

NAME: _____

DATE: _____

Assistive Technology Confidence Scale

Instructions: Please consider how much confidence you feel when participating in different tasks related to the use of Assistive Technology with children Grades K to 12. Circle the number that you think best describes your beliefs.

Definitions:
 IDEA defines an Assistive technology device as “any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain or improve functional capabilities of a child with a disability.”

Assistive technology service is defined as: “any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device.” Examples of services outlined in IDEA include: evaluation of the needs of a child; purchasing, leasing, or providing for the acquisition of a device; training or technical assistance in the use of a device for the child or for professionals.

I feel confident in my ability to:	Strongly Disagree	Moderately Disagree	Disagree Slightly	Agree Slightly	Moderately Agree	Strongly Agree
1. Assess a student's need for assistive technology related to performance of a functional skill such as reading, writing or communication.	1	2	3	4	5	6
2. Refer a student to an assistive technology specialist if needed.	1	2	3	4	5	6
3. Participate in an assistive technology assessment.	1	2	3	4	5	6
4. Determine whether an assistive technology device will increase a student's ability to participate in classroom activities and routines.	1	2	3	4	5	6
5. Decide whether an assistive technology device/tool is the least intrusive, yet most effective device available for a student.	1	2	3	4	5	6
6. Utilize assistive technology equipment in the assessment process.	1	2	3	4	5	6
7. Base assistive technology assessments on student's preferences.	1	2	3	4	5	6

adapted from:

Wilcox, M. J., Weintraub, H. L., Aier, D. (October, 2003). Confidence in Use of Assistive Technology by Early Interventionists. Paper presented to the annual meeting of CEC, Division for Early Childhood, Washington, DC.

I feel confident in my ability to:	Strongly Disagree	Moderately Disagree	Disagree Slightly	Agree Slightly	Moderately Agree	Strongly Agree
8. Be responsive to a student's culture and language when making decisions concerning assistive technology assessment and intervention.	1	2	3	4	5	6
9. Collaborate with related professionals during the assistive technology assessment process.	1	2	3	4	5	6
10. Utilize assistive technology as a vehicle for more effectively serving students.	1	2	3	4	5	6
11. Evaluate the effectiveness of an assistive technology device / tool.	1	2	3	4	5	6
12. Make provisions for assistive technology devices and services on a student's IEP.	1	2	3	4	5	6
13. Assist families in the use, maintenance and generalization of assistive technology to facilitate child development.	1	2	3	4	5	6
14. Ensure that children have access to assistive devices across settings (i.e. home, school, etc.)	1	2	3	4	5	6
15. Help families incorporate the use of assistive devices into their daily routines (i.e. mealtimes, classroom, etc.)	1	2	3	4	5	6
16. Collaborate with related professionals about the use and application of assistive technology for individual children.	1	2	3	4	5	6
17. Utilize state and local AT resources to gather information about assistive technology assessment, intervention or funding.	1	2	3	4	5	6
18. Locate appropriate assistive technology funding sources to help acquire AT equipment.	1	2	3	4	5	6
19. Obtain training in assistive technology assessment and intervention.	1	2	3	4	5	6
20. Gather information for families on maintenance services for repair and replacement of assistive technology devices.	1	2	3	4	5	6
21. Coordinate assistive technology support for children undergoing service transition (i.e. from grade level to grade level).	1	2	3	4	5	6
22. Make low tech devices/ tools (such as picture symbols, hand grips, positioning supports) for students.	1	2	3	4	5	6
23. Adapt tools or equipment (such as page fluffers, page turners, switch use, making talking books, visual story and song boards) for use by individual students.	1	2	3	4	5	6
24. Find the most up-to-date information about the availability and use of high tech AT devices (such as wheelchairs, augmentative communication devices, etc.)	1	2	3	4	5	6

adapted from:

Wilcox, M. J., Weintraub, H. L., Aier, D. (October, 2003). Confidence in Use of Assistive Technology by Early Interventionists. Paper presented to the annual meeting of CEC, Division for Early Childhood, Washington, DC.

A Brief Introduction to the SETT Framework

Joy Smiley Zabala

The SETT Framework is an organizational tool to help collaborative teams create Student-centered, Environmentally useful, and Tasks-focused Tool systems that foster the educational success of students with disabilities. The SETT Framework is built on the premise that in order to develop an appropriate system of assistive technology devices and services, teams must first gather information about the student, the customary environments in which the students spend their time, and the tasks that are required for the students to be active participants in the teaching/learning processes that lead to educational success. It is believed that the elements of the SETT Framework, with minor adjustments, can also be applied to non-educational environments and service plans.

Critical Elements of SETT

- Collaboration
- Communication
- Multiple Perspectives
- Pertinent information
- Shared Knowledge
- Flexibility
- On-going Processes

It must be remembered that SETT is a framework, not a protocol. The questions under each section of the SETT Framework are expected to guide discussion rather than be complete and comprehensive in and of themselves. As each of these questions is explored, it is likely that many other questions will arise. The team continues the exploration until there is consensus that there is enough shared knowledge to make an informed, reasonable decision that can be supported by data.

The Student

- What is the functional area(s) of concern? *What does the student need to be able to do that is difficult or impossible to do independently at this time?*
- Special needs (related to area of concern)
- Current abilities (related to area of concern)

The Environments

- Arrangement (instructional, physical)
- Support (available to both the student and the staff)
- Materials and Equipment (commonly used by others in the environments)
- Access Issues (technological, physical, instructional)
- Attitudes and Expectations (staff, family, others)

The Tasks

- What *SPECIFIC* tasks occur in the student's natural environments that enable progress toward mastery of IEP goals and objectives?
- What *SPECIFIC* tasks are required for active involvement in identified environments? (related to communication, instruction, participation, productivity, environmental control)

The Tools

In the SETT Framework, Tools include devices, services and strategies... everything that is needed to help the student succeed.

Analyze the information gather on the Student, the Environments, and the Tasks to address the following questions and activities.

- Is it expected that the student will not be able to make reasonable progress toward educational goals without assistive technology devices and services?
- If yes, describe what a useful system of assistive technology devices and services for the student would be like.
- Brainstorm Tools that could be included in a system that addresses student needs.
- Select the most promising Tools for trials in the natural environments.
- Plan the specifics of the trial (expected changes, when/how tools will be used, cues, etc.)
- Collect data on effectiveness.

It is expected that the SETT Framework will be useful during all phases of assistive technology service delivery. With that in mind, it is important to revisit the SETT Framework information periodically to determine if the information that is guiding decision-making and implementation is accurate, up to date, and clearly reflects the shared knowledge of all involved.

THE SETT FRAMEWORK - PART I

Collaborative Consideration of Student Need for Assistive Technology Devices and Services

Student: _____ Date: _____ Perspective: _____

EXAMINING CURRENT CONDITIONS TO CONSIDER EDUCATIONAL NEED	ENVIRONMENTS	TASKS
STUDENT		

CIRCLE AREAS WHICH PRESENT BARRIERS TO STUDENT PROGRESS

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Please provide feedback on effectiveness and suggestions for modifications/revisions by email to joy@joyzabala.com

ROLES & RESPONSIBILITIES MATRIX

From the work of Gary Cumley (in the book by Buekleman & Miranda)

The purpose of this matrix is to identify all of the items of responsibility around a student who needs assistance with communication. These responsibilities should be distributed throughout the team. Team members should speak for themselves, not be assigned by others. No one person should hold all Assignments and no one should have no assignments or back-ups.

RESPONSIBILITIES	ROLES									
	Student	Parent	Teacher	SLP	OT	PT	AT staff	Administrator	Other:	
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										

Directions to this page:

- (1) In the left column, make a list of the items that need to be done for this student.
- (2) Across the top, make a list of the team members including the student.
- (3) For each item, agree upon a team member who is (A) Assigned Responsibility and one who is (B) Back-up Responsibility.

