



# Basic AT for Activities of Daily Living

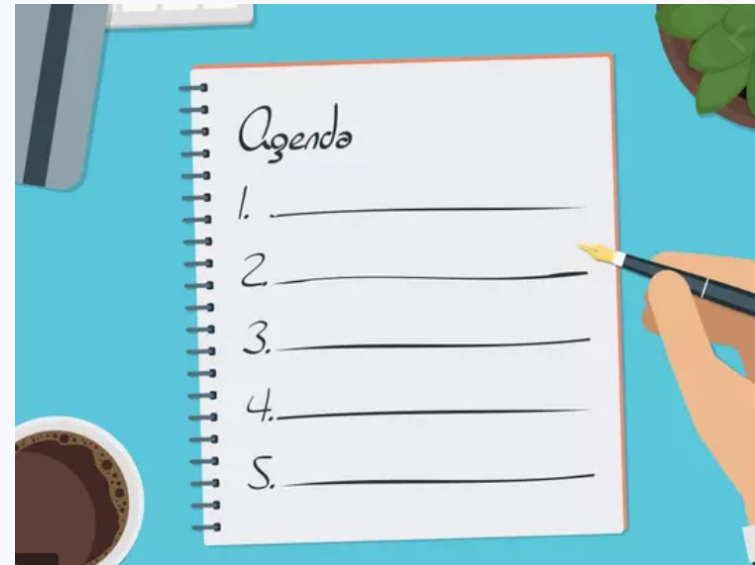
Tools for Life, Georgia's Assistive Technology Act  
Program

Center for Inclusive Design and Innovation

*June 2021*

# Agenda

- Welcome and Introductions
- Defining Device Abandonment
- What is the Right Assistive Technology (AT)?
- Brief look at some AT for Independence
- Questions



# Tools for Life (TFL)



Tools for Life (TFL), Georgia's Assistive Technology Act Program, provides Georgians of all ages and disabilities the opportunity to gain access to and acquisition of assistive technology devices and service so they can live, learn, work, and play independently in the communities of their choice.



# Tools for Life Website



Georgia Tech **TOOLS for LIFE**  
Georgia's Assistive Technology Act Program

HOME ASSISTIVE TECHNOLOGY TFL NETWORK CALENDAR OF EVENTS Search our Site  Go

TRAINING  
FUNDING  
PUBLICATIONS  
TFL WIKI  
MEET THE TFL TEAM  
MEET THE ADVISORY COUNCIL  
DIRECTIONS/MAP  
JOIN OUR MAILING LIST  
HOW CAN WE HELP?  
AT REFERRALS

Welcome AT Services Try AT Get AT AT Guides Research

**Discover Your AT Solutions**

**COVID-19 RESOURCES FOR PEOPLE WITH DISABILITIES**

**WEBINARS**

**JUN 9** [Wired Wednesday: AT Bits & Bytes with TFL and WATAP](#)

**JUL 14** [Wired Wednesday: AT Bits & Bytes with TFL and WATAP](#)

**AUG 11** [Wired Wednesday: AT Bits & Bytes with TFL and WATAP](#)

[Current Webinar Schedule](#)

[Webinar Archives](#)

**TOOLS FOR LIFE APPFINDER**

...for Living, Learning, Working, and Playing.

**AT ONLINE EXCHANGE**



# Device Abandonment



# Device Abandonment

Device Abandonment is defined as the act of discontinuing use of the AT after obtaining it and using it for a time

- 29% of AT abandoned within three years
- Leads to negative perceptions for all AT by family and user
- Costly – individuals, providers, Medicaid/Medicare
- Example: Only 30% of adults 50+ with hearing loss wear hearing aids

# Common Reasons For Abandonment

## Problems

- Limited user input
- Too hard/easy to get
- Doesn't "fit"
- Limited or no training
- Feels embarrassed
- "I can't do technology"
- Denial of need
- Overwhelmed
- Cultural issues

## Solutions

Engage the user in the selection

- Access
- Customize to need and size. Adapt to changes. Environment.
- Train. Repeat. Follow Up.
- Provide written information and links to information
- Promote benefits to being independent
- Engage younger family members
- Limit number of devices introduced
- Consider community mores

# Reducing AT Device Abandonment

- Meet consumer "where they are"
- Gradually introduce new AT
- Practice and have "fun" to reduce fears or reluctance
- Encourage success with AT





# Strategies for Avoiding Abandonment

- Concentrate on limited number of items.
- What items or things are they used to using?
- Engage the user in selection. What do they like/don't like?
- How can you “make their day”?
- Demonstrate the benefit – not the feature.
- Engage younger family members.
- Set up the first use for success – batteries charged, customization to size or environment, few distractions.

