# **Using Generative AI in Speech and Language Therapy:**

# Further Listening, Watching, Reading & Exploring

## **Podcasts:**

- Stanford Graduate School of Business Podcast (June 2024): Co-Intelligence: An AI Masterclass with Ethan Mollick https://stanford.io/3KCWJDo
- The Ezra Klein Show Podcast (April 2024): How should I be using AI right now? https://open.spotify.com/episode/1d2kAxYfxhfmpCvdUNlQmd
- RCSLT Podcast (Oct 2024): Using Generative AI in speech and language therapy: a journey from sceptic to advocate
  - https://soundcloud.com/rcslt/introduction-to-using-gen-ai
- Diary of an SLT Podcast (August 2024): Ruth Crampton with Rachel Barton Using Al to enhance my therapy sessions and enthuse others <a href="https://open.spotify.com/episode/4yTAOiPhylqiYWsDR6X3Wy?si=vky3V5YTQ4CEuUuuPHyDAQ">https://open.spotify.com/episode/4yTAOiPhylqiYWsDR6X3Wy?si=vky3V5YTQ4CEuUuuPHyDAQ</a>
- Your Everyday AI Newsletter, YouTube videos, and podcasts with Jordan Wilson. Also offers a free prompting course.

https://www.youreverydayai.com/

https://www.youreverydayai.com/ai-in-education-podcast/

https://www.youreverydayai.com/ai-in-healthcare-podcast/

- The Artificial Human Podcast (Radio 4)
   https://www.bbc.co.uk/programmes/m001wjf8
- Google DeepMind: The Podcast Hannah Fry https://open.spotify.com/show/39fjU5Q5L5UecTCRMeqjwb?si=2598ca7c47bc4d75
- The Infinite Monkey Cage How I is AI? (Radio 4) (Nov 2023)
   <a href="https://www.bbc.co.uk/sounds/play/p0gr7lx0">https://www.bbc.co.uk/sounds/play/p0gr7lx0</a>
- WriteUpp Podcast Human Touch in a Digital World: Using AI in Healthcare (January 2024) https://www.youtube.com/watch?v=6U\_uLjXEJAY&t=24s

#### Videos:

- Henrik Kniberg Generative AI in a Nutshell: How to survive and thrive in the age of AI https://www.youtube.com/watch?v=2IK3DFHRFfw
- CGP Grey How Als, like ChatGPT, Learn https://www.youtube.com/watch?v=R9OHn5ZF4Uo
- Grant Sanderson Large Language Models explained briefly https://youtu.be/LPZh9BOjkQs?si=B47Xc\_zu2jUeHrKL

- Introducing GPT-4o
   https://www.youtube.com/watch?v=DQacCB9tDaw
- Two GPT-4os interacting and singing https://www.youtube.com/watch?v=MirzFk\_DSil
- Introducing Sora OpenAI's text-to-video model https://youtu.be/HK6y8DAPN\_0
- Hayls World 10 ChatGPT hacks that take it to the next level https://www.youtube.com/watch?v=LHNghEPMZIs
- Hayls World 10 AI tools you must know in 2024 https://www.youtube.com/watch?v=YN9x04rhm7c
- The Al Advantage ChatGPT Advanced Voice Mode <a href="https://www.youtube.com/watch?v=mJ1rWch5Ekw">https://www.youtube.com/watch?v=mJ1rWch5Ekw</a>

