

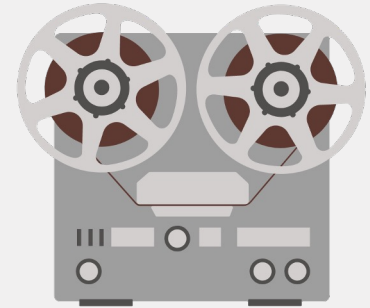
Artificial Intelligence: Exploring AI's Potential to Reduce Isolation, Enhance Independence, and Support Daily Life for Seniors

2024 Sara and Samuel J. Lessans Healthcare Symposium

Joan L. Green, M.A. CCC-SLP
Speech-Language Pathologist, Assistive Technology Specialist & ElderTech Advisor

www.innovativespeech.com
Joan@innovativespeech.com

Remember these?



Transformative Tech

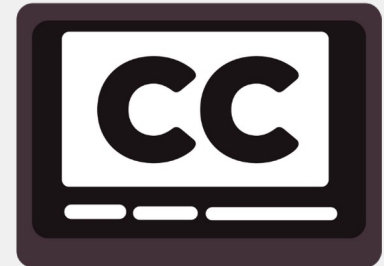
- Typewriters
- Calculators
- Laptops
- Email
- Mobile phones
- Search Engines
- Wikipedia
- Google Translate
- Video Meetings and Calls
- ChatGPT



AI- Enormous potential to help seniors

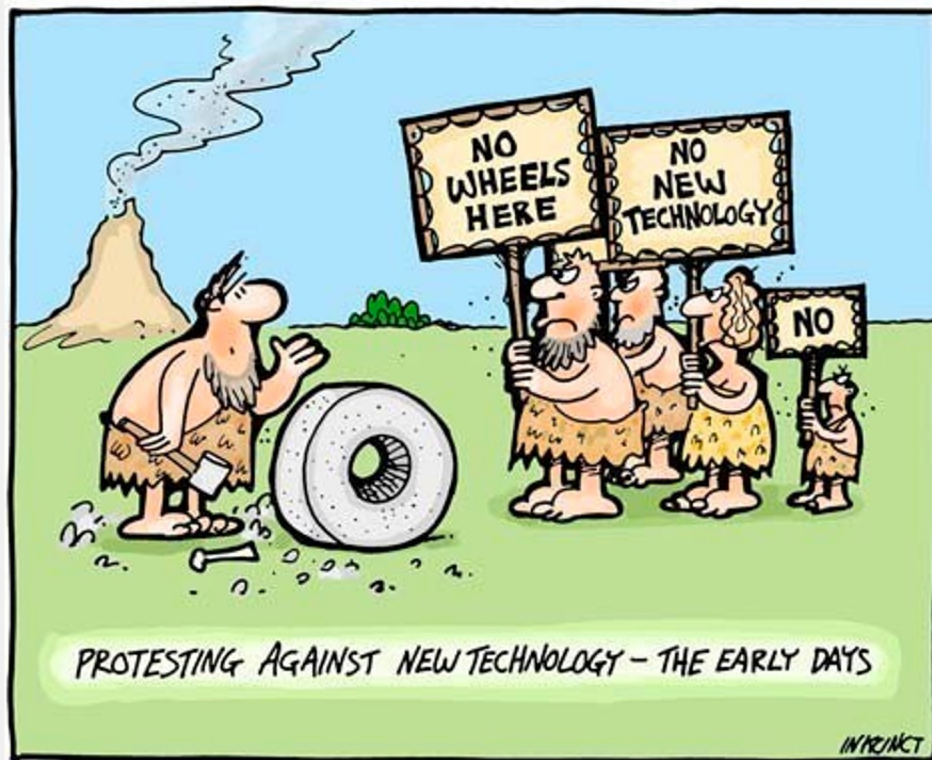
It's already in many of the tech tools we use

- Closed captioning
- Translation tools
- Summarization Tools
- Website searches
- Word prediction
- Speech recognition
- Adaptive learning platforms



Seniors are often left behind and may resist tech

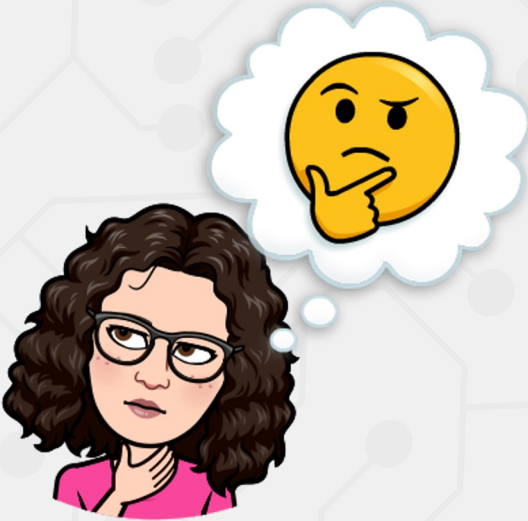
- Lack of experience and familiarity
- Physical limitations
- Fear of looking incompetent
- Fear of change
- Lack of patience
- Perceive uselessness
- Prefer older methods
- Isolation



More barriers....

- Desire human interaction
- Prefer status quo
- Fear of breaking it
- Security and privacy concerns
- Distrust
- Policy restrictions
- Staff and volunteer turnover
- **Skilled advisor to match needs with solutions**





New Tech Mindset



“How can current technologies help older adults reduce anxiety, stay connected and enjoy life?”

Joan Green- Your Tech Advisor and Coach



The screenshot shows the homepage of Innovative Speech Therapy. At the top left is the logo, and to its right is a navigation menu with links for 'About', 'Online Learning', 'Blog', 'Work With Me', 'Resources', 'Books', and 'Contact'. The main content area features a large portrait of Joan Green on the left. To her right is the heading 'Innovative Speech Therapy' followed by 'Hello and welcome!'. Below this is a paragraph describing the services offered, a '30 YEARS' anniversary badge, and a short bio of Joan Green. At the bottom of the main content area are two buttons: 'Let's get started' and 'Join our email list'. A dark blue footer bar at the bottom contains the text 'Improving Communication, Cognition and Productivity with Tech-Savvy Strategies, Solutions and Support'.



About Online Learning ▼ Blog Work With Me Resources ▼ Books Contact 🔍



Innovative Speech Therapy

Hello and welcome!

IST offers a uniquely effective guidance empowering individuals, families and professionals with state-of-the-art local and long-distance therapy, coaching and training programs.



Joan Green is a licensed and certified speech-language pathologist and assistive technology specialist with many years of experience helping children and adults who have communication, cognitive, literacy, learning, and executive functioning challenges.

Let's get started

Join our email list

Improving Communication, Cognition and Productivity with Tech-Savvy Strategies, Solutions and Support

www.innovativespeech.com

My favorite tech tools



Computers



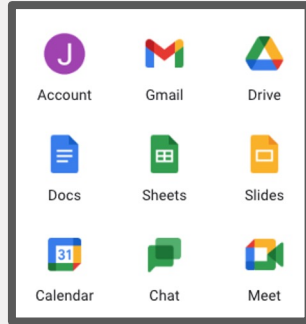
Tablets



Smartphones



ChatGPT



Google Apps



Apple Watch



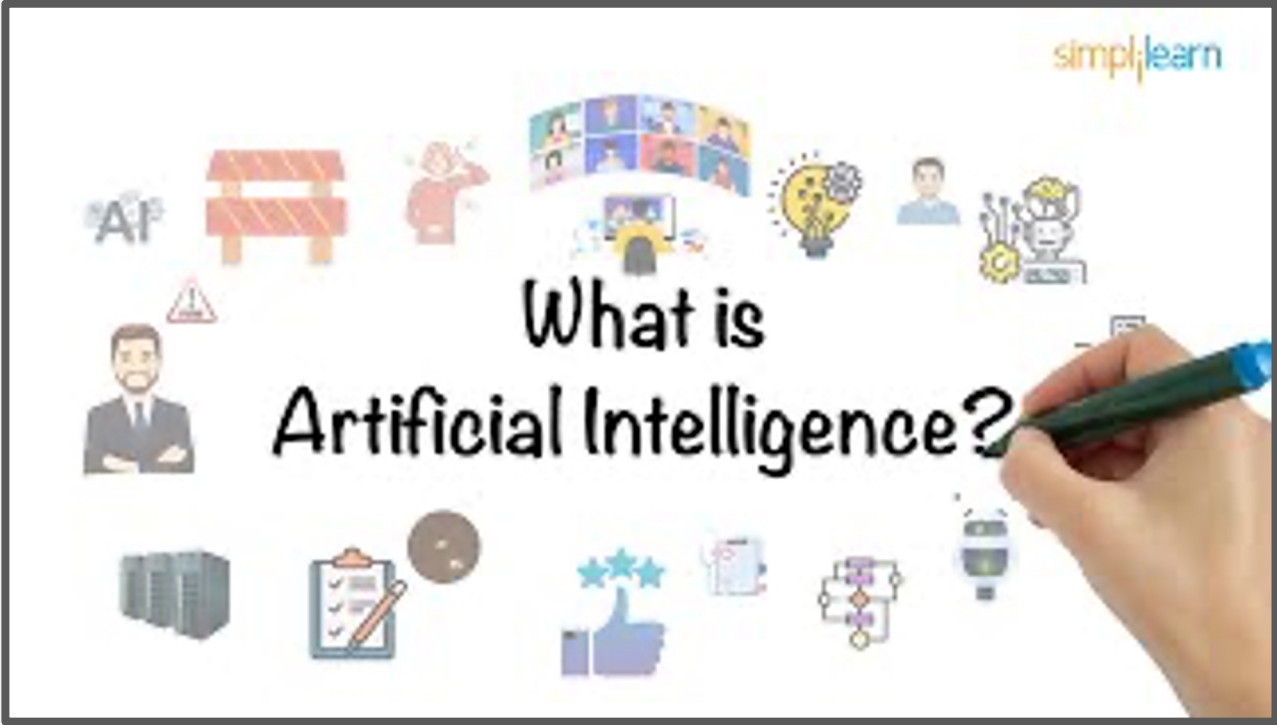
Amazon's Echo Show

Tech can help overcome disabilities

- Expressive Communication Challenges- stroke, head injury, tumor, degenerative diseases
- Vision and Hearing loss
- Mobility Limitations
- Dexterity- arthritis
- Isolation- depression- lack of stimulation
- Memory and Reasoning- Mild cognitive impairment, Dementia