WATI Assistive Technology Checklist

COMPUTER ACCESS

- Keyboard using accessibility options
- Word prediction, abbreviation/expansion to reduce keystrokes
- Keyguard
- Arm support
- Track ball/track pad/joystick with on-screen keyboard
- Alternate keyboard
- Mouth stick/head mouse with on-screen keyboard
- Switch with Morse code
- Switch with scanning
- Voice recognition software
- Other: _____

WRITING

Motor Aspects of Writing

- Regular pencil/pen
- Pencil/pen with adaptive grip
- Adapted paper (e.g. raised line, highlighted lines)
- Slantboard
- 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
- Other: _____

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
- Voice recognition software
- Other: _____

COMMUNICATION

- Communication board/book with pictures/objects/ letters/words
- Eye gaze board/frame communication system
- Simple voice output device
- Voice output device w/levels
- Voice output device w/icon sequencing
- Voice output device w/dynamic display
- Device w/speech synthesis for typing
- Other: _____

READING, STUDYING, AND MATH

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
- Scanner w/OCR and text to speech software
- Software to read websites and emails
- Other: _____

Learning/Studying

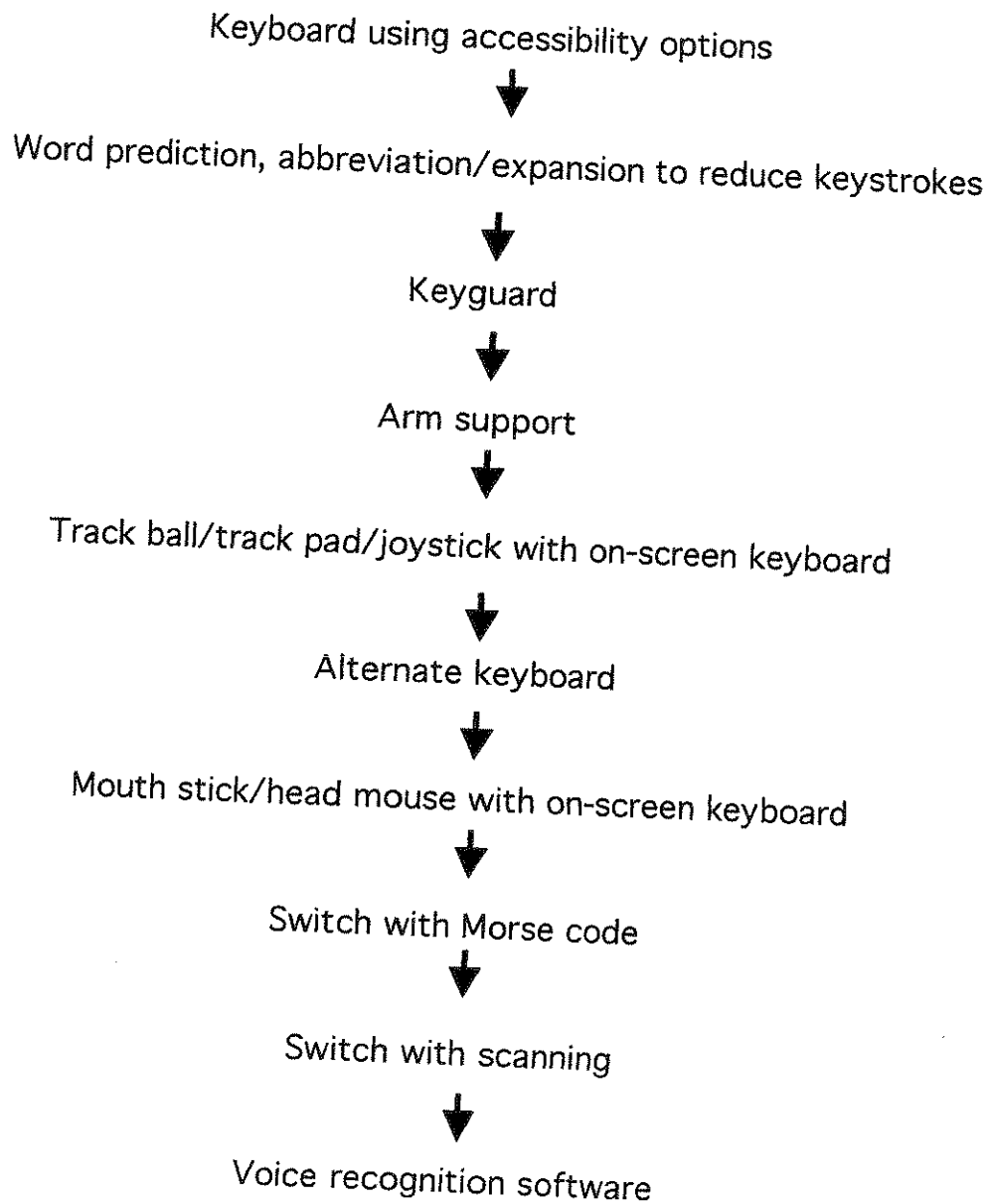
- Print or picture schedule
- Low tech aids to find materials (e.g. index tabs, color coded folders)
- Highlight text (e.g. markers, highlight tape, ruler, etc.)
- Recorded material (books on tape, taped lectures with number coded index, etc.)
- Voice output reminders for assignments, steps of task, 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
- Palm computers
- Other: _____

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 printout
- Calculator with large keys and/or large display
- Talking calculator
- Calculator with special features (e.g. fraction translation)
- On-screen/scanning calculator
- Alternative keyboard
- Software with cueing for math computation (may use adapted input methods)
- Voice recognition software

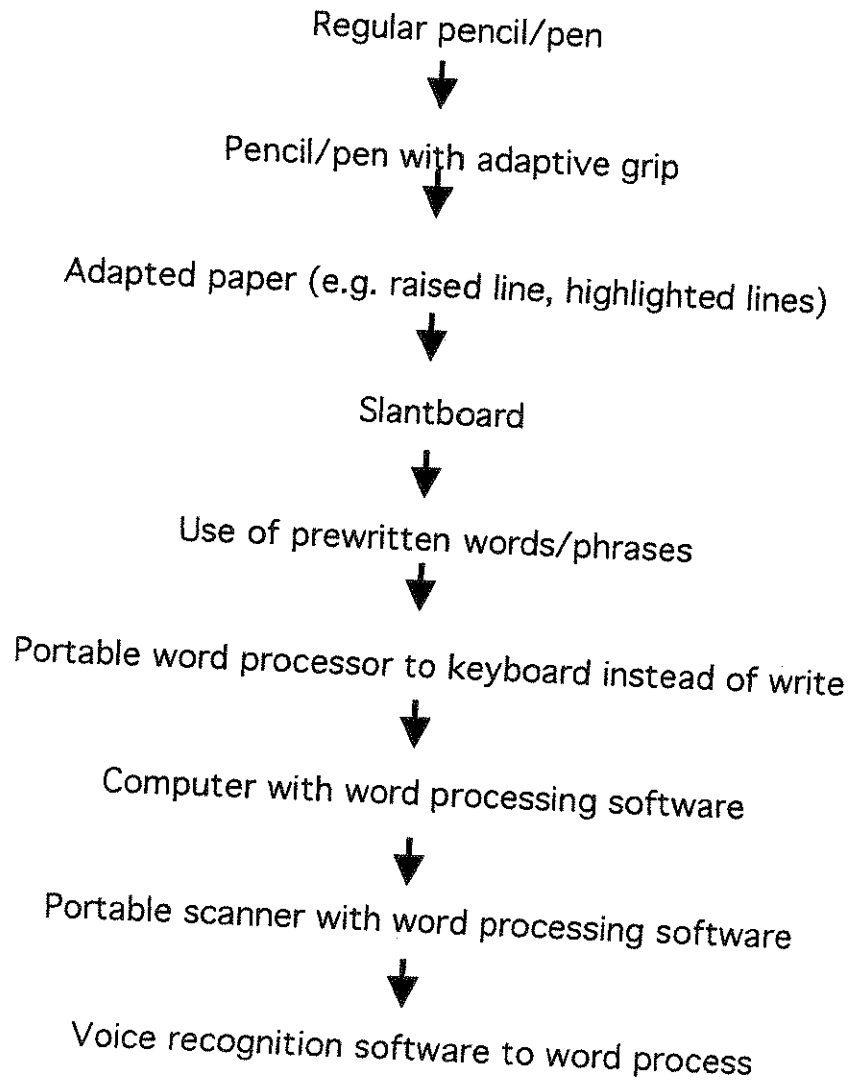
A Continuum of Considerations For Assistive Technology

