Overview of ATC/External Aids
Evidence for effectiveness of ATC
4 PIE Steps to Effective Training
  • Select from range of available devices
  • Individualized needs assessment
  • Train to use device
  • Measure effectiveness with each user

Disclosure Statement
Royalties are received for the following materials mentioned in this presentation:
  • Textbook: Sohlberg & Turkstra (2011)
  • CogLink
  • PACK
What is ATC?
- Subclass of AT designed to increase, maintain, or compensate for cognitive impairments
  - Focus on real-life, functional task performance
  - Technology oriented (simple to complex)
- Any technology that assists cognitive function during task performance (Gillespie et al., 2012)
  - a.k.a. “cognitive orthoses” or “cognitive prosthetics” (Gillespie et al., 2012; Kirsch et al., 2004; LaPresti et al., 2004; Scherer et al., 2005)

What are the Benefits of ATC?
- Support completion of functional activities in real-life contexts
- Customizable, flexible treatment option
- Increased consumer “acceptance”
- Reduce care-provider burden & stress
- Decrease “digital divide” for clients with CI
  (Kirsch et al., 2004; LaPresti et al., 2004; Scherer et al., 2005; Vaccaro et al., 2007)

What are the Barriers to Using ATC?
- Clinician training, comfort, & experience
- Client training, comfort, & experience
- Lack of systematic training to use devices
- Risk of device abandonment
- Cost of devices
- Inadequate assessment to match person & device
- Availability of range of devices
- Constantly changing technology
- Complexity/cognitive demands
  (Hart et al., 2003; Kirsch et al., 2004; Scherer et al., 2005; Sohlberg et al., 2007)

Clinician Comfort & Experience

Tools/Devices Don't Work
Technology is the Panacea

(Hart, O’Neil-Powers, & Morita, 2003)
Evidence Supports Use of ATC

Existing Reviews
- ATC and specific user groups (older adults; Pollack, 2005; dementia (Bharucha et al., 2009)
- Efficacy (de Joue et al., 2010)
- Type of ATC (LoPresti et al., 2004)
- Rehabilitation aims of ATC (Cole, 1999)
- Practice Guidelines (Sohlberg et al., 2007)

Most Recent/Extensive Review (Gillespie et al., 2012)
- Included more studies than previous reviews
- Conceptualized ATC by type of cognitive function being assisted

Systematic Review Aims
(Gillespie et al., 2012)

1. How has the ATC field changed over time?
2. What is the relation between ATC & cog functions?
3. What is the relation between ATC and activity domains?
4. What is the relation between ATC and clinical populations?
5. What is the evidence supporting ATC supporting specific cognitive functions?

Study Characteristics Coded
- Authorship, year
- Intervention (ATC Function: Alerting, Reminding, Mixed, Distraction, Navigation, Microprompting)
- ISO Technology Category: (alarm, computer, Audio-visual, telephone)
- Population
- Study Quality Rating
- N
- Treatment Effect (Yes, No, Qualitative, Mixed)

Bottom Line Findings
- Relationships exist between ATC function and ICF cognitive function:
  - attention is assisted by alerting devices, emotion regulation uses distraction, organization/planning-uses prompting devices, time management/prospective memory assisted by single prompt devices, episodic memory augmented using devices that store and display experiential information
- ATC effectively supporting wide range of functions
- Treatment efficacy
  - Substantial efficacy for reminding devices
  - Strong evidence for alerting, distracting and microprompting
Established that ATC is Helpful

But Still Need to Know:

- Who is best helped?
- How best to train people with memory impairments?
- What behaviors, processes or skills are influenced by the introduction of external aids?

SEE: Sohlberg et al., 2007 - Practice Guideline for Memory Aids

Framework for Selection & Training

PIE Model

- Planning: Many critical decisions are made outside of therapy session including careful needs assessment
- Implementation: Need to use methods to maximize efficiency & durability of learning; decisions & clinical behaviors implemented during the session (stimulus presentation, practice regimen etc.)
- Evaluation: Importance of evaluating client performance within and outside of session; measuring outcome and learning.