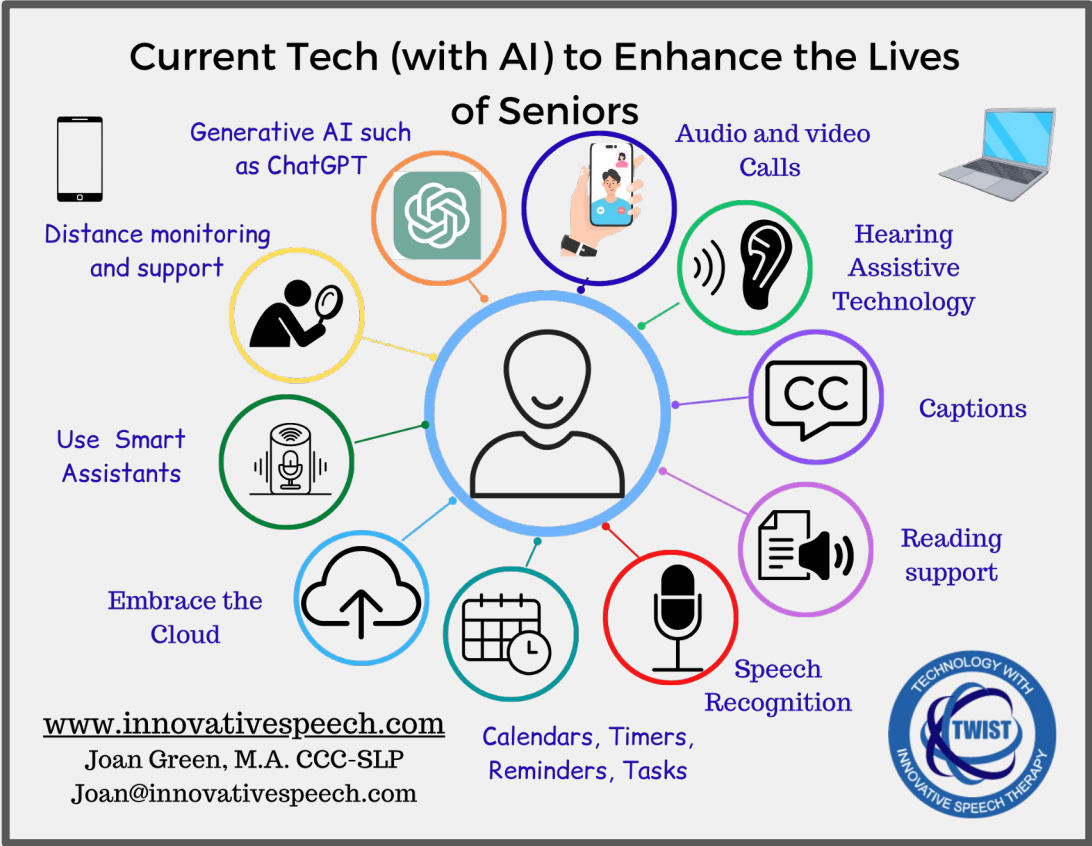


Everyone is talking about AI- Artificial Intelligence



(5 min video) What is Artificial Intelligence by Simplilearn

Tech infused with AI can make all the difference!



Use Audio and video calling features to reduce isolation

Current Tech (with AI) to Enhance the Lives of Seniors

Audio and video Calls

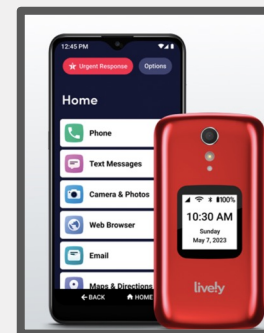
www.innovativespeech.com
Joan Green, M.A. CCC-SLP
Joan@innovativespeech.com

AI can help seniors stay in touch

- Audio and video calls help minimize isolation and loneliness!
- Maintaining social connections is critical for well being as we age.
- Seniors can attend events “virtually” they can’t get to in person.



Vtech



Jitterbug



RAZ
Mobility

AI is also embedded into video communication apps



Facetime



Google Meet- Free on all phones, tablets and computers

Simpler video call options



Grandpad



Amazon's
Echo Show-
Drop-in



Sociavi360



ViewClix



Onscreen-
use TV

Explore hearing assistive technology

Current Tech (with AI) to Enhance the Lives of Seniors

Audio and video Calls

Hearing Assistive Technology

www.innovativespeech.com
Joan Green, M.A. CCC-SLP
Joan@innovativespeech.com

Tech can help people with hearing loss



- Hearing aids- amplify certain frequencies, bluetooth pairs AT to it- microphones, TV, phone
- Flashing lights and vibration
- Over-the-counter solutions for mild- mod loss
- iOS- Live Listen, customize airpods
- Get notified of unsafe hearing levels
- Explore settings on your smartphone



New tech that uses AI to support hearing

Xander Glasses- Offers real-time captioning on the lenses of glasses, designed for both hearing-impaired and normal-hearing individuals to facilitate communication in noisy environments. Uses AR- Augmented reality.

Consumer Electronics Show (CES) 2024-

<https://www.hearingtracker.com/news/ces-2024-what-s-new-in-hearing-aids-hearables-and-hearing-healthcare-tech>



Use captions and transcription

Current Tech (with AI) to Enhance the Lives of Seniors

Audio and video Calls

Hearing Assistive Technology

Captions

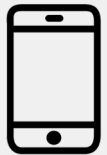
www.innovativespeech.com
Joan Green, M.A. CCC-SLP
Joan@innovativespeech.com

20

Captions & Transcriptions

Captions are free but the feature may need to be set up in advance.

Transcription may have errors. The quality is dependent on the speaker and environment.

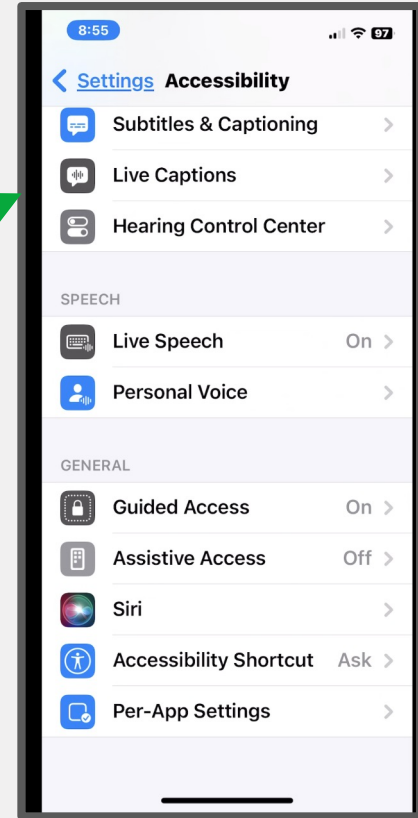


Using iOS 17 or a Pixel phone?

Enable the captions for in-person conversations or to use while having a phone call!

iPhone

Settings > Accessibility > Live Captions

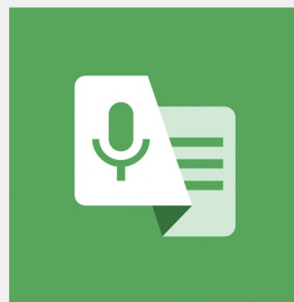


Apps with instant transcription

- Have a hard time following conversations in person or online?
- Seeing words live can help.
- There are apps now that you can use to provide text as people speak!



[Live Transcribe- iOS](#)



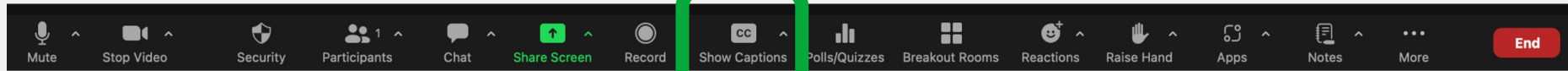
[Live Transcribe-
Android](#)



[Ava- iOS,](#)
Android and
desktop

Zoom meetings

The host can set up the ability for everyone to use live captioning!



Google Meet- Settings and options

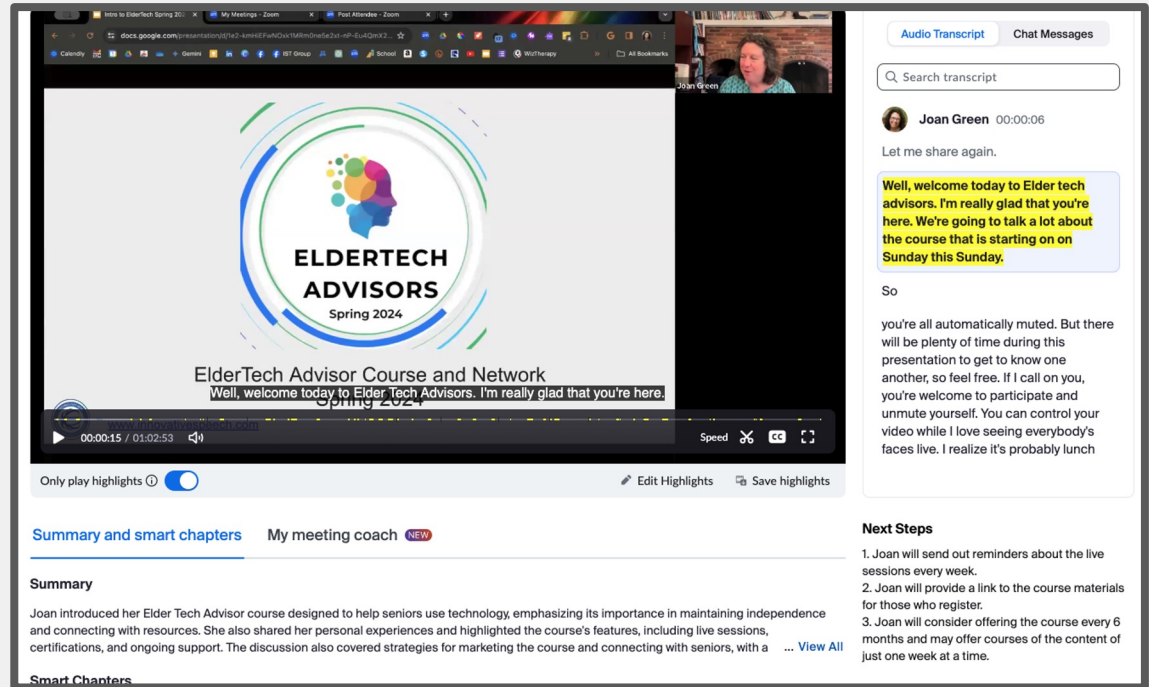


The image shows a composite of three screenshots from the Google Meet interface. On the left is the 'More options' menu, with 'Change background' and 'Turn on captions' highlighted by a green and blue box respectively. Red arrows point from these boxes to the 'Backgrounds' panel in the center, which shows a grid of background options with the 'None' option highlighted by a green box. A red arrow also points from the 'None' option to the 'Captions' panel on the right, which shows a video feed with a thumbs-up gesture and a caption box containing the text 'You Captions are wonderful.' The caption box is highlighted by a blue box. At the bottom right of the video feed, there is a 'Turn off captions' button.

Similar to Zoom. Can also use for 1:1 video calls similar to Facetime on iPhone. There is a mobile app or go to Meet.Google Com Need a Google username and password.

