A primary goal of education is to assist individuals to become more independent in managing their own behavior. For most people, this is a gradual process which extends well into adulthood! For many individuals with autism spectrum disorders, moving towards increased independence is difficult without systematic, long term instruction. Though support persons strive to assist individuals with autism spectrum disorders in reaching greater heights of independence and autonomy, many of our efforts actually result in teaching individuals to be heavily reliant on outside influences and controls.

Typically, instruction for individuals with autism spectrum disorders has focused on teaching ALL of the skills and behaviors needed in EACH instructional setting, since individuals with autism may experience difficulty generalizing behaviors and skills across settings. Unfortunately, this becomes an overwhelming prospect as well as an inefficient strategy. Instead, it would seem more logical and efficient to teach behaviors that have the potential to transfer across settings and to benefit the individual in multiple settings. Self-management is such a behavior.

What is self-management?

Self-management is a procedure in which people are taught to discriminate their own target behavior and record the occurrence or absence of that target behavior (Koegel, Koegel, & Parks, 1995). Self-management is a useful technique to assist individuals with disabilities, including autism spectrum disorders, to achieve greater levels of independence in vocational, social, academic and recreational activities. By learning self-management techniques individuals can become more self-directed and less dependent on continuous supervision. Instead of teaching situation specific behaviors, self-management teaches a general skill that can be used in an unlimited number of environments. Self-management techniques have also been useful in reducing or eliminating such behaviors as stereotypic responding. The procedure has broad applications for individuals with and without disabilities and can be adapted in some manner to benefit a variety of learners.

How do you teach self-management?

Koegel, Koegel and Parks (1995) have outlined five general steps to teach self-management. These are: (1) operationally define the target behavior; (2) identify functional reinforcers; (3) design or choose a self-management method or device; (4) teach the individual to use the self-management device; and (5) teach self-management independence. Each of these steps are explained below.

1. **Operationally define the target behavior.**
   First, it is essential that the target behavior(s) be described so that the individual who is learning to self-monitor as well as all who support him/her can identify and agree upon the occurrence or non-occurrence of a behavior. For example, a description such as behaving in the lunchroom is vague and open to interpretation. Instead, staying in the lunch line, not touching other students, remaining seated until finished eating provides a description of the behavior that is observable, measurable, and can result in agreement across observers.

   When first instructing an individual in self-management, the target behavior should be simple enough to be performed fairly quickly and easily so the student can gain access to a reward. As the individual experiences success, more behaviors can be added to the procedure.
2. **Identify functional reinforcers.**
   Reinforcers, by definition, increase the behaviors they follow. What is reinforcing varies across people. The best way to select a meaningful reinforcer is to let the individual select it. However, sometimes it is difficult to identify reinforcers. In these instances, several strategies may be helpful. First, observe the individual to see what they like to do. Second, look at the possible function of behavior. This may provide a direct link to a functional reinforcer. For example, for an individual who exhibits challenging behavior to escape a boring or difficult task, access to free time may be the logical (and preferred) reinforcer.
   It is important (at least initially) that reinforcement for performing the target behavior and for self-monitoring the occurrence of the behavior be given each time. In addition, students can be encouraged to access their own reinforcer.

3. **Design or choose a self-management method or device.**
   The purpose of the self-management method or device is to provide the individual with a clear means to record the occurrence of behavior. This could entail making check marks on paper, placing stickers in a notebook, using a tape recorder with pre-recorded signals at pre-set intervals, or using a wrist counter.
   Considerations for choosing a method/device include: the present ability level of the individual, ease of use and portability (so that self-monitoring can be expanded to many settings), age-appropriateness, and the behavior(s) to be targeted. For example, a large cumbersome device probably would not work well during gym class.

