



Accommodations and Compensatory Strategies For Cognitive Deficits Resulting from a Brain Injury

The following workbook is a compilation of strategies, knowledge and information collected by the Massachusetts Rehabilitation Commission over the last decade by attending certified trainings, conducting research, consulting with experts and our departmental experience.

This handout is organized by cognitive deficit, followed by how the deficit may appear when interacting with an individual, and compensatory strategies/accommodations that may be helpful while working together. An individual may have one or more of these impairments.

Note that some symptoms of brain injury can be masked by other medical conditions or exacerbated by co-morbidities such as age, poor health, substance use, and mental illnesses. Customize your approach in partnership with the individual. Pick strategies that are achievable for the individual. Build in support for follow through of selected strategies outside your time together. Identify people or means to reinforce compensatory strategies. Make sure to check in with the individual and assess if strategies are working, otherwise readjust.

For those with cognitive deficits:

- Find out whether the individual is able to comprehend both written and spoken language (if someone is not able to speak (or speak easily), inquire as to alternative methods of expression (e.g., writing or gestures))
- Ask how well, or if the person is able to read and write
- Ask the individual “what helps you with _____?” (i.e., cognitive deficit or ADL)
- Apply contextual understanding of the person by asking (e.g. understand what has and hasn’t worked in the past, and how can you help)

Type of Impairment	Appearance (What it may look like)	Accommodations and Compensatory Strategies
Attention and Concentration	<ul style="list-style-type: none"> • Fidgeting, squirming in seat • Unable to sit still • Low frustration tolerance • Talks excessively • Unable to stay on topic • Impulsivity (disinhibition) 	<ul style="list-style-type: none"> • Grab the individuals’ attention prior to beginning a task <ul style="list-style-type: none"> ○ Check to make sure there is good eye contact ○ Don’t give instruction while individual is busy or preoccupied with another task or activity; stop the individual from what he or she is doing to make sure you have their attention ○ Begin an activity with something engaging and/or involves participation ○ Focus on one task at a time • During tasks, reduce distractions <ul style="list-style-type: none"> ○ Have individual work in environment that is quiet and that has few interruptions (such as persons walking through work area, etc.) • Keep instructions brief, simple, and to the point <ul style="list-style-type: none"> ○ Shorten tasks and sentences ○ Use cue words to alert the individual to pay attention (e.g., “look”, “listen”) • Establish non-verbal cueing system (eye contact, touch)

<p>Attention and Concentration</p>		<p>Additional Considerations:</p> <ul style="list-style-type: none"> ○ Have client participate in discussion and development of plan ○ Use frequent short breaks or rest periods ○ Ask individual to repeat or summarize information back in own words to insure comprehension ○ Remind the individual to focus, and learn to monitor focus ○ Ear plugs and sunglasses are helpful for some individuals to reduce excess sensory stimuli ○ Develop routines and stick with them ○ Watch for signs of fatigue or overload ○ Keep regular sleep schedule ○ Avoid alcohol and other drugs
<p>Slow Processing</p>	<ul style="list-style-type: none"> ● Slow to respond ● Appears to not be paying attention ● Appears confused ● Does not follow instructions 	<ul style="list-style-type: none"> ● Simplify information <ul style="list-style-type: none"> ○ You may choose to say one piece of information at a time ● Speak slowly <ul style="list-style-type: none"> ○ To ensure comprehension, ask the individual to summarize and rephrase back to you what they heard ● Provide additional time for individual to review information <ul style="list-style-type: none"> ○ Include additional time as needed for the person to process and respond ○ Count silently to yourself after asking a question to allow for extra time ● Utilize checklists and a written schedule of routines ● Provide cues for organizing (“first do this, then do this”) ● Offer assistance with completing forms ● Additional considerations: <ul style="list-style-type: none"> ○ Slower cognitive processes can be accompanied by slower physical or motoric activity; the individual may need a longer period of time to complete tasks. ○ Watch for individual being overwhelmed by the information being shared ○ Be patient.
<p>Memory</p>		<ul style="list-style-type: none"> ● Repeat information and summarize

Memory

- Unable to remember more than one thing at a time
- Unable to remember details
- Appears disorganized
- Appears to have an “attitude problem”
- Appears manipulative

- Keep information tangible and relevant
- Provide a written summary, cue them to record important information (e.g., dates and action items)
- Considering writing down step-by-step directions (including a written schedule of a daily routine)
- Teach individual to use a remind system (e.g., a planner) and review new information frequently
 - Use an **information logbook** (for communication of persons working different schedules)
 - Encourage individual to use self-reminders, such as post-it notes or notebooks
- Stick to routine as much as possible
- Practice and reinforce strategies until they become automatic
- Teach “**chunking**” as a way to aid in retention (individual pieces of information are broken down and then meaningfully grouped together)
- If reading/writing is difficult:
 - Use an audio recorder
- Additional Considerations:
 - utilizing smart phone features such as calendar, alarms, notes
 - Label cabinets, drawers, and closets (using words or pictures)
 - Break tasks into smaller pieces, add additional steps after the initial tasks have been mastered, and link new learning to previous knowledge
 - Shorter, more frequent work shifts are preferable to longer, less frequent shifts
 - Keep regular sleep schedule
 - Avoid alcohol and other drugs

Things to do at home:

- Use “word association” - Names, faces, grocery list
- Repeat things out loud - Say it multiple times
- Agree on the same place for regularly used items (keys, calculator, etc.) - Ask everyone in home to return things to the chosen spot.
- Use sound or sight cues - Wristwatch alarms, egg/stove timers, post-it notes, bulletin boards or stickers
- Set up: 1) filing and bill payment systems, 2) a message center, 3) organize and label cupboard, 4) use storage

<p>Memory</p>		<p>containers/boxes</p> <ul style="list-style-type: none"> • Make a meal plan with favorite dishes and the groceries needed, make a monthly schedule of meals, grocery shop using a check list • Practice safe habits: 1) use appliances with automatic shut-off, 2) stay in the kitchen when cooking, 3) use a timer or set and alarm when cooking, 4) avoid cooking when extremely tired or distracted • Focus on diet (promote intake of anti-inflammatory / antioxidant foods)
<p>Executive Function</p>	<p>Impaired Sensory Motor Skills:</p> <ul style="list-style-type: none"> • Appear overwhelmed • Emotional melt down • Irritable, short fused • May appear oppositional • Shuts down <p>Reasoning:</p> <ul style="list-style-type: none"> • Concrete thinkers • Cannot think of alternative solutions • Difficulties answering open-ended questions • Difficulties learning from experience, cause and effect <p>Difficulty with initiating action and/or following</p>	<p>Impaired Sensory Motor Skills:</p> <ul style="list-style-type: none"> • Keep environment quiet <ul style="list-style-type: none"> ○ Keep noise and lights to a minimum • Keep sessions short to minimize onset of headaches and fatigue • Schedule rest periods and breaks from planned activities <p>Reasoning:</p> <ul style="list-style-type: none"> • Point out possible consequences of decisions, short and long-term • Ask, “Is this a good idea? What might happen? Is this consistent with your goals?” • Teach step by step approach to problem solving using reasoning • Use graphic organizers or flow charts to help with decision-making • Avoid open-ended questions • Offer two options instead • Speak concretely • Be clear on expectations and consequences of risk-taking behaviors • Be supportive and continually identify strengths <p>Difficulty with initiating action and/or following through with tasks:</p>

Executive Function

through with tasks:

- Appears lazy or spacey
- Appears unmotivated
- Follower
- Needs constant cuing
- Lags in independent living

Difficulty with mental flexibility (including abstract thought, generalizing, considering others' perspectives):

- Difficulties taking feedback

- Encourage the client to focus on one step at a time
- Ask client to repeat instructions to ensure comprehension
- Use underlining and highlighting for significant parts of directions. Checklists and calendars (as previously mentioned) can help organize
- Use color-coding
- Break complex directions into small steps and assign action items
- Help the person get started
- Repeat instructions or intervention multiple times in different ways
- Help the person learn to refer to checklists when "stuck" in order to move onto the next step. Overtime this may become familiar routine
- Timers or alarms can be used to alert a person to begin a task, as well as set time limits (kitchen or stove timers and smart phone)
- Additional considerations:
 - Offer rewards.
 - Write down expectations.
 - Check in with individual to problem solve any issues that may arise in course of task completion.
 - Allow individual to work in established routine, disruptions to routine can lead to confusion.
 - Developing a cueing system that may involve family and friends.
 - A lack of initiation is not equal to a lack of motivation.
 - Keep regular sleep schedule.
 - Avoid alcohol and other drugs.
 - Ask about mood and clarify poor initiation versus depression

Difficulty with mental flexibility (including abstract thought, generalizing, considering others' perspectives):

- Develop and practice routines, and plan ahead for changes in routines
- Prepare for transitions
- Help develop alternative plans

Executive Function

- Perseverate
- Resistant
- Can appear stubborn or argumentative
- May appear to lack empathy

- Assist in prioritizing goals, breaking them down into small tangible tasks
- Provide respectful feedback to obvious problem areas
- Practice strategies in multiple environments with different staff/support persons
- Try to plan for obstacles by creating a back-up plan
- Provide direction in clear, direct and concise manner
- Verbalize impact of actions on others

Planning and Organization:

- Encourage the person to develop and maintain day-to-day routines
- Identify a physical space to keep important items such as keys, glasses, etc.
- Encourage the use of an organizing system such as “to do” lists, planners/calendars, smart phone apps (e.g. those developed to meet the needs of those with cognitive deficits)
- Prompt the person to write down key information
- Teach: “Think, Plan, Do!”
- Remind individual of activity:
 - Purpose
 - Expectations along the way
 - Final outcome
 - Goal
- Provide directions and/or instructions several times, and ask the person to repeat the information back to you

Self-awareness and insight:

- **Plan. Practice. Promote.**
- Plan ahead for situations that may bring about poor judgement and talk about potential obstacles
- Practice positive interactions ahead of time
- Cue for compensatory strategies
- Promote positive behavior with encouragement/praise/reward
- Stop and address undesirable behaviors immediately
- Provide alternative comments or choices that could have been made

<p style="text-align: center;">Executive Function</p>		<ul style="list-style-type: none"> • Be patient, know this is not happening on purpose. • Gradually expose the person to reality testing situations • Point out possible negative consequences of a person's unrealistic plan • Place external limitations when necessary (e.g. remove the car) <p>Problem solving and judgement:</p> <ul style="list-style-type: none"> • Simple, straightforward, concrete tasks are best. • Be patient. Point out issues in a kind, easy manner • Try to plan for problems that are sure to arise; write a simple sheet of everyday problem occurrences and their solutions down for the individual. Cue the individual to write information down. • Promote positive behavior • Stop and address undesired behavior immediately. • Always make sure individual has an identified, clear chain of command. The individual should always be aware of his or her supervisor, particularly when multiple supervisors oversee a particular group <p>Difficulty recognizing own limitations:</p> <ul style="list-style-type: none"> • Give honest, non-confrontational feedback about performance, with suggestions on how to remedy problem • Videotaping is sometimes helpful. • Be sure to recognize the positive. <p>Spatial disorientation:</p> <ul style="list-style-type: none"> • Signs or Directions in Hallways • Travel Training
<p style="text-align: center;">Emotional and Behavioral</p>	<ul style="list-style-type: none"> • Over/under reaction • Difficulties with anger management • Melt down • Can appear emotionally "flat" • Difficulties 	<ul style="list-style-type: none"> • Avoid focusing only on individuals' deficits • Promote self-awareness by stopping and addressing undesired behavior immediately • Don't interpret lack of emotion as a sign of lack of interest • Practices positive social interactions. Provide alternative comments or choices that could have been made • Suggest breaks if the individual becomes irritable or agitated

<p style="text-align: center;">Emotional and Behavioral</p>	<p>making friends</p> <ul style="list-style-type: none"> • Can appear argumentative 	<ul style="list-style-type: none"> • Speak in a quiet calm manner if individual is irritable or agitated and try to avoid escalating <p>Depression:</p> <ul style="list-style-type: none"> • Positive response with therapy, medications, and exercise • Clarify mood issues (sadness) versus poor initiation and/or “flat affect” which may be the result of brain injury <p>Anxiety:</p> <ul style="list-style-type: none"> • Start meeting with a review of the last, starting with the positives • Minimize anxiety with reassurance, education, and structure • Take breaks • Simplify Tasks <p>Emotional Lability:</p> <ul style="list-style-type: none"> • Utilize stress management and relaxation techniques • Incorporate mindfulness exercises to aid clients in accurately identified internal emotional states: progressive relaxation, body scans, deep breathing exercises <p>Anger:</p> <ul style="list-style-type: none"> • Recognize that outbursts are common and help others not to take it personally • Learn to detect early warning signals: • Physical: muscle tension, sweating • Emotional: irritated, frustrated • Cognitive: racing thoughts, jumbled thoughts • Have a signal and the individual should learn to take a “time out” or a “break” <p>Psychosis:</p> <ul style="list-style-type: none"> • Be clear with what you are working on together • Stress that everyone has structures and rules to follow • Always set the stage, maybe take a few deep breathes <p>Inappropriate Behavior, Impulsivity, Disinhibition, Lack of Social Judgment:</p>
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<p>Emotional and Behavioral</p>		<ul style="list-style-type: none"> • Teach “stop, think, act”, encourage a person to slow down and think about the consequences of a behavior/activity before deciding to act • Respond to the inappropriate behavior with feedback <ul style="list-style-type: none"> ○ Be clear when articulating expectations, limits and behavior consequences ○ Give honest, non-confrontational feedback about performance, with suggestions on how to remedy problem. ○ Verbalize the impact of actions on others. ○ Be sure to recognize the positive. ○ Hold individuals accountable for their own actions, natural consequences are a valuable teaching tool. ○ Withholding feedback helps no one. Constructive feedback raises awareness. • Additional considerations: <ul style="list-style-type: none"> ○ Use Arm’s Length Rule. ○ Remove objects from environment that may be harmful
<p>Communication</p>		<p>Communication (Interpersonal):</p> <ul style="list-style-type: none"> • Determine if written word improves communication • Pragmatics: are the problems communicating related to initiation, turn taking, making a point, trouble keeping up with the conversation, trouble sticking to the topic – set topic boundaries <p>Communication Ideas:</p> <ul style="list-style-type: none"> • Ask people to get your attention before starting to talk to you • You need time to shift your attention and focus on them • Ask people to be brief, simple and to the point • Encourage people to take notice of the speed they talk and how much they say • Repeat back information to make sure you understood it • Keep background noise as low as possible- Turn off music/TV • Avoid large groups of people with a lot of talking - Stand or sit in a corner so that noise is not all around

		<p>you</p> <ul style="list-style-type: none"> • Reading a letter or note gives you more time to think about it - Ask Family and friends to write things down • Decide on what you have to remember and focus only on that - Do not try to remember everything
Mental Fatigue		<p>Mental Fatigue:</p> <ul style="list-style-type: none"> • Frequent short breaks or rest periods. • Help individual determine best time of day for work, some individuals tire in early afternoon, others have more difficulties in the morning. • Present information in small segments, watch for signs of overload. • Start with shorter shifts, endurance often builds in time.
Language	<p>Social Pragmatics:</p> <ul style="list-style-type: none"> • Do not interpret body language • Inappropriate eye contact • Personal Bubble • Say too little or too much • Little awareness of inappropriate behavior <p>Receptive:</p> <ul style="list-style-type: none"> • Say “huh” frequently • Confused • Struggle with abstract language/sarcasm • May withdraw 	<p>Social Pragmatics:</p> <ul style="list-style-type: none"> • Provide direct, structured and concrete feedback • Do not rely on body language to convey a message • Role play • Videotape interactions <p>Receptive:</p> <ul style="list-style-type: none"> • Be direct • Avoid abstract humor, sarcasm, metaphors, colloquialisms, etc. • Allow wait time for person to process what has been said • Provide instructions/directions slowly and one at a time • Ask if it would be helpful to repeat or rephrase your message • Let the individual know that you value their input, thoughts, and feelings • Consider written instructions if reading is easier for individual

<p>Language</p>	<p>Expressive:</p> <ul style="list-style-type: none"> • Poor grammar or immature speech • Difficult to follow in conversation • Difficulty staying on topic • Difficulties navigating social rules • May withdraw 	<p>Expressive:</p> <ul style="list-style-type: none"> • Redirect if the individual is off topic • Provide opportunities to practice expression • Role play common real-life conversations • Teach individual to rehearse silently before replying • Be patient and allow person time to respond • Generate written scripts for simple interactions in advance
<p>Accessibility</p>		<p>Accessibility:</p> <ul style="list-style-type: none"> • Take into account the needs of individuals with developmental (e.g. intellectual) disabilities who may have deficits in all over mental capacities. • Ensure appropriate materials for those who are blind or visually impaired (e.g. braille or other alternative formats such as large print or electronic font). • Ensure appropriate materials for those who are deaf or hard of hearing
<p>Other Considerations</p>		<p>General Principles</p> <ul style="list-style-type: none"> • Individualized planning and care • Trauma-informed care – many individuals with disabilities have experienced physical, or sexual abuse, or other trauma • Consider vulnerable populations such as people of color, LGBTQ+, and potentially additional & intersecting sources of stress • Integrated and specialized services • Consider providing pain-coping strategies - many adults with disabilities experience persistent pain



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