Terrific note-taking tools with AI

- Meeting summaries
- Smart recordings
- Action steps
- Images
- Study tools
- [Clean](#)
- [Otter.ai](#)
- [Zoom](#)

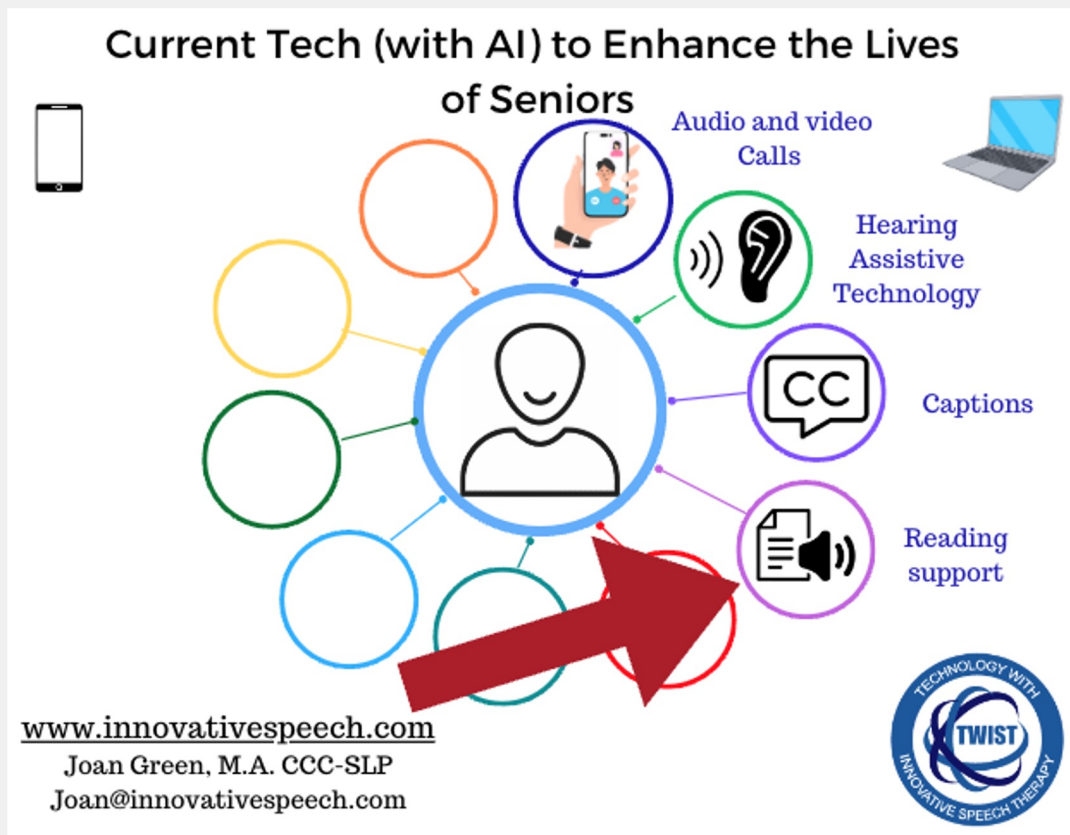


The screenshot displays a Zoom meeting recording interface. The central video player shows a presentation slide for "ELDERTECH ADVISORS Spring 2024" with a subtitle: "ElderTech Advisor Course and Network Well, welcome today to Elder Tech Advisors. I'm really glad that you're here." Below the video player, there are controls for "Only play highlights" (checked), "Edit Highlights", and "Save highlights".

To the right of the video player is a transcript panel with a search bar and a "Chat Messages" tab. The transcript shows a message from "Joan Green" at 00:00:06: "Let me share again. Well, welcome today to Elder tech advisors. I'm really glad that you're here. We're going to talk a lot about the course that is starting on on Sunday this Sunday." Below this, there is a "So" section and a paragraph: "you're all automatically muted. But there will be plenty of time during this presentation to get to know one another, so feel free. If I call on you, you're welcome to participate and unmute yourself. You can control your video while I love seeing everybody's faces live. I realize it's probably lunch".

Below the transcript, there are sections for "Summary and smart chapters" (with a "NEW" badge) and "My meeting coach". The "Summary" section contains the text: "Joan introduced her Elder Tech Advisor course designed to help seniors use technology, emphasizing its importance in maintaining independence and connecting with resources. She also shared her personal experiences and highlighted the course's features, including live sessions, certifications, and ongoing support. The discussion also covered strategies for marketing the course and connecting with seniors, with a ... View All". Below the summary is a "Smart Chapters" section.

Optimize reading support



Do you have a hard time reading?

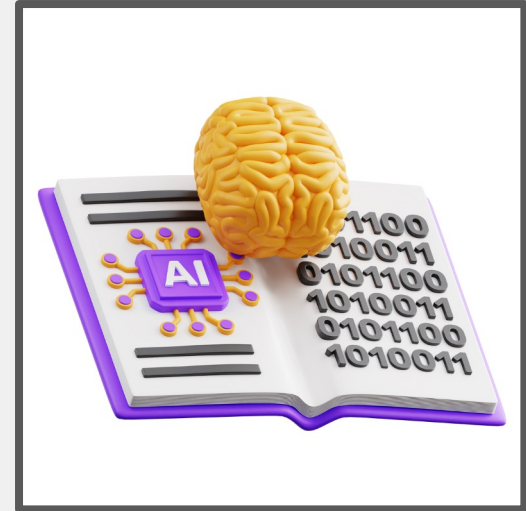
Low vision

Headaches, seizure, sensitivity to light

Too many ads and pop-ups

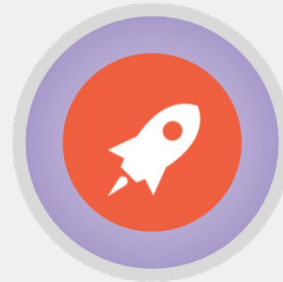
Distractions

Small print



Reader view

- Declutter the screen, remove ads, change font size and type
- Built into Safari, Edge and Firefox
- [Postlight Reader Extension](#)
(Chrome, Edge, Firefox)
(Formerly Mercury Reader)



Listen to text read aloud

All devices can read aloud for free!

Helpful for :

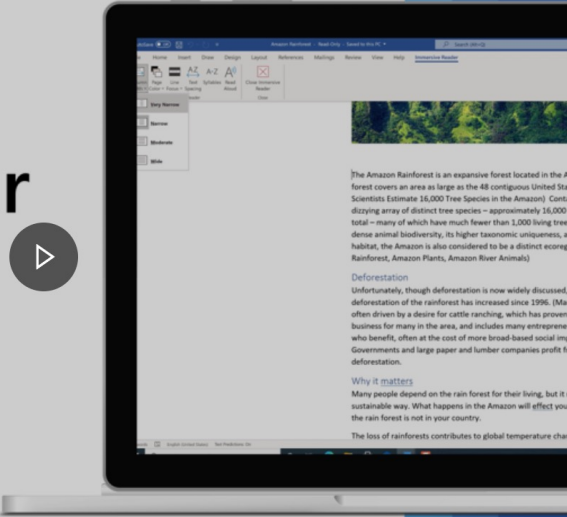
- Small print
- Low vision or visual perceptual challenges
- attention or memory challenges
- Reading difficulties
- Prefer to listen rather than read with eyes



Microsoft's Immersive Reader- Free

Microsoft Word

Improve your reading with Immersive Reader



The Amazon Rainforest is an expansive forest located in the Amazon basin, covering an area as large as the 48 contiguous United States. Scientists estimate 16,000 tree species in the Amazon. Contain a dizzying array of distinct tree species – approximately 16,000 different total – many of which have much fewer than 1,000 living trees. It has dense animal biodiversity, its higher taxonomic uniqueness, and its habitat, the Amazon is also considered to be a distinct ecoregion. Rainforest, Amazon Plants, Amazon River Animals)

Deforestation
Unfortunately, though deforestation is now widely discussed, the deforestation of the rainforest has increased since 1995. (Marginal often driven by a desire for cattle ranching, which has proven to be a business for many in the area, and includes many entrepreneurs who benefit, often at the cost of more broad-based social improvements. Governments and large paper and lumber companies profit from deforestation.)

Why it matters
Many people depend on the rain forest for their living, but it must be managed in a sustainable way. What happens in the Amazon will affect your life if the rain forest is not in your country.

The loss of rainforests contributes to global temperature changes.

<https://support.microsoft.com/en-au/office/use-immersive-reader-in-word-a857949f-c91e-4c97-977c-a4efcaf9b3c1>

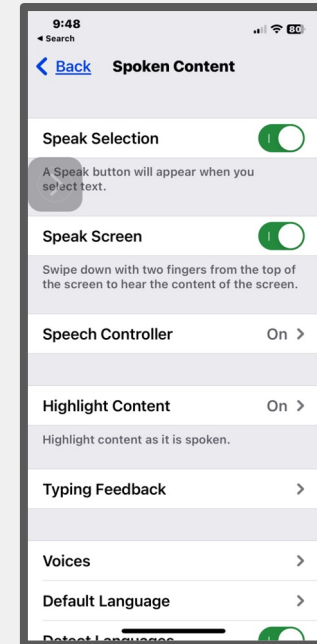
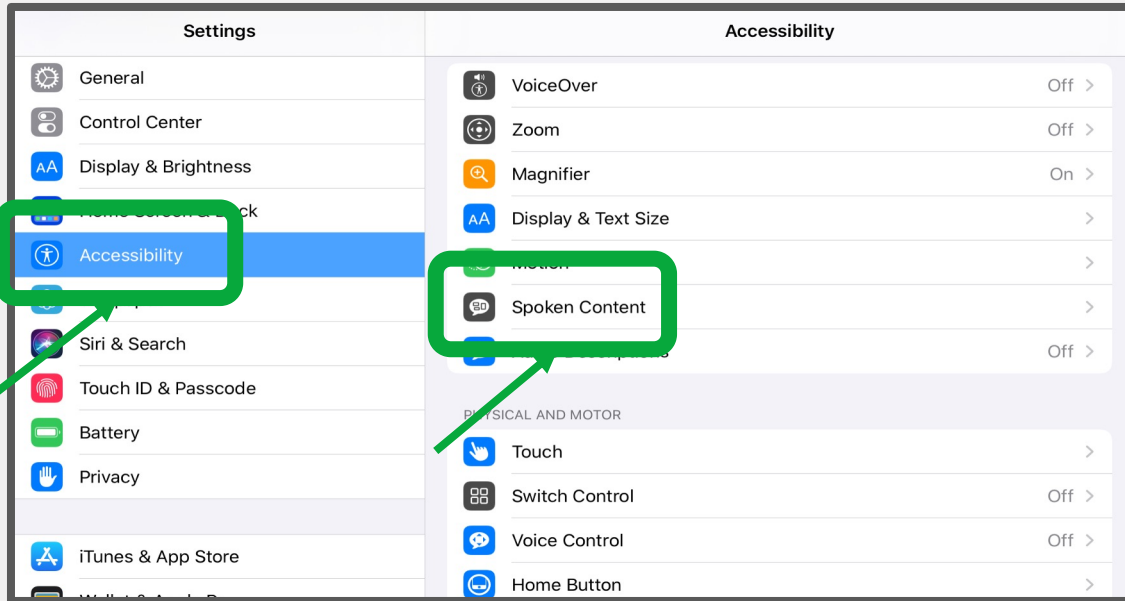
iDevices

Speak Selection Speak Screen



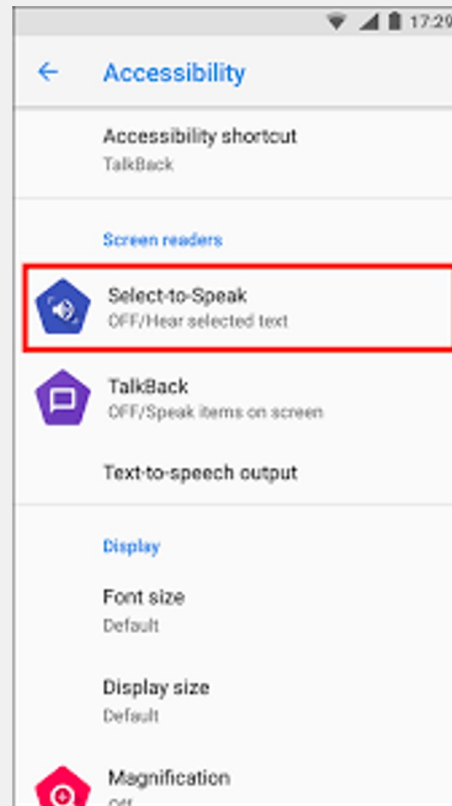
- Settings > Accessibility > Spoken Content
- Speak selection- select text then touch “speak”
- Speak screen- swipe down with two fingers from the top of the screen and then press play (use assistive touch)