for Computer Access



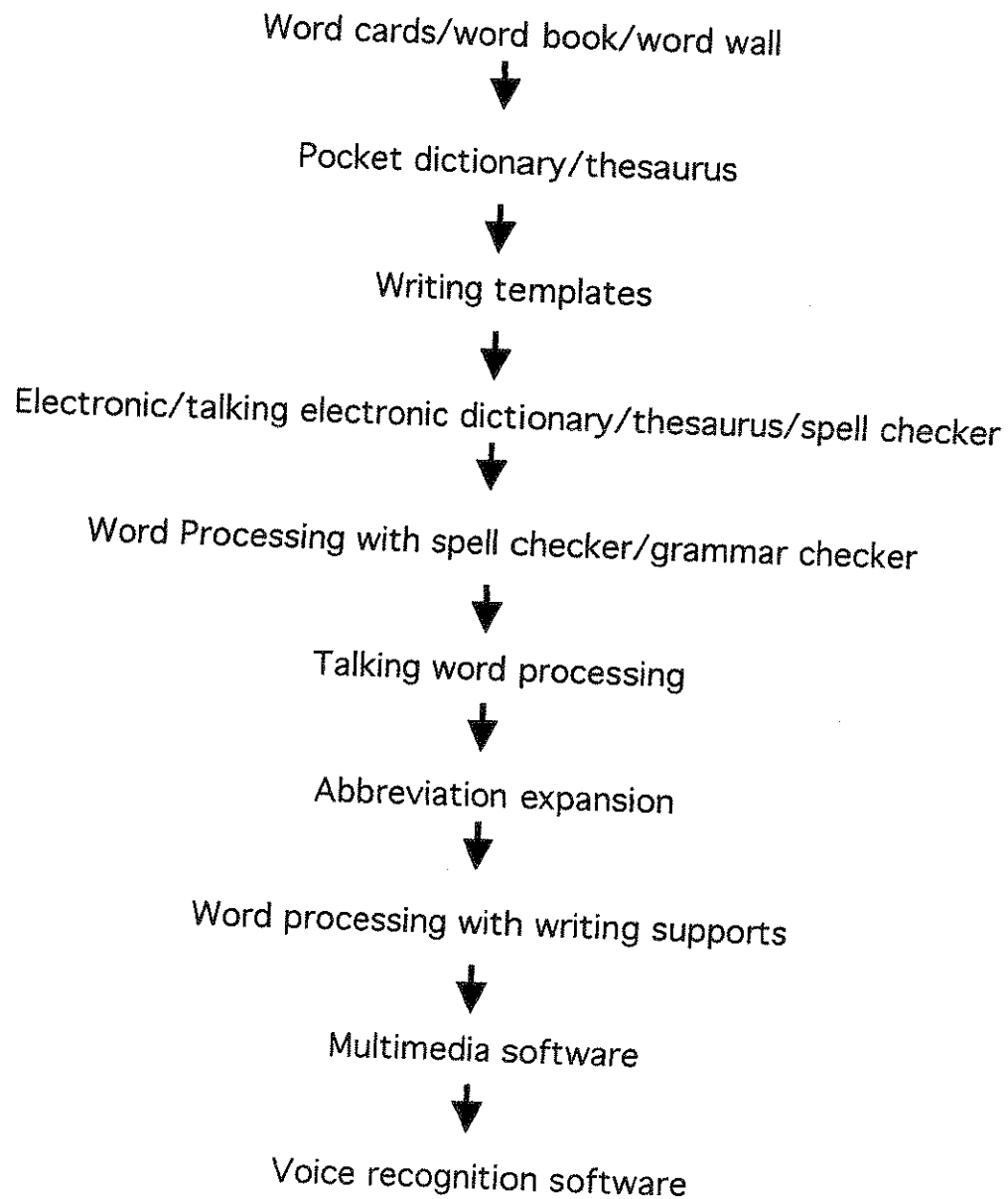
A Continuum of Considerations For Assistive Technology

for the Motor Aspects of Writing



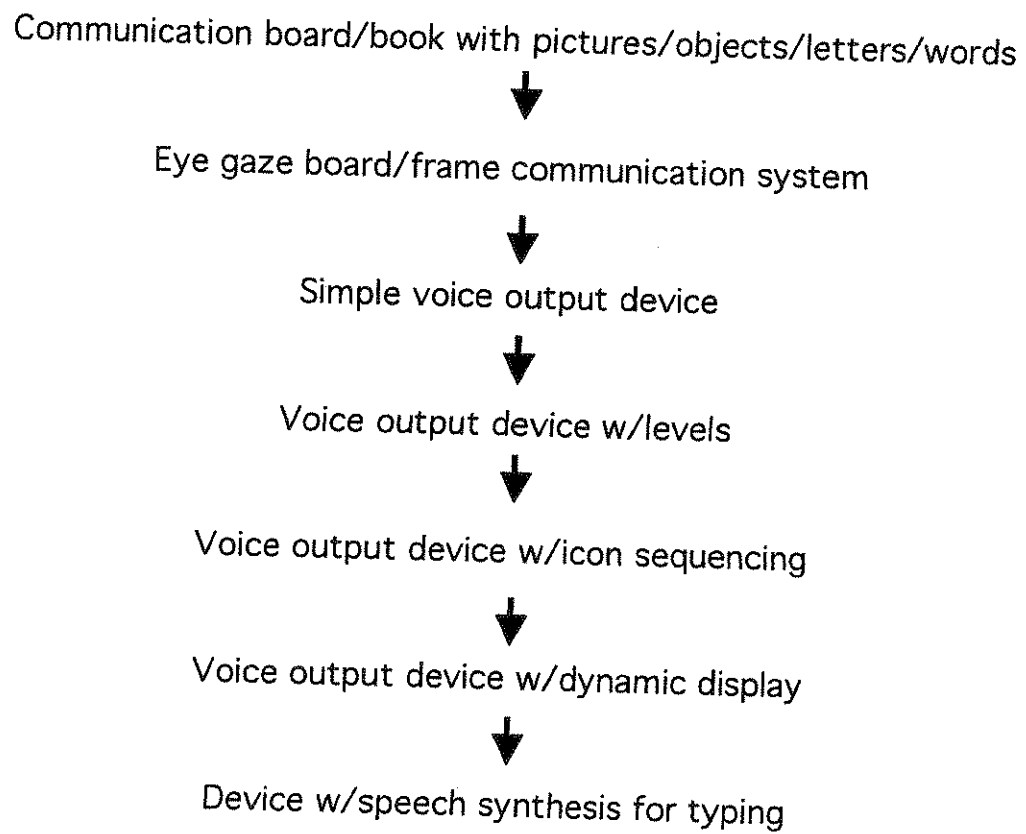
A Continuum of Considerations For Assistive Technology

for Composing Written Material



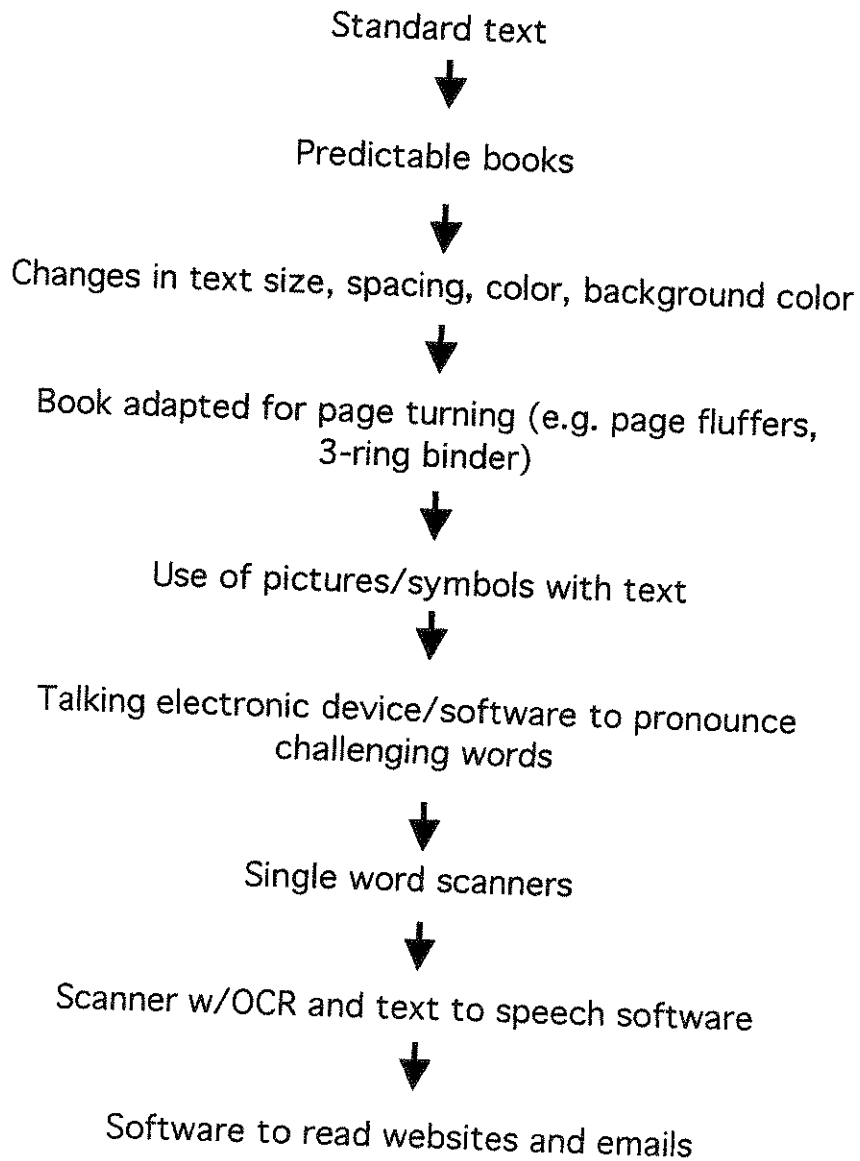
A Continuum of Considerations For Assistive Technology

for Communication



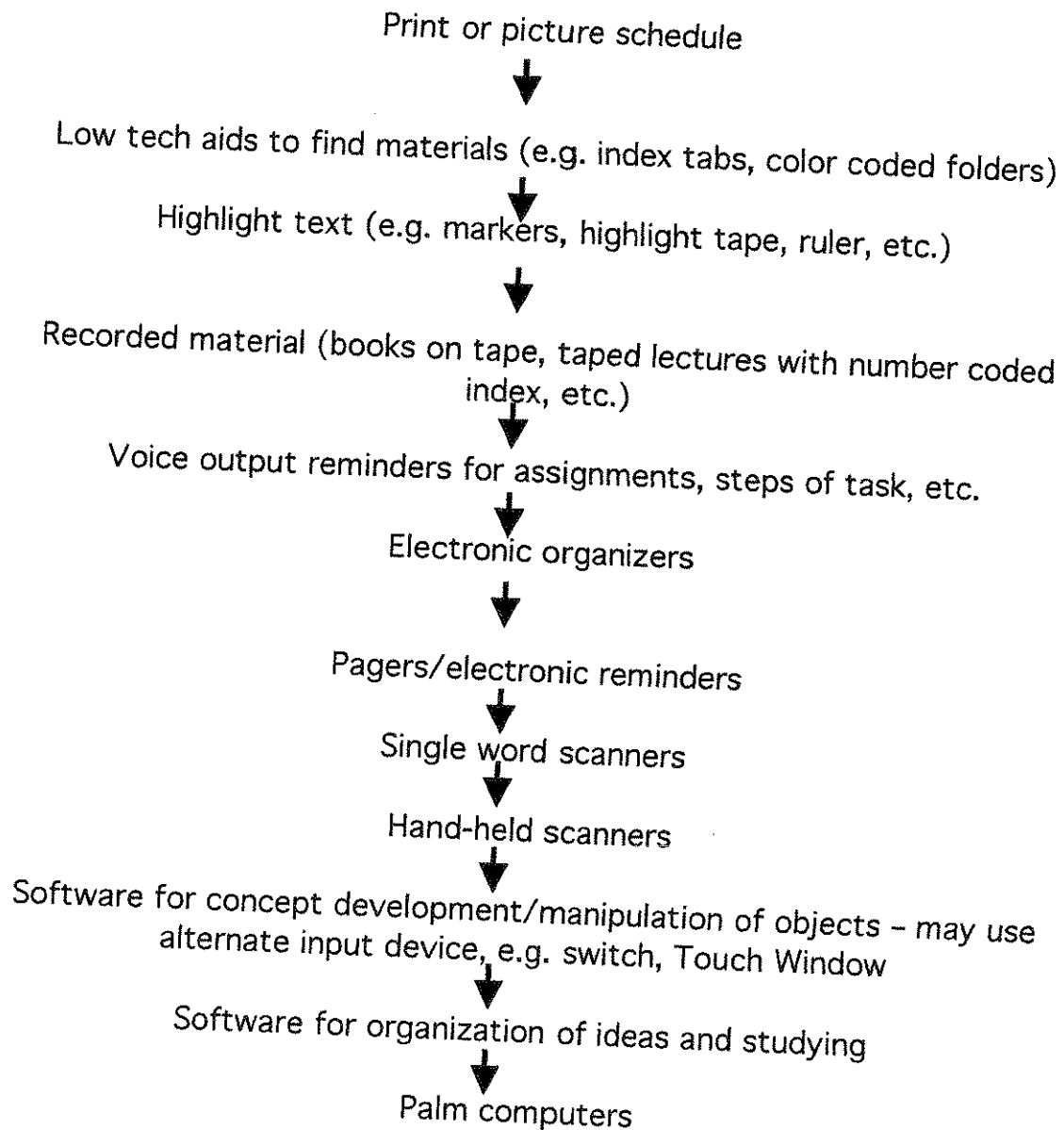
A Continuum of Considerations For Assistive Technology

