

# Demystifying Technology for Individuals Who Are Deafblind

ATC19 – May

Presented by the Community Outreach  
Program for the Deaf





# Presentation's Focus

- You will learn:
- ...about the factors that are considered in determining appropriate technology – with an emphasis on distance communication, advance communication, and internet access technology
- ... about the iCanConnect Program which provides technology to New Mexicans who are deafblind
- ...about the impact iCanConnect has had on the quality of life of New Mexicans



# First Look at Technology

Low Tech ...to... High Tech



# We Need to Define...

## “Deafblind”:

- Multiple definitions: three federal definitions, agency definitions, consumer group definitions)
- Various spellings: deaf/blind, deaf-blind, deafblind, DeafBlind
- Other labels: Combined Vision and Hearing Loss, Dual Sensory Impairment, Dual Sensory Losses, etc...



# Three Other Quick Definitions

We need to first define what is meant by:

- Telecommunications Technology
- Advanced Communications Technology
- Internet Access Technology



# Considerations When Selecting Technology

Factors determining technology used by individuals who are deafblind:

- Vision
- Audition
- Tactile perception



# Considerations When Selecting Technology

Factors determining technology used by individuals who are deafblind:

- Language and speech
- Cognition
- Reading



# Considerations When Selecting Technology

Factors determining technology used by individuals who are deafblind:

- Writing and typing
- Motor skills
- Money



# Considerations When Selecting Technology

Factors determining technology used by individuals who are deafblind:

- Previous and current use of technology
- Task(s)



# Reading

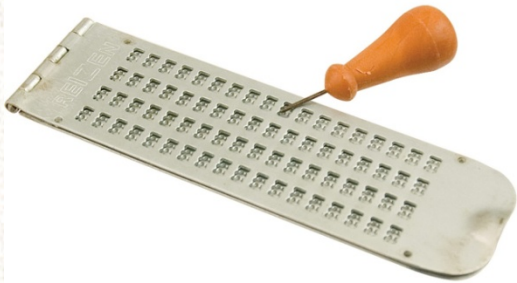
- Magnification ...relative size, relative distance, angular, and electronic (vision)
- Optical character readers (audition, tactile)





# Reading

- Braille (tactile)





# Braille vis-à-vis American Sign Language

Clarity is needed here about teaching Braille to individuals whose first language is American Sign Language (ASL):

- The use of Braille – particularly the contractions used in UEB – is dependent on a high level of English skills (spelling and grammar)
- Not easily/readily learn by those whose first language is ASL and don't have good English reading skills



# Close/1:1 Communication

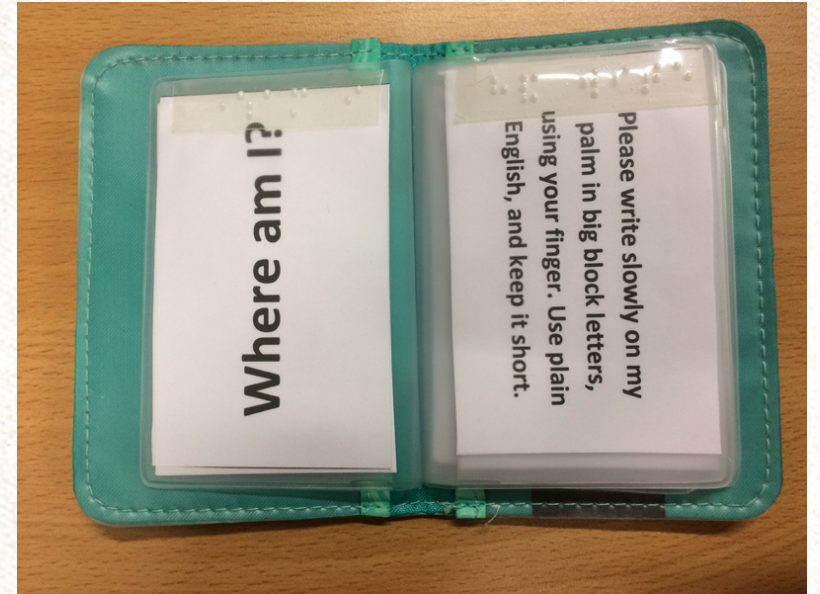
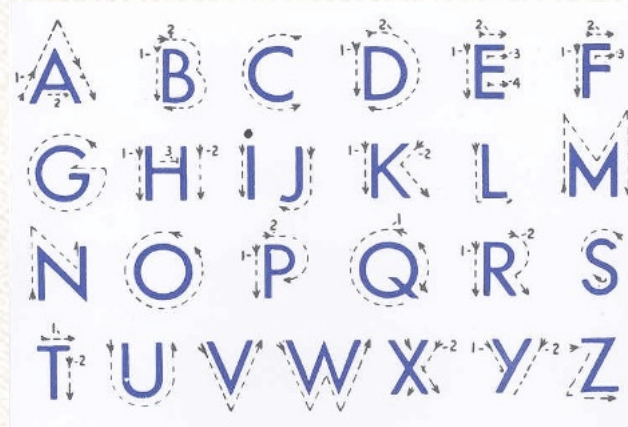
Communicating directly with another person or group of people

