 8

- Teachers **do not feel confident or competent** incorporating GenAI in their teaching (Edmett et al., 2023; Moorhouse & Kohnke, 2024)



- 1. Gain insights** from the latest research findings
- 2. Acquire strategies** for designing, developing, and producing audio and video-based ELT materials supported by GenAI
- 3. Develop a balanced perspective** on the opportunities and challenges associated with incorporating GenAI in ELT material design

- **Podcasts** (Turner et al., 2024)



- **Synchronous** video computer-mediated communication in ELT (Jung et al., 2019; Kessler et al., 2021)
- **Recorded** video-based materials such as MOOCs and video lectures (Luo & Ye, 2021)
- **Video-based** VR environments (Zou et al., 2023)



- **Pedagogical affordances** of GenAI in language teaching (Kohnke et al., 2023; Moorhouse, 2024)
- The effectiveness of incorporating GenAI in **enhancing language skills** (Edmett et al., 2023)
- **Issues to consider** when integrating GenAI into ELT (Kohnke et al., 2023; Moorhouse, 2024; Yang et al., 2024)
- **Developing** language teachers' professional **GenAI competence** (Moorhouse et al., 2024)
- **Challenges** of incorporating GenAI into ELT (Kohnke et al., 2024)
- **Perceptions of teachers** (Moorhouse & Kohnke, 2024)
- **Competencies** in using GenAI in language education (Kohnke et al., 2023; Moorhouse, 2024)

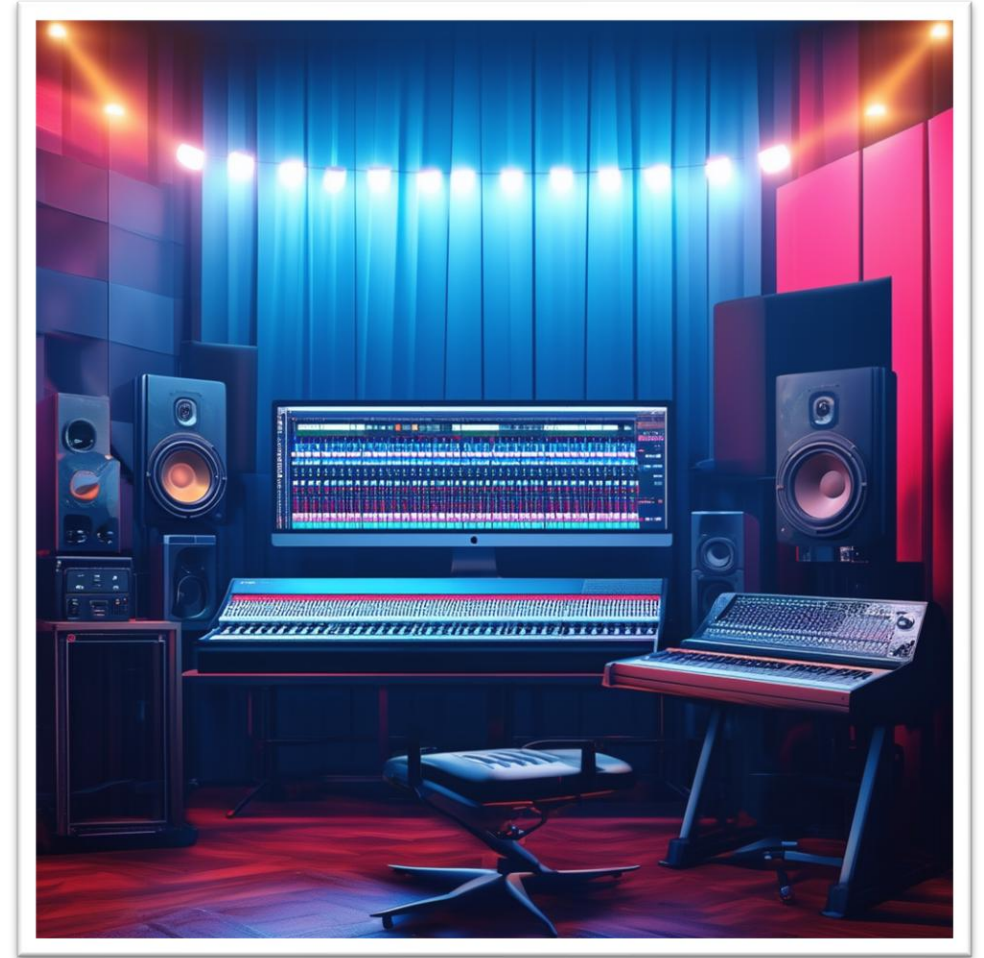
Creating audio and video-based ELT materials using GenAI tools