# Research and Articles Relating to SLT and AI:

- ASHA article (March/April 2024) Using ChatGPT to create treatment materials
   https://leader.pubs.asha.org/do/10.1044/leader.EOAI.29032024.chatgbt-therapy-materials-slp.26/full/
- Barton, R (June 2024) Getting the Best Service from Generative Als: The SERVE Prompt
  Framework <a href="https://www.chatterboxsussex.com/post/getting-the-best-service-from-generative-ais-the-serve-prompt-framework">https://www.chatterboxsussex.com/post/getting-the-best-service-from-generative-ais-the-serve-prompt-framework</a>
- Barton, R (June 2024) *How can AI Support Young People with DLD?* https://www.chatterboxsussex.com/post/how-can-ai-support-young-people-with-dld
- Barton, R (July 2024) The Future is Now: Al's Potential to Revolutionise Speech and Language Therapy <a href="https://www.chatterboxsussex.com/post/the-future-is-now-ai-s-potential-to-revolutionise-speech-and-language-therapy">https://www.chatterboxsussex.com/post/the-future-is-now-ai-s-potential-to-revolutionise-speech-and-language-therapy</a>
- Cassity, J (Jan 2024) ChatGPT and the SLP
   https://www.thedigitalslp.com/chatgpt-and-the-slp/
- Du & Juefei-Xu (2023). Generative AI for Therapy? Opportunities and Barriers for ChatGPT in Speech and Language Therapyhttps://openreview.net/pdf?id=cRZSr6Tpr1S
- Eldawlatly, S. On the role of generative artificial intelligence in the development of brain-computer interfaces. BMC Biomed Eng, 6, 4 (2024). https://doi.org/10.1186/s42490-024-00080-2
- Nesta.org How might the early years sector use generative AI?
   <a href="https://www.nesta.org.uk/project-updates/how-might-the-early-years-sector-use-generative-ai/">https://www.nesta.org.uk/project-updates/how-might-the-early-years-sector-use-generative-ai/</a>

- RCSLT AI Information Pages: <a href="https://www.rcslt.org/members/delivering-quality-services/artificial-intelligence-resources/#section-1">https://www.rcslt.org/members/delivering-quality-services/artificial-intelligence-resources/#section-1</a>
- Valencia, S. et al. (2023). "The less I type, the better": How AI Language Models can Enhance or Impede Communication for AAC

Users.https://dl.acm.org/doi/fullHtml/10.1145/3544548.3581560

## More General Research and Articles Relating to Generative AI:

- Ethan Mollick's Blog Research-based implications of Al https://www.oneusefulthing.org/
- Abbas, M., Jam, F.A. & Khan, T.I. Is it harmful or helpful? Examining the causes and consequences of generative AI usage among university students. Int J Educ Technol High Educ, 21, 10 (2024).

https://doi.org/10.1186/s41239-024-00444-7

- Ahmad, S.F., Han, H., Alam, M.M. et al. Impact of artificial intelligence on human loss in decision making, laziness and safety in education. Humanit Soc Sci Commun, 10, 311 (2023). https://doi.org/10.1057/s41599-023-01787-8
- Deng R., Jiang M., Yu X., Lu Y., & Liu S. Does ChatGPT enhance student learning? A systematic review and meta-analysis of experimental studies. Computers & Education. https://doi.org/10.1016/j.compedu.2024.105224
- Dergaa I., Ben Saad H., Glenn JM, et al. (Apr 2024) From tools to threats: a reflection on the impact of artificial-intelligence chatbots on cognitive health. Front Psychol.
   2;15:1259845.https://doi.org/10.3389/fpsyg.2024.1259845
- Goh, E. et al. Influence of a Large Language Model on Diagnostic Reasoning: A Randomized Clinical Vignette Study (preprint, not yet certified by peer review). <a href="https://www.medrxiv.org/content/10.1101/2024.03.12.24303785v1.full.pdf">https://www.medrxiv.org/content/10.1101/2024.03.12.24303785v1.full.pdf</a>

## Al in Education:

- Laura Dumin Repository of AI information for educators. https://ldumin157.com/
- Laura's Repository of Al Information: Curated by Dr. Laura Dumin, a professor in English and Technical Writing at the University of Central Oklahoma, this repository offers a comprehensive collection of Al-related content, including teaching aids, articles, and practical advice for integrating Al into educational settings.
- Kılınç, S. (2024). Comprehensive Al assessment framework: Enhancing educational evaluation with ethical Al integration. Journal of Educational Technology & Online Learning, 7(4), 521-540. <a href="https://dergipark.org.tr/en/pub/jetol/issue/82927/1492695">https://dergipark.org.tr/en/pub/jetol/issue/82927/1492695</a>

This article explores the development of a comprehensive framework for integrating artificial intelligence into educational assessment. It emphasizes: Ethical considerations in AI applications for evaluation. How AI can improve the accuracy and efficiency of educational assessments. Potential challenges, such as ensuring fairness and preventing bias in AI-driven evaluations.