- Asking directions on the street
- Ordering lunch at a restaurant
- Conversations with another person



# Close/1:1 Communication

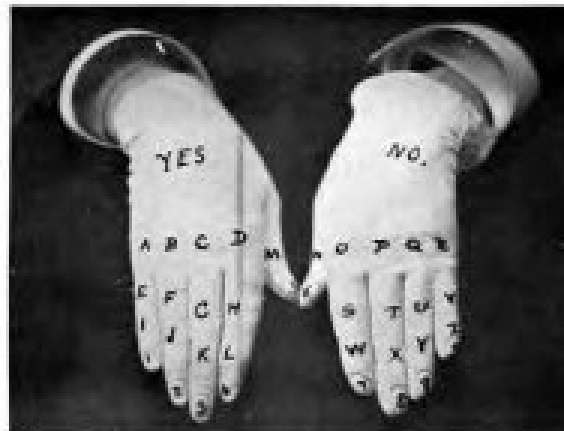
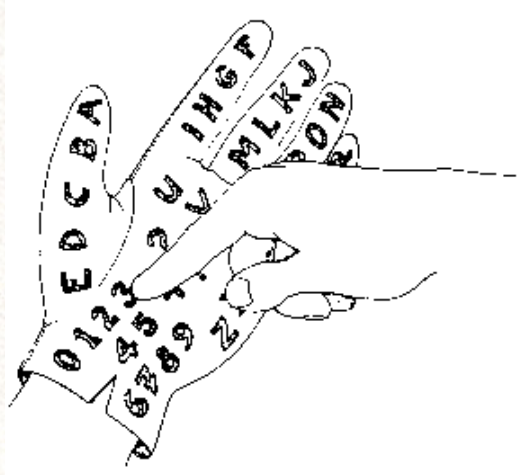
- Communication cards
- Print on Palm





# Close/1:1 Communication

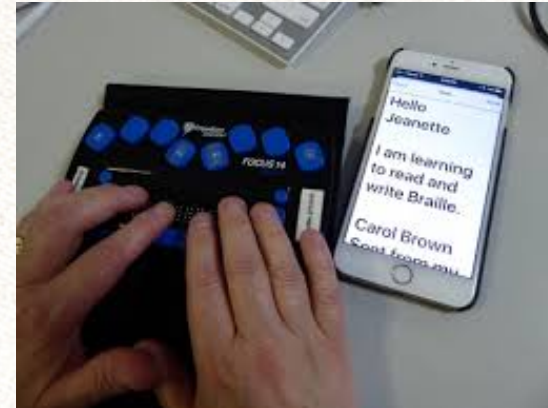
- DeafBlind Pocket Communicator (vision, Braille, raise large print letters)
- Alphabet gloves (touch)





# Close/1:1 Communication

- A Braille device with a smart phone (Braille)
- Bluetooth keyboard and Braille device (Braille, vision, voice, President – optional)





# Close/1:1 Communication

- Assistive communication apps on tablets (vision, audition, touch, cognition)
- Amplification such as hearing aids (including those with t-coils settings), personal amplifiers, FM/IR systems (audition)