4 Phases PIE Process

1. Become familiar with range of ATC tools (Planning)
2. Conduct individualized needs assessment (Planning)
3. Train use of device (Implementation)
4. Measure effectiveness (Evaluation)
4 Step Process

1. Become familiar with range of ATC tools
2. Conduct individualized needs assessment
3. Train use of device
4. Measure effectiveness

- **Low Tech/Specific Task**
  - Calculator
  - Phone dialer
  - Electronic spell checker, thesaurus, dictionary
  - Oven timer
  - Watch/Timer
  - Key Finder
  - Color coding files, instructions, baskets
  - Mail service

- **Mid Tech/Multi-Function**
  - Post it notes
  - Check labels
  - Answering machines
  - Appointment calendars
  - Get steno pads

- **High Tech/Multi-Function**
  - Data watchers (e.g., Timex data watch; Fossil Watch Palm, Casio Digital Watch)
  - Voice recorder/digital
  - Cell phone
  - Pagers

- **High Tech/Multi-Function**
  - Smart phone (e.g., i-Phone, BlackBerry)
  - Personal digital assistants (PDA)
  - Specialized Task Guidance systems (Planning and Executive Assistant and Trainer-PEAT, MAAC, Pocket Coach)

**Adapted Email**

- High tech; Single Function; Specialized
- “CogLink” - Specifically designed for users with CI
- Software + training program
- Tech support available (800 number)
- Closed system

**www.coglink.com**
Assistive Technology for Cognition
McKay M. Sohlberg, PhD

80 Apps reviewed by users
Categories:
- Business/Productivity
- Calendar/Time Management
- Education/Study Skills
- Finance
- Games
- Health/Fitness
- News
- Notetaking
- Speech/Language

http://mccappreviews.com

Michelle Ranae Wild
michelle@id4theweb.com
(949) 310-3202
1. Become familiar with range of AT tools (Planning).
2. Conduct individualized needs (Planning) assessment.
3. Train use of device (Implementation).

PlanningIE:
Selecting best tool requires:

1. Identifying key client characteristics (Who?);
2. Defining the treatment target (What, Where & When?);
3. Specifying the desired outcome (Why?); and
4. Designing an individualized training plan.

Needs Assessments--Help Answer PIE Planning Questions:

- CTI (Compensation Techniques Inventory) (Sohlberg & Turkstra, 2011)
- MPT-Matching Person and Technology (Scherer, Sax et al., 2005)
- TechMatch (www.coglink.com:8080/TechMatch/)
Compensation Techniques Inventory

- Primary Areas of Need
- Past Strategy Use
- Current Strategy Use
- Designed to Facilitate Goal Setting

Matching Person & Technology Assessment (MPT)

- Assistive Technology Outcomes Measure (ATOM)
  - Matching Person to Technology - consider:
    - Person
    - Environment
    - Technology
  - Outcomes - measure:
    - Clinical use, comfort, & satisfaction
    - Functional impact / QOL
    - Cost & time

(Scherer, 2002, 2004)

TechMatch

www.coglink.com:8080/TechMatch/

Needs Assessment: Person

- Team-driven assessment of personal factors:
  - Physical needs (gross + fine motor, speech)
  - Sensory needs (vision, hearing)
  - Cognitive needs (insight, attention, memory, executive)
  - Cultural values & expectations
  - Perceptions of technology benefits
  - Pre-injury familiarity with technology
  - Motivation to...
    - Improve in daily tasks
    - Use assistive devices
Assistive Technology for Cognition
McKay M. Sohlberg, PhD

**Needs Assessment: Environment**
- Type of Supports
  - What is already in place?
  - Are natural supports in place?
  - Who is available for technical support?
- What is device needed for?
- Frequency
  - How often is support needed?
  - How often do opportunities to use device occur?
- Physical Environment
  - Distractions
  - Lighting

**Needs Assessment: Device**
- Cognitive Demands:
  - Memory load
  - Number of steps
  - Complexity of decision trees
- Physical Demands:
  - Access (button, stylus, touch screen)
  - Size, complexity, sensitivity
- Sensory/Language Demands:
  - Symbols (text, pictures, both)
  - Size & layout