Accessibility features- iOS



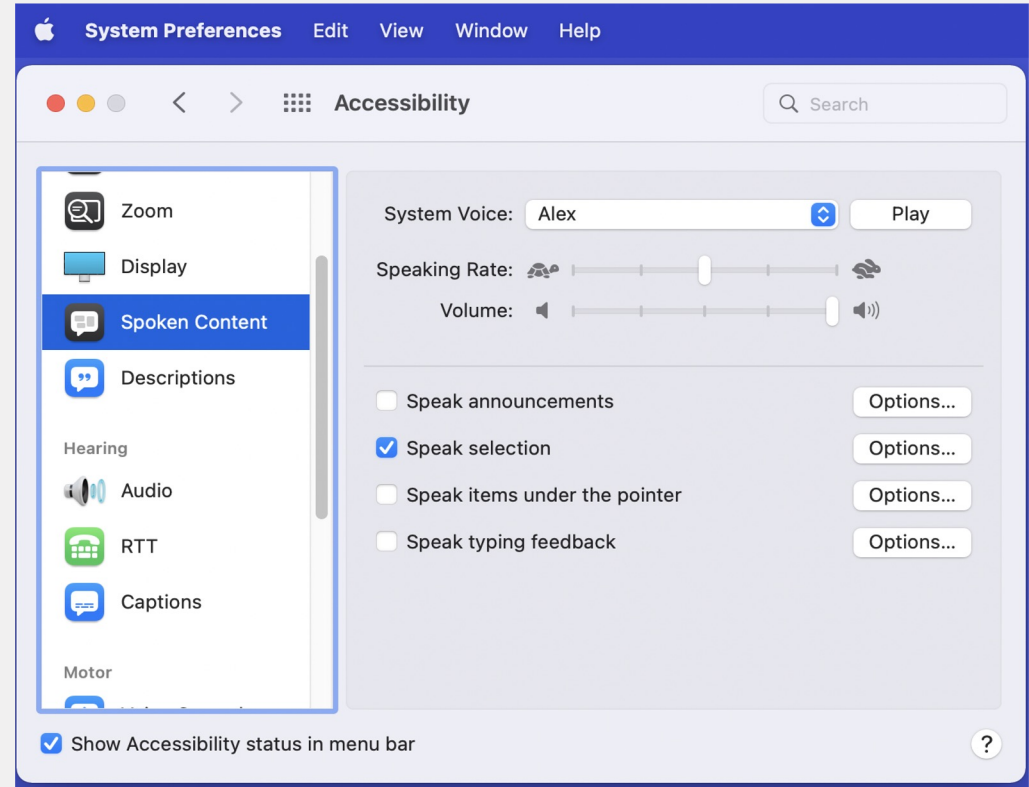
Android phones

- Android 11 and up
- Settings > accessibility> Select to Speak
- If doesn't work- go to Google Play store and download the Android Accessibility Suite
- Turn on Select to Speak Shortcut (2 finger swipe up) or 3 finger swipe if TalkBack is on, or tap the accessibility button
- Tap Play

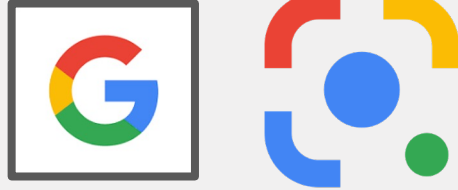


Read aloud- Mac

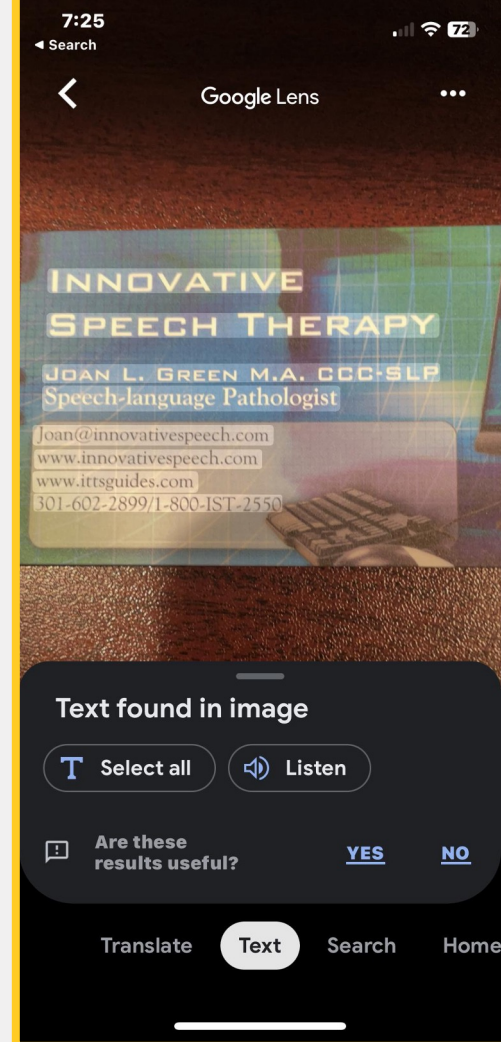
- Apple menu > system preferences> Accessibility> Spoken Content selected text when the key is pressed
- Option + Esc



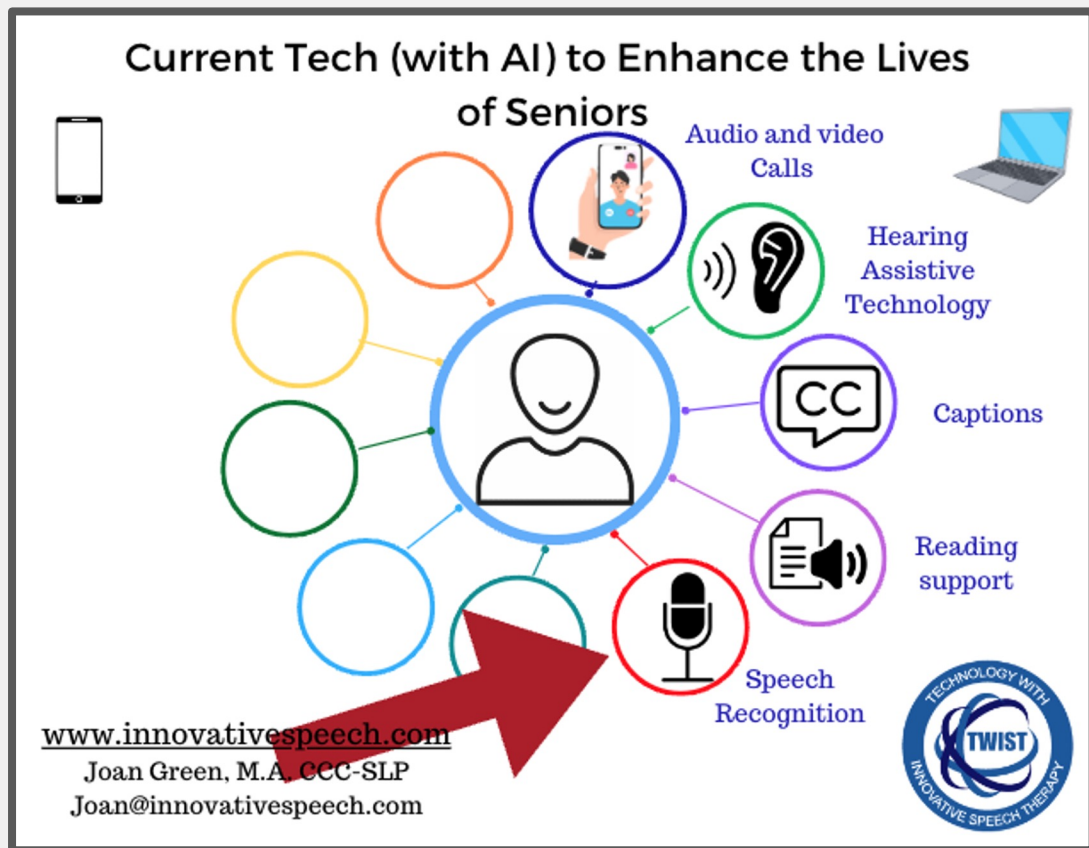
Google Lens



- This app uses the camera on a tablet or smartphone
- On iOS use the Google app and tap on the Lens icon.
- Select either “search” or “text” on the bottom depending on your version.
- Take a picture of text in environment (a sign, book, handout), tap the captured text and it reads it out loud immediately! It can also translate.
- Free



Get help with typing



Speak instead of type

- Arthritis
- Low vision
- Small devices
- Difficulty spelling



Email



Facebook



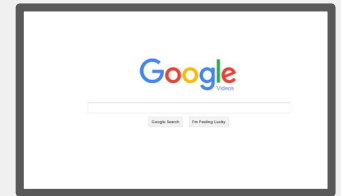
Google Docs



Messages



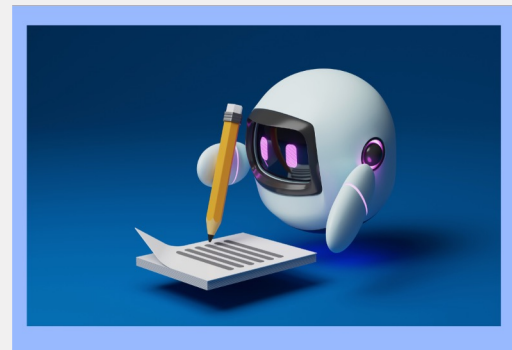
Microsoft
Word



Google Search

Speech-to-text/ Speech Recognition/ Dictation

- Helpful when typing is difficult.
- It's a feature on all current computers, phones and tablets for free!
- Whenever there is a cursor blinking, you should be able to enter text with your speech.
- The process depends on the device, operating systems and format of the material.
- Mobile devices- look for microphone in keyboard
- Google Docs- Tools> Voice Typing