# Which AT is the Right AT?



# Choosing the Right AT

## Considerations:

- Individual
- Environment
- Tasks or functions
- Tools
  - HATT Model by Cook and Hussey

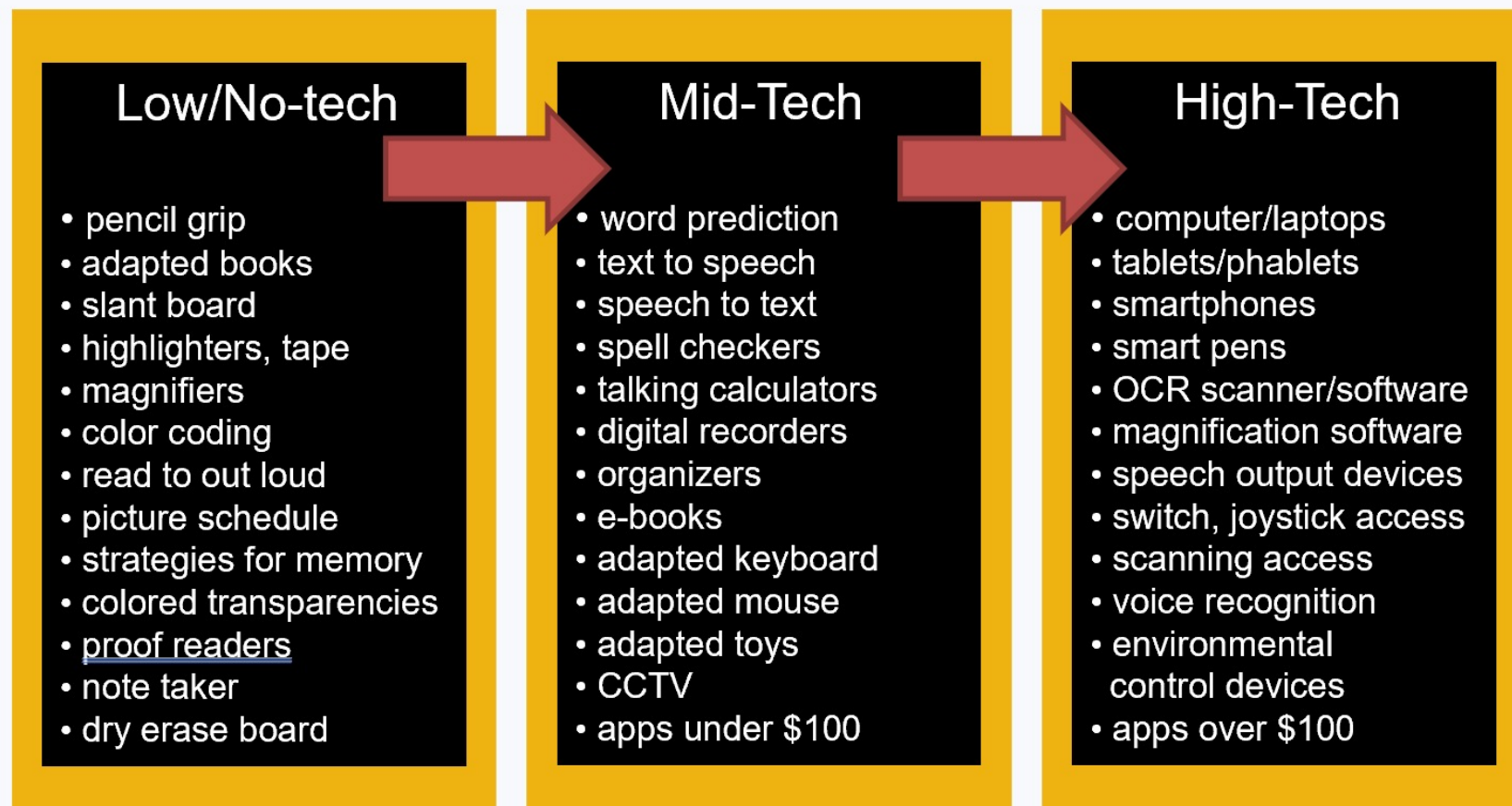
Promote independence, safety,  
and avoid AT abandonment



# Assistive Technology Continuum

Observations and  
"Hanging out with  
Intent"

Assistive  
Technology is a  
**continuum of  
tools, strategies,  
and services** that  
match a person's  
needs, abilities,  
and tasks.



