Steps in Implementing Self-Monitoring

The steps in implementing self-monitoring are well established (Reid & Lienemann, 2006). Note that the time needed for some steps may vary dramatically depending on what type of self-monitoring is used.

Was I Paying Attention?

Am I at my desk?		Am I listening to the teacher?
Am I doing my assignment?		Am I asking for help?
Yes		No

Figure 3.1. Example self-monitoring of attention tally sheet
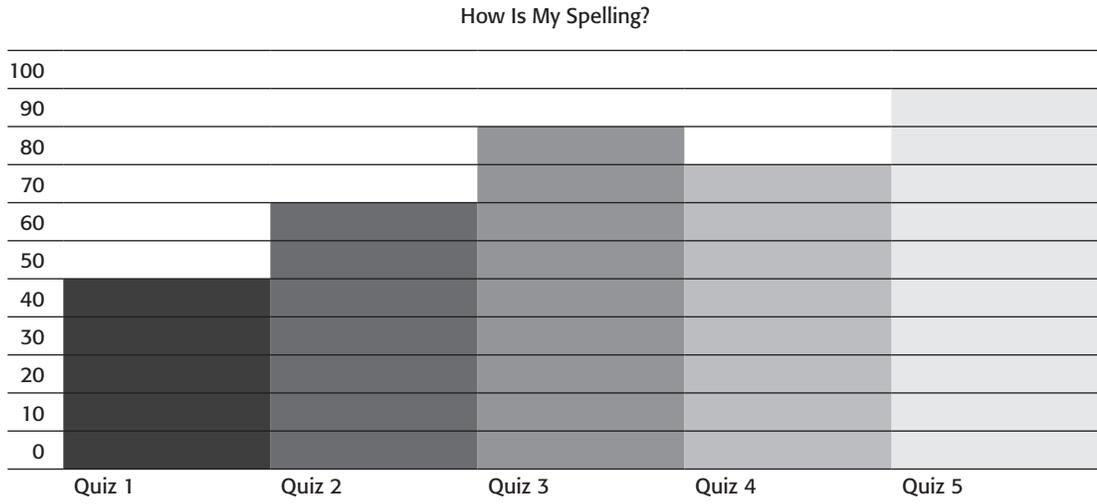
How Is My Spelling?

Figure 3.2. Example self-monitoring of performance graph

STEP 1: Select a Target Behavior

The first step is to decide what behavior the students will self-monitor. It's important that the behavior be well specified. For example "doing your best work" is much too vague; "percent correct on my math work" is much better. For self-monitoring to work, the students must understand exactly what they will self-assess and self-record. Make sure that the behavior is one that the students are already able to perform. Self-monitoring will not create new knowledge or behavior; it will, however, change the frequency, intensity, of duration of behaviors that students are *already able to perform*. It is also critical that the behavior be under the students' control.

STEP 2: Collect baseline data

Before starting self-monitoring, it is necessary to collect baseline data on the students' behavior. This will allow the teacher to assess accurately whether self-monitoring was effective. Collecting baseline data can be very straightforward; for example, if the teacher planned to use SMP to increase the number of math problems students completed on their daily math seat work, collecting baseline data might be as easy as compiling and graphing worksheets over three or four days.

STEP 3: Obtain students' cooperation

For self-monitoring to be effective, the students must be active and willing participants. Remember that the students will actually perform the self-monitoring. Teachers should meet with the students and talk about the problem frankly by discussing the benefits of improving the behavior, (e.g., staying in your seat means you don't lose recess; doing all your arithmetic problems means you'll do better on the test). The discussion should be positive; the teacher should stress, without making exaggerated claims, that self-monitoring has helped many students. In practice, the great majority of students will immediately buy in to trying self-monitoring. If any student is unsure, try using a contingency contract. In this case, the student agrees to try self-monitoring for a set period of time and will receive a reinforcer simply for trying it. After you have enlisted cooperation, explain when and where self-monitoring will be used (e.g., during second period math class seat work time).

STEP 4: Teach the self-monitoring procedures

In this stage the students are taught how to self-monitor. Note that although the time needed to teach procedures can vary widely (depending on the type of self-monitoring used) this process is not time-consuming; instruction time is typically well under one hour. There are three critical tasks at this step. First, the teacher needs to define the target behavior for the students. The teacher simply explains to the students exactly what constitutes the target behavior. This typically is quite simple. For example in SMP this may entail little more than telling the students to count the number of correctly worked math problems. For other types of self-monitoring, defining the target variable may be more complex. In SMA this may mean teaching the students what it means to "pay attention." Here the teacher and the students can develop a list of specific behaviors that constitute "paying attention" such as looking at the teacher or your work, writing answers, listening to the teacher, or asking a question. Remember that students must understand the target behavior to be able to self-assess whether the behavior has occurred.

Next the teacher needs to be sure that the students can discriminate the target behavior from other behaviors, (e.g., the students can tell whether they were paying attention or not paying attention). This is rarely an issue in SMP, but sometimes can be a problem with SMA.

If there is any doubt whether the students can accurately discriminate the target behavior, the teacher should model examples and non-examples of the target behavior and assess whether the students can tell which is which. For example, if the target behavior was paying attention, the teacher might leave her seat and walk around the room (non-example) or raise her hand to ask a question (example). This provides reinforcement of the knowledge of the target variable gained in the previous stage and also provides evaluative feedback for the teacher.