Case 1: Creating audio-based materials using ElevenLabs

Case 2: Creating video-based materials using Synthesia

What functions are typically available in **AI-audio**-generating platforms?

- **Text-to-speech**
- **Voice generator**
- **Voice cloning**
- **Stock sound effects and music**
- **Dubbing**





- **Text-to-speech**
- **Script-to-video**
- **Avatars**
- **Voice cloning**
- **Templates**
- **Stock images, music, and videos**
- **Video translation**





1. Identifying a topic

2. Scripting/storyboarding (for videos)

3. Recording/customizing

4. Editing

5. Sharing



With support
from GenAI tools

Case 1: Creating an introduction using ElevenLabs



ElevenLabs

AI AUDIO ▾SOLUTIONS ▾APIPRICINGCOMPANY ▾

GO TO APP

Create the most realistic speech with our AI audio platform

Pioneering research in Text to Speech, AI Voice Generator, and more

GET STARTED FREE

TRY A SAMPLE

A large, abstract graphic consisting of flowing, wavy bands of blue and white, resembling a stylized sound wave or liquid motion, spanning the width of the page below the main text.

TEXT TO SPEECH

SPEECH TO SPEECH

DUBBING

TEXT TO SFX

VOICE CLONING

Text input



IIElevenLabs



Speech Synthesis

Unleash the power of our cutting-edge technology to generate realistic, captivating speech in a wide range of languages.

CREATE

Text to Speech

Voice Changer

Voices

Sound Effects

WORKFLOWS

Projects

Voiceover Studio Beta

Dubbing Studio

Audio Native

Conversational AI Beta

TOOLS

Voice Isolator

AI Speech Classifier



Allows teachers to experiment with the effects of adopting different voice qualities in delivering content.



Search for a voice...

Recent

- Mark - calm and wise teacher Deep +1 more... ✓
- Benjamin - Deep, Warm, C... English (American) +2 more...

Voice Library - Top Picks for You

- Jessica Anne Bogart - A V... English (American) +2 more...
- Sully English (American) Deep Narrative & Story
- Tim Rooney English (American) Calm Narrative & Story

Professional

- Benjamin - Deep, Warm, C... English (American) +2 more...

Generated

Find more voices

...undergoing fast changes since the advent of genres such as podcasts and videos provides new of materials design and pedagogy. Furthermore, / continues to revolutionise language teaching in ges, the presentation has two aims: first, to based on the latest research findings, and second, achers on how to incorporate audio and video- materials. Recognising the growing significance of he presentation looks to the future and discusses pment of audio and video-based materials for

Mark - calm a... Settings 0 / 8,623 Regenerate speech



Mark - calm and wise teacher

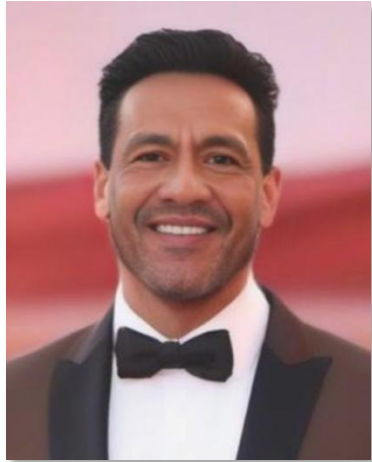


1.4K 33M 744

An old British male voice, a deep and velvety voice with some hoarseness, perfect for educational videos.

