How To: Teach Students to Change Behaviors Through Self-Monitoring

Student self-monitoring is an effective tool for behavior change. Self-monitoring has two components, measurement and evaluation (Loftin, Gibb, & Skiba, 2005): That is, the student (1) measures and records his or her own behavior (measurement), and then (2) compares that recorded behavior to a pre-determined standard (evaluation). Self-monitoring can take many forms. One student may use a paper form to rate her study skills at the end of each class period, for example, while another student might verbally rate his social behaviors when approached by his teacher at random times across the school day.

Self-monitoring takes advantage of a behavioral principle: the simple acts of measuring one's target behavior and comparing it to an external standard or goal can result in lasting improvements to that behavior. Self-monitoring is sometimes described as having 'reactive' effects (Kazdin, 1989), because students who measure and pay close attention to selected behaviors often react to this monitoring information by changing those target behaviors in the desired direction.

In classroom settings, self-monitoring offers several advantages. Self-monitoring requires that the student be an active participant in the intervention, with responsibility for measuring and evaluating his or her behaviors. Also, in order to accurately self-evaluate behaviors, the student must first learn the teacher's behavioral expectations. That ability of a child or youth to understand and internalize the behavioral expectations of others is a milestone in the development of social skills. Finally, student self-monitoring data is typically economical to collect, even in a busy classroom, and can often be used to document the success of a behavioral intervention.

Before considering self-monitoring, the teacher should ensure that the student has the skills necessary to carry it out successfully (Menzies, Lane, & Lee, 2009). Here are questions to assess the student's readiness:

- 1. Can the student control those problem behaviors and/or perform expected behaviors that are the focus of the self-monitoring program?
- 2. Does the behavior to be monitored occur with sufficient frequency to be easily tracked?
- 3. Can the target behavior be reliably observed and recorded?

If the answer to all of these questions is 'yes', then the student is a good candidate for a self-monitoring intervention.

There are many possible variations to student self-monitoring programs. In order to be most effective, however, self-monitoring programs will usually include the following 9 steps:

1. Define Behavior Target(s) to Self-Monitor

The teacher and student select and carefully define one or more behaviors that the student will monitor.

Targets for self-monitoring can include behaviors to *increase* (Webber et al., 1993), such as:

- Focusing on the task or assignment (on-task).
- Making positive statements to peers.
- Completing work.
- Complying with teacher requests.
- Reading pages of text read during study periods.
- Completing math computation problems.

Self-monitoring can also focus on behaviors to *decrease* (Dunlap, Clarke, Jackson, Ramos, & Brinson, 1995), such as:

- Calling out.
- Leaving one's seat.
- Requesting teacher assistance.

The teacher should meet privately with the student to discuss the behavior(s to be monitored. For each goal behavior, the teacher and student write a clear, specific behavioral definition that provides observable 'look-fors' to indicate when the behavior is displayed. For example, 'on-task' can be made observable by defining it as "eyes on the teacher or desk-work".

2. Choose a Method for Recording Self-Monitoring Data

Student self-monitoring does not necessarily require that monitoring data be written down. For example, a student who regularly consults a self-correction checklist before turning in math assignments or keeps a mental count of call-outs during large-group instruction may see behavioral improvements even if she does not commit her self-monitoring information to writing. However, creating a written record of self-monitoring data will allow the student to collect data over time to look for trends of improvement and to share self-monitoring information with teachers and/or parents.

Reviewed here are three convenient formats to structure the collection of self-monitoring data and to record the resulting behavioral data--rating scale, checklist, and frequency count (Chafouleas, Riley-Tillman, & Sugai, 2007):