- Turnitin Blog How will AI impact skill development in education?
   <a href="https://www.turnitin.com/blog/how-will-ai-impact-skill-development-in-education">https://www.turnitin.com/blog/how-will-ai-impact-skill-development-in-education</a>
  - This article explores the dual-edged nature of AI in education, discussing how AI tools can both hinder and enhance skill development depending on their application.
- The Alan Turing Institute Generative AI in Education.
   <a href="https://www.turing.ac.uk/sites/default/files/2023-08/generative\_ai\_in\_education\_-">https://www.turing.ac.uk/sites/default/files/2023-08/generative\_ai\_in\_education\_-</a>
   <a href="https://www.turing\_institute\_0.pdf">the\_alan\_turing\_institute\_0.pdf</a>
  - This report delves into the potential benefits and challenges of integrating generative AI into educational contexts, offering insights into ethical considerations and future implications.
- PsyPost ChatGPT linked to declining academic performance and memory loss in new study.
   https://www.psypost.org/chatgpt-linked-to-declining-academic-performance-and-memory-loss-in-new-study/

#### **AI Ethics:**

- Barton R (Sept 2024) Bias in AI What Speech and Language Therapists Need to
   Know Available at: <a href="https://www.chatterboxsussex.com/post/bias-in-ai-what-speech-and-language-therapists-need-to-know-and-do">https://www.chatterboxsussex.com/post/bias-in-ai-what-speech-and-language-therapists-need-to-know-and-do</a>
- Barton R (Nov 2024) Shaping the Future of Speech and Language Therapy: A Pledge for Responsible Generative AI Use Available at: https://www.chatterboxsussex.com/post/shaping-the-future-of-speech-and-language-therapy-a-pledge-for-responsible-generative-ai-use
- Jones, A. (2024). What is AI alignment? AI Safety Fundamentals. Available at: https://aisafetyfundamentals.com/blog/what-is-ai-alignment/
- **Hern, A.** (2023) 'Revealed: The human toll of training AI chatbots for Meta and OpenAI', *The Guardian*, 2 August. Available at: <a href="https://www.theguardian.com/technology/2023/aug/02/ai-chatbot-training-human-toll-content-moderator-meta-openai">https://www.theguardian.com/technology/2023/aug/02/ai-chatbot-training-human-toll-content-moderator-meta-openai</a>

## **Government Publications:**

• UK Government. *Guidance to Civil Servants on the Use of Generative AI*. Published January 2024. Available at: <a href="https://www.gov.uk/government/publications/guidance-to-civil-servants-on-use-of-generative-ai/guidance-to-civil-servants-on-use-of-generati

This document provides practical guidance for civil servants on leveraging generative AI tools responsibly and effectively while ensuring compliance with ethical standards (in the absence of more detailed guidance for health this is the most useful document I've found)

UK Government (2024). AI Regulation: A Pro-Innovation Approach. Published White Paper.
 Available at: <a href="https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach">https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach</a>

This white paper outlines the UK Government's strategy for regulating AI technologies to promote innovation while safeguarding public trust and addressing ethical concerns.