Voice Design Old Male Informative & Educational

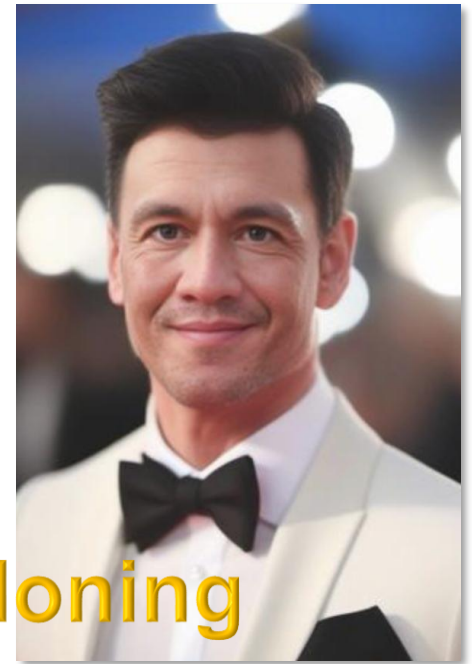
AI-generated images



Voice Cloning

Text-to-Speech

Deepfake



Prompts:


- Professional, academic speaker
- Asian
- Male, fluent English speaker
- Conversational, narrative
- Online, podcast, modulated



Case 2: Creating a video using Synthesia



NEW RELEASE **AI Video Localization** [Learn more](#) ×


 [Platform](#) [Solutions](#) [Resources](#) [Pricing](#) [Enterprise](#) [Log in](#) [Book demo](#) [Get started →](#)

#1 AI VIDEO COMMUNICATIONS PLATFORM ⓘ

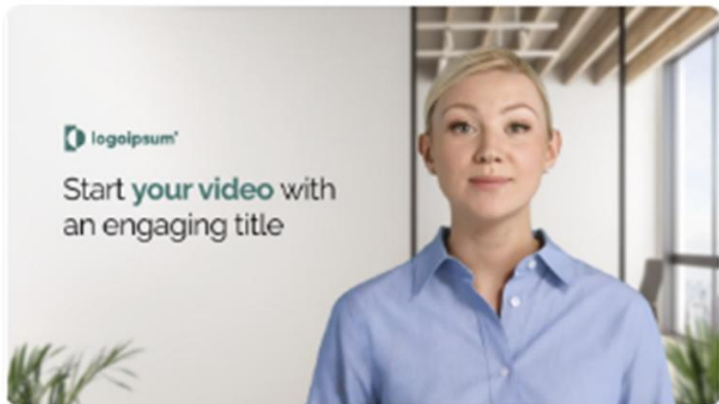
Turn text to video, in minutes

Create studio-quality videos with AI avatars and voiceovers in 140+ languages. It's as easy as making a slide deck.

[Get started for FREE →](#)