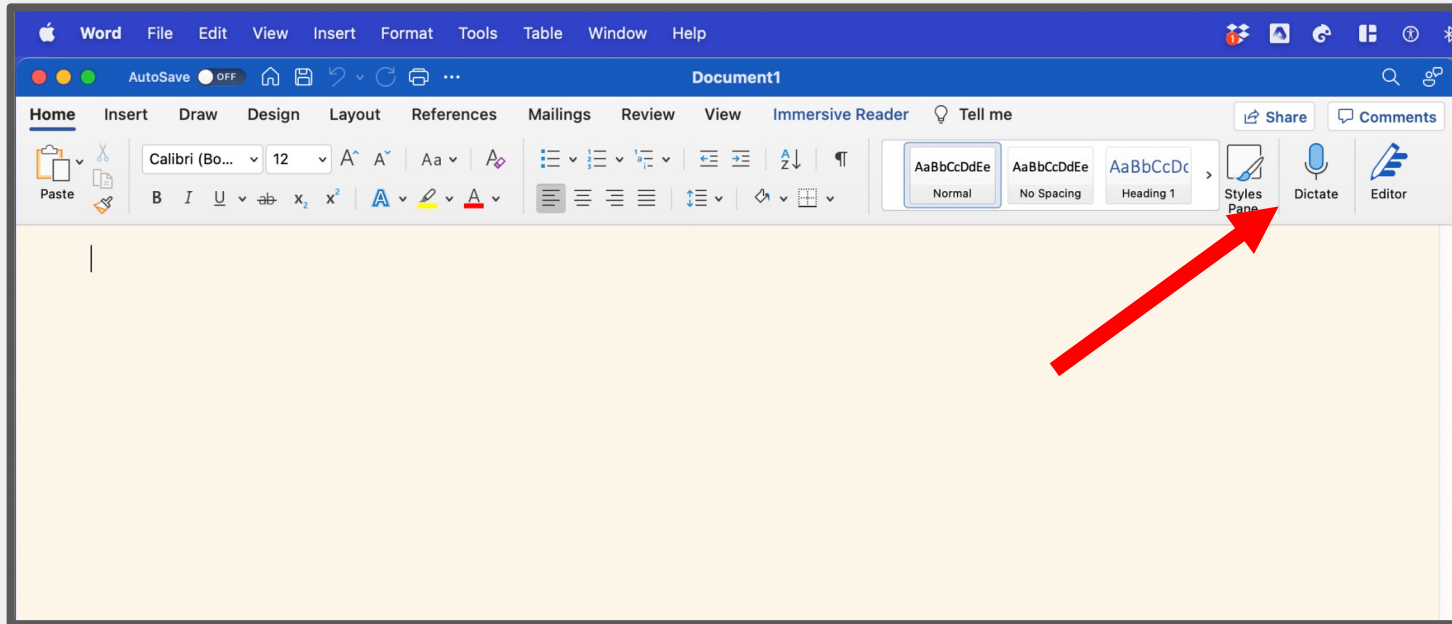


Mobile phones and tablets

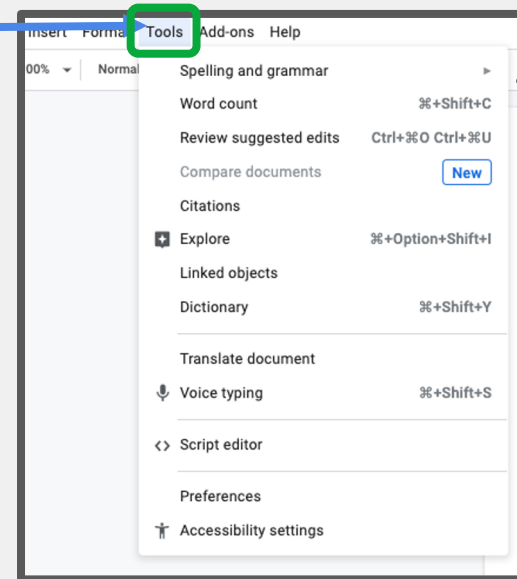
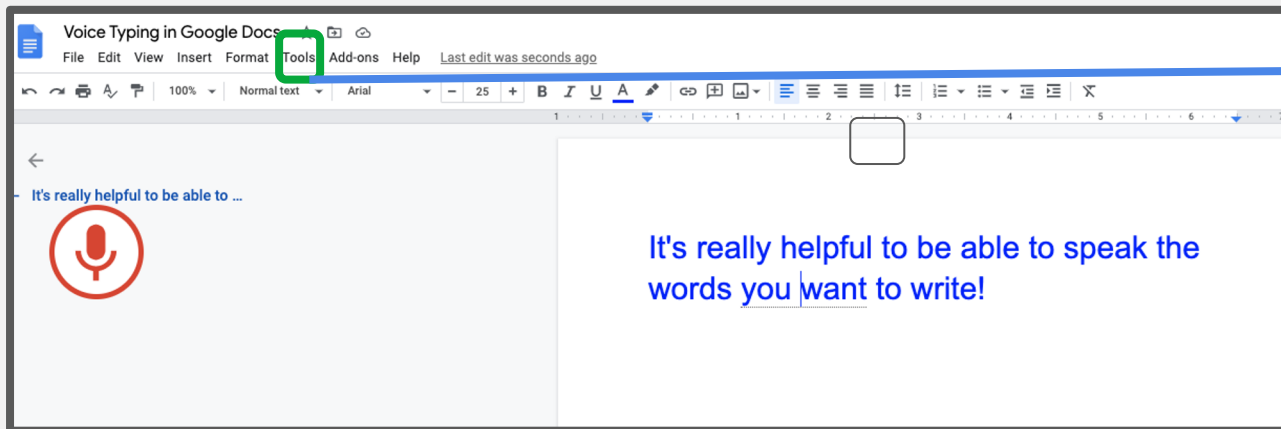
1. Find the microphone on the keyboard
2. Make sure the cursor is in the right spot
3. Tap on the microphone
4. Speak clearly- use punctuation
5. Tap again to stop dictating
6. Edit as needed



Dictation in MS Word 365 and Word for Web



Voice typing in Google Docs on computer



[Docs.google.com](https://docs.google.com)

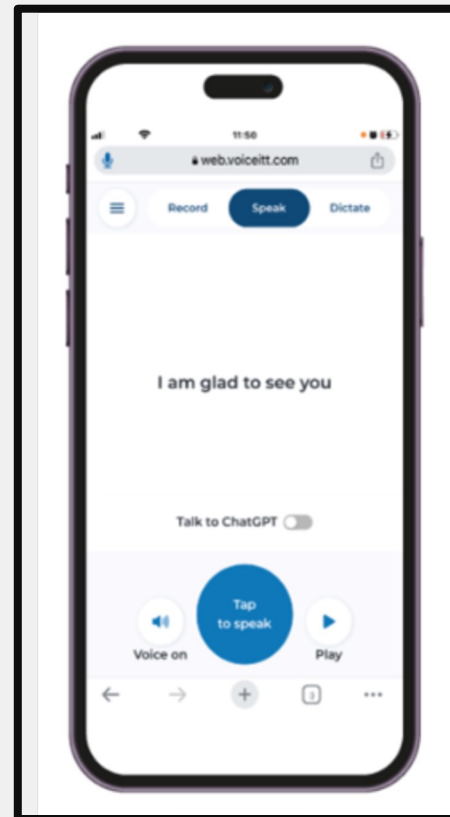


Tools Menu

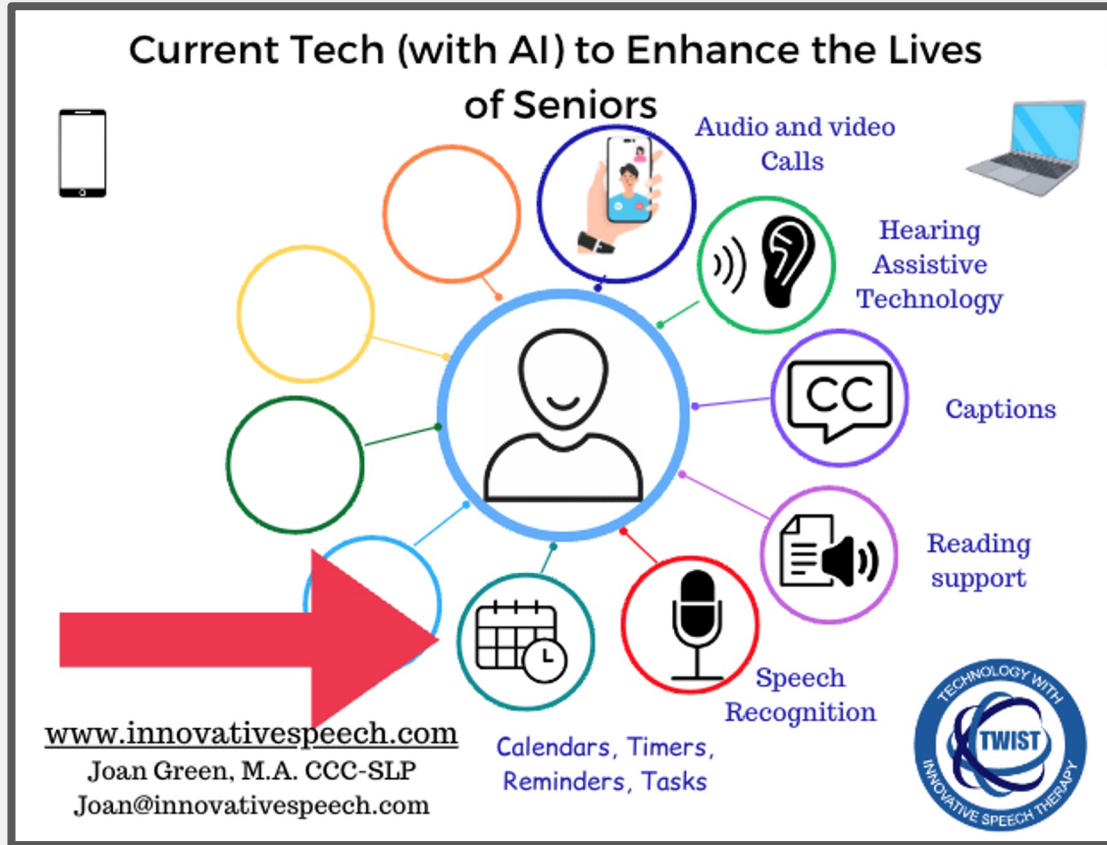
New speech recognition for nonstandard Speech

[Voiceitt2](#)- Automatic speech recognition for people with speech disabilities, aging voice and accents. [RAZ Memory Cell Phone](#)

[Google's Project Relate](#)- App to transcribe text, repeat speech, or use Google Assistant

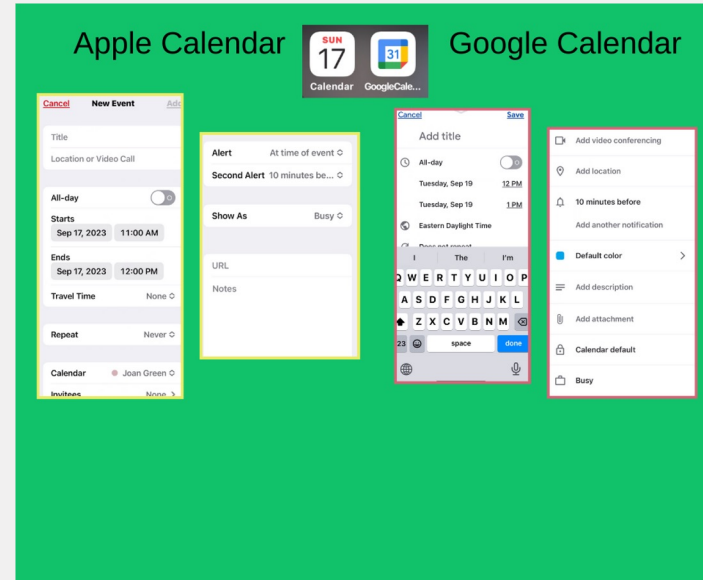
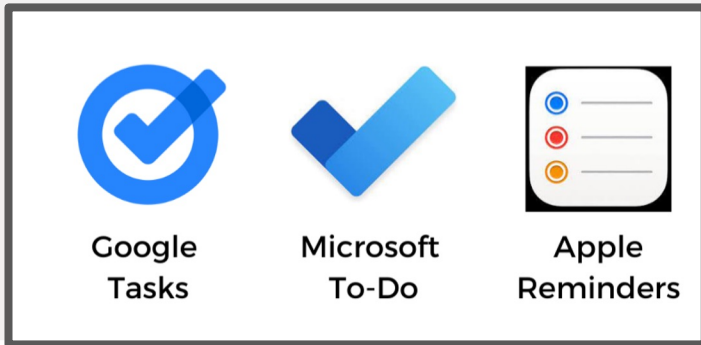


