**Tutorial: Self-Monitoring and Self-Evaluating**

(See also Tutorials on Self-awareness, Sense of Self, Self-Regulation Routines, Organization)

**WHAT IS SELF-MONITORING?**

Self-monitoring is the process of observing one’s behavior and evaluating it in relation to goals. Self-monitoring can be conscious and deliberate (e.g., a student double checks problems on a math test to ensure accuracy); alternatively it can be subconscious and automatic (e.g., a student subconsciously notices whether or not others are paying attention to him in conversation).

Self-monitoring can be understood as an act of cognition separate from other cognitive and self-regulatory acts. Alternatively – and more accurately – it can be understood within the more general context of self-regulation. Individuals who are successful in life tend to know what they need and want, set goals for themselves, make plans to achieve the goals, act in a goal-directed manner (i.e., initiating relevant behaviors and inhibiting distracting behaviors), pay attention to their success in achieving goals (i.e., self-monitoring), and make adjustments when goals are not achieved. Thus self-monitoring is a critical component of self-regulation or executive functioning and should be understood within this context. *(See SELF REGULATION/Executive Function Routines)*

Self-monitoring tends to develop in steps from (1) minimal understanding of what is easy and what is difficult, to (2) increasing understanding that some activities/functions are easy and some are difficult, to (3) recognition that a mistake has been made after it is made, to (4) anticipating difficult activities and doing something in advance to succeed. Thus self-monitoring is closely tied to self-awareness of strengths and weaknesses. *(See Self-Awareness)* When students are not aware of difficulties in a specific domain of functioning – or actively resist acknowledging such difficulties – they are unlikely to effectively monitor their performance in that domain. When students resist self-monitoring systems or fail to develop habits of self-monitoring, it is often because of either weak awareness of or resistance to acknowledging their difficulties.

**WHY IS SELF-MONITORING IMPORTANT FOR MANY STUDENTS AFTER TBI?**

For many people, the process of setting goals, planning, monitoring/reviewing, and adjusting is often relatively automatic. For many students with disability, including disability associated with TBI, this process is not automatic. It may be more conscious and deliberate because there are more obstacles to overcome and goals to achieve. Or the process may be resisted because of the negative associations with disability. Furthermore, this process of managing goals and self-monitoring may be a relatively specific deficit. Individuals with damage in the frontal regions of the brain, common after TBI, tend to have difficulty understanding their needs, setting realistic goals, making plans to achieve the goals, initiating relevant goal-directed behaviors, inhibiting distracting behaviors, monitoring their performance, evaluating the outcomes in relation to goals, and making strategic adjustments as a result of this monitoring process. Therefore, goal management and self-monitoring are often specific intervention targets in working with students with TBI.

As stated above, it is unlikely that strategies and systems of self-monitoring will be accepted and used in the absence of the students’ awareness of their difficulties. As a result of damage to the frontal lobes, many students with TBI are relatively unaware of their difficulties. Alternatively, they may resist that awareness because it is emotionally painful. In either case, the students will likely resist self-monitoring systems until awareness and resistance are effectively addressed. *(See Self-Awareness)*
WHAT ARE THE MAIN THEMES IN INSTRUCTION AND SUPPORT FOR STUDENTS WHO HAVE DIFFICULTY WITH SELF-MONITORING?

Understanding the Problem: As always, step one in helping students with complex disability is understanding the problem. For example, difficulty self-monitoring could be a direct consequence of the injury, a normal developmental difficulty for young children, a product of normal adolescent bravado, an emotional response to disability after the injury, a control issue, or other behavioral problem. The problem-solving steps on this web site should help staff and family identify the factors associated with the student’s difficulty with self-monitoring.