No credit card required  Rated 4.7/5 on G2

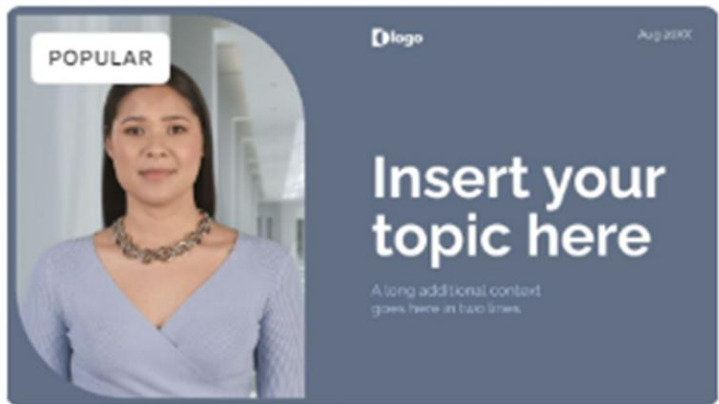
Selection of templates



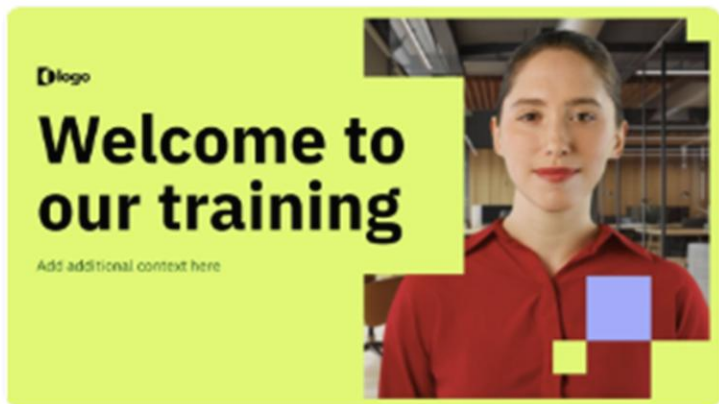
Sleek Corporate



Elegant Personal Avatar Training



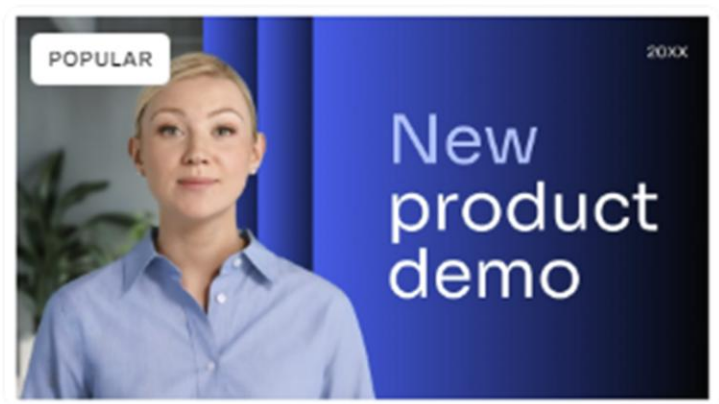
Sleek Corporate Knowledge Base



Green Pixel Training

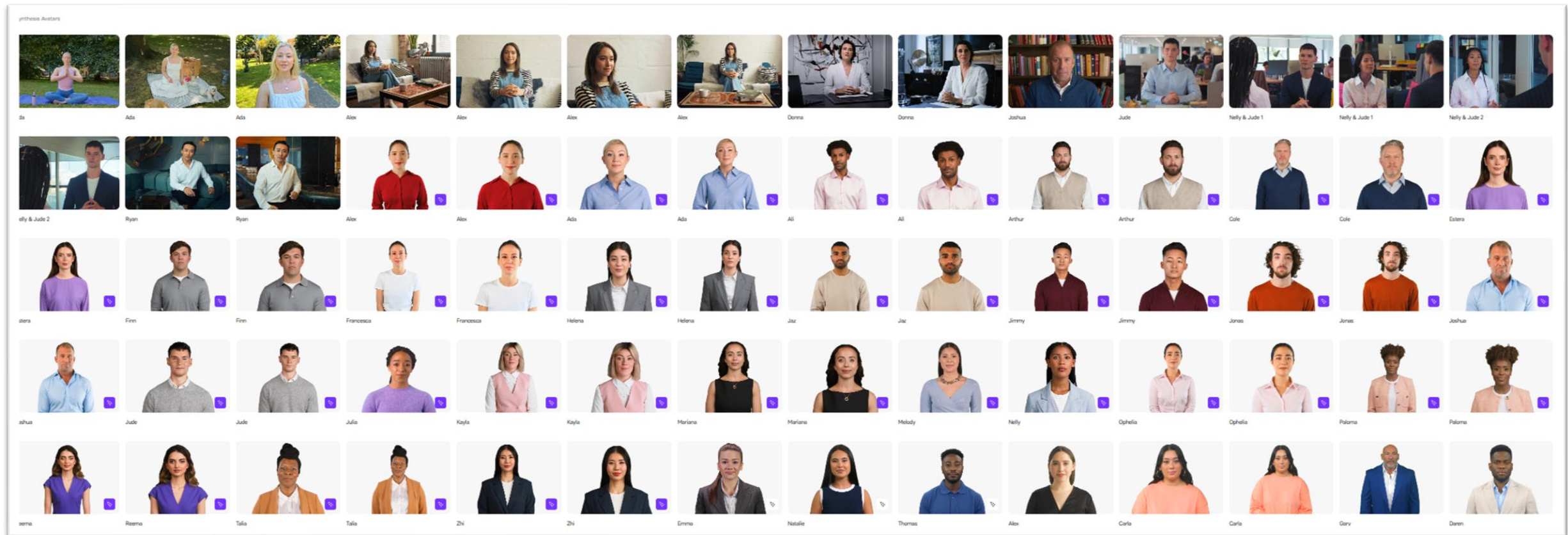


Corporate Personal Avatar Training



Bright Sales Outreach

Selection of avatars



Intercultural diversity and sensitivity
Multimodal design principles: distance of shot indicates level of involvement

Focus on speech options and features



Changing English Accents

Increases students' exposure to the use of English as a lingua franca.