The last step in this stage is to explain the procedures involved in self-assessing and self-recording the target behavior. First, the teacher models the self-monitoring procedures while verbalizing the steps. The students are then asked to verbalize the steps as the teacher performs them. Following this, the students are asked to both model and verbalize the procedures. The students must be able to perform the self-monitoring procedures effortlessly. Self-monitoring procedures should not be a distraction for the students. If the procedures are difficult for the students to remember or if the students have trouble performing the procedures, they are probably inappropriate for the students. After the students can demonstrate the procedures correctly, the teacher should provide a brief period of guided practice where the teacher and students collaboratively practice the procedures. This provides structured experience for the students and also allows the teacher to assess mastery. Again, in practice this entire procedure can be done very quickly.

STEP 5: Implement self-monitoring

The first time the students are to use the self-monitoring procedures it is a good idea to prompt the students, (e.g., remember to listen for the beep and then mark down whether you were paying attention or not). During the first few sessions, the teacher should monitor the students to ensure that the self-monitoring procedures are used consistently and correctly. This is critical for self-monitoring effectiveness. If any students appear to be having difficulty using the procedures, re-teaching may be needed. Sometimes simply providing students with prompts, such as reminders of what constitutes the target behavior or cues to self-assess or self-record may be all that is required. Be sure to note that if a student consistently has difficulty, self-monitoring may not be appropriate. The teacher should continue to collect data on the target behavior in order to determine the effectiveness of the intervention. With self-monitoring, improvement usually is rapid (in a matter of days) and pronounced. The teacher should also make periodic checks to assess whether improvements are maintaining. In practice, students can maintain increased performance levels for considerable periods of time in the classroom. However, if the students' performance begins to deteriorate, the teacher should schedule "booster sessions" in self-monitoring procedures. The following vignette illustrates self-monitoring in practice:

> Ms. Casey teaches eighth grade earth science. She recently adopted a new approach to teaching the content that is more hands on. Much of her class now requires students to work in groups on projects. Ms. Casey works with each group for a few minutes to ensure that they are on the right track before moving to another group. This group work is then followed by independent follow up assignments. It is a large class with 35 students, and it is very difficult her to monitor that many students all doing different tasks. She realizes that students are failing to complete group projects in the allotted time, and that some students are not finishing their independent follow-up work. It does not seem to be a problem with grasping the content; the work that is completed is acceptable. It's not a discipline problem either; the students are not breaking rules or being disruptive. Rather, it looks as if the students are simply wasting a lot of time during group projects with horseplay or gossip, and failing to focus on their independent assignments. It's getting to the point where it's affecting students' grades. Ms. Casey knows she needs to do something quickly. She decides that she will try self-monitoring to see if it can keep the students on task.

She decides that she will use completing assignments as a target behavior. This is easy to define and students should have not problem understanding what it means to complete an assignment. Because her group projects have a consistent format with six activities, she uses percent of activities completed as a target behavior. To be counted as complete, an activity must be completed with at least 80% accuracy. Since she is worried about both the group and individual portions of assignments, Ms. Casey decides to use self-monitoring in both settings. She does not want to introduce too much too quickly, so she decides to start with group-work assignments. Then, if she is successful, she can move to individual work. Next, Ms. Casey collects baseline data. This is simple All she needs to do is go back through the group assignments for the last week. She takes the last three assignments for each of her groups and computes the percent of completion for each group for each assignment. She then graphs the results for each group individually (See Table 3.1). Collecting this data shows her that there is indeed a serious problem.

The next class period, Ms. Casey talks to the class about the problem. She gives each of the groups the graph she created and has the students look at the percent of assignments that the group has completed. She notes that this is starting to be a serious problem for some students, and that almost all the groups have room for improvement. She stresses that the assignments are a major part of each student's grade and that she does not want anyone to get a bad grade for this reason. She also reminds the students that exams will cover work they should have completed on assignments. Many students are shocked; they had not realized that they were doing so poorly at completing assignments. Ms Casey then tells the class that she believes that the problem is that groups are getting distracted, and that she has a way to help them stay focused on their work. She asks the students to agree to try something new that she believes will really help them. The students agree.

Next, Ms. Casey shows the students how they will self-monitor. During group activities, each group will have its completed assignment graph. Ms. Casey reviews what it means to complete an activity with the students, stressing to the students that to complete an assignment all parts must be completed correctly. Next, Ms. Casey establishes how the students will self-assess and self-record. Ms. Casey tell the students that the time scheduled for assignments will be divided into six equal segments. At the end of each segment she will cue the groups to self-assess how many parts of their assignment they have completed. They then will mark their graphs with the amount of work they have completed. She tells the students that they will practice the procedures today on a short assignment. She uses an egg timer to track the time. Each time it rings, the students self-assess and self-record. Ms. Casey monitors the students during the practice session and answers any questions. She tells the students that tomorrow they will be using the graphs and self-monitoring during their regular class.

Table 3.1. Ms. Casey's Self-Monitoring Graph

Group Members: Elwood, Dixie, Steve, Fred

Step	66%	33%	50%							
6										
5										
4	▒									
3	▒		▒							
2	▒	▒	▒							
1	▒	▒	▒							
	Asmt. ____	Asmt. ____	Asmt. ____	Asmt. ____	Asmt. ____	Asmt. ____	Asmt. ____	Asmt. ____	Asmt. ____	Asmt. ____

The next day, when it is time for group work, Ms. Casey passes out the assignment graphs. She reminds the students of their purpose and briefly reviews the self-monitoring procedures. She then tells the students to begin their work and starts the timer. The first two times the egg timer goes off she prompts the students to self-assess and self-record. After this the students are sensitive to the procedures, and Ms. Casey does not think additional prompts are needed. Ms. Casey uses the procedures for the rest of the week. She tracks assignment completion for each group. She notes that after one week of using self-monitoring, the students almost always complete the entire group assignment.