- *Rating scale.* A rating scale consists of one or more items that a student can use to complete a global rating of a corresponding number of behaviors (e.g., "How well did I: (1) stay in my seat?; (2) participate?; (3) avoid distracting others?; (4) follow directions?"). The rating scale usually has a qualitative, sliding-scale rating format (e.g., "poor...fair...good"). Rating scales are typically completed at the conclusion of a fixed observation period (e.g., after a class period; at the end of the school day). See the sample *Behavior Rating Scale* later in this article for an example of how to set up a rating scale to measure student behaviors.
- *Checklist.* A checklist is a listing of behaviors (to be increased or decreased) that the student periodically reviews, checking off those behaviors actually displayed during the monitoring period. For example, a student may have a checklist for independent assignments that contains these 3 work-readiness items: *(1) I have all work materials needed, (2) My desk workspace is organized, (3) I understand the directions of this assignment.* Before beginning independent work, that student reviews and verifies that these preparatory actions have been carried out. Checklists are helpful for monitoring multi-step behaviors (e.g., the plan-write-revise-edit stages of the writing process) or for monitoring clusters of several related behaviors (e.g., as illustrated in the work-readiness example cited above). Investigate the sample *Behavior Checklist* elsewhere in this article as a guide for setting up a behavior checklist.
- *Frequency count.* In a frequency count, the student keeps a running tally of the number of times that a he or she displays a target behavior (e.g., number of call-outs or requests for teacher assistance) during an observation period. Check out the example, *Frequency Count*, further on in this article for advice on monitoring the frequency of student behaviors.

3. Choose a Self-Monitoring Schedule

Because self-monitoring requires that the student periodically measure his or her behavior, the teacher and student must decide on what schedule the monitoring will occur (Rafferty, 2010; Webber et al. 1993). Here are options:

- *Start of period or day.* The student monitors at the start of the class period or school day. Sample behaviors suitable for 'start' intervals include arriving to class on time and having all required work materials.
- *End of period or day.* The student monitors at the end of the class period or school day. Sample behaviors suitable for 'end' intervals include copying homework assignments from the board and global ratings of the student's behavior during that classroom period or school day.
- Scheduled transition points through period or day. The student monitors periodically during the class
 period or school day, with each monitoring episode tied to a scheduled, easily identified 'transition point'
 that naturally occurs in that classroom setting. A common transition point would be the student's moving
 from one learning activity to another (e.g., from independent seatwork to whole-class lecture). Sample
 behaviors suitable for 'transition point' intervals include the speed of the student's transition between
 activities and the student's general behavior during transition periods.
- Start or end of assignments. As student academic work is often the focus of self-monitoring, a logical time-point for doing that monitoring is when beginning or finishing assignments. Sample behaviors suitable for 'start of assignments' include checking for the presence of all work materials and clearing the desk to create an uncluttered work space. Sample behaviors suitable for 'end of assignments' include ensuring that a writing assignment is legible and correctly formatted and applying a self-correction checklist to a math assignment to catch and correct common mistakes.
- *Fixed intervals through period or day.* The student monitors at fixed periods during the class period or school day (e.g., every 15 minutes; at the top of each hour). Sample behaviors suitable for 'fixed' intervals include overall classroom behaviors, attention and focus, social interactions with other students, and compliance with adult requests.

4. Decide on a Monitoring Cue.

Once the teacher and student have determined a monitoring schedule, they should decide on a cue to trigger student monitoring (Rafferty, 2010). Below are some options. (Note that most of these cuing methods can either be self-administered by the student or used by the teacher to cue one student, a small group, or even an entire class):

- 'Beep tape'. The student is given an audio tape (or electronic audio file) with beeps spaced at fixed intervals whose rate matches the student's self-monitoring schedule. For example, a student monitors his on-task behavior every 5 minutes on a self-rating scale using an MP3 player with an audio-file beep tape with tones at 5 minute intervals. NOTE: Schools can download free fixed-interval beep tapes in MP3 format and in a range of interval-lengths from: http://www.interventioncentral.org/free-audio-monitoring-tapes
- *Timer.* The student or teacher sets a timer (e.g., kitchen timer, cell-phone timer, stopwatch) for a pre-set interval. When the timer rings, the student self-monitors behavior and then the timer is reset. For example, a student in a math class sets a cell-phone timer with vibration setting for 3-minute intervals during independent work. When the timer rings, the student counts up the number of math-computation problems completed during the interval.

- Teacher-delivered cue. The teacher delivers a cue to the student to remind him or her to self-monitor.
 For example, at the end of an in-class writing assignment, an English instructor prompts the class to review their compositions using self-correction checklists before turning in their work.
- *Student-delivered cue.* The student is given responsibility to initiate self-monitoring informally without use of a timer, beep tape, or other external cue. For example, a student monitoring her understanding of assigned texts during in-class independent reading is directed to use a rating scale at least 3 times during the activity to rate and record her comprehension of the text --with the student determining how to space those self-checks.