Keeping track of time, appointments, and tasks



Use Digital Calendar and Task apps

- Help with communication and memory.
- Reduce stress and support mental health.
- Coordinate appointments and errands



Free Google Apps are Terrific for Seniors

Google Calendar

Google Keep

Google Tasks

Google Photos

Google Drive

Google Docs

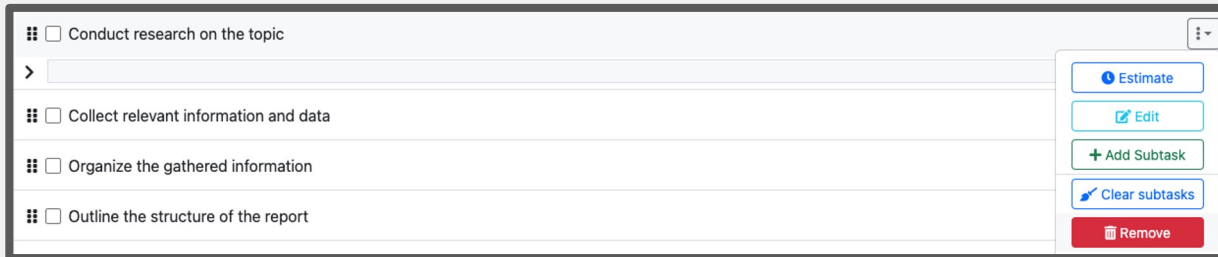
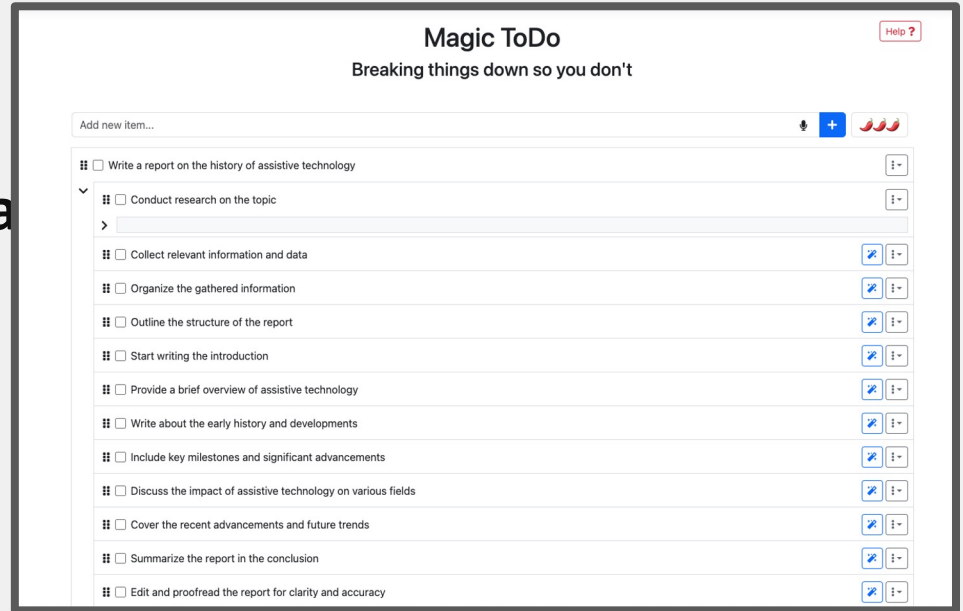


[Joan's Get Going with Google Course](#)

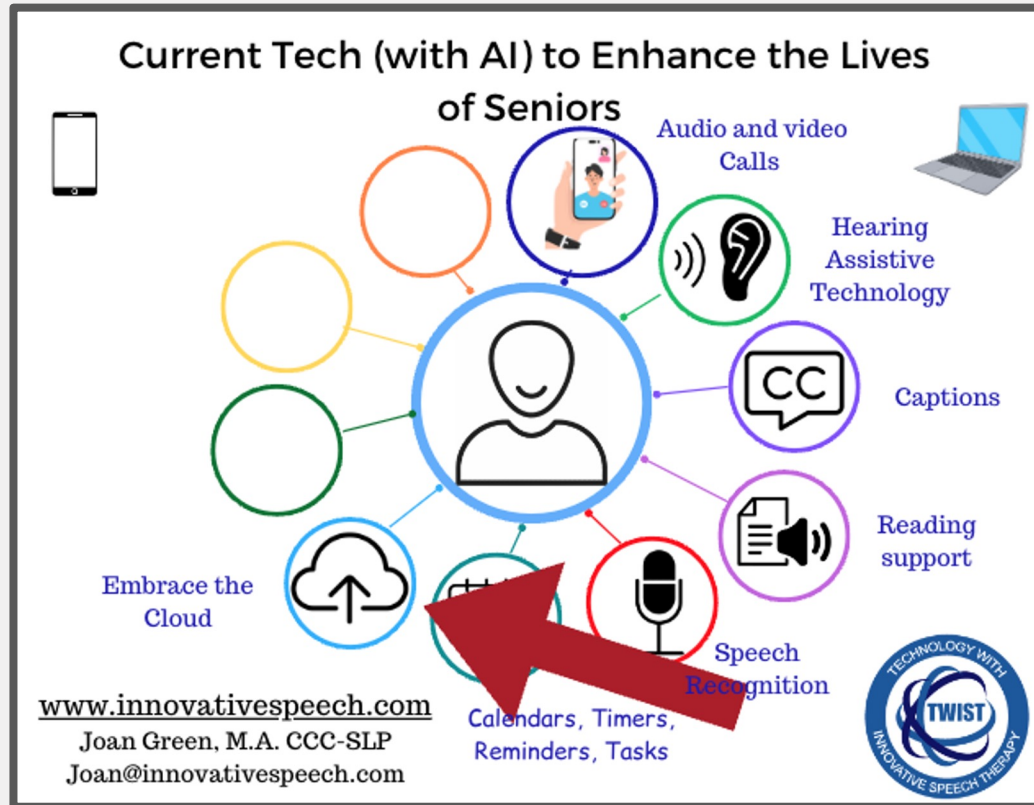
Goblin Tools

<https://goblin.tools/>

- Magic ToDo- Helps break down tasks
- Free
- Web based
- Android & iOS app



Embrace the cloud for access and sharing important information

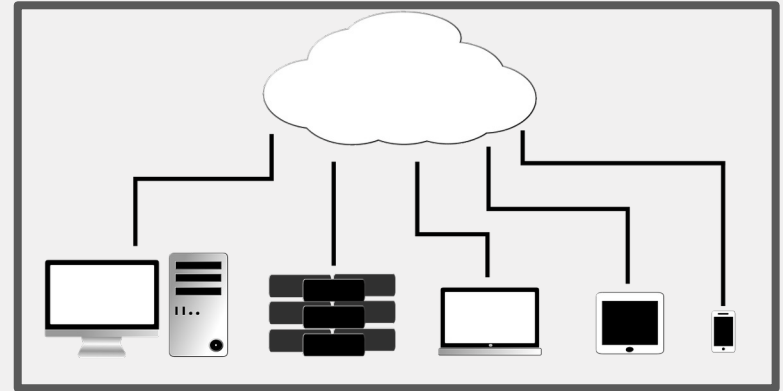


Is your important info at home on paper?

How do you coordinate support?

Can you access info when you need it?

- Important for emergency situations
- calendars-appointments
- Documents
- Groceries needed
- Photos- search and share



Cloud based organization and access

- Automatically saves
- Robust searching
- Access account from other devices
- Automatically syncs
- Share and collaborate
- Stay organized and efficient

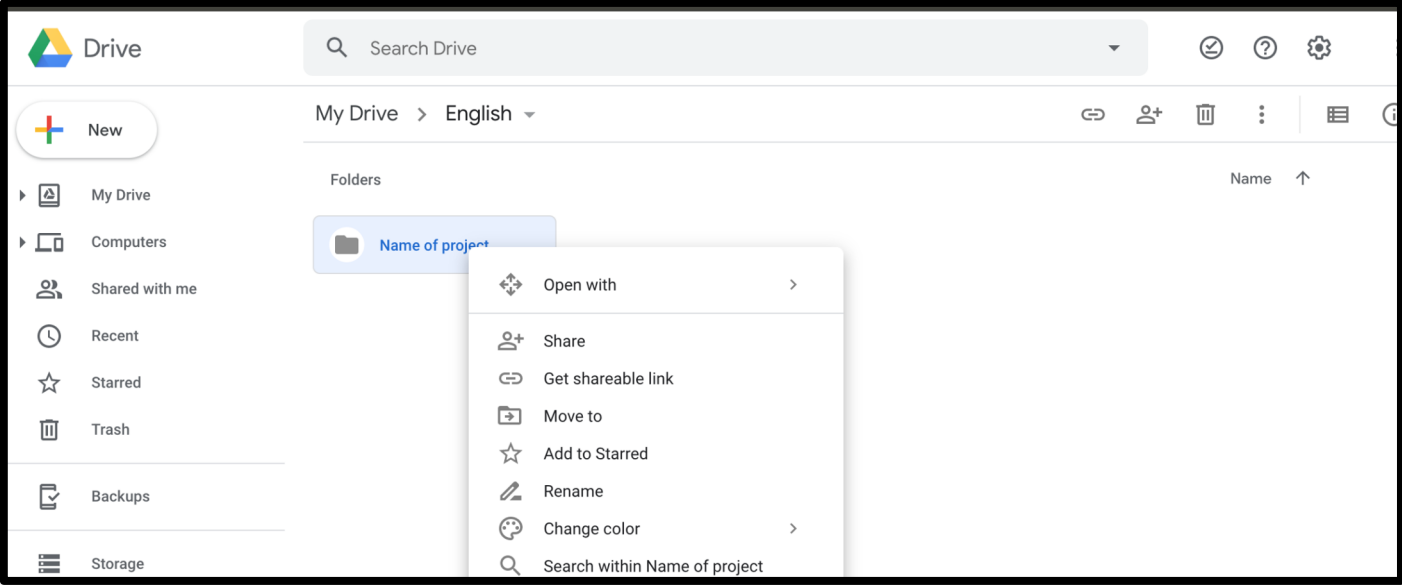
The Google logo, consisting of the word "Google" in its signature multi-colored font (blue, red, yellow, green, red).