# Distance

- Telecommunications
- Advanced Communications
- Internet



# Telecommunications

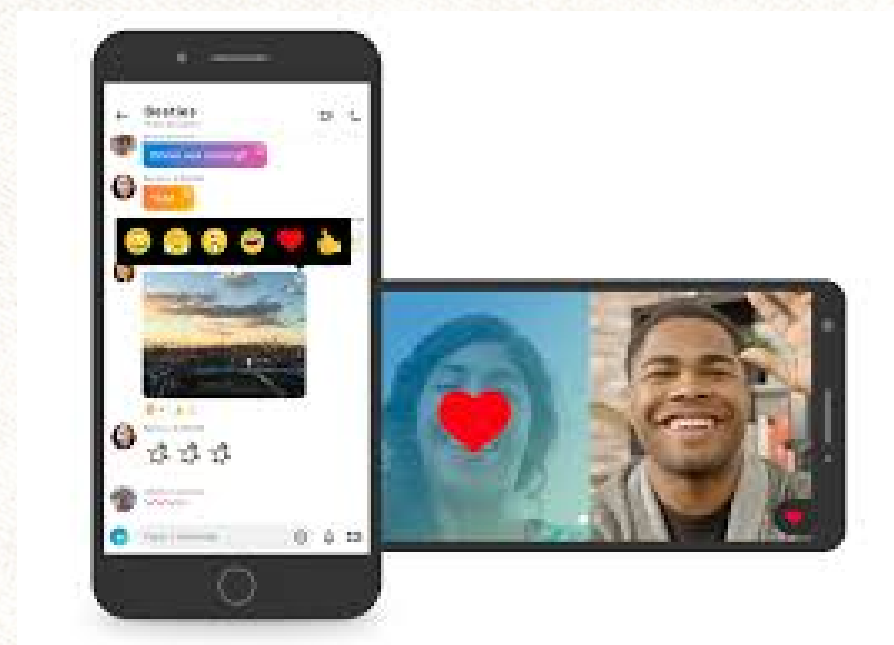
- Video phones w/ larger monitors or deafblind communication facilitators/SSPs (vision, tactile)
- Nearly all video phone services provide apps for mobile devices such as tablets and smart phones (vision)





# Telecommunications

- Other video based communication such as FaceTime, SKYPE, ooVoo, and Google Duo (vision, audition)





# Telecommunications

- Telephones (mobile and landline) w/ amplification such as Bluetooth connectivity with hearing aids, streamers, amplification within the device itself, etc. (audition)





# Telecommunications

- Captioned telephones (vision and tactile)





# Advanced Communications

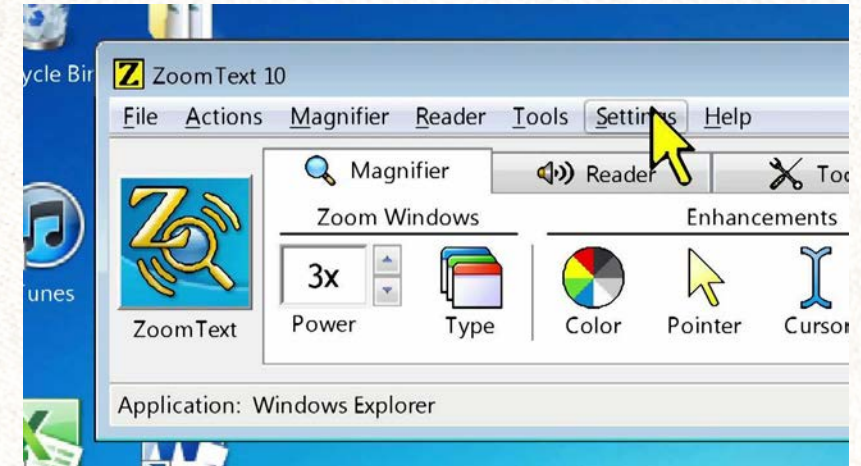
- As stated earlier, advanced communications includes: email, texting, video communication, instant messaging, etc.
- Partially addressed above with telecommunications
- Further addressed below under Internet Access





# Internet Access

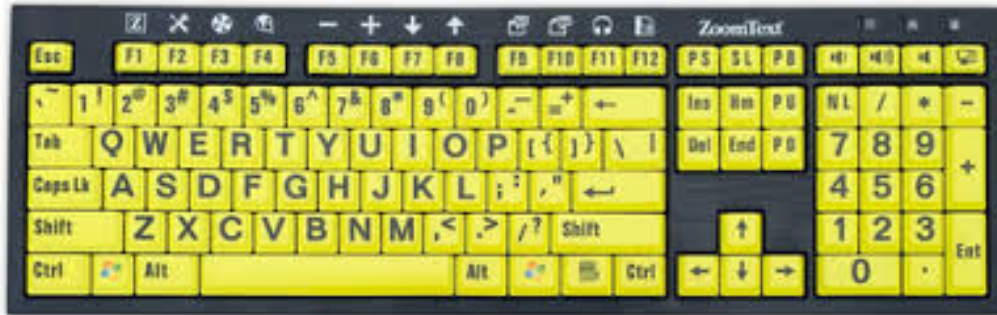
- Screen magnification such as ZoomText, Magnifier (Windows), Zoom (Apple) Virtual Magnifying Glass, etc. (vision)
- Screen readers such as Windows Eyes, VoiceOver (Apple), JAWS/ZoomText/Fusion, etc. (audition, tactile)