Changing English Tones

Allows teachers to experiment with the effects of adopting different tones in delivering content.

Create your own avatar



Create your Avatar

How do you want to create your Avatar?



Use your webcam

Record yourself reading a short script with your webcam.

Record yourself



Upload footage

Upload between 1 and 5 minutes of video recorded with a camera or smartphone.

Upload



Privacy issues?

Previous

Customizing your video output



- **Genre** – is it a full-length video or a bite-sized explainer?
- **Audience** – what is the level of students? Where are they from?
- **Purpose** – for in-class instruction or for out-of-class learning?

AI video assistant
Turn any source material into a video in minutes

File URL Prompt Script

Document1_for AI.docx Remove

Template
Minimalistic Knowledge Base Landscape

Length
8 scenes

Objective
Convince viewers to take basic first steps towards planning their finance

Audience
Language teachers who are interested in incorporating GenAI in their teaching.

Language
English

Speaker
An applied linguist with experience in the field.

Tone
Academic

< 1/1 > |

[Continue in editor](#)

Scene 1

Welcome to this exploration of technology in language teaching. We'll delve into how digital innovations, like podcasts and videos, are reshaping pedagogical approaches, and examine the transformative role of Generative AI in this evolving landscape.

Scene 2

The rapid evolution of digital technologies has significantly impacted language teaching. With the rise of digital genres, educators now have new opportunities for material design and pedagogy, enhancing the teaching and learning experience in unprecedented ways.

Scene 3

Generative AI is revolutionizing language teaching by offering innovative tools and methods. This presentation aims to introduce these changes, supported by the latest research, and guide teachers in integrating audio and video technologies into their teaching practices.



(Created with Synthesia)



- Do you **need an avatar**, or do you prefer to do your own filming?
- Do you want to **play your own (cloned) voice**, or use an avatar's voice?
- Do you already **have the content** that you wish to be turned into an audio or video, or do you wish to generate the content by GenAI? If it is the latter, how do you ensure the accuracy of information?
- How do you **show sensitivity** to students' linguistic and cultural backgrounds when choosing premade avatars and accents?
- How do you **localize the content** so that it is culturally relevant to your students?



- Using GenAI as a **collaborator** and **conversation partner**
- Using GenAI materials to assist in **creating a flipped classroom**
- Creating **authentic** tasks and scenarios
- Providing **personalized** learning materials
- Suggesting **customized** learning paths
- Allowing for a high level of content customization and localization **based on learners' needs**
- Support **assessment and feedback**



- Technology breakdowns
- Limited capabilities
- Fear of over-reliance on technology
- **Privacy issues**
- Accuracy of responses
- **Cultural bias**
- **Reinforcing standard language use and ideologies**
- Developing AI literacies among students and teachers