5. [Optional] Choose Rewards for Successful Behavior Change.

The teacher may want to choose suitable rewards to further motivate students to use self-monitoring to move toward positive behavior change (Loftin, Gibb, & Skiba, 2005). Teachers can increase the power of a self-monitoring program by rewarding students when they consistently achieve positive ratings. Remember, though, that students differ in what experiences, privileges, or objects they find positively reinforcing. Here are 3 ideas for figuring out what rewards will motivate a particular student:

- Administer a reinforcer survey. Reinforcer surveys contain a list of possible rewards acceptable for use in a classroom. The teacher meets with the student to review each reinforcer item on the survey, and the student rates whether he or she finds the item to be a motivating reward. The teacher can then create a menu of possible rewards for the student using those reinforcers that the student rated as most motivating. (HINT: Teachers can conveniently create their own customized reinforcer surveys online at this web address: http://www.interventioncentral.org/teacher-resources/student-rewards-finder.)
- Watch the student in action. Teachers can often get a very good idea of a student's preferred rewards, or reinforces, simply by observing the student across the school day. The locations where a student chooses to spend time, the people he or she chooses to interact with, and the activities the student engages in all provide hints about what the student finds rewarding. For example, one student may have a friend that he enjoys spending time with, suggesting that the student would view 'free time with a friend of your choice' as a motivating reward. Another student might frequently beg the teacher to be allowed to care for the class mascot, a pet rabbit—presenting the possible reward idea of 'five minutes petting the rabbit'.
- Ask people who know the student well. Adults such as parents or past teachers who have interacted with the student regularly for months or years may be able to supply a list of ideas about rewards that will really motivate him or her.

6. [Optional] Decide How the Student is to Graph Monitoring Results.

Students are often motivated when viewing visual displays of their self-monitoring data (Menzies, Lane, & Lee, 2009). The teacher may therefore want to have the student graph his or her self-monitoring data after each session and to reflect periodically on the data levels and trend.

7. Train the Student to Use the Self-Monitoring Program.

When all elements of the plan are in place, the teacher meets with the student across one or more sessions to provide instruction in self-monitoring. The training should include modeling, coaching, and role-play in how to use the self-monitoring procedures (Menzies, Lane, & Lee, 2009). When the plan is in effect, it is also recommended that the teacher briefly cue the student before any session in which he or she is expected to self-monitor.

8. Conduct Periodic Accuracy Checks.

Periodically, the teacher should check the student's self-monitoring data and procedures--particularly at the start of the monitoring--to ensure that the student is recording accurately (Webber et al., 1993). Random spot-checks tend to result in higher-quality student self-recording data.

9. Fade the Self-Monitoring Plan.

As the student attains his or her behavioral goals, self-monitoring procedures should be faded--that is, gradually simplified or discontinued (Loftin, Gibb, & Skiba, 2005; Rafferty, 2010). The goals in fading are (1) to streamline self-monitoring so that it becomes sustainable over the long term, while (2) maintaining the student's behavioral gains. Specific methods used in fading will vary, depending on the elements that make up the self-monitoring plan. Fading strategies might include condensing the monitoring format (e.g., distilling a 6-item checklist for monitoring classwork-readiness into a single question: "Am I ready to work?"), changing the monitoring cue (e.g., moving from use of an external beep-tape to student-delivered cues); and monitoring less frequently (e.g., having the student shift down from a daily monitoring schedule to monitoring twice per week on randomly selected days).

References

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Student Self-Monitoring: Behavior Rating Scale

This self-rating scale allows you to rate how well you carry out selected behaviors.

How to Use This Behavior Rating Scale. This scale is to be used to rate your selected behaviors at the end of a predetermined period (e.g., after independent work; at the end of the school day; at the end of math class.)

How to Set Up the Behavior Rating Scale: Follow these steps to prepare the rating scale:

- Select Behaviors. In the left column of the table below, write down up to 6 behavior goals that you plan to rate
- (e.g., stay in seat, complete seatwork, work well with others, participate in the activity, keep workspace clear).
- Choose a Schedule for Completing the Rating Scale. Decide when you will fill out this self-rating scale (e.g., after independent work; at the end of the school day; at the end of math class; just before lunch and again at school dismissal).