Microsoft 365

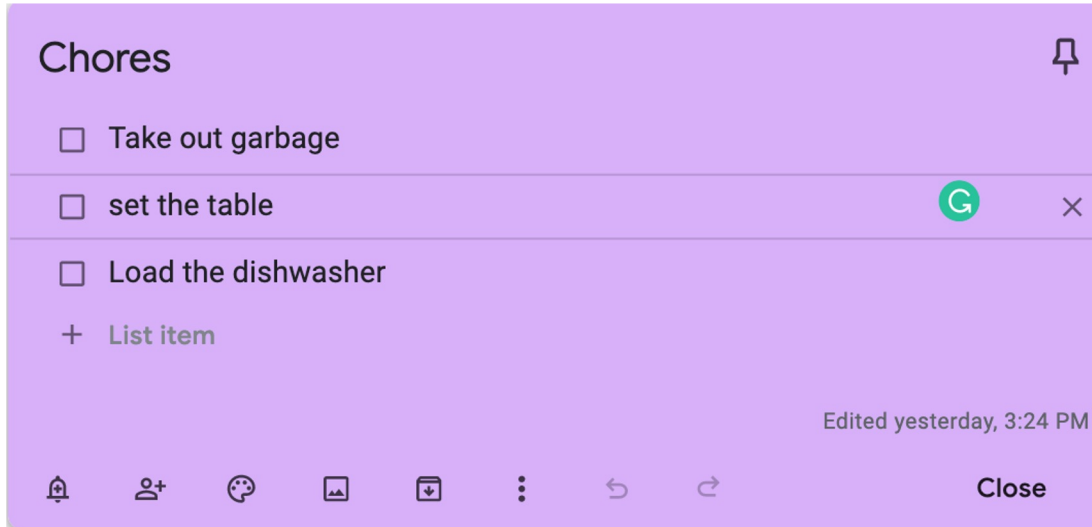


iCloud Drive

Google Drive & OneDrive- Organize folders



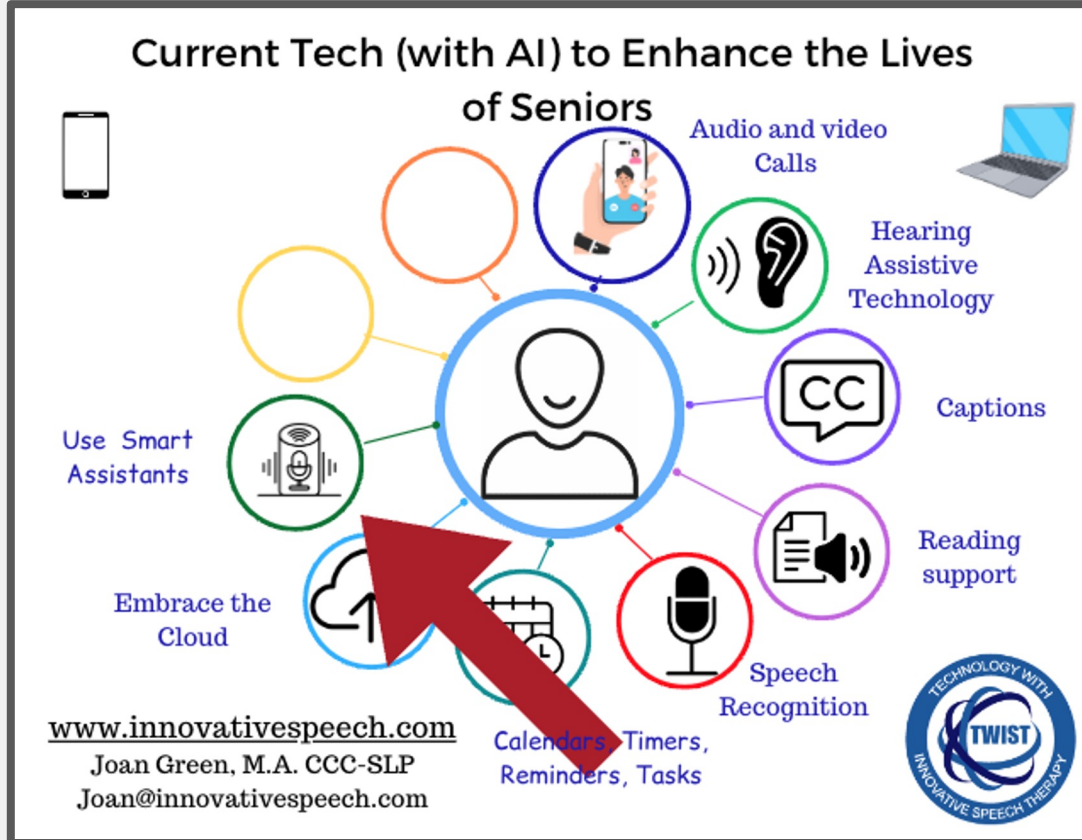
Google Keep- task manager and note taking



- Use color
- Reminders
- Share lists
- Searchable

Keep.google.com or
mobile app (iOS, Android)

Get to Know Alexa, Siri and Google Assistant



Smart Assistants make life easier

- Send a text or email
- Make calls
- Get Reminders
- Set Alarms
- Listen to Music
- Play Games
- Weather
- News
- Answer Questions
- Turn on lights

Alexa- Echo Dot

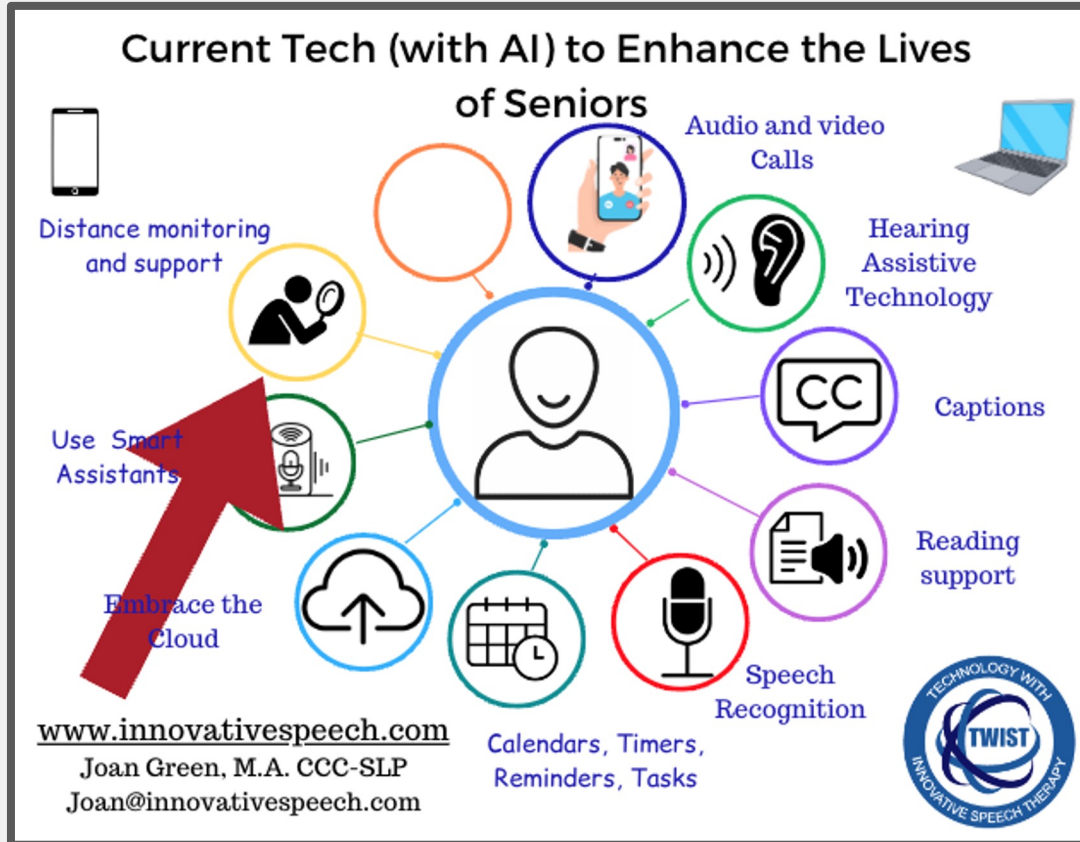


“Hey Google”- Google Home



Siri

Maximize Independence- Distance Monitoring and Support



Smart home automation

- Security cameras- see who's at the front door
- Adjust lighting and temperature
- Motion sensors
- Smart Locks

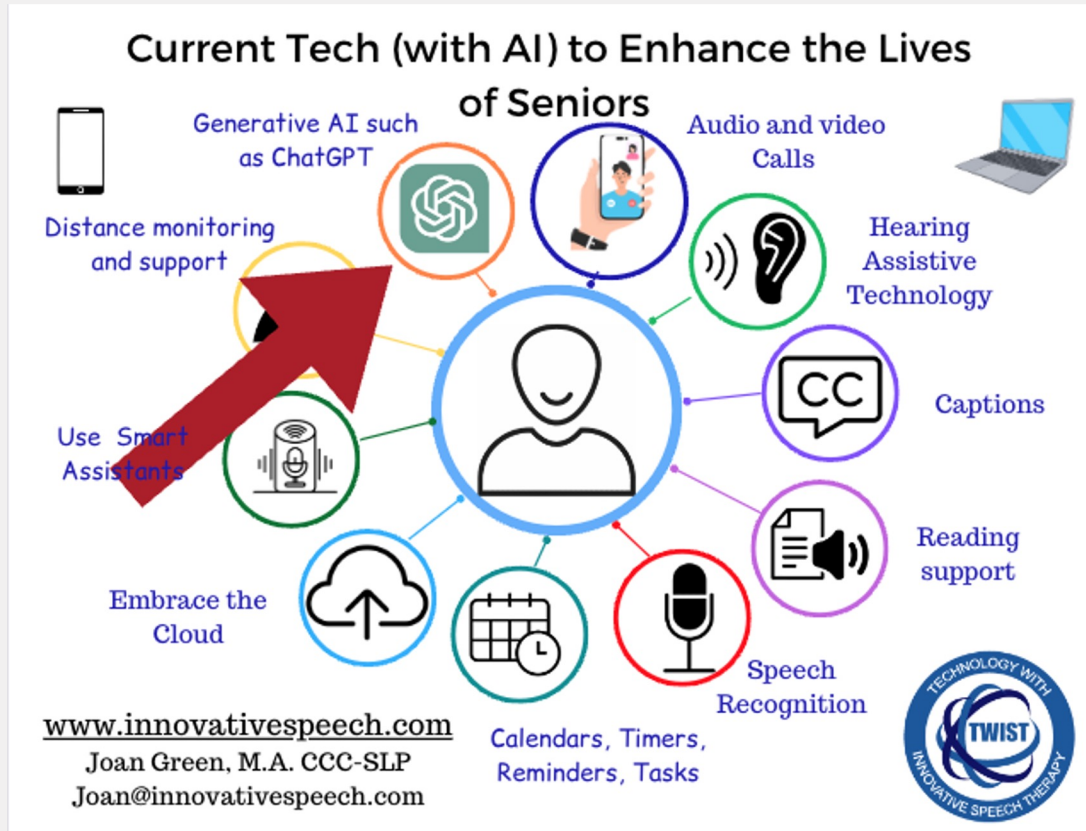


Supports for Preserving Independence

- **Medication management-** reminders, tracking, and alerts re potential drug interactions
- **Fall detection systems-** AI-enabled sensors detect falls in real-time and alert caregivers or emergency services. Reduce response time for better outcomes
- **Remote monitoring systems-** track vital signs, activity levels, and sleep patterns.
- **Virtual Check-Ins**
- **Fitness support-** Monitor heart rate