#### Al in Healthcare:

- The Health Foundation Priorities for an AI in Healthcare Strategy (26th June 2024). https://www.health.org.uk/publications/long-reads/priorities-for-an-ai-in-health-care-strategy
- Al in the NHS: Shaping the Future of Healthcare Event (18th July 2024) Videos of the event. https://www.health.org.uk/about-the-health-foundation/get-involved/events/ai-in-the-nhs-shaping-the-future-of-healthcare
- Signify Research Predictions for AI in Healthcare.

  https://www.signifyresearch.net/insights/top-five-predictions-for-generative-ai-in-healthcare-in-2024/

# Al Environmental Impact:

- PlanBe (May 2024) AI's Carbon Footprint: How does the popularity of artificial intelligence
   affect the climate? Available at: <a href="https://planbe.eco/en/blog/ais-carbon-footprint-how-does-the-popularity-of-artificial-intelligence-affect-the-climate/">https://planbe.eco/en/blog/ais-carbon-footprint-how-does-the-popularity-of-artificial-intelligence-affect-the-climate/</a>
- Podcast (BBC Radio 4) How Green is my Al?
   https://www.bbc.co.uk/programmes/m00208g4
- Luccioni, S., Trevelin, B., and Mitchell, M. (2024) 'The Environmental Impacts of AI -- Primer',
   Hugging Face Blog, 3 September. Available at: <a href="https://huggingface.co/blog/sasha/ai-environment-primer">https://huggingface.co/blog/sasha/ai-environment-primer</a>
- Your Everyday Al podcast with Jordan Wilson. (16<sup>th</sup> Oct 2024) Episode 381
   <a href="https://www.youreverydayai.com/ai-energy-crisis-can-quantum-save-the-day/">https://www.youreverydayai.com/ai-energy-crisis-can-quantum-save-the-day/</a>
- Your Everyday Al podcast with Jordan Wilson. (10<sup>th</sup> Oct 2023) Episode 119
   <a href="https://www.youreverydayai.com/ai-in-renewable-energy-insights-from-nvidia/">https://www.youreverydayai.com/ai-in-renewable-energy-insights-from-nvidia/</a>

#### **Books:**

- Mollick, E. (2024). Co-Intelligence: Living and Working with AI.
   <a href="https://www.penguin.co.uk/books/460207/co-intelligence-by-mollick-ethan/9780753560778">https://www.penguin.co.uk/books/460207/co-intelligence-by-mollick-ethan/9780753560778</a>
- Khan, Salman (2024). Brave New Words: How AI Will Revolutionize Education (and Why That's a Good Thing).

https://www.penguin.co.uk/books/460644/brave-new-words-by-khan-salman/9781802064896

• Kniberg, H. (2025). *Generative AI in a Nutshell; How to Survive and Thrive in the Age of AI*. https://leanpub.com/ainutshell

# Al Chatbots (Large Language Models) - descriptions written by Grok

These are services that leverage advanced artificial intelligence to provide conversational interfaces. They can perform tasks like answering questions, writing content, coding assistance, and more. Each link represents:

ChatGPT from OpenAI for versatile conversational AI.

https://chatgpt.com/

**Copilot** by Microsoft, integrated with Microsoft products for enhanced productivity. https://copilot.microsoft.com/

Claude by Anthropic, known for its ethical AI approach and thoughtful responses.

https://claude.ai/

**Perplexity AI**, designed to provide accurate, sourced answers to queries.

https://www.perplexity.ai/

**Gemini** by Google, offering multimodal capabilities across text, images, and coding. https://gemini.google.com/app

**DeepSeek**, focusing on deep learning for various Al applications.

https://www.deepseek.com

Meta AI by Meta, enhancing user experience across Meta's platforms.

https://www.meta.ai/

**Grok** by xAI, aiming to provide truthful and helpful answers from an outside perspective on humanity. (This is what Grok wrote about itself!)

https://x.com/i/grok

## Al Image and Art creators:

These platforms are AI-powered tools that transform your text descriptions into images, allowing you to create art and visuals effortlessly.

https://leonardo.ai/

https://www.midjourneyfree.ai/

https://www.canva.com/ai-image-generator/

https://www.craiyon.com/

https://www.openart.ai/

#### Al summarisers:

https://www.notta.ai/en/blog/best-ai-summarizers - 2025 article reviewing the best summarisers

https://www.notta.ai/en - Turns audio and video into text and summaries

https://eightify.app/ - Summarizes YouTube videos quickly

https://www.scholarcy.com/scholarcy-features - Pulls out key points from research papers

# Companies using AI in SLT/health related software (descriptions with support from Perplexity & ChatGPT):

https://beautifulvoice.co.uk/

Beautiful Voice focuses on making speech therapy accessible and engaging, specifically for adults, both at home and with therapists. For individuals, it provides a personal coach that identifies speech weaknesses and delivers customised, interest-based training. For therapists, it offers tools to streamline assessments and treatment delivery, enhancing efficiency and outcomes. Their mission is to create a fun and effective way for adults to improve their speech.