# AT for Eating and Meal Preparation

- Research has shown using Red tableware can stimulate appetite for people living with Dementia or Alzheimer
- Contrasting colors for low vision
- Variety of Grips
- Use mats or plates with rubber bottoms to help stabilize





# Grocery Delivery Apps

**NOTE: May not be available in all areas**

- Instacart
- Shipt
- Chewy
- Walmart+
- Amazon Fresh
- Some stores like Publix, Walmart, and Kroger do online shopping and curbside pick-up.



# Considerations for Bathing and Toileting

Grab Bars and are not created equal!



Consider: Medical Needs  
Physical Needs/Demands  
Cognitive  
Safety  
Environmental

# Person- Centered Options

"Built-in" features can provide support:

- Raised and/or padded seating, arm rests, back support
- Organize and place items within reach
- Contrasting colors aid low vision, Dementia



# Reachers

- Low-tech
- Variety of styles
  - Make sure you pick right strength- glassware
- Variety of lengths
- Some have magnets on the end
- Good to have in every room



# AT for Hearing

Technology that allows for the amplification of sound

- Visual signals
  - Doorbells and fire alarms
- Pocketalkers
- TV ears
- FM systems-wireless radio frequencies to transmit audio signals directly from a transmitter into a receiver attached to or embedded within hearing aid(s)





# CapTel Phone

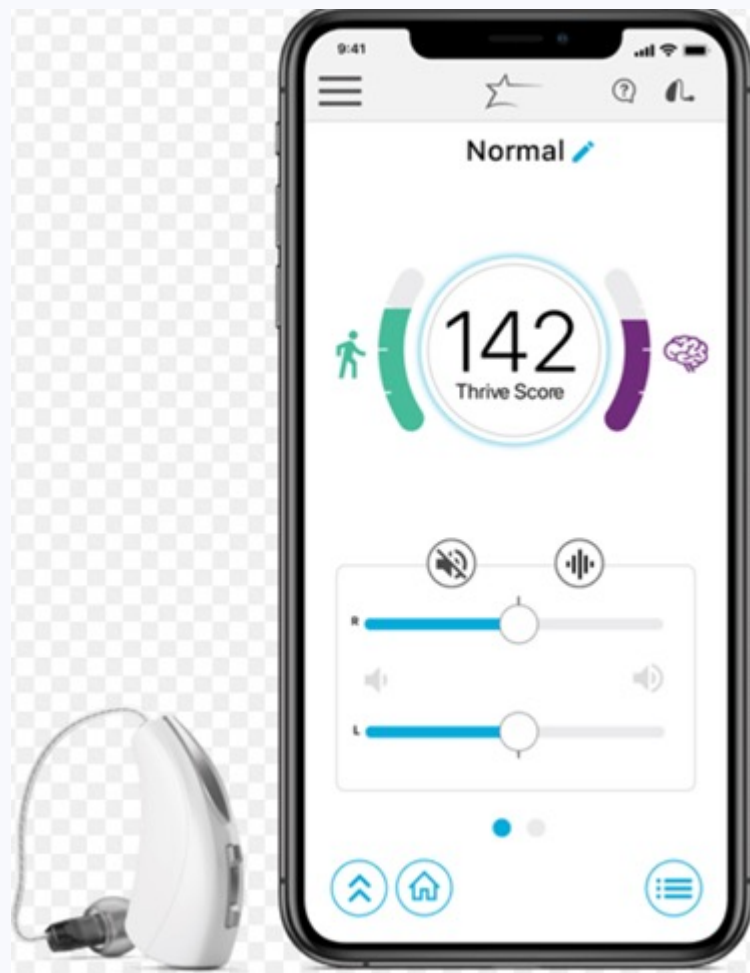
- Allows for the phone to be connected to the internet
- Free service to caption conversations
- Funding available

[https://www.captel.com/nocostcaptel/index.php?offer\\_id=1&aff\\_id=1021&url\\_id=103&gclid=CjwKC-AjwwqaGBhBKEiwAMk-FtNAbakCKV6ZYSMIli-827zkMr09Mab3K2CPq9U1eOEiGkl\\_05FBs3BoCehAQAvD\\_BwE](https://www.captel.com/nocostcaptel/index.php?offer_id=1&aff_id=1021&url_id=103&gclid=CjwKC-AjwwqaGBhBKEiwAMk-FtNAbakCKV6ZYSMIli-827zkMr09Mab3K2CPq9U1eOEiGkl_05FBs3BoCehAQAvD_BwE)



# Hearing Aids

- Many newer models work with apps
  - Adjust setting for better quality
- Adjust hearing aids in different environments
- Try before you buy!



