

Why Counselors Need to Know About Assistive Technology for Everyone

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Counseling and Rehabilitation

Definition AT

Assistive Technology - "Any item, piece of equipment, or product system, whether acquired commercially or off the shelf, modified or customized, that increases, maintains, or improves functional capabilities of individuals with disabilities."



Functional Loss

- Vision
- Hearing
- Communication
- Cognitive
- Physical loss upper/lower extremities

Greater loss of functional limitations as we age

Common issues

- Keep Track of Appointments and Events
- Stay Focused on a Task
- Keep Track of Taking Medications
- Remember Names and Faces
- Management of Emotion
- Getting lost
- Reading
- Writing

Symptoms

Physical	Cognitive	Emotional and Behavioral
Agnosia	Attention span	Anxiety
Aphasia	Executive dysfunction	Depression
Coordination or Balance	Language Processing	Substance Abuse
Headaches	Memory changes	Lack of social skills
Hearing Impairments	Poor concentration	Mood changes
Pain	Impaired judgment	Personality changes
Seizures	Reaction time delay	Psychotic symptoms
Additional injuries	Poor impulse control	ANGER
Visual impairment	Fatigue	Sleep issues

AT for upper extremities.



AT as mobility aids



Daily living aids



AT for Pill Dispensers



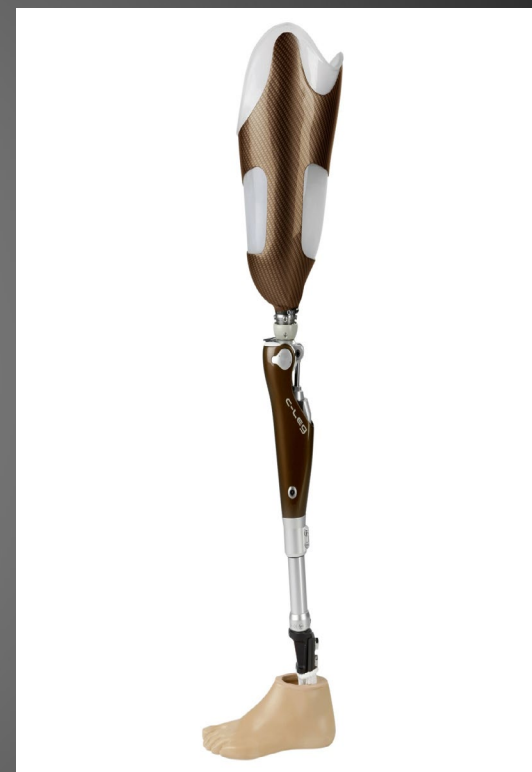
Hand Held Magnifiers



Arms



Legs



EEG systems



High-Tech, Low-Tech, No-Tech

- ✓ High-Tech: Greater degree of computers or electronic devices (power wheelchairs, computer sensory switches, computer communication boards).
- ✓ Low-Tech or mid tech: Low level mechanical devices (manual wheel chairs, tape recorders, organizers).
- ✓ No-Tech: Simple devices (rulers, magnifying glasses, word board).
 - Low technology usually easier to learn and less costly, but may limit applications and user friendliness.
 - High technology equals more applications but higher cost.

Computer Access

- Screen readers
- Audio books
- Voice Navigation
- Voice dictation
- Screen Magnification
- High Contrast screens
- Accessible search tools
- Closed captioning
- Braille or raised letters

Microsoft office

- Speech recognition
- Hear written text read aloud
 - Speak is a built-in feature of Word, Outlook, PowerPoint, and OneNote
- Change Screen or background color
- High Contrast setting
- Save Talking Book
- Narration to Powerpoint
- Check for accessibility issues

Google Chrome

ChromeVox
(Web Screen
reader)

ChromeVis
(Magnify and
change color)

SpeakIt
(Web Screen
reader)

Dictanote
(Voice
Recognition)

ChromeShades
(Text only)

Smart phones



Samsung Galaxy S6 LG L22C Power

i Phone 6

Apple I-Phone Accessibility

- Assistive Touch
- Closed Captions
- Dictation
- Display Accommodations
- Font Adjustments
- Guided Access
- Hearing Aids and Sound Processors
- Keyboard Shortcuts
- Magnifier
- Mono Audio
- Predictive Text
- Speak Screen
- Switch Control
- Touch Accommodations
- TTY
- Visible and Vibrating Alerts
- VoiceOver
- Zoom

Android Phone Accessibility

- Accessibility shortcut
- BrailleBack
- Captions
- Contrast and color options
- Easy Home Screen
- Flash Alerts
- Font Size
- Google Assistant
- Magnification
- Magnification Gesture
- Mono Audio
- One Handed Operation
- Screen Color Adjustment
- Select to Speak
- Split Keyboard
- Speak passwords
- TalkBack
- Text-to-speech
- Touch and hold delay
- Touch Assistant
- Voice Access
- Zoom

Smartphones

Con

- Short Battery Life
- High Cost of Devices
- Time Consuming to Learn
- No Built-in Reminders for Using the Apps
- Difficult to Use the Devices
- Need for Frequent Updates
- Lost it

Pro

- Effectiveness
- Cost-effective
- Ease-of-Use of Apps
- Social Networking
- Checklist of Goals
- Calendar Synchronization
- Fun-of-Use
- Alerts to Get User Attention

Reading Apps



FBReader



Audible eReader

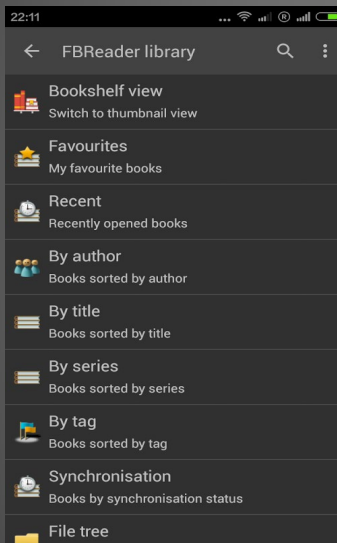
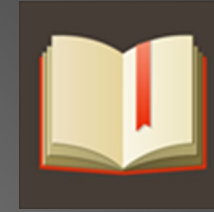


OverDrive

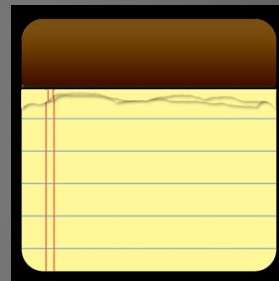
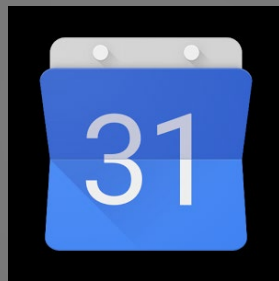
Library eBooks & Audiobooks



FBReader or Cool Reader



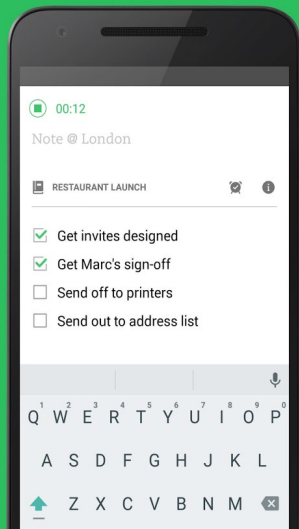
Keep Track of Appointments and Events



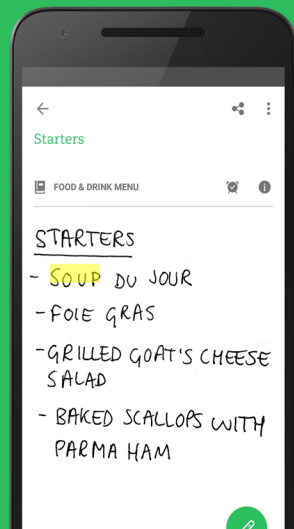
Evernote



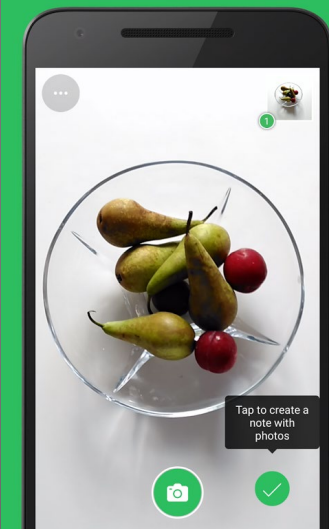
Record voice-memos
and audio notes.



Search and annotate
within your images.

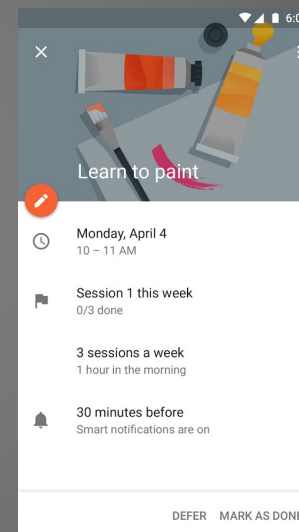
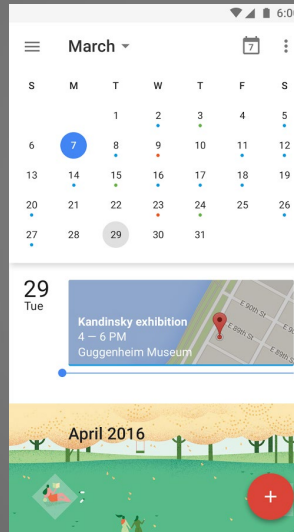
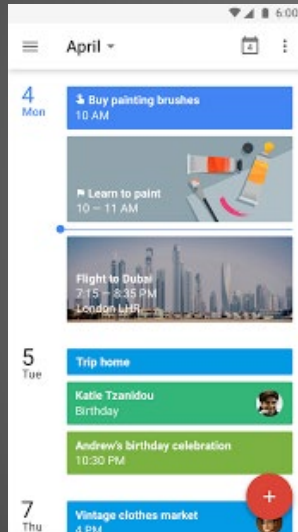
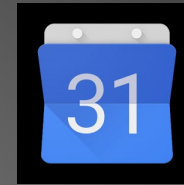