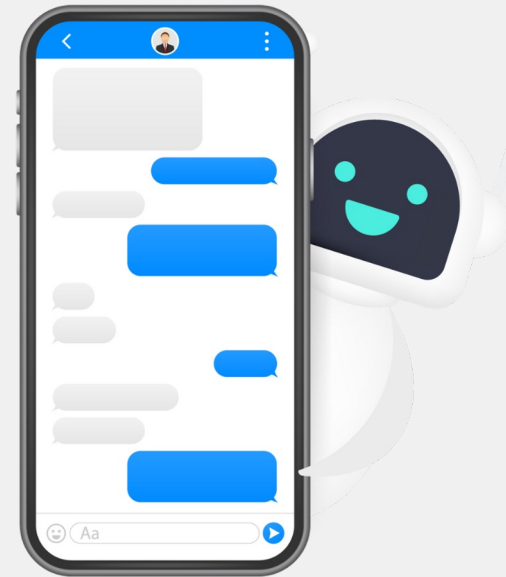


Generative AI such as ChatGPT



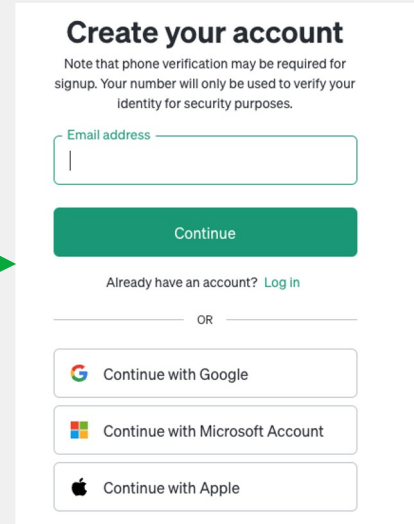
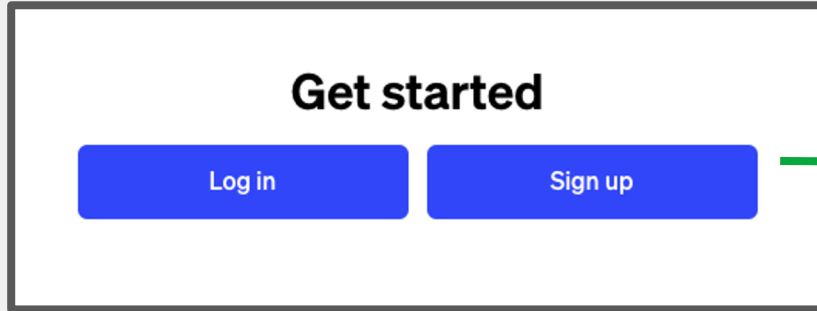
Text and Idea Generation

- **ChatGPT**- <https://chat.openai.com/>
- **Gemini**- (formerly Bard)- <https://gemini.google.com/app>- need a free Google account to sign up
- **Copilot**- (formerly Bing) uses chatgpt 4- sign up at <https://bing.com>
- **Claude** - <https://claude.ai>
- Some now also generate artwork,songs and even video.
- Now many are more accessible with read aloud and dictation features

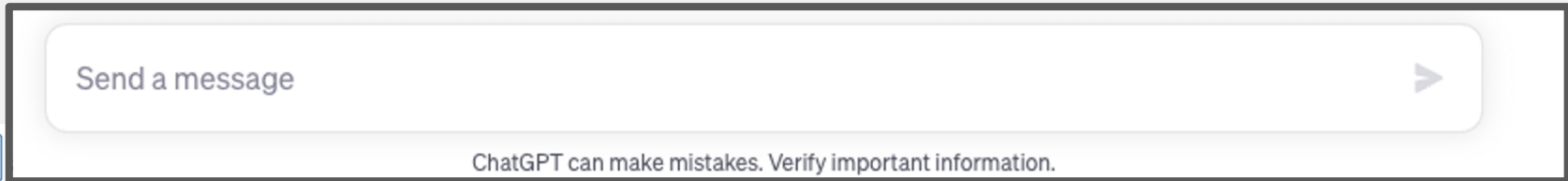


Getting started with ChatGPT

- Go to <https://chat.openai.com/>



A screenshot of the "Create your account" page. At the top, the heading "Create your account" is followed by a note: "Note that phone verification may be required for signup. Your number will only be used to verify your identity for security purposes." Below this is a text input field labeled "Email address" with a vertical cursor. Underneath the field is a green "Continue" button. Below the button, there is a link: "Already have an account? Log in". A horizontal line with "OR" in the center separates this from the social login options. There are three buttons: "Continue with Google" (with the Google logo), "Continue with Microsoft Account" (with the Microsoft logo), and "Continue with Apple" (with the Apple logo).



More Practical Applications of Generative AI

- Help people learn to help themselves
- Offer pros and cons for a described situation
- Generate recipes and stories
- Explain complex topics
- Provide step-by-step instructions
- Give ideas about how to fix computer problems
- Create jokes
- Summarize books, articles and movies
- Plan trips and sightseeing
- Organize spoken memories into memoirs
- Brainstorm and generate ideas for work or writing projects- get “unstuck”



Chat GPT Prompts

- “Please summarize this article and simplify the content so a 5th grade student can understand it.”
- “Please create an outline of this article and create 5 bullets for key ideas.”
- “Summarize the following text in 500 words.”
- “Provide a concise summary of the book..... In an easily understandable format highlighting the themes.
- “Please suggest a few books I might like to read that are similar to
- “Create a list of books to read to help me learn about...”
- “Can you suggest an image I could use to help me remember a main lesson in this book?”

A few statistics...

- ChatGPT had 1 million users within the first five days of being available
- 400 million workers could be displaced because of AI
- Research estimates AI will create 97 million jobs
- A quarter of companies are adopting AI because of labor shortages
- Half of U.S. mobile users use voice search every day
- 97% of business owners believe ChatGPT will help their business
- Over 60% of business owners say AI will increase productivity
- Over 75% of consumers are concerned about misinformation from AI


[24 Top AI Statistics & Trends In 2023 – Forbes Advisor- April 25, 2023](#)

Summarizing a PDF

ChatGPT 4 ▾

ChatGPT
I can definitely help with summarizing a PDF! You can either share the main points or key passages from the document, or you can upload the PDF here, and I can take a look to help you summarize it.

You

 wilkinson-et-al-2023-an-evidence-base... PDF

Please summarize this PDF

ChatGPT
The PDF you provided discusses an evidence-based approach to augmentative and alternative communication (AAC) design specifically tailored for individuals with cortical visual impairment (CVI). Here is a summary of the key points:

Purpose and Method

- The article aims to develop a framework involving service providers, researchers, and families to support optimal visual and communication outcomes for individuals with CVI using AAC.
- It reviews existing literature on CVI and AAC, providing clinical considerations and design features that address the unique needs of these individuals.

Findings and Clinical Implications

- The paper highlights the importance of designing AAC systems that consider the unique visual processing characteristics of individuals with CVI to enhance communication effectiveness.
- It emphasizes the role of external research and internal evidence from lived experiences to optimize AAC system design.

Practical Applications

- The article illustrates the lived experience of Emma, a 20-year-old with CVI and other disabilities, who uses AAC. Her story exemplifies the need for individualized assessments and interventions that reflect the research and considerations discussed.

Conclusions

- Tailoring AAC systems to the specific visual needs of individuals with CVI is crucial for promoting positive communication outcomes.
- Future research should explore additional experiences of individuals with CVI to inform further developments in AAC design.

Be careful!

- Don't believe everything they tell you. "Hallucinations". Need to fact check.
- Don't share your full name, address, phone number, passwords, financial info, or private or proprietary information.
- If very risk averse, may want to set up a new Gmail address and free Google Voice telephone number for accounts.

BONUS TIP- Apps using AI

Improve Skills and keep your brain sharp!

AI helps to adjust the level of difficulty- provide feedback

[Lumosity](#)

[Duolingo](#)

[Anki flashcards](#)



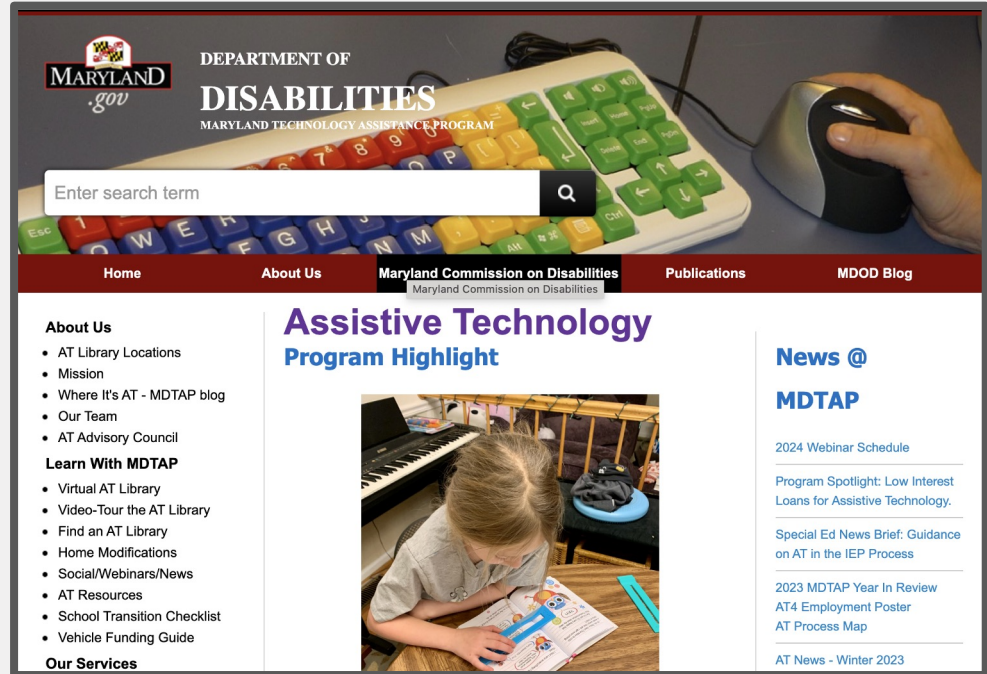
Tech use is now a necessity & rate of change has sped up!

- The need for digital literacy support is growing.
- The rise in technology use in older adults and the ever expanding need for it in society in placing a strain on caregivers, staff and families.
- As technology advances, the necessity to provide residents in senior care communities and homes also grows.
- We need to both empower caregivers to become more comfortable with readily available game-changing technology and provide expert personalized tech assistance.



State AT Act Programs

- Maryland Technology Assistive Program
- [MD- TAP](#)
- Device Loans
- Device Demos
- Device Reutilization
- Financial Loans
- Other State Financing



ElderTech Advisor Course- “Train the trainer”

<https://innovativespeech.com/eldertech-advisors/>



Free Private Facebook Group - IST Tech Savvy Solutions



 **Innovative**
SPEECH THERAPY Presents:

**IST TECH SAVVY
SOLUTIONS**

JOIN US

Connect. Inspire. Thrive.

Let's help each other.
Everyone is welcome to
join!!

Just answer a few questions

<https://www.facebook.com/groups/ISTTechSavvySolutions/>

Let's stay in touch!

Joan Lipman Green

www.innovativespeech.com

Joan@innovativespeech.com

Facebook- [Innovative.Speech.Therapy](https://www.facebook.com/Innovative.Speech.Therapy)

FB Group- [IST Tech Savvy Solutions](#)

LinkedIn- [Joan Lipman Green](#)

Instagram- [joanlipmangreen](#)

[Free 15-minute phone consultations](#)

HAPPY TO HELP