# Advanced Communications

- Braille Terminals (tactile)
- “Large print” keyboards (audition)





# Emails, Texting, and Instant Messaging,

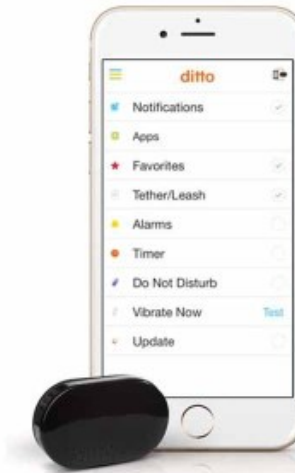
- Braille Notetakers and Smart Displays





# Alerting

- Doorbells, telephones/VP, weather, children crying, etc. (vision, tactile)





# iCanConnect

- Formal name: National Deaf-Blind Equipment Distribution Program (NDBEDP)...
- Part of the Twenty-First Century Communications and Video Accessibility Act of 2010, Section 105, Relay Services for Deaf-Blind Individuals
- Launched July 1, 2012



# iCanConnect

- Every State, the District of Columbia, Puerto Rico, and US Virgin Islands
- New Mexico: Community Outreach Program for the Deaf – New Mexico

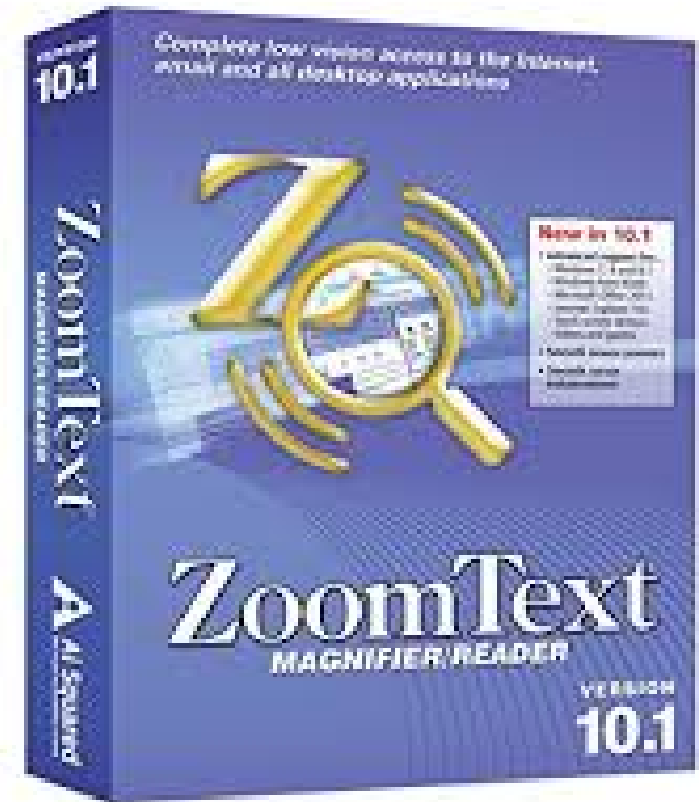
The logo for iCanConnect features the word "iCan" in a blue sans-serif font and "Connect" in a green sans-serif font. The "i" in "iCan" has a green dot.

**The National Deaf-Blind Equipment Distribution Program**



# iCanConnect's Purpose

- Provides technology/equipment for telecommunications, advanced communications, and/or Internet access
- Provides technology/equipment which may be hardware, software, or applications, separate or in combination, mainstream, or specialized





# iCanConnect Eligibility

For New Mexicans who...

- ...meet iCanConnect's definition of deafblindness...
- ...have income that does not exceed 400% of the Federal Poverty Guidelines (ex: \$49,960/1 person – higher in AK and HI), and...
- ...need access technology allowed under iCanConnect



# iCanConnect Steps

- Intake/determination of eligibility
- Technology assessment/determination of technology needs
- Ordering and installation/set up of technology
- Training on technology



# iCanConnect Steps

- Follow-up support if needed



# iCanConnect's Impact in New Mexico

- Provided technology to over 30 New Mexicans
- Ages range from 13 – 93 years of age
- Provided technology to individuals who have never been exposed to advanced communications and/or internet access technology



# iCanConnect's Impact in New Mexico

- Significantly addressed the isolation experienced by individuals who are deafblind...
  - ✓ Can interact more frequently/more easily with friends and family
  - ✓ Can explore the Internet
  - ✓ Can contact COPD to request SSP and other services



# The End!



Photo of Larry in his 20s.