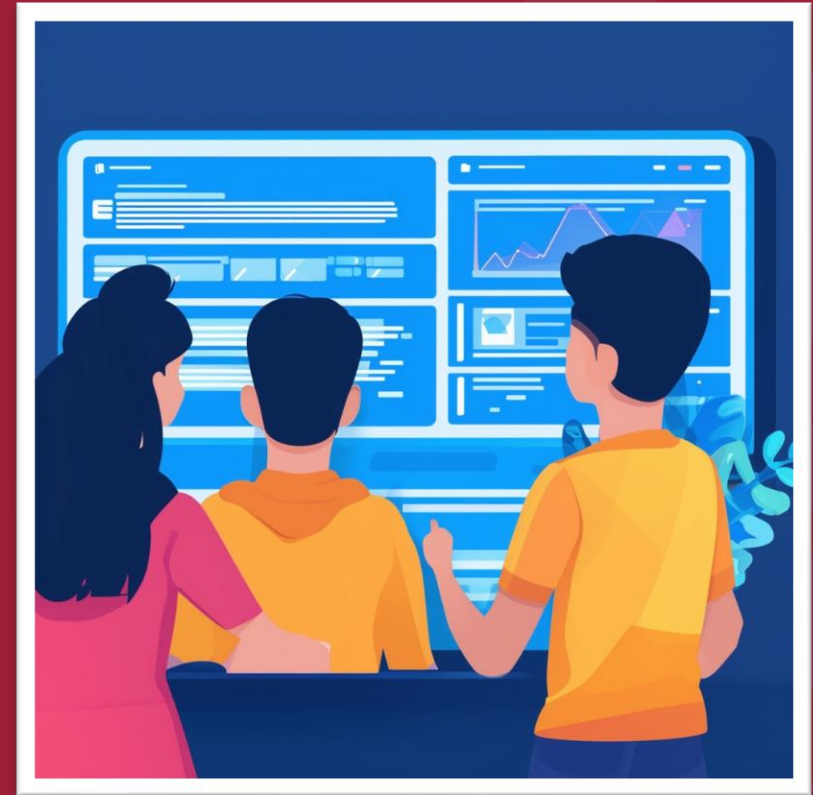


- Develop **AI literacies** (Moorhouse & Kohnke, 2024; Moorhouse et al., 2024)
- Develop **multimodal literacies** (Lim & Tan-Chia, 2023)
- Encourage **creative** use of technology in the classroom
- Focus on personalization and localization
- **Enjoy the process** (hopefully)! Have fun.



- Edmett, A. Ichaporia, N., Crompton, H., & Crichton, R. (2023). Artificial intelligence and English language teaching: Preparing for the future. British Council. <https://doi.org/10.57884/78EA-3C69>
- Kessler, M., Loewen, S., & Trego, D. (2021). Synchronous video computer-mediated communication in English language teaching. *ELT Journal*, 75(3), 371–376. <https://doi.org/10.1093/elt/ccab007>
- Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). ChatGPT for Language Teaching and Learning. *RELC Journal*, 54(2), 537–550. <https://doi.org/10.1177/00336882231162868>
- Kohnke, L., Zou, D., & Moorhouse, B. L. (2024). Technostress and English language teaching in the age of generative AI. *Education Technology & Society*, 27(2), 306–320.
- Lim, V. & Tan-Chia, L. (2023). *Designing learning for multimodal literacy: Teaching viewing and representing*. Routledge.
- Luo, R., & Ye, Z. (2021). What makes a good-quality language MOOC? An empirical study of criteria to evaluate the quality of online language courses from learners' perspectives. *ReCALL*, 33(2), 177–192. <https://doi.org/10.1017/S0958344021000082>
- Moorhouse, B. L., & Kohnke, L. (2024). The effects of generative AI on initial language teacher education: The perceptions of teacher educators. *System*, 122, 103290. <https://doi.org/10.1016/j.system.2024.103290>
- Moorhouse, B. L., Kohnke, L., & Chiu, T. K. F. (2024). Developing a context- and subject-specific professional digital competence framework for beginning English language Teachers in Hong Kong. *The Asia-Pacific Education Researcher*, 33(5), 1105–1115. <https://doi.org/10.1007/s40299-023-00778-2>
- Moorhouse, B. L., Wan, Y., Wu, C., Kohnke, L., Ho, T. Y., & Kwong, T. (2024). Developing language teachers' professional generative AI competence: An intervention study in an initial language teacher education course. *System*, 125, 103399. <https://doi.org/10.1016/j.system.2024.103399>
- Yang, Z., Wu, J. G., & Xie, H. (2024). Taming Frankenstein's monster: Ethical considerations relating to generative artificial intelligence in education. *Asia Pacific Journal of Education*, 1–14. <https://doi.org/10.1080/02188791.2023.2300137>
- Zou, D., Jong, M. S. Y., Huang, X., Cheng, G., Hwang, G. J., & Jiang, M. Y. C. (2023). A systematic review of SVVR in language education in terms of the ADDIE model. *Interactive Learning Environments*, 1–26. <https://doi.org/10.1080/10494820.2023.2277747>

Thank you!



Note: All AI-generated images created by Stable Diffusion 3