## https://www.cognishine.com/

Cognishine is a digital platform for therapists, supporting cognition, language, speech, and social communication. Designed for multidisciplinary use, it aids conditions like stroke recovery, brain injury, speech disorders, and autism. Key features include remote and in-person sessions, a library of culturally adapted activities, tools for creating custom content, and engagement tracking.

https://chatty-learning.com/chatty-software/

Chatty Learning's Chatty Toolbox helps children improve vocabulary with tools like Chatty Nouns, Verbs, and Topics, covering essential words and subject-specific vocabulary. The software is research-based, supporting children with language delays or EAL.

#### https://www.ogmatherapy.com/

Ogma Therapy uses Al-driven tools and animated agents to support SLTs in delivering evidence-based speech and language therapy. Designed for family convenience, it offers flexible scheduling, at-home practice tools, and 24/7 therapist access. The Ogma Assistant streamlines admin tasks like note-taking, enabling therapists to focus on care. Ogma aims to make therapy more accessible, efficient, and child-focused.

#### https://www.heidihealth.com/

Heidi Health is an AI-powered medical scribe that automates clinical documentation, allowing healthcare providers to focus more on patient care. It transcribes consultations in real-time, creates customisable templates, and integrates with Electronic Health Records (EHR) systems. The platform ensures GDPR and HIPAA compliance, improving documentation accuracy and efficiency while reducing administrative burdens for clinicians.

## https://kinva.health/

Kinva Health is a secure digital platform for health professionals to deliver personalised therapy plans, monitor client progress, and manage caseloads efficiently. It supports real-time tracking, secure communication, and collaboration with specialists, ensuring compliance with data protection standards. Kinva focuses on improving patient outcomes and streamlining therapy across various healthcare settings.

# Companies using AI in education related software:

## https://www.khanmigo.ai/

Khanmigo is Khan Academy's Al-powered tutor and teaching assistant, offering personalised guidance for students and support for educators. It helps learners with problem-solving, writing feedback, and coding exercises, while assisting teachers with lesson planning, progress tracking, and resource creation. Khanmigo integrates with platforms like Canvas and is available via subscription for learners, with free access for educators.

#### Other AI Tools:

https://notebooklm.google/ - upload docs, websites, videos to produce summaries, podcasts and more!

https://goblin.tools/ - breaks down tasks

https://www.napkin.ai/ - creates visuals from text

https://gamma.app/ - designs slides and presentations

https://www.heygen.com/ - video and avatar generator

https://www.synthesia.io/ - video and avatar generator

https://pi.ai/ - chatbot with 'emotional intelligence'

https://suno.com/ - create lyrics and music

# **ChatGPT – specialised GPTs (found under 'Explore GPTs' in ChatGPT)**

For SLT (developed by Rachel Barton):

https://chatgpt.com/g/g-dFOZS78Us-wordmango - AI-powered word-learning assistant designed to support teenagers with Developmental Language Disorder (DLD)

https://chatgpt.com/g/g-s4rl4L260-analogymango - Creates customised analogies for speech and language therapists, educators, and caregivers to explain concepts to children.

https://chatgpt.com/g/g-dKQi9sWlq-conceptmango - Creates fun activities for teaching concepts to children

## For Learning:

https://chatgpt.com/g/g-hRCqiqVlM-tutor-me (Khan Academy)

#### For Research:

https://chatgpt.com/g/g-kZ0eYXUe-scholar-gpt (Built in critical reading skills)