# New Technology- Google Phone Pixel 4a

Automatic captioning on live phone calls

<https://www.youtube.com/watch?v=7hb3p8LZlq8>







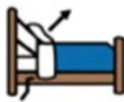
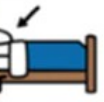


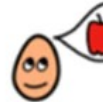












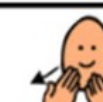


# Don't forget Landlines

- Some people still use landline phones
- Have had phone number for many years and want to keep
- Rural areas and cell services may not be available or spotty
- Personal Choice



# Many ways to Communicate

 I'M IN PAIN	 OXYGEN	 TROUBLE BREATHING	 I'M COLD	 I'M HOT	 CHANGE DIAPER
 ADJUST BED UP	 ADJUST BED DOWN	 SIT DOWN	 LIE DOWN	 I'M HUNGRY	 I'M THIRSTY
 TURN ON LIGHTS	 TURN OFF LIGHTS	 ADJUST POSITION	 ORAL CARE	 CALL THE DOCTOR	 CALL MY FAMILY
 HOW AM I DOING?	 I'M SCARED	 PLEASE DON'T LEAVE ME	 WHAT DAY/TIME IS IT?	 PEN & PAPER	 THANK YOU
YES		I DON'T KNOW		NO	





# AT for Vision - Magnifiers

- Handheld magnifiers
- Electronic Video Magnifiers
  - Optalec Compact Devices
  - Humanware
  - Zoomax
- Bar Magnifiers
- OrCam Read
  - Handheld device that reads print or digital text



# AT for Vision - Wearables

- OrCam MyEye
  - Identifies text, faces, products, colors, and currency
- BuzzClip
  - Detects head level obstacles for people with low vision and provides haptic feedback
- Patriot ViewPoint
  - Wearable magnifier with OCR capabilities