for Reading



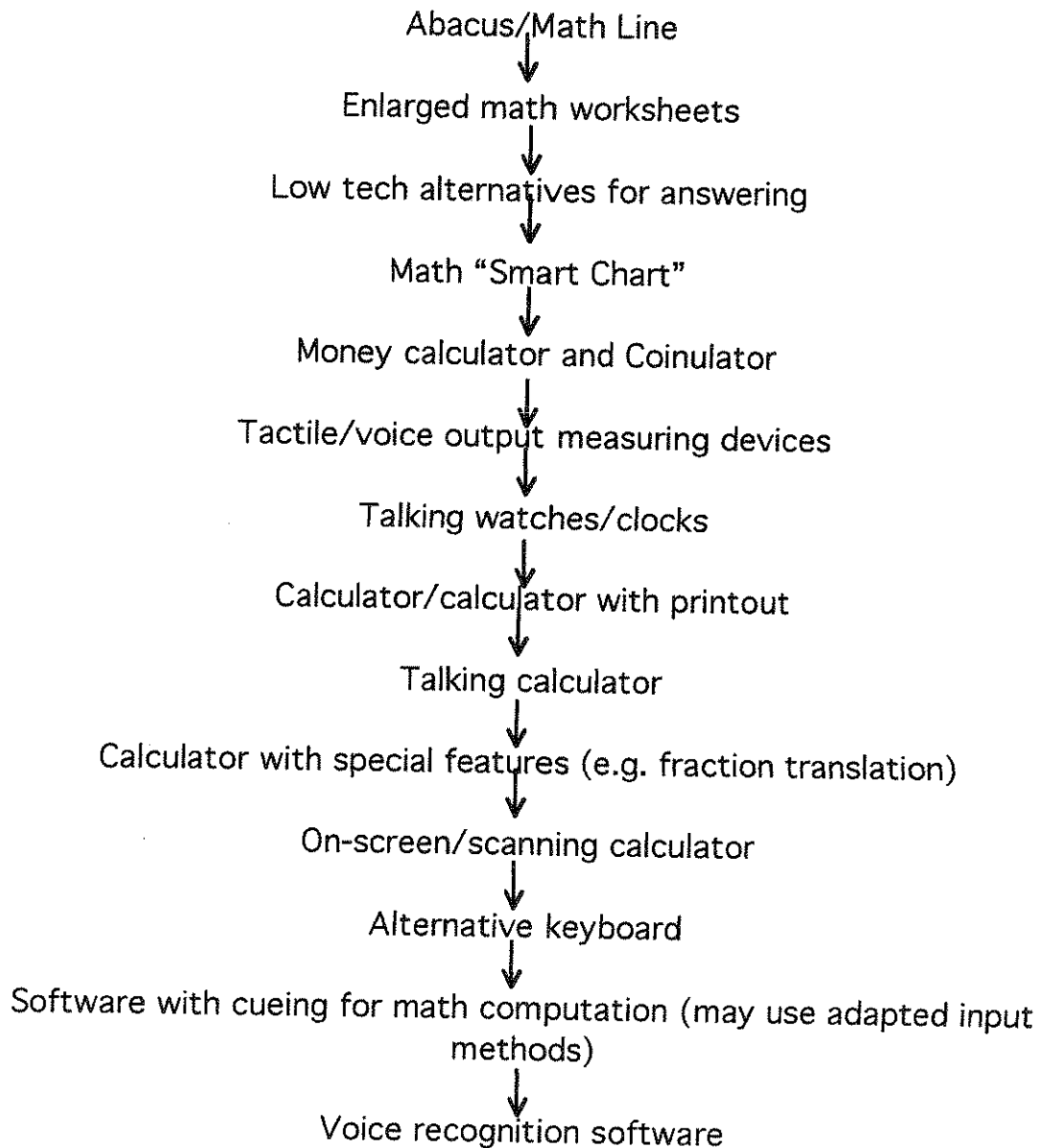
A Continuum of Considerations For Assistive Technology

for Learning/Studying



A Continuum of Considerations For Assistive Technology

for Math



RESOURCES

Learning Disabilities

Ashton, T.M. (2005). Students with learning disabilities using assistive technology in the inclusive classroom. In D. Edyburn, K. Higgins, & R. Boone (Eds.), *Handbook of special education technology research and practice* (pp. 229-238). Whitefish Bay, WI: Knowledge by Design.

A Parent's Guide to Helping Kids with Learning difficulties
<http://www.schwablearning.org>

LD Online
<http://www.ldonline.org>

Emotional/Behavioral Disabilities

Fitzgerald, G. (2005). Using technologies to meet the unique needs of students with emotional/behavioral disorders: Findings and directions. In D. Edyburn, K. Higgins, & R. Boone (Eds.), *Handbook of special education technology research and practice* (pp. 335-354). Whitefish Bay, WI: Knowledge by Design.

Behavior/Emotional Disability
<http://aimstar.knowbility.org>

SERI Behavior Disorders Resources
<http://seriweb.com/behavior.htm>

Mental Retardation

Wehmeyer, M.L., Smith, S.J., & Davies, D.K. (2005). Technology use and students with intellectual disability: Universal design for all students. In D. Edyburn, K. Higgins, & R. Boone (Eds.), *Handbook of special education technology research and practice* (pp. 309-323). Whitefish Bay, WI: Knowledge by Design.

AT and Mental Retardation
<http://www.sc.edu/scatp/mr.htm>

Curriculum

Writing Helpers, Math Chart (Elementary), Math Chart (Secondary)
Hey! Can I Try That?
<http://www.wati.org/Curriculum/curriculum.html>

Assessment

Wisconsin Assistive Technology Initiative-free forms
<http://www.wati.org/Products/freematerials.html>

SETT: <http://www.joyzabala.com>

Loans

CATE: California Assistive Technology Exchange
<http://cate.ca.gov/>

Writing (motor aspect) Templates

Free downloadable writing templates

http://www.steps4kids.com/writing_templates.html

Writing (composition)

Graphic organizers: <http://www.graphic.org/goindex.html>

Reading

E-Texts: <http://home.wanadoo.nl/cecilia.mccabe/instructions.htm>

Great lessons on what e-texts are, where to find them, and how to download them along with free readers.

Aligning Assistive Technology Resources, Strategies, and Tools with Common Instructional Challenges Experienced by Students with Mild Disabilities

Instructional Challenge Assistive Technology Resources, Strategies, and Tools

MEMORY

Difficulty remembering to complete tasks iPing <http://www.iping.com>
(A service that sends reminders via email, pager, phone, or fax)

READING

Poor decoding/fluency interferes with comprehension ReadPlease <http://www.readplease.com>
(Free software; teach students to copy and paste text so they can listen)

Key to Access <http://www.premier-programming.com>
(Accessibility software on a pocket-size USB drive goes everywhere)

Kurzweil 3000 <http://www.kurzweilededu.com>
(A scan and read system that converts printed text into digital text)

Read and Write Gold <http://www.texthelp.com>
(A software suite designed to support the struggling reader/writer)

Solo <http://www.donjohnston.com>
(A software suite designed to support the struggling reader/writer)

Difficulty with the volume of reading demands SparkNotes <http://www.sparknotes.com>
(A collection of notes, resources, summaries, and study aids)

Cognitive Rescaling <http://www.uwm.edu/~edyburn/Cognitiverescaling.pdf>
(A how-to document on making summaries with Microsoft Word)

Difficulty reading grade level curriculum materials Windows to the Universe <http://www.windows.ucar.edu/>
(Features multi-level reading material on space)

StarChild <http://starchild.gsfc.nasa.gov/docs/StarChild/StarChild.html>
(Features multi-level reading material and audio version of level 1)

Ben's Guide to US Government <http://bensguide.gpo.gov/>
(Features multi-grade level reading material on government)

Poor vocabulary makes it difficult to access ideas Visual Thesaurus <http://www.visualthesaurus.com>
(Software and web site to graphically display synonyms and more)

Vocabulary <http://www.vocabulary.com>
(Converts any web page into clickable text to access definitions)

Merriam-Webster Toolbar <http://www.m-w.com/tools/toolbar>
(Adds a dictionary to your web browser)

Aligning Assistive Technology Resources, Strategies, and Tools with Common Instructional Challenges Experienced by Students with Mild Disabilities

Instructional Challenge Assistive Technology Resources, Strategies, and Tools

CURRENT EVENTS

Low reading level makes it difficult to access current events	News 2 You	http://www.news-2-you.com (A subscription service that provides a weekly newsletter with symbols)
	9	http://9.yahoo.com (A free 4 minute daily video of what's new and noteworthy)
	Newsmap	http://www.marumushi.com/apps/newsmap/newsmap.cfm (Access news via a color coded map)
	Ten by Ten	http://www.tenbyten.org/ (Access news via a 10x10 grid of photos that represent the news story)

WRITING

Difficulty planning/organizing the tasks associated with a research project	Assignment Calculator	http://www.lib.umn.edu/help/calculator/ (An innovative tool to break a large project into manageable daily tasks)
	So You Have to...	http://www.ri.net/schools/East_Greenwich/research.html (A teacher created web site with step by step guidance and resources)
Difficulty getting ideas on paper to get started	Inspiration, Kidspiration	http://www.inspiration.com (Graphic organizers provide a great way to brainstorm and organize)
	Graphic organizers	http://www.eduplace.com/graphicorganizer/ (Ready to reproduce graphic organizers)
Difficulty in the process of composing written work	PixWriter	http://www.slatersoftware.com/pixwriter.html (A word processor designed for emerging readers and writers)
	Scholastic Keys	http://www.tomsnyder.com (Provides developmental and cognitive access to Microsoft Word)
	Co:Writer	http://www.donjohnston.com (A predictive word processor)
	iDictate	http://www.idictate.com (A dictation service; dictate over the phone, receive draft via email)

MATH

Difficulty with computations	WebMath	http://www.webmath.com (Free calculating tool that supports math from grade to graduate school)
Difficulty with math concepts	Interactive Math	http://math.asu.edu/nlvm/nav/vlibrary.html (Free online virtual math manipulatives, makes the abstract concrete)

Assistive Technology...Issues to Address

- _____What are the individual's current unmet needs for access to communication, writing, or educational materials?
- _____What are the short and long term educational goals?
- _____What are the daily educational demands which require the use of assistive technology?
- _____Have the appropriate team members, including parents, been involved in the assessment process?
- _____What are the features of the technology that would assist the individual in meeting daily classroom demands?
- _____Why is the selected equipment more appropriate than other alternatives?
- _____Have all of the individual's environments been considered?
- _____Does the selected equipment reflect the least restrictive intervention strategy?
- _____Is the equipment necessary to achieve educational/life goals?
- _____How will the individual physically manage the equipment in all environments?
- _____How will the equipment be integrated into the individual's daily life?
- _____How will the use of the assistive technology promote inclusion of the individual into activities in the school and community?
- _____Which members of the education team will be trained to use the equipment?
- _____How will the individual be trained to use the equipment?
- _____How will the family be involved with the individual and the equipment?

ASSISTIVE TECHNOLOGY EVALUATION
Functional Analysis

Name: **Chuck**

Date:

Grade Level: **Sixth**

Overall Description: Chuck is a sixth grade student who receives all of his instruction in the regular classroom. Chuck has right hemiplegia. His right upper extremity is more affected than his lower extremity. He has difficulty with total body movements requiring bilateral coordination, especially with upper extremities. Chuck has a leg length discrepancy with his right leg being shorter than his left. He wears a lift in his shoe to compensate for the difference. Chuck has low average intelligence and normal speech. He reads at the third grade level, and does math at grade level, except for story problems. Chuck is very concrete in his thinking and has great difficulty understanding figurative language. Chuck has a full time aide in the regular classroom who modifies assignments and helps to keep him on task. Socially, Chuck is polite and well-behaved, but appears to be immature in his social relationships.

Need	Current Status	Next Step	Criteria for Success	Support Required	Locations
Cognitive Ability	Chuck is able to do grade level assignments, but he is very literal in his interpretations, especially of abstract concepts.		Completion of grade level assignments with evidence of understanding of main concepts	Limit requirements to a few concrete concepts in each academic unit	Home School Community Work Recreation
Attending	Chuck is very easily distracted both visually and auditorily	Try having Chuck use earphones when he is word processing	Chuck will be on task 65-70% of time during independent work periods.	Distraction free environment, study cartel; proximity to teacher or aide	Home School Community Work Recreation
Perception	Chuck has a blind spot which makes it difficult for him to track from line to line when he is reading. He also has trouble distinguishing the figure from the background. Because of perception problems, Chuck must have a large display screen on his computer.		Chuck will complete modified assignments independently at least 85% of the time.	Enlarge worksheets and reading material. Highlight key vocabulary words. Use a cardboard window to isolate individual lines when reading. Enlarge on screen display when doing word processing. Laptop computer Printer	Home School Community Work Recreation
Fine Motor Hand Writing Note Taking	Chuck can use only one hand for fine motor tasks, including typing. Chuck is an excellent one-handed typist both in terms of speed and accuracy. Chuck can write in cursive, but handwriting is very labor intensive and tiring for him. He produces much better written products using a computer. Chuck cannot take notes and listen at the same time.	Try giving Chuck notes before the classroom presentation. Have him highlight keywords with a highlighting pen as he is listening to the discussion.	Chuck will be able to produce written work at about the same pace as other students in his class.	Co-Writer with Write-Out-Loud for word processing and word prediction. Chuck needs to use word processing whenever written assignments are required. Whenever possible his written assignments should be shortened or he should be expected to respond using multiple choice or one word answers.	Home School Community Work Recreation
Self Help	Chuck cannot tie his own shoes and he has difficulty zipping his jacket with one hand.	Try having a peer buddy assist Chuck with his shoes and jacket.	Chuck will be able to receive help with a minimum of fuss or embarrassment.	Teacher support of the peer buddy relationship.	Home School Community Work Recreation

ACTIVITY-BASED AT ASSESSMENT

Adapted Book Activity

Materials: Choose book from your kit with page-turners, props, and Velcro fasteners on back of book. Place book on slanted board, using 3-ring binder covered with a piece of felt from kit. Anchor the felt so that book stays put.

Positioning: Support child in comfortable seated position with book at midline in visual range and reach of child.

Procedure:

1. Read book (with props removed) with child and pause frequently to observe child's response/request for turning pages, etc. Observe response to key words and vocabulary in book and social/emotional response to story elements. Observe any requesting behaviors that indicate desire to turn page, repeat lines, find particular pictures, etc.
2. Observe child's physical response to the book and child's attempts to turn pages with adaptations.
3. Read book again with props. Select 2-3 props, depending on child's attention and vision. Place on dark felt background, on binder or clipboard. Begin reading book and stop periodically to "fill in" the prop. Point to picture in book and matching prop on felt. Ask "where is the _____?" and observe child's response to the prop or attempt to reach and place in the book.
4. Record repeated line in book on single message VOCA (Big Mack, Step-by-Step in single message mode, Photo Album VOCA). Read book again and pause for repeated line. Observe child's response to the VOCA and attempts to participate. Demonstrate and observe the number of trials and models before child begins to show expectation and activation of the VOCA to take turns with the repeated line in the book.

What to Observe:

Child's Physical Position	Child's Actions (What he/she does)	Child's Behaviors (gestures, sounds, gaze directed toward another person)	Obstacles or Barriers for Child's Participation	Expectations of Typical Peer in same Activity/Routine	Discrepancy between Child and Typical Peer Expectations	Possible Solutions to increase child's participation

ACTIVITY-BASED AT ASSESSMENT

Making Choices in Play

Materials: Digital photos of each item are included in the kit, in the communication book. Select photos of the activities that you plan to use from the kit such as the bubbles, book, doll, markers, and battery operated toy, etc. Use a piece of dark felt to attach the photos, either on a slant board such as a 3-ring binder or the clipboard.

Positioning: Support child in comfortable seated position as recommended by parent or team members. Place photos on dark felt background within visual range and within reach.

Procedure:

1. Place appropriate number of pictures on dark background (trifold stand, foam core, Velcro-friendly material, etc.) near child within visual range and physical range. Select two-three photos, depending on the child's attention and vision.
2. Ask the child while pointing to each picture, "Do you want the bubbles or the book?" Watch the child's eyes, gestures, facial expression, body movements, vocal/verbal behavior to indicate any type of choice. Repeat 2-3 trials to determine reliable mode of response, if available. After 2-3 trials, provide the actual item that the child appears to want, through any mode of response.
3. If there is no apparent choice, repeat the procedure with objects to determine if there are responses to one of two objects.
4. It is important to provide item to the child after 2-3 trials using either photo or object choice. Even without clear choice, the parent may have indication of the child's choice. Ask how the parent "reads" the child's choice.
5. Once child has the object, allow several minutes to play with the item and repeat photo/object choices throughout the assessment. Observe changes in the child's choice making throughout repeated opportunities in the assessment.

What to Observe:

Child's Physical Position	Child's Actions (What he/she does)	Child's Communication Behaviors (gestures, sounds, gaze directed toward another person)	Obstacles or Barriers for Child's Participation	Expectations of Typical Peer in same Activity/Routine	Discrepancy between Child and Typical Peer Expectations	Possible Solutions to increase child's participation
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ACTIVITY-BASED AT ASSESSMENT

Adapted Toy

Materials: Select the battery-operated toy in the kit. Make sure batteries and switch are working correctly.

Positioning: Place child in comfortable position for play, either on the floor or in supported position as recommended by parent or team members. Place toy out of reach of child but within visual or auditory range. Connect switch and place within physical reach of child.

Procedure:

1. Observe the child's response to the toy for a few minutes. What attempt does the child make to reach the toy through any means? Does the child independently operate the switch placed within reach?
2. Observe access to switch and operation of toy. How does child attempt to reach the switch? What type of activation is used?
3. If child does not attempt to access switch independently, model and support child appropriately to activate switch.
4. Observe child's reaction when toy is activated and record physical, gestural, vocal, verbal, gaze, or other active responses.
5. Repeat above steps to observe child's attempts to activate the toy after demonstration, reactions to toy, social and communication engagement around the toy.

What to Observe:

Child's Physical Position	Child's Actions (What he/she does)	Child's Communication Behaviors (gestures, sounds, gaze directed toward another person)	Obstacles or Barriers for Child's Participation	Expectations of Typical Peer in same Activity/Routine	Discrepancy between Child and Typical Peer Expectations	Possible Solutions to increase child's participation

1. Family Concerns (adapted from Judge, 2002)

Child's Name: Birthdate: Parent Name: Address: Phone:	Agency Name: Referral Source: Date of Assessment: Team Members: Dominant Language in Home: Family Comments
Areas Addressed Child Strengths: <ul style="list-style-type: none"> • Vision • Hearing • Communication • Motor 	
Child Needs: <ul style="list-style-type: none"> • Vision • Hearing • Communication • Motor 	
Family Daily Routines & Activities	
Child's Preferred Activities	
Family Priorities for Child Participation in Daily Activities	
Family Use of Technology & Priorities	

2. Child Characteristics: Communication Modalities (adapted from Cress, 2006)

Child Signal	Meaning	Adult Response
	Request Attention, Affection	
	Request Help	
	Request Desired Object/Action	
	Refusal, Protest, Cessation	
	Greetings	
	Comment: Person/Object/Action	
	Express humor	
	Express confusion	
	Express frustration	
	Express anger	
	Express happiness	
	Express sadness	

3. Team Assessment Planning (adapted from SETT Framework, Zabala, 2003)

What we know	Child Characteristics	Current Environments	Current Activities/Tasks	Current Tools
What we need to know	What are child's strengths and needs?	How is disability limiting environments? What are possible future environments?	What are desired activities and possible future activities?	What AT tools or strategies will increase participation in activities?

4. Observing Activity-Based Participation (adapted from Dowden & Marriner, 1995)

Child's Name: _____ Date of Observation: _____
 Age: _____ Observer: _____
 Location/Setting: _____ Begin and End Time: _____

ACTIVITY/ROUTINE:

Child's Physical Position	Child's Actions (What he/she does)	Child's Communication Behaviors (gestures, sounds, gaze directed toward another person)	Obstacles or Barriers for Child's Participation	Expectations of Typical Peer in same Activity/Routine	Discrepancy between Child and Typical Peer Expectations	Possible Solutions to increase child's participation

5. AT Action Plan (Adapted from Mistrett, 2004).

AT Access	AT Solutions	Environmental Adaptations	Resources Needed (Equipment, Funding, Training, Personnel)	Timelines	Person Responsible
Positioning					
Mobility					
Communication					
Vision					
Hearing					

6. AT Observation Trials (adapted from Mistrett, S., Ruffino, A., Lane, S., Robinson, P., Reed, P. & Milbourne, S., 2004).

AT Support	Activity #1 Date/Time	Activity #2 Date/Time	Activity #3 Date/Time	AT Effectiveness	Modifications Needed
AT for Play Access:					
AT for Communication Access:					
AT for Computer Access:					
AT for Literacy Access:					

7. AT Evaluation Plan

AT Intervention Goal	AT Materials Implemented	Effectiveness of Intervention	Need for Modifications	Person Responsible
Play				
Communication				
Computer				
Literacy				
Other				
Other				



University of Nebraska-Lincoln

Special Education & Communication Disorders
College of Education & Human Sciences

Cress Inventory

Communication Signal Inventory

Date:

Child:

Signal	What It Means	What Do You Do/Say?
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Communication Signal Inventory

Date:

Child: S.C.

Signal	What It Means	What Do You Do/Say?
Head back when facing parent	-Want up/down game	-Repeat game
Open mouth	-More food	-Give more food
Spread arms		
Bang		
Aaah		
Eager breathing	-Hungry	-Feed
Sound (Vowel or hmm sound)	-Interested	-Continue activity
Stop activity	-Interested/Focused	-Continue activity
Stand in bed/screech	-Happy to see you, or	-Get up and greet her, or,
Flap arms when standing	-Wants you, or,	-Continue to let her play
	-Playing by self	
Open mouth	-Wants to play, esp. active	-Help her walk or bounce in
Jump on knees	motion	up/down game
Fusses	-Uncomfortable, unhappy,	-Give her attention
	wants attn.	
	-Awake	
"Looks at watch", quiets down,	-Seizure	-Wait until recovered, and
arms (esp. left arm), stiff rt. leg,		looks around stiff room to
looks at side, grasps afterward		refocus before resuming
		activity
Pushes away, Turns head away	-Doesn't want or like	-Take it away
	something	
Pound and growl	-Excited or overstimulated	Help her reduce stimulation or
	by something	restrict stimulation, e.g. wrap
		her up
Move independently toward object	-May indicate interest in	-Help her walk or move, or
or activity, esp. in playpen	object or activity	bring object or activity closer

Looks towards sounds or watches faces	-Interested or paying attention to sounds and faces	-Bring interesting items into good viewing range (close may be worse)
Reaches, especially for a bottle	-Wants the bottle, "more" drink	-Tell her what her reaching means to use (e.g. you reached - you want more)

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Feature Matching Checklist Adaptive Switch Assessment

Please check features in each area that are important to meet the client's needs for best switch selection and access. Remember that the client's preferences for position, switch selection and location, may not be the most optimal features. Check optimal features and circle client preference (if different.) Highlight features that will be addressed for selection and use.

Client Positioning for Access				Switch Location for Access			
<input type="checkbox"/> Sitting in Chair	Type of Chair:			<input type="checkbox"/> Tray	Type:		
<input type="checkbox"/> On Floor				<input type="checkbox"/> Table			
<input type="checkbox"/> Sitting	<input type="checkbox"/> Sidelying			<input type="checkbox"/> Mount Unit	Type:*		
<input type="checkbox"/> On Stomach	<input type="checkbox"/> Wedge			<input type="checkbox"/> Alternate Body Location(s):			
<input type="checkbox"/> On Back				<input type="checkbox"/> Head			
<input type="checkbox"/> Standing:	Device Type/Name:			<input type="checkbox"/> Arm			
<input type="checkbox"/> Prone				<input type="checkbox"/> Foot			
<input type="checkbox"/> Supine				<input type="checkbox"/> Other:			
<input type="checkbox"/> Other:				*A complete evaluation of mounting system(s) should occur			
Notes:							
Motor Abilities – Controlled Movement Patterns and Sites for Switch Access							
Switch activation sites and movements must be under voluntary control of the user and are repeatable and consistent?							
<input type="checkbox"/> Arm	Left	Right	Both	<input type="checkbox"/> Head			
<input type="checkbox"/> Hand	Left	Right	Both	<input type="checkbox"/> Side of head	Left	Right	Both
<input type="checkbox"/> Thumb	Left	Right	Both	<input type="checkbox"/> Location to Ear	in front	behind	
					above	below	
<input type="checkbox"/> Finger(s)	pointer index, ring, pinkie			<input type="checkbox"/> Back of head			
<input type="checkbox"/> Elbow	Left	Right	Both	<input type="checkbox"/> Cheek	Left	Right	Both
<input type="checkbox"/> Shoulder	Left	Right	Both	<input type="checkbox"/> Chin			
<input type="checkbox"/> Leg	Left	Right	Both	<input type="checkbox"/> Temple	Left	Right	Both
<input type="checkbox"/> Knee	Left	Right	Both	<input type="checkbox"/> Eyebrow			
<input type="checkbox"/> Foot	Left	Right	Both	<input type="checkbox"/> Mouth	Lips	Tongue	Jaw
<input type="checkbox"/> Toe	Left	Right	Both	<input type="checkbox"/> None			
<input type="checkbox"/> Heal	Left	Right	Both	<input type="checkbox"/> Eye Blink	Left	Right	Both
				<input type="checkbox"/> Breath	Sip / Puff	Blow	
Notes:							
Switch Selection Considerations							
User's Abilities							
<input type="checkbox"/> Force available to activate switch:				<input type="checkbox"/> Minimal switch size:			
<input type="checkbox"/> Effort needed for switch activation:				<input type="checkbox"/> Maximum switch size:			
<input type="checkbox"/> Strength/Fatigue level:				<input type="checkbox"/> Gross Motor skills			
<input type="checkbox"/> Eye-Hand Coordination/Timing:				<input type="checkbox"/> Fine Motor skills			
<input type="checkbox"/> Range of motion:				<input type="checkbox"/> Finger isolation			
<input type="checkbox"/> Able to cross midline:				<input type="checkbox"/> Other:			
<input type="checkbox"/> Able to maintain pressure hold:		<input type="checkbox"/> Unable to maintain pressure hold:		<input type="checkbox"/> Able to release pressure hold:		<input type="checkbox"/> Unable to release pressure hold:	

Switch Selection Considerations	
User's Need – Type(s) of Switches	
<input type="checkbox"/> Single Switch	<input type="checkbox"/> Dual or Two Switches
<input type="checkbox"/> Cause and Effect	<input type="checkbox"/> Morse Code
<input type="checkbox"/> Continuous Scanning	<input type="checkbox"/> Two switch step scanning
<input type="checkbox"/>	
<input type="checkbox"/> Multiple Switches	<input type="checkbox"/> Joystick
<input type="checkbox"/> Connected as one unit	
<input type="checkbox"/> Separated	
Switch Activation Attributes	
<input type="checkbox"/> Momentary	<input type="checkbox"/> Sound Activated
<input type="checkbox"/> Latched	<input type="checkbox"/> Light Activated
<input type="checkbox"/> Timed	<input type="checkbox"/> infrared (Fiber Optic)
<input type="checkbox"/>	<input type="checkbox"/> Magnetic
	<input type="checkbox"/> Touch Activated
	<input type="checkbox"/> Motion Activated
	<input type="checkbox"/> Displacement
	<input type="checkbox"/> Rotate / Tilt
	<input type="checkbox"/> One Directional
	<input type="checkbox"/> Pneumatic
	<input type="checkbox"/> Pull
	<input type="checkbox"/> Muscle Movement
	<input type="checkbox"/> Push
	<input type="checkbox"/> Proximity
	<input type="checkbox"/> Squeeze
	<input type="checkbox"/> Membrane
<input type="checkbox"/> Switch Interface	<input type="checkbox"/> Size of Switch (height/diameter):
<input type="checkbox"/> Other:	<input type="checkbox"/> Weight of Switch:
<input type="checkbox"/> Force needed to activate:	
<input type="checkbox"/> Travel distance to activate:	
<input type="checkbox"/> Amount of play in switch:	
Notes:	
Feedback (to user)Considerations	
<input type="checkbox"/> Auditory	<input type="checkbox"/> Sound <input type="checkbox"/> Silent
	<input type="checkbox"/> Click <input type="checkbox"/> Beep <input type="checkbox"/> Other:
<input type="checkbox"/> Tactile	<input type="checkbox"/> Movement
<input type="checkbox"/> Smooth	<input type="checkbox"/> Membrane
<input type="checkbox"/> Textured	<input type="checkbox"/> 2 D <input type="checkbox"/> 3D
<input type="checkbox"/> Objects	<input type="checkbox"/> Switch Color
<input type="checkbox"/> Visual	<input type="checkbox"/> Solid <input type="checkbox"/> Flashing
<input type="checkbox"/> Lighted Display	<input type="checkbox"/> Light Color:
<input type="checkbox"/> Other	<input type="checkbox"/> Other Client Preferences:
Notes:	
Purpose of Switch Use	
<input type="checkbox"/> Battery Operated Toys	<input type="checkbox"/> Communication
<input type="checkbox"/> Environmental Control:	<input type="checkbox"/> Computer Access
<input type="checkbox"/> Mobility	<input type="checkbox"/> Other
Notes:	

Resources for AT and Emergent Literacy

References:

1. Books Made Easy! Book Adaptations for Infants, Toddlers, and Young Children of All Abilities by Pati King-DeBaun

www.creativecommunicating.com

2. Highlighter Tape

Calloway House

www.callowayhouse.com

800-233-0290

Onion Mountain Technology

www.onionmountaintech.com

860-693-2683

Beacon-Ridge

www.beacon-ridge.com

800-737-8029

3. **Voice Output Communication Aids (VOCAs)**

Enabling Devices for Children

Attainment Company: www.attainmentcompany.com

Augmentative Resources: www.augresources.com

Advanced Multimedia Devices, Inc.: www.amdi.net

Ablenet: www.ablenetinc.com

Adaptivation Incorporated: www.adaptivation.com

4. **Repetitive Line Books**

• <http://janesville.k12.wi.us/assistive/stories.html>

• <http://www.wati.org/Curriculum/Literacy/literacyinfo.html>

• <http://aacintervention.com/litboards.htm>

• http://www2.edc.org/NCIP/workshops/EC_Event/favbooks.html

5. Correction Tape

Avery and 3M

6. Alternate Text Resources

Boardmaker by Mayer-Johnson: www.mayerjohnson.com

• http://schools.nycenet.edu/D75/literacy/adapted_books/default.htm

• http://www.baltimorecityschools.org/boardmaker/adapted_library.asp

• <http://prekese.dadeschools.net/BMD/interactivestorybooks.html>

Picture It by Slater Software, Inc.: www.slatersoftware.com

7. Talking Books

My Own Bookshelf by SoftTouch

www.softtouch.com

IntelliPics Studio by Intellitools (part of IntelliTools Classroom Suite 4)

www.intellitools.com