4. **Teach the individual to use the self-management device.**
   In this step the individual is taught (generally through modeling by a facilitator) to accurately recognize and record the occurrence or nonoccurrence of target behaviors and receive reinforcement for accurate recording. Then the individual is instructed to perform the target behavior and self-record the occurrence of the behavior. To ensure that problem behaviors are not strongly reinforced, the facilitator should provide more reinforcement for recording the occurrence of desired behaviors, and less reinforcement for monitoring the occurrence of undesirable ones. Again, the time to teach self-monitoring will vary considerably across individuals. However, it is important that the facilitator ensure that individuals learn to self-monitor in the individual's real world.
   Interestingly, individuals do not always have to record with complete accuracy to achieve the desired effect, though it will be important for facilitators to ensure two things:
   - That the individual understands the procedure; and
   - That the individual is not simply cheating to gain a reward. Careful monitoring by the facilitator will reduce the effect of either of these factors.

5. **Teach self-management independence.**
   This is the stage at which the facilitator fades himself out of the picture and allows the individual to self-monitor and self-reinforce. The following outcomes should be addressed at this stage:
   - Prompts to self-manage behavior should be reduced.
   - The amount of time the individual spends self-managing should be increased.
   - The number of self-recording responses expected before reinforcement should be increased.
   - The schedule of reinforcement should be reduced by increasing the duration between times when self-recording is expected.
   - The individual should be taught to access their own reinforcement for successful self-recording.

Example: Adam is a nine year old with a diagnosis of autism and severe mental retardation. He is extremely active and moves about his fourth grade classroom continuously. It was estimated that Adam would stay seated (at best) for about three minutes at a time. His parents and teachers were concerned that if this pattern continued it would compromise his chances to learn and be included in typical educational activities. They wanted to consider
educational interventions before investigating medications to address this hyperactivity. It was decided to teach Adam a self-management procedure. Each step is described below.

Step 1. **Operationally define the target behavior.**
Initially, only one behavior was targeted: staying in seat. Since the duration of a typical group lesson in Adam’s class was about 20 minutes, remaining seated for this period of time became a long-term goal for Adam. The target behavior was communicated to Adam with a photograph of him seated at his work table with three other students.

Step 2. **Identify functional reinforcers.**
Observations of Adam quickly showed that his preferred reinforcer was simply to move about the classroom freely. Since Adam did not disturb the classroom environment in any way when he walked around, it was agreed that Adam could earn free time to walk about the room.

Step 3. **Design or choose a self-management system.**
Adam was familiar with typical kitchen timers. His parents had used them successfully at home to indicate transition times. It was agreed that a kitchen timer would indicate intervals at which to self-monitor. In addition, Adam greatly enjoyed cartoons. Stickers of cartoon characters would be used to record the appropriate target behavior of staying in seat.

Step 4. **Teach the individual to use the self-management device.**
Initially the teacher used one of Adam’s peers to model in and out of seat behavior and prompted Adam to record his peer’s behavior (placing a cartoon sticker under the *in-seat* picture if his peer was seated). When Adam responded correctly to 8 out of 10 trials, his teacher began to use the timer.

Initially, to teach the procedure, the timer was set at two minute intervals (about a minute less than he typically stayed seated) during his regular instruction. No physical or verbal prompts were used to keep Adam seated during instruction. At the end of each interval, Adam was asked, *Were you seated?* If he was seated and correctly identified that he was seated, he was given a sticker. If he was seated and answered incorrectly, he was told, *Yes, you WERE seated, you earned a sticker.* He placed the sticker on a monitoring card and was told, *You earned free time.* He was then allowed to walk around the room for a minute.

When Adam was out of his seat at the end of the interval, he was brought back to his desk, but not seated. He was asked, *Were you seated?* If he correctly identified that he was not seated, he was praised and asked to sit down and begin working. Adam was then instructed to remain seated until the bell and his assistant resumed instruction.

Step 5. **Teach self-management independence.**
Over time Adam was able to stay in his seat for continuously longer periods. The length of the timed intervals has gradually increased until after 6 weeks he was remaining in his seat consistently for 10 minutes at a time and at times for up to 15 minutes! The amount of instruction Adam is receiving has greatly increased.

On-going efforts will be made to increase self-management independence (as outlined in Step 5). Though Adam still requires his teacher or assistant to prompt him through the procedure when the timer rings, Adam is beginning to more accurately identify his behavior.

**Discussion**

Self-management is a procedure with broad applications. Though there is a general series of steps to follow, individualization is critical to increase the likelihood of success. It is also important that self-management procedures