Continuum of Considerations

A CONTINUUM OF CONSIDERATIONS
FOR ASSISTIVE TECHNOLOGY
For the Mechanics of Writing

Regular pencil or pen

Pencil or pen with adaptive grip

Adapted paper (e.g. raised line, highlighted lines)

Slantboard to create slanted writing surface

Use of prewritten words/phrases

Portable word processor to keyboard instead of write

Computer with word processing software

Portable scanner with word processing software

Voice recognition software to word process

(See Computer Access Continuum)
A CONTINUUM OF CONSIDERATIONS FOR ASSISTIVE TECHNOLOGY

For Computer Access

Keyboard using accessibility options

→

Word prediction, abbreviation/expansion to reduce keystrokes

→

Keyguard

→

Arm support (e.g. Ergo Rest)

→

Track ball/track pad/joystick with on-screen keyboard

→

Alternate keyboard (e.g. IntelliKeys, Discover Board, TASH)

→

Mouth stick/Head Master/Tracker with on-screen keyboard

→

Switch with Morse code

→

Switch with scanning

→

Voice recognition software

Reprinted with permission of Penny Reed (editor), Wisconsin Assistive Technology Initiative (WATI); Assessing Student’s Needs for Assistive Technology ©2000.
A CONTINUUM OF CONSIDERATIONS FOR ASSISTIVE TECHNOLOGY
For Composing Written Material

- Word cards/word book/word wall
- Pocket dictionary/thesaurus
- Writing templates
- Electronic/talking electronic dictionary/thesaurus/spell checker
- Word processing with spell checker/grammar checker
- Talking word processing
- Abbreviation/expansion
- Word processing with writing supports
- Multimedia software for expression of ideas
- Voice recognition software
A CONTINUUM OF CONSIDERATIONS
FOR ASSISTIVE TECHNOLOGY
For Communication

Communication board/book
with pictures/objects/letters/words
↓

Eye gaze board/frame
↓

Simple voice output device
↓

Voice output device with levels
↓

Voice output device with icon sequencing
↓

Voice output device with dynamic display
↓

Device with speech synthesis for typing
A CONTINUUM OF CONSIDERATIONS FOR ASSISTIVE TECHNOLOGY

For Reading

Standard text

→

Predictable books

→

Changes in text size, spacing, color, background color

→

Book adapted for page turning (e.g. page fluffers, 3-ring binder)

→

Use of pictures/symbols with text

→

Talking electronic device/software to “pronounce” challenging words

→

Single word scanners (e.g. Seiko Reading Pen)

→

Scanner w/OCR and talking word processor

→

Electronic books
A CONTINUUM OF CONSIDERATIONS
FOR ASSISTIVE TECHNOLOGY
For Learning/Studying

Print or picture schedule

↓

Low tech aids to find materials (e.g. index tabs, color coded folders)

↓

Highlight text (e.g. markers, highlight tape, ruler)

↓

Recorded material
(e.g. books on tape, taped lectures with number coded index, etc.)

↓

Voice output reminders for assignments, steps of task, etc.

↓

Electronic organizers

↓

Pagers/electronic reminders

↓

Single word scanners

↓

Hand-held scanners

↓

Software for concept development/manipulation of objects
- may use alternate input device, e.g. switch, touch window

↓

Software for organization of ideas and studying
(e.g. Inspiration, Claris Works Outline, PowerPoint, etc.)

↓

Palm computers

Reprinted with permission of Penny Reed (editor), Wisconsin Assistive Technology Initiative (WATI); Assessing Student’s Needs for Assistive Technology ©2000.
A CONTINUUM OF CONSIDERATIONS
FOR ASSISTIVE TECHNOLOGY
For Math

Abacus/Math Line

Enlarged math worksheets

Low tech alternatives for answering

Math “Smart Chart”

Money calculator and Coinulator

Tactile/voice output measuring devices

Talking watches/clocks

Calculator/calculator with print out/calculator with large keys and/or large display

Talking calculator

Calculator with special features (e.g. easy fraction translation, etc.)