**Experimental evaluation of ATC Selection (Lemoncello, Sohlberg et al., 2012)**

**METHODS**
- RCT Crossover Design
- 23 adults with TBI
- Prompting through television vs. typical prompting

**FINDINGS**
- Significantly more task completion with TV prompting than typical prompting
- No difference between preferred and non-preferred tasks

Reminder of the difference in performance when using different tools

**Designing an Individualized Plan**

Review Worksheet
4 Step Process Embedded in PIE

1. Become familiar with range of ATC tools (Planning)
2. Conduct individualized needs assessment (Planning)
3. Train use of device (Implementation)
4. Measure effectiveness (Evaluation)

3 Reasons for Failed ATC (Elharrat et al., 2012)

1. Lack of instruction
2. Lack of effective instruction
3. Lack of instruction targeting generalization and/or maintenance

Systematic Training Makes a Difference

Components:
- Task analysis (step-by-step instructions; chain together)
- Prevent errors during initial learning (model - cue - consistent feedback)
- Review regularly to reinforce & solidify learning (during session & subsequent sessions)
- Encourage high numbers of correct repetitions to master skill
- Encourage active learner engagement (Brush & Camp, 1998; Evans et al., 2000; Sohlberg et al., 2005; Wilson et al., 2001)

Need to know...

- Important Training Principles during Acquisition phase
- Important Training Principles during Generalization phase
- Important Training Principles during Maintenance phase
Client with cognitive impairment who needs to learn procedures for using tool

### Initial Instructional Objectives (Acquisition Training)
- Systematically teach and chain steps of the task analysis with the procedures for using the tool
- Isolate steps that are difficult and provide mass practice
- Use distributed practice to solidify procedures

### Initial Instructional Objectives (Mastery/Generalization Training)
- Focus on fluent, efficient use of tool
- Practice alternate procedures especially if there are steps where there is hesitation (Can time completion of task)
- Help client make list of when and how tool would be used
- Develop list of sample items that will be programmed or entered in
- Make list of supplemental steps that may facilitate use of the tool (e.g., setting alarm)

---

### Initial Assessment

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Task Analysis</th>
<th>Accuracy (+/−)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Notice watch beep</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Read text on watch</td>
<td>−</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Walk to wall agenda</td>
<td>−</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Look at watch and find corresponding agenda item</td>
<td>−</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Find material for agenda item (form, exercise illustration, or call button)</td>
<td>−</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Initiate action</td>
<td>−</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Press red button on watch</td>
<td>−</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Baseline:** __2__/___

---

### Dynamic Assessment to Establish Cue Hierarchy

<table>
<thead>
<tr>
<th>Task Analysis</th>
<th>Type of Prompt/Cue</th>
<th>Performance</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Watch beeped +</td>
<td>Direct verbal cue</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>2. Watch beeped +</td>
<td>Pointing to watch</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>3. Watch beeped +</td>
<td>Question cue “what next?”</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>4. “read the text and follow instructions” +</td>
<td>“walk to agenda”</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>5. “read the text, now what?” -</td>
<td>(When pointed to agenda, she walked to it)</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Cue Hierarchy:**
- Level I: Direct verbal cue
- Level II: Pointing
- Level III: Question cue
- Level IV: __Minimize learner's errors Move from massed to a distributed practice schedule Provide sufficient practice Chain steps together__

---

### Principles of Acquisition Training

- Minimize learner's errors
- Move from massed to a distributed practice schedule
- Provide sufficient practice
- Chain steps together

---

**Assistive Technology for Cognition**

**McKay M. Sohlberg, PhD**
Session Probe at the beginning

Client: Tyrone
Date: 11/2

Step | Number of Massed Practice Trials & Level of Cueing | Duration & Number of Distributed Practice Trials | Comments
--- | --- | --- | ---
2. | 45 minutes | | 
3. | 1 min + 5 min + 10 min | | 
4. | 1 min + 5 min | | 
5. | | | 
6. | | | 

Summary

Helped to isolate and provide mass practice.