I plan to complete this rating scale on the following schedule:

Behaviors:	1	2	3	4	5
	Date	Date	Date	Date	Date
•	Good	Good	Good	Good	Good
	Fair	Fair	Fair	Fair	Fair
	Poor	Poor	Poor	Poor	Poor
•	□ Good	□ Good	□ Good	□ Good	☐ Good
	□ Fair	□ Fair	□ Fair	□ Fair	☐ Fair
	□ Poor	□ Poor	□ Poor	□ Poor	☐ Poor
•	□ Good				
	□ Fair				
	□ Poor				
•	□ Good				
	□ Fair				
	□ Poor				
•	□ Good				
	□ Fair				
	□ Poor				

Student Name:

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Student Self-Monitoring: Behavior Checklist

Behavior checklists are simple way to 'check off' whether or not you carry out selected behaviors.

How to Use This Behavior Checklist. This behavior checklist can be used before starting an activity to ensure that you are prepared (e.g., before beginning independent work) or after the activity (e.g., at the completion of independent work) to track whether you displayed target behaviors. This behavior checklist form allows you to list up to 6 different behaviors. NOTE: Checklists are an excellent tool at the end of an assignment for you to use to check your work.

How to Set Up the Behavior Checklist: Follow these steps to prepare the checklist:

- List Behaviors to Be Tracked. In the left column of the table below, write down up to 6 behaviors to make up your checklist. Good checklist items are those that can be easily verified as 'done' or 'not done' (e.g., arrived to class on time; brought all work materials to class; avoided chatting with classmates during independent work time).
- Choose a Schedule for Completing the Behavior Checklist. Decide when you will fill out this checklist (e.g., before or after independent work; at the start or end of the school day; before or after math class).

I plan to complete this behavior checklist on the following schedule:

Behaviors: I	1	2	3	4	5
engaged in	Date	Date	Date	Date	Date
these behaviors	//	//	//	//	//
•	□ Yes	□ Yes	□ Yes	□ Yes	□ Yes
	□ No	□ No	□ No	□ No	□ No
•	□ Yes	□ Yes	□ Yes	□ Yes	□ Yes
	□ No	□ No	□ No	□ No	□ No
•	□ Yes	□ Yes	□ Yes	□ Yes	□ Yes
	□ No	□ No	□ No	□ No	□ No
•	□ Yes	□ Yes	□ Yes	□ Yes	□ Yes
	□ No	□ No	□ No	□ No	□ No
•	□ Yes	□ Yes	□ Yes	□ Yes	□ Yes
	□ No	□ No	□ No	□ No	□ No

Grade/Classroom:

Student Self-Monitoring: Frequency Count

A frequency count is a recording of the number of times that a you engaged in a behavior during a specific time-period (e. g., during a class period). Frequency counts can be used to track behaviors that you want to increase or decrease.

How to Use This Frequency-Count Form. With this frequency count form, you record each occurrence of the behavior with a tally-mark ('/'). At the end of the time-period, you add up the tally-marks to get a total sum of behaviors for that observation session.

How to Set Up the Frequency-Count Form: Follow these steps to prepare the frequency-count form:

• Define the Target Frequency-Count Behavior. In the space below, describe the behavior that you will measure using a frequency count. (Here are some examples: "leaving my seat without teacher permission", "completing a math problem", "requesting teacher help", "talking with other students about off-task topics"):

Target Behavior to Measure:

• Choose a Schedule for Conducting the Frequency Count. Decide when you will use the frequency-count form to track the target behavior:

I plan to conduct the frequency count at the following time(s) and/or during the following activitie(s):

1	Tally Box: Write a mark ('/') in this box each time the target behavior occurs:		Total Behaviors for Session
Date://		>	
2	Tally Box: Write a mark ('/') in this box each time the target behavior occurs:		Total Behaviors for Session
Date://		>	
3	Tally Box: Write a mark ('/') in this box each time the target behavior occurs:		Total Behaviors for Session
Date://		>	
4	Tally Box: Write a mark ('/') in this box each time the target behavior occurs:		Total Behaviors for Session
Date://		>	
5	Tally Box: Write a mark ('/') in this box each time the target behavior occurs:		Total Behaviors for Session
Date://		>	

Grade/Classroom: