

Computer Access Hierarchy
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Keyboard

Can the client physically access a standard computer keyboard?

- I. Yes. You are done!

- II. Yes, with difficulty
 - A. Repeated keystrokes
 - 1. Filter Keys
 - B. Difficulty simultaneously pressing keys
 - 1. Sticky Keys
 - C. Difficulty with finger isolation and accuracy
 - 1. Keyguard
 - D. Types with one hand
 - 1. DVORAK layout
 - 2. Chorded keyboard
 - 3. One handed typing software
 - 4. Mini keyboard
 - E. Types with one finger
 - 1. DVORAK or Fitaly layouts
 - F. Slowly
 - 1. Rate enhancement strategies: word prediction, word completion, abbreviation expansion

- III. No
 - A. Cause: limited fine motor control
 - 1. Enlarged keyboard
 - 2. Keyguard, as needed, to facilitate finger isolation and provide stability
 - B. Cause: limited muscle strength and range of motion
 - 1. Mini keyboard
 - 2. Various layouts to minimize travel required
 - C. When an alternative keyboard won't do:
 - 1. Mouthsticks, headsticks, pointers
 - 2. Keyboard emulation
 - a. On screen or virtual keyboard with mouse access
 - b. Multifunction switch access (**i.e. The Grid 2 software**)
 - i. Switch interface required
 - c. On screen or virtual keyboard with switch scanning
 - d. Morse Code (**i.e. Darci USB**)
 - 3. Speech Recognition software
 - a. Requires clear, consistent speech and ideally a 5th grade reading level or higher
 - 4. Eye Tracking software
 - a. Requires good vision and ocular motor control

Can the client see the standard computer keyboard?

- I. Yes. You are done!

- II. Low vision
 - A. Enlarged characters on standard keyboard (keyboard labels)
 - B. Enlarged keyboard
 - C. Colors to minimize visual tracking and seeking required

- III. No vision
 - A. Refer to blindness specialist working in assistive technology

Mouse

Can the client physically access a standard computer mouse?

- I. Yes. You are done!
- II. No
 - A. Cause: limited fine motor control
 - 1. Large movements with decreased control
 - a. Trackball alternative mouse with recessed control buttons (for click) or switches
 - 2. Large movements with decreased control requiring stability
 - a. Joystick alternative mouse with recessed control buttons (for click) or switches
 - B. Cause: limited muscle strength and range of motion
 - 1. Trackpad alternative mouse
 - C. No functional use of hands for an alternative mouse, but good head control
 - 1. Head mouse
 - a. Click control: switch or dwell software
 - D. No functional use of hands for an alternative mouse, but good oral motor control
 - 1. Mouth operated mouse (**i.e. IntegraMouse**)
 - E. No functional use of hands for an alternative mouse, but good speech
 - 1. Speech Recognition software
 - F. No functional use of hands for an alternative mouse, but good eye movements
 - 1. Eye Tracking software
 - G. When an alternative mouse won't do:
 - 1. Mouse Emulation
 - a. Mouse Keys
 - b. Keyboard shortcuts
 - c. Switches for mouse control (**i.e. Pretorian Track-IT!**)
 - d. Morse Code (**i.e. Darci USB**)

Switch

Does the client have cognitive limitations?

- I. Single switch software
 - A. To develop cause and effect and more sophisticated cognitive concepts
 - B. To develop switch skills
 - C. To develop scanning skills
 - D. Hardware
 - 1. Switch interface
 - 2. Switch adapted mouse (**i.e. Chester Mouse**)
 - E. Software
 - 1. Variety of sources