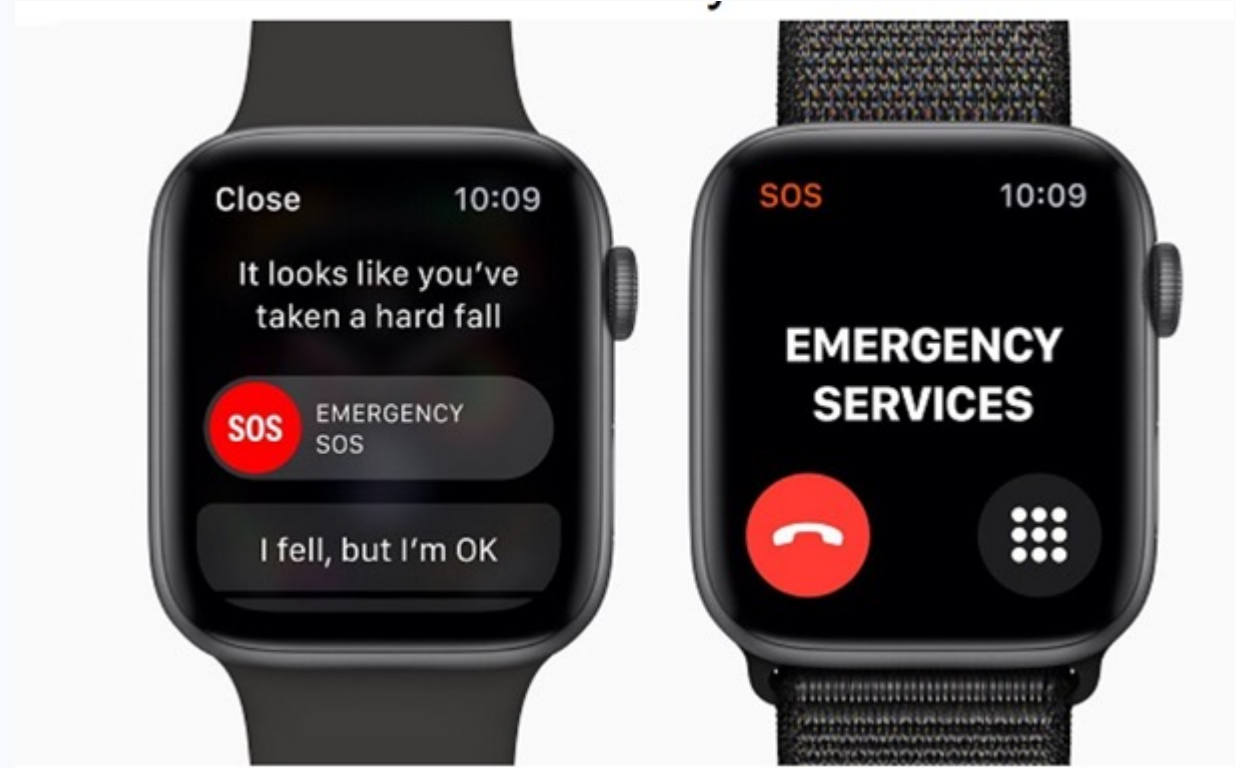
# Optical Character Recognition

- Scans text and reads aloud
- Free options available
- Some apps can do handwriting
- Seeing AI
  - Identifies money, products, and short text
  - Handwriting
  - People
- TapTapSee
  - Helps identify objects
- KNFB Reader



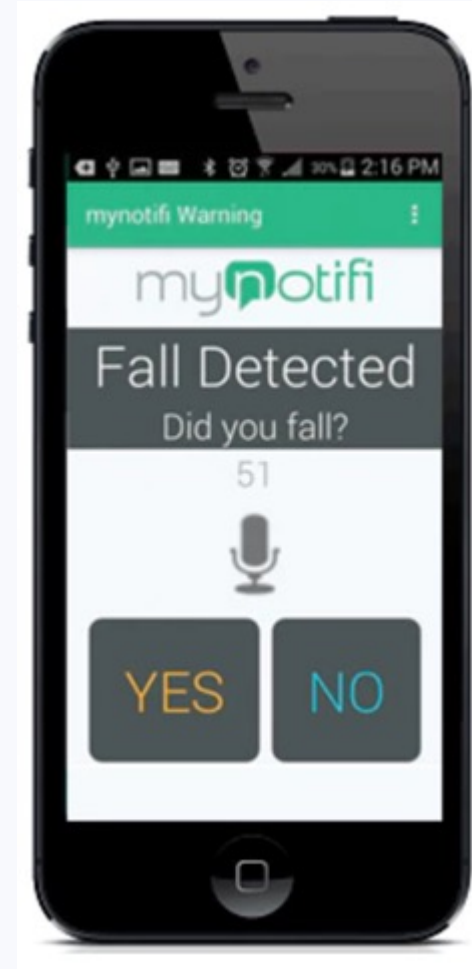
# Smartwatches- Fall Detection

- Apple 4 and above
- Galaxy Watch 3
- FitBit (Ionic and Versa)
- Kanega Watch



# MyNotifi- Fall Detection

- Wearable Technology
  - Need Smartphone
- No Monthly Charges
- No push button
- Automatically sends text notifications to family, friends, and emergency contacts of choice
- Mobility Exercises in App





# Monitoring Medical Needs

- Telemedicine
- Wearable technologies to measure heart rate, blood pressure, oxygen, skin integrity
- Alternative devices to assist with hearing, vision, physical needs