Developmental Appropriateness: The ability to self-monitor develops gradually over the childhood and adolescent years. Preschoolers might be expected to self-monitor physical activities (e.g., “I didn’t pick up all of my toys; I made it only half way on the balance beam without falling”), but not cognitive, academic, or emotional activities. By the late preschool years, children should be able to monitor some simple self-regulation activities (e.g., “I couldn’t wait for my cookie until after lunch”). In addition to physical goals, elementary-age students can be expected to monitor some cognitive and academic activities with help (e.g., “Write down how many problems you finish before lunch. Be sure to check your work. Keep track of how many pages you read”). Middle school and high school students can be expected to monitor cognitive and academic activities more independently (e.g., “I can pay attention to the whole class in science, but I lose my focus in English after a few minutes; I study more effectively without the radio on; I use an editing cheat sheet when I edit my essays”). Furthermore, they can be expected to anticipate problems on specific occasions and act strategically in light of this anticipation (e.g., “It’s noisy in this room so I’d better go to a quieter room so I can concentrate”).

Older elementary students and middle/high school students can be expected to participate in developing the goals on their Individualized Education Plan (i.e., long-term goals) and in monitoring progress toward these goals. This participation might be highly supported. For example, the student might be presented with a checklist of functioning areas with which to identify (with help if necessary) areas of strength and need. With help, the student may then formulate statements of “current levels of functioning” and update those statements every year or half year. Older and more mature students can engage in this process with systematically increasing independence.

Students who experience their TBI at a younger age often exhibit developmental lags in their self-monitoring abilities as they age (i.e., exhibit self-monitoring skills expected an earlier developmental stage). Students who experience their TBI during adolescence may exhibit arrested growth of self-monitoring abilities after their TBI.

Systematic Transfer of Control from Adult to Student: From the preschool years through late adolescence, there are many steps and stages in the development of self-monitoring and other self-regulatory functions. Corresponding to these many steps should be a systematic transfer of responsibility to the student for self-monitoring and other aspects of self-regulation. It is expecting too much of a preschooler to ask for independent self-monitoring; similarly it is asking too little of an adolescent for adults to continue monitoring their performance for them and modifying their goals. Shift in responsibility should be systematic, based on an observation-based judgment of how much responsibility the student can accept – but always moving to higher levels of independence for the student and lower levels of support from adults. Students with TBI may require more help in self-monitoring, resulting in a slower rate of this shift of responsibility from adult to student.

General Self-Regulation Script/Routine: Goal-Obstacle-Plan-Do-Review

As stated above, self-monitoring is ideally understood within the context of more general self-regulation. What follows is an outline of how people achieve success when tasks are difficult (consciously or subconsciously). Self-monitoring can take place in the discussion of obstacles or during the review stage. One of the goals of education is to plant this template into the heads of the students – particularly those
with disability, because they more frequently face difficult tasks than students with no disability. Ideally this GOPDR script will become a habit for adults in the student’s life, thereby increasing the likelihood that it becomes a habit of thinking for the student. (See Self-Regulation/Executive Function Routines)

**GOAL:** What’s the goal? what are you trying to achieve? what do you want to have happen? what’s it going to look like when you’re done?

**OBSTACLE:** What is standing in the way of you achieving the goal? What is the problem?

**PLAN:** So what’s the plan? what do you need to do? you need help? want to do it as a team? think that plan will work??

**PREDICTION:** So how well do you think you will do? how many can you get done? on a scale of 1 to 10, how well will you do?

**DO:** [Perhaps solving problems along the way or revising the plan]

**REVIEW:** So how’d it work out? what worked? anything that didn’t work? why not? what are you going to try next time? How might you do it better?

Self-Regulatory Scripts: See **Self-Regulation/Executive Function Routines** for a variety of self-regulation scripts/routines that are relevant for individuals with self-monitoring difficulty. Of special relevance is the “hard/easy” script. This can be understood as an elaboration of the Obstacle stage of the GOPDR routine. The “big deal/little deal” script, “ready/not ready” script, and others can also be seen as directly relevant to success in self-monitoring.

**Hard To Do/Easy To Do Script**

**Importance:** This is a critically important concept for people with disability – because it is necessary to know that something is difficult to do if one is going to work hard or be strategic to get it done. People with disability need to work hard and be strategic to get things done. Therefore, it is critical for them to be able to identify what is hard to do versus what is easy to do. Furthermore, even if students possess strategies to enhance their performance, they will not use the strategies unless they anticipate difficult tasks.

**Script:**

1. **Identify/label the issue** (e.g., “This is kind of hard to do, isn’t it?” – or medium hard or pretty easy)
2. **State the reason** (e.g., “It’s hard/easy to do because...”)
3. **Offer a strategy** (e.g., “Maybe you should ask for help? Or .....” Or “It’s easy because you did .....”)
4. **General reassurance** (e.g., “Great; that was kind of hard to do – but you asked for help (or other strategy) and we did it. There’s always something that works, isn’t there?”)

Gradually reduce external support as it becomes possible to do so. Because many students are anxious and acutely aware of some of their difficulties, it is important that most of these interactions highlight what is easy for them – and the “hard to do” scripts remain positive in the sense that the focus is on the strategy and success, not on the inability.

**Participation In Self-Monitoring/Record Keeping Activities: Academics**

As mentioned above, older elementary students and middle/high school students can be expected to participate in developing the goals on their Individualized Education Plan (i.e., long-term goals) and monitoring progress toward these goals. However, to develop a habit of self-monitoring, students should be encouraged to monitor progress on short-term goals and everyday activities.

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Older elementary school students can have taped to their desk top (and covered by plastic) a checklist that includes: Assignment:....; Date Due:....; Started:....; Strategies Used: ....; Finished and Checked:....; Turned In: .... Grade: .... What Worked? .... What Didn't Work? .... and What Will I Do Differently .... Middle and high school students can have similar checklists on paper placed in their school binder. Whether or not there are written checklists of this sort, teachers should ensure that their students are routinely asking themselves these questions, paying attention to their outcomes, and reflecting on what works for them and what does not work. A habit of self-monitoring will be formed only if students routinely monitor their work, initially with teacher encouragement. In the case of large assignments – for example, major projects in high school – teachers should help students break the large project into smaller parts, and monitor their work on each part.

Students’ reflection on what they might do differently to succeed can be facilitated with a checklist of common strategies:

___ : Start working early
___ : Ask for help (from teachers or parents)
___ : Work collaboratively with peers (if allowed)
___ : Break large tasks into small tasks
___ : Have somebody check work along the way
___ : Devote specific times every day at home to homework
___ : Have a special quiet place at home where homework is done
___ : Check math work with a calculator
___ : Use a spell checker and grammar checker for written assignments
___ : Promise self a reward when finished

**Participation in Self-Monitoring/Record Keeping Activities: Social, Emotional, and Behavioral Functioning**

Similar self-monitoring activities can be encouraged in social, emotional, and behavioral domains. To heighten self-understanding, students can be asked to list situations that cause stress or problem behaviors (e.g., performance demands; multiple assignments; conflicts with friends; conflicts at home; specific school or work tasks; poor grades). Students should also list their known reactions to stress (e.g., increased heart rate; perspiration; rapid breathing; trembling hands; feeling of illness, headache, or fatigue; feeling of anxiety, fear, anger, irritability; inability to concentrate or remember; aggressive thoughts or actions; self-critical thoughts or actions; social withdrawal).

Third, students should list useful strategies to use when feeling stress or other negative emotions (e.g., ask for help; talk to family or friends about the problem; create a plan to deal with the problem and act on it; engage in fun, relaxing activities; exercise; reduce demands; view the problem as a challenge to be resolved; try to find something positive or funny about the situation).

With the help of a teacher or counselor, the student can then periodically describe difficult emotions or behaviors that have occurred, their reactions, their behaviors and strategies, the outcome, and alternative
strategies for the future.
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