Take photos and save them
alongside your project notes.

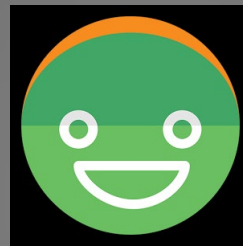


Top Developer

Google Calendar

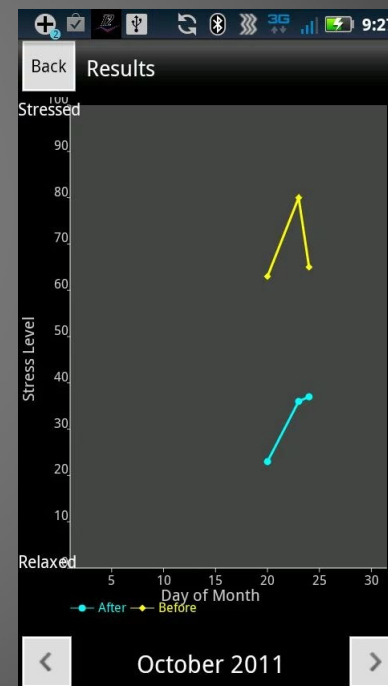
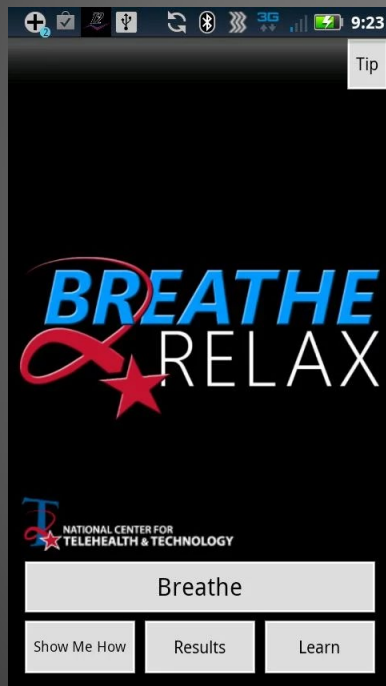


Mood Trackers

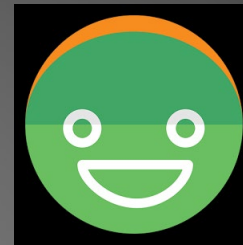


Breathe2Relax Diary - Mood Tracker T2 Mood Tracker

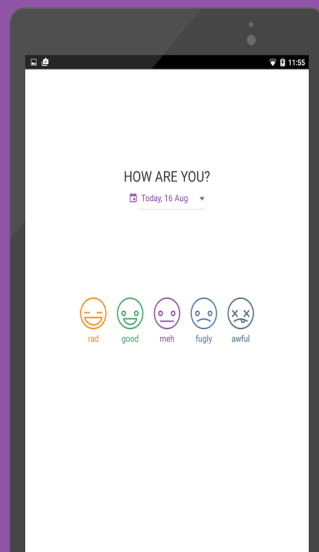
Breathe2Relax



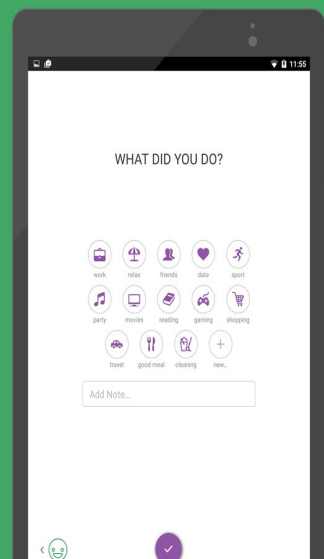
Diary - Mood Tracker



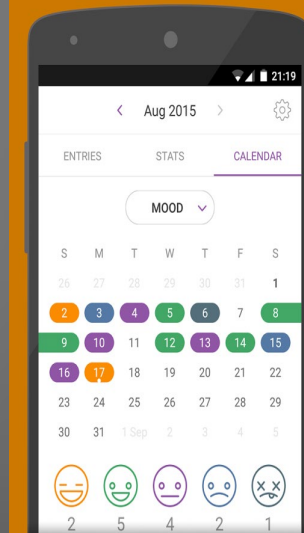
Pick your mood...



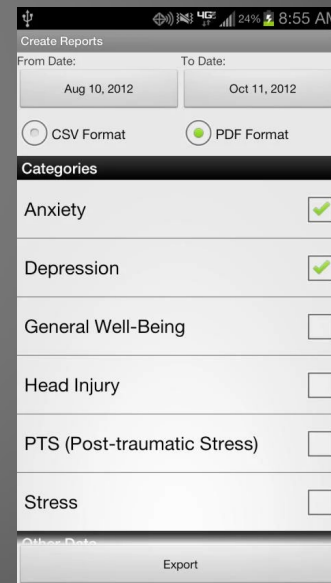
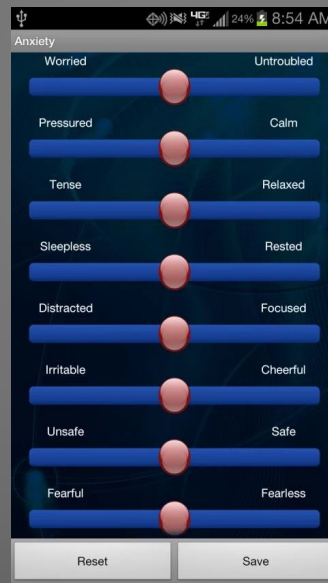
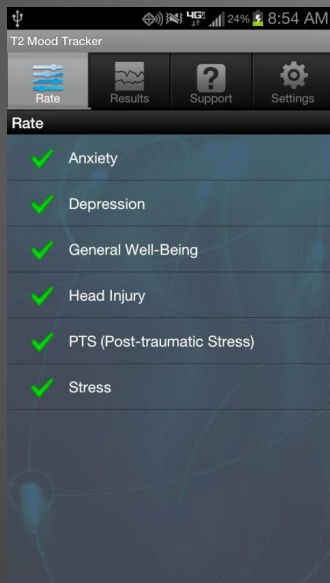
Select things
you've been up to...



View all your moods and
activities in a calendar



T2 Mood Tracker



Speech Recognition

Windows

- Free

Dragon Naturally Speaking

- Mac, Window, Ipod, Ipad
- Price varies



Chrome Book

- Free

Macintosh Dictation

- Free

Types of Software

- Adobe Creative Suites
- Zoomtext Magnifier & Reader
- JAWS Professional
- NVDA Screen reader
- Dragon Professional
- Wynn Literacy Software
- Large collection of Apps



Types of Physical AT

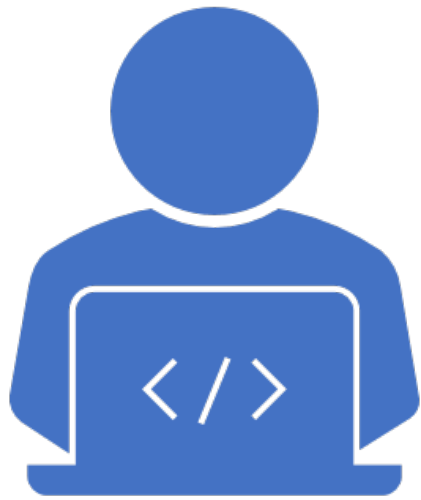
- 3M Ergonomic Mouse
- Ablenet BIG trackball
- Air Mouse
- Jumbo Playing Cards
- Kenko Talking Calculator
- Kensington Mouse Trackball
- Adaptive Keyboards
- Mini Solidtek Keyboard
- VZ-X Wireless Document Camera
- Pearl Portable Reading Camera

AT Devices





Virtual Reality



VR/AR and PWD

- How is it used
 - As a assistive device
 - As therapeutic tool
 - As a place for socialization and games
 - As a educational device.



Educational and Skill Training

- A multimodal approach to traditional learning.
- Safe areas for practice and skill building.



Telehealth and Virtual Counseling

- Allowing practitioners to work in remote settings
- Counseling in the person's home or place of business



As Therapeutic Tool



As a Place for Socialization and Games



Immersive Experiences

Allow persons without disabilities to experience what it's like for person to have autism, vision impairment, Alzheimer's.



Mindfulness Training

Pain Management
Addiction therapy

Why is AT not used

- Lack of confidence in overall in their ability
- Lack of exposure to AT
- Lack of hands on testing
- Lack of choice
- Lack of knowledge of what is best
- Lack of Practice

PPP

- Plan a time to practice
- Practice at different times of day and setting
- Patience for yourself and the situation of learning