Click to add text



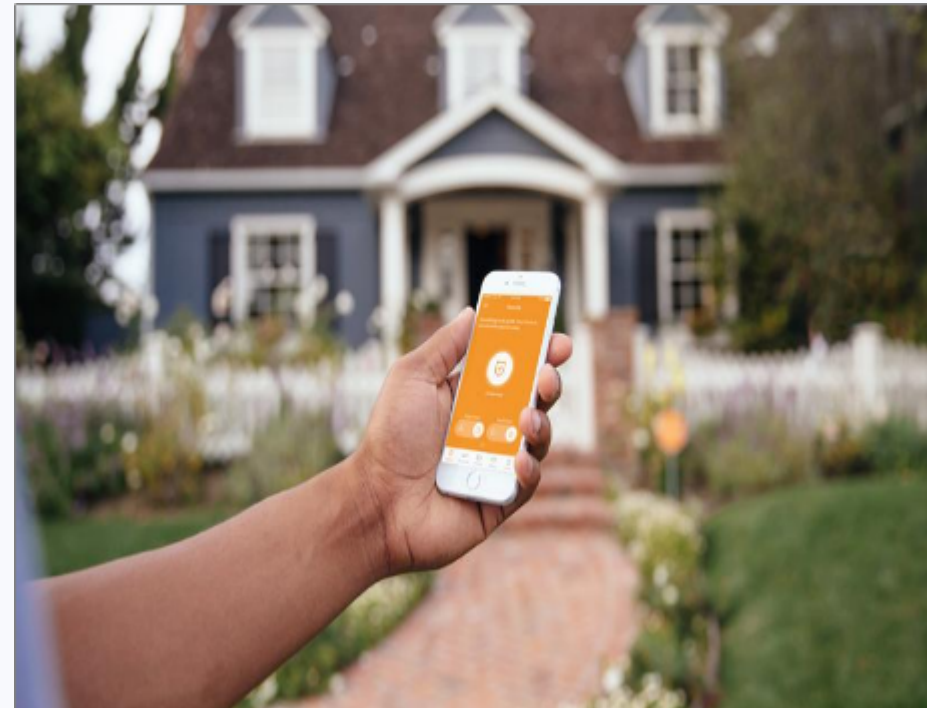
## Glutrac:

- Noninvasive glucose monitor without needle sticks
- Sensors, AI and cloud base technology
- In process of certifications and FDA approval

# Smart Home Technologies

Smart home is a term that refers to homes that have appliances, lighting, and/or electronic devices that can be controlled remotely by the owner, often via a mobile app.

- Convenience
- Access
- Independence
- Safety
- Health
- Care provider access



# Smart Home Robots

- Vacuums
- Mops
- Instant Pots
- Thermostats
- Microwaves
- So much more...





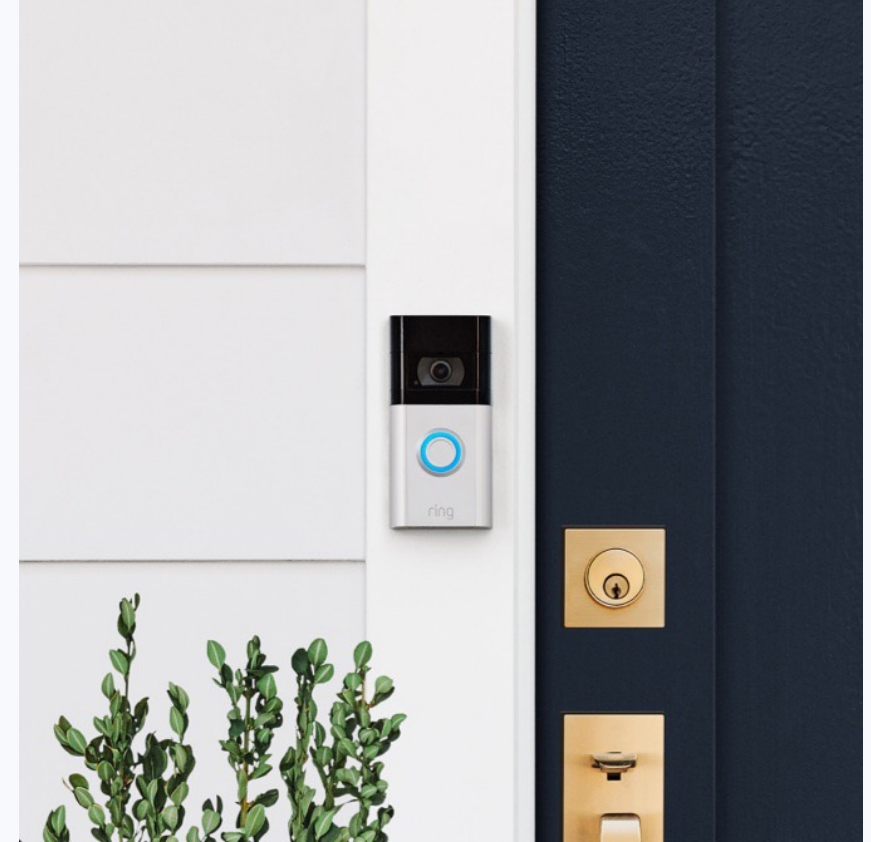
# Home Safety

- Flood Sensors
  - Uses an alarm to let home owners know when there is a leak immediately
  - Can be integrated with smart home technologies through apps
  - Bathrooms, garages, attics, basements, laundry rooms
- Smart Lights
  - Turn on lights easily in the dark to avoid falling or tripping
  - Keep lights on when not home
  - Lighting can help with moods
- Smart Locks
  - Can unlock from smart phone
  - Passcodes for caregivers