On-screen/Scanning calculator

Alternative keyboards (e.g. IntelliKeys)

Software with cueing for math computation or manipulation of objects

Voice recognition software

Reprinted with permission of Penny Reed (editor), Wisconsin Assistive Technology Initiative (WATI); Assessing Student’s Needs for Assistive Technology ©2000.
A CONTINUUM OF CONSIDERATIONS
FOR ASSISTIVE TECHNOLOGY
For Recreation and Leisure

Toys adapted with Velcro™, magnets, handles, etc.

Toys adapted for single switch operation

Adaptive sporting equipment (e.g. lighted or beeping ball)

Universal cuff or strap to hold crayons, markers, etc.

Modified utensils (e.g. rubber stamps, rollers, brushes)

Ergo Rest or other arm support

Electronic aids to control/operate TV, VCR, CD player, etc.

Software to complete art activities

Games on the computer

Other computer software
A CONTINUUM OF CONSIDERATIONS
FOR ASSISTIVE TECHNOLOGY
For Activities of Daily Living (ADLs)

Nonslip materials to hold things in place

Universal cuff/strap to hold items in hand

Color coded items for easier locating and identifying

Adaptive eating devices (e.g. foam handles, deep sides)

Adaptive drinking devices (e.g. cup with cut out rim)

Adaptive dressing equipment (e.g. button hook, elastic shoe laces, Velcro™ instead of buttons)

Adaptive devices for hygiene
(e.g. adapted toothbrush, raised toilet seat, etc.)

Adaptive bathing devices

Adaptive equipment for cooking
A CONTINUUM OF CONSIDERATIONS FOR ASSISTIVE TECHNOLOGY

For Mobility

• Walker
  ↓
• Grab bars and rails
  ↓
• Manual wheelchair
  ↓
• Powered mobility toy (e.g. Cooper Car, GoBot)
  ↓
• Powered scooter or cart
  ↓
• Powered wheelchair w/ joystick or other control
  ↓
• Adapted vehicle for driving
A CONTINUUM OF CONSIDERATIONS FOR ASSISTIVE TECHNOLOGY
For Control of the Environment

Light switch extension

↓

Use of interface and switch to activate battery operated devices

↓

Use of interface and switch to turn on electrical appliances (e.g. radio, fan, blender, etc.)

↓

Radio/ultra sound to remotely control appliances

↓

Use of electronic aid to daily living to control environment in connection with an augmentative communication device
A CONTINUUM OF CONSIDERATIONS
FOR ASSISTIVE TECHNOLOGY
For Seating and Positioning

Standard seat at correct height and depth

Non-slip surface on standard seat to prevent slipping (e.g. Dycem)

Bolster, rolled towel, blocks to assist in positioning

Adapted/alternate chair, sidelyer, stander

Custom fitted wheelchair or insert
A CONTINUUM OF CONSIDERATIONS
FOR ASSISTIVE TECHNOLOGY

For Vision

Eye glasses

Magnifier

Large print books

CCTV (closed circuit television)

Screen magnifier (mounted over screen)

Screen magnification software

Screen color contrast

Screen reader, Text reader

Braille translation software

Braille printer

Enlarged or Braille/tactile labels for keyboard

Alternate keyboard with enlarged keys

Braille keyboard and note taker

Reprinted with permission of Penny Reed (editor), Wisconsin Assistive Technology Initiative (WATI); Assessing Student’s Needs for Assistive Technology ©2000.
A CONTINUUM OF CONSIDERATIONS
FOR ASSISTIVE TECHNOLOGY
For Hearing

- Pen and paper
- Computer/portable word processor
- TDD for phone access with or without relay
- Signaling device (e.g. flashing light, vibrating pager)
- Closed captioning
- Real Time captioning
- Computer aided note taking
- Screen flash for alert signals on computer
- Phone amplifier
- Personal amplification system/Hearing aid
- FM or Loop system
- Infrared system

Reprinted with permission of Penny Reed (editor), Wisconsin Assistive Technology Initiative (WATI); Assessing Student’s Needs for Assistive Technology ©2000.