Client charted progress data on progress monitoring form which appeared reinforcing.

Recommendations for next session:

Initial Assessment (one time only)

Session Probe at beginning of session

Training (session data)

- Minimizing learner errors during practice (clinician demonstration; fading of prompts)
- High repetition with intensive massed practice to establish the skill
- Chaining newly learned steps with previously learned steps
- Distributing or spacing practice as the steps are learned
- Incorporating meta-cognitive strategies to increase learner engagement (e.g., anticipation of difficult steps; charting own data; reinforcing context)
**Review Sample Script on Your Own**
- Check
- Model
- Practice
- Self Reflection
- What to do when client makes a mistake

**Mastery/Generalization**
- Lengthen distributed practice
- Quickly correct errors (isolate difficult steps and chain back in sequence)
- Introduce natural supports
- Vary stimuli/prompts
- Facilitate natural reinforcement (opportunities & reinforcers)

**Maintenance: Best Insurance**
- Selecting a device that meets the needs of the client
- Effectively training the use of the device
- Setting up ongoing reinforcement and support for device implementation
- Plan for ongoing support (spread out therapy sessions? schedule follow up visit to promote generalization and make any needed adjustments to the usage plan?)

**Efficacy Study**
**METHODS**
- Compared systematic instruction with conventional instruction (trial & error) for teaching use of PDA
- RCT; double blind; pre-post-test
- N=29; ABI
- Moderate-severe cognitive impairments

**FINDINGS**
- No significant difference in post testing on measures of accuracy & fluency
- Systematic instruction resulted in generalization
- Systematic instruction more powerful at 30 day follow up

Rehabilitation Does Not Occur in a Vacuum...

- Contextual variables affect the rehabilitation process
- Key personal characteristics
  - Self efficacy
  - Locus of control
  - Beliefs about therapy

4 Step Process

1. Become familiar with range of ATC tools (Planning)
2. Conduct individualized needs assessment (Planning)
3. Train use of device (Implementation)
4. Measure effectiveness (Evaluation)

Measuring Therapy Outcomes

- Can the client use the device?
  - Session probe data (progress monitoring)
- What is the impact of using the device?
  - Establish from beginning-caregiver burden, logs/diaries
- Program for long-term maintenance
  - Support, motivation, cost/benefits...

MultiLevel Data

- Progress Monitoring (Probe at beginning)
- Session Data (practice trials)
- Generalization/Maintenance Data
Sample Evaluation Indices
Target: Daily logging in voice organizer

<table>
<thead>
<tr>
<th>Session Data</th>
<th>Generaliz Probe</th>
<th>Maint Probe</th>
<th>Impact Data</th>
<th>Efficacy Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of practice trials indep listen &amp; record entry</td>
<td># of new entries during week</td>
<td># new entries for 2 week period after therapy completed</td>
<td>Pre/Post Scores on Memory Forgetting Log completed by spouse</td>
</tr>
</tbody>
</table>

How Did We Do?
1. Become familiar with range of ATC tools
2. Conduct individualized needs assessment
   - Compensation Questionnaire, Cognitive Testing; observed patterns of disorientation
3. Train use of device
   - Defined components for ideal entry; practiced; prompted during the week; evaluated entries; showed him data
4. Measure effectiveness

What is a tool YOU are committed to learning about?
1. Get to know some devices...
   - Start slowly
   - Shop around & ask around
   - Ask about disability services & supports
   - Know device features
   - Be able to customize for each client
2. How will you teach your client to use the device?
3. How will you measure treatment effectiveness?

ATC Resources
- Michelle Ranae Wild Making Cognitive Connections (http://makingcognitiveconnections.com)
- Institute for Cognitive Prosthetics (www.brain-rehab.com)
- Rehab Engineering Research Ctr for Advancement of Cognitive Technologies (RERC-ACT) (http://rerc-act.org)
## Instructional Planning Worksheet: External Aid

<table>
<thead>
<tr>
<th>Primary Function</th>
<th>Requisite Skills</th>
<th>Impact/Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Short term</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long term</td>
</tr>
</tbody>
</table>

**Long-term Goal**  

Initial Acquisition  
Objectives:  
(specify target, approach, objective performance, independence, criterion, context/conditions)

**WHAT** will I teach the client to do? (Use of Tool)  
Task Analysis (List Steps)

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Plan is customized to client  
- Context/antecedent specified  
- Progress measurement specified in LTG and/or Acquisition Goal

Plan to enhance client motivation/engagement:

Plan to involve environmental supports:

**WHEN and HOW** will I teach the instructional target?  
Therapy Frequency: _______/ week  
Session Duration: _______ min  
Therapy Duration: _______ Sessions, Weeks, Months

- There is opportunity for sufficient practice within sessions  
- There is opportunity for sufficient practice across sessions

List materials needed to practice using tool & plan for varying stimuli with sufficient examples:

What is the plan for progressing from modeling to distributed practice?  

**WHERE** will the tool ultimately be used?

**WHO** will support training and tool use?

Describe context:

Describe plan to train support people:

---

Figure 7.2: Instructional Planning Worksheet for Training External Aid
Sample # 1—Basic Skills
Training Script

Training Focus—Calendar: Checking Today’s Schedule

Prepare ahead of time—See Session Guide above.

Steps:
1. Turn on device.
2. Locate/press calendar icon.
3. Press Today’s date
4. Read schedule

CHECK

Trainer: [Before “Check” trainer programs device with event information for the target dates, if necessary, & turns device off.]

Trainer: Last session you learned how to turn on your device and locate the calendar icon on your home page. Let’s review. Where is the calendar icon?

Client: Turns on device, points to calendar icon

Trainer: Perfect! You’re ready to move on to checking your daily schedule.

MODEL

Trainer: I’ll show you. [Device is already turned on; current month is June] I need to check my schedule today. Watch.
1. First, turn on the device [Presses “on” button]
2. Next, presses calendar icon [Presses calendar icon]
3. Then press today’s date [Presses date]
4. Read the schedule. Appt with Dr. Jones at 10:00 and exercise class at 2:30 pm.

[REPEAT with different types of activities-times on today’s schedule.]

PRACTICE

Trainer: What does your schedule look like for today? Client presses turns on device
Client presses calendar icon
Client presses today’s date.
Client reads today’s schedule.

Many times clients can perform a skill in one condition (sitting down) but have trouble doing the same skill in other conditions (standing up or in the midst of noise). Practice like this will help the client learn and retain skills.
Trainee: Excellent! Practice this skill in different ways.
Practice Variations (see end of script for more ideas)
  - Client does the task standing up vs. sitting down
  - Trainer places the device upside down or turned around on table.
  - Client removes device from his/her carrying system first (in pocket, purse, holder)
  - Trainer calls client from another room or using cell phone (in order to observe)
  - Client does the task with distractions (music on in the background)

[REPEAT practice with several other examples using the variations below until client is solid/confident with skill can do this skill independently/can check for events independently.]

Trainee: Let’s take a short break and then we’ll do it again.
[Trainee and client have a short chat on a favorite topic or similar activity or review previously mastered skills on device. After about 3-5 minutes…]

Trainee: Let’s review. What’s your schedule for today?
Client correctly performs all 4 of the above steps.

[REPEAT with other examples and/or review previously mastered skills]

---

**SELF-REFLECTION**

Trainee: Today you’ve learned how to check your daily schedule. Let’s get some practice outside. We’ll look up some movie times in the paper, then you can check to see if you’re available to go. How do you think it will go?

Client: States *it will go well or perhaps isn’t sure.*

Trainee: [Both go out in the lobby and pick up the paper to check movie times.]

Trainee: What movie would you prefer? Looks like there’s a 5:00 matinee.

Client: Performs all 4 of the above steps and confirms he’s available to go.

Trainee: [After leaving lobby and returning to the office.] How do you think it went using your device to check your daily schedule?

Client: States “It went well!”

Trainee: Yes, it did! Let’s take a look at your Progress Tracking Sheet. Overall, where would you say you are with progress with learning the Calendar program on the scale of 1-5?

Client: States “I’d say I’m at about a 2.” and circles this 31

Taking short breaks between practice trials helps the brain remember better.

Practice in the “real world” with other people is critical for learning to use the skills in daily life.

The client’s self-reflection builds motivation to keep working hard.
Trainer: What would it take to move from a 2 to a 3?
Client: States “Remembering to do this when I’m at home or in the community and distracted.”
Trainer: We’ll get there soon. Next session we’ll review the skills you learned today then go from there. Nice work today!

CORRECTIONS-What if the client makes a mistake?

Trainer: [Quickly but kindly states] “Not quite. I’ll show you again.”
Trainer: [Isolates the difficult step(s), then MODELS this.]
Client: Practices the difficult step(s) until easy to do.
Trainer: [Integrates the step back into the sequence; MODELS the sequence.]
Client: Practices the sequence of steps until easy to do.

END of SCRIPT
Who: We are recruiting trainers who work with adults with acquired brain injury learning to use assistive technology for cognition (ATC). ATC includes cell phones, smart phones, pagers and tablets used to compensate for memory and organizational impairments post-injury.

Trainers include speech-language pathologists, occupational therapists, job coaches, residential care staff, and rehabilitation assistants.

What: We would like trainers to use the TATE ATC Toolkit with a client and give us feedback.

When: March, 2012-August, 2012

Why: We know that systematic training of ATC is important and we want the TATE Toolkit to be as trainer friendly as possible.

Benefits: Trainers will learn about evidence-based practices for assessing and training ATC and will also receive a small stipend for their participation.

For more information, please contact:
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Center on Brain Injury Research and Training, Western Oregon University
harwickr@wou.edu
541-346-0574

Laurie Ehlhardt Powell, PhD, CCC-SLP
Project Director
Center on Brain Injury Research and Training, Western Oregon University
ehlhardl@wou.edu
541-346-0572
ATC Training Toolkit: Overview

ATC—What is it? Assistive technology for cognition ((ATC) refers to systems and devices to aid individuals with cognitive impairments. These include low-tech external memory aids (e.g., calendars, clocks) as well as electronic memory aids that allow for repeated entries and provide external cues to prompt task performance. Both customized and off the shelf ATC systems can be effective aids. Commonly used off the shelf devices include PDAs (e.g., iPod Touch), iPad, Windows Mobile PCs, smart phones (e.g., iPhone, Blackberry, Androids); and standard flip phones (e.g., Nokia).

With technology always changing, why bother with this toolkit? While the names and features of devices such as those listed above change quickly—two things remain constant: (1) the need for a systematic assessment process matching the individual to the most appropriate technology given his/her abilities and goals; and (2) the need for systematic training to learn the technology. The goal of this manual is to address these constants.

Trainers? Who are they? Trainers (instructors, coaches) include caregivers, family members, job coaches, speech pathologists, occupational therapists, and volunteers—anyone in a position to help someone with a brain injury learn to use ATC.

This ATC Training Toolkit is designed for trainers of all experience levels and backgrounds to make it as easy as possible to help individuals with brain injuries to:

- develop meaningful goals that can be supported by the use of ATC
- select/match an appropriate device
- train ATC skills and routines to insure they “stick” and are useful in supporting the client in achieving his/her goals

This Toolkit was informed by the latest research on how to assess, select and train ATC for individuals with cognitive impairments due to acquired brain injury. We recommend that the trainers start at the beginning of the manual and work to the end with their client over several sessions. However, each form is designed to stand alone as a helpful tool to trainers and clients. The development of this toolkit was funded by the National Institute on Disability and Rehabilitation Research (NIDRR) Project # H133G090227
### Compensation Techniques Inventory

<table>
<thead>
<tr>
<th>Client Name:</th>
<th>Date:</th>
</tr>
</thead>
</table>

#### I. Independence Screen

<table>
<thead>
<tr>
<th>Life Tasks</th>
<th>How much help needed? (see rating scale)</th>
<th>Comments (check any that are important goal areas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making appointments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social arrangements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meal planning &amp; prep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleaning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laundry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal care</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1=unable; 2=lots of help; 3=occasional help; 4-reminders only; 5=independent

#### II. Functional Cognition Screen

<table>
<thead>
<tr>
<th>Cognitive Issue</th>
<th>Frequency of Problem (see rating scale)</th>
<th>Comments (check any that really bother you)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don't know the date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miss appointments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lose keys</td>
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<tr>
<td>Double schedule</td>
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<tr>
<td>Forget to complete tasks at home or work</td>
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<tr>
<td>Don't know what appointments are coming up next week</td>
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<tr>
<td>Have trouble organizing days and tasks that need to be completed</td>
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<tr>
<td>Start but don’t finish tasks</td>
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<tr>
<td>Lose track of time</td>
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<tr>
<td>Cannot stay focused and return to task when interrupted</td>
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<tr>
<td>Forget what I did yesterday</td>
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</table>

1=happens constantly; 2=happens frequently; 3=happens occasionally; 4=very rarely happens; 5=not an issue
# Past and Current Compensation Use

<table>
<thead>
<tr>
<th>Type of Aide</th>
<th>Freq of Use PRIOR</th>
<th>How Useful PRIOR</th>
<th>Freq of Use NOW</th>
<th>How Useful NOW</th>
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<tbody>
<tr>
<td><strong>EXTERNAL SCHEDULING AIDS</strong></td>
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<tr>
<td>Wall Calendar</td>
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<tr>
<td>“Enter scheduled events”</td>
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<tr>
<td>“Enter “things to do””</td>
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<tr>
<td>“Refer to entries”</td>
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<tr>
<td>“Check off entries”</td>
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<tr>
<td>“Reschedule as needed”</td>
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<tr>
<td>Planner</td>
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<td>“Set alarm”</td>
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<td>“Reschedule as needed”</td>
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<td>Electronic Scheduler</td>
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<td>“Reschedule as needed”</td>
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<tr>
<td><strong>OTHER EXTERNAL AIDS</strong></td>
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<tr>
<td>Voice recorder</td>
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<td>Car memo pad</td>
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<tr>
<td>Digital stop watch</td>
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<tr>
<td>Wrist watch</td>
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<tr>
<td>Bulletin board with notes</td>
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<tr>
<td>Home filing system</td>
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<tr>
<td>Post it notes</td>
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<tr>
<td>Reminders on fridge</td>
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<tr>
<td>Pill reminder System</td>
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<td>Voice mail</td>
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<tr>
<td>Calculator</td>
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<tr>
<td>Camera</td>
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<tr>
<td>Others:</td>
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<tr>
<td>STRATEGIES</td>
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<td>------------------------------------------------</td>
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<tr>
<td>Use cue card of compensation techniques</td>
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<tr>
<td>Stop and think</td>
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<tr>
<td>Slow down to work carefully</td>
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<tr>
<td>Recheck work for accuracy</td>
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<tr>
<td>Ask direct questions if needed</td>
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<tr>
<td>Follow written directions</td>
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<tr>
<td>Ask for help if unsure</td>
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<tr>
<td>Self-Talk (talk through a plan)</td>
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<tr>
<td>Repetition (repeat to self or review information repeatedly)</td>
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<tr>
<td>Write down and repeat information to self</td>
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<tr>
<td>Others:</td>
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<table>
<thead>
<tr>
<th>ENVIRONMENTAL ADAPTATIONS</th>
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<tbody>
<tr>
<td>• Label house or work drawers/cupboards</td>
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<tr>
<td>• Organized filing system</td>
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<td>• Keep space neat</td>
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<td>• Sit in a quiet place to work</td>
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<td>• Remove irrelevant or distracting items</td>
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<tr>
<td>Others:</td>
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Frequency of Use Scale: 0=never; 1=1X/week; 2=a few times/week; 3=most days
Helpfulness Scale: 0=N/A or not useful; 1=rarely helps; 2=pretty helpful; 3=very helpful