# Ring Doorbell

- Video doorbell that detects motion when there is activity on your property
- Users can see, hear, and speak to visitors in real time from anywhere
- Good for people who may not be able to get to the door easily
- Safer option than opening the door to strangers
- Ring also has security cameras and smart lights





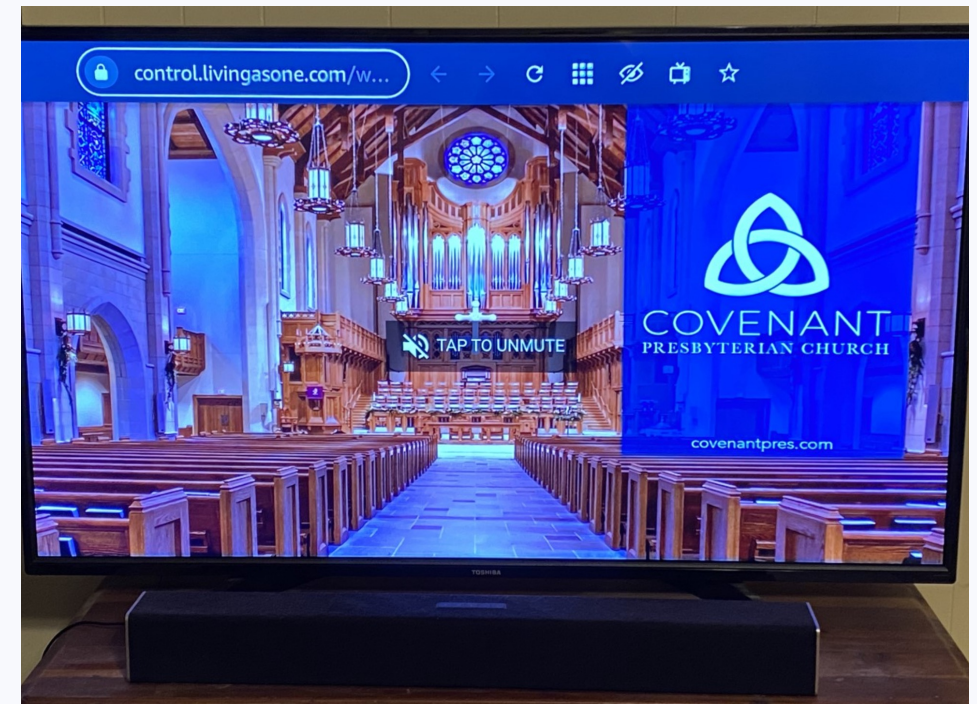
# Smart Speakers

- Options from Apple, Google, and Amazon
- Weather, traffic, and news updates
- Video calls/Drop-Ins if screen is provided on device
- Reminders
- Connect to smart devices around the home and control them
- Amazon Echo Show has a screen with feature to "Show and Tell" for low vision/blindness



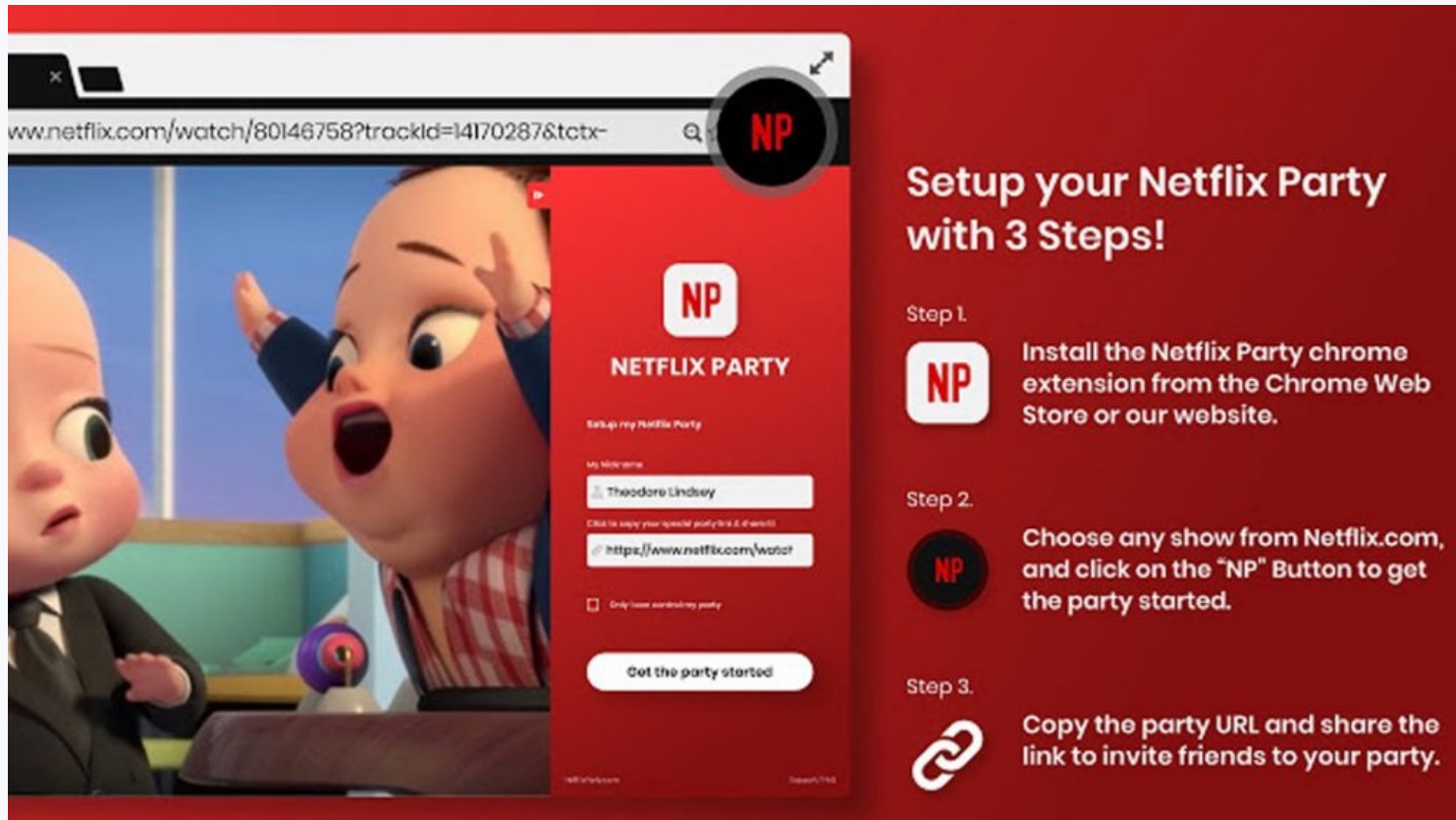
# Smart TVs

- Growing increasingly popular
  - 2018, 70% of TVs shipped to USA were Smart TV
- Smart TV users are to increase by 119 million by 2022
- Becoming more affordable
- Able to connect HDMI Cords
- Able to check emails
- Able to surf the internet



# Staying Connected

- Explore the many apps and platforms
- Watch movie or shows together virtually while engaging in "real-time" with friends and family



The image displays the Netflix Party (NP) interface. On the left, a browser window shows the Netflix website with a video player featuring two animated characters. A red overlay with the 'NP' logo is positioned over the video. To the right, a red panel titled 'Setup your Netflix Party with 3 Steps!' provides instructions:

**Step 1.** Install the Netflix Party chrome extension from the Chrome Web Store or our website.

**Step 2.** Choose any show from Netflix.com, and click on the "NP" Button to get the party started.

**Step 3.** Copy the party URL and share the link to invite friends to your party.

The setup interface on the left includes a 'NETFLIX PARTY' header, a 'Setup my Netflix Party' section with a 'My nickname' field (containing 'Theodore Lindsay'), a 'Click to copy your special party link & share it' button (containing the URL 'https://www.netflix.com/watch/80146758?trackId=14170287&tctx-'), and a 'Got the party started!' button.



# Virtual Communication

- Video calling apps like Zoom, Google Hangouts, FaceTime, etc. have become more popular since the beginning of the COVID-19 pandemic
- Allow for people to see each other "face to face"
- Auto-generated captioning available on some platforms
- Tele-health appointments
- Makes life more accessible for those individuals who may not be able to attend events in person



# Tools for Life AppFinder

Search by:

- App name
- Categories
  - Books/reading
  - Education
  - Environmental adaptations
  - Hearing
  - Vision
  - Navigating
  - Cognition, learning, and development
  - Personal care and safety
  - Productivity
  - Communication
  - Therapeutic aids
  - Social Distancing





# Questions



# The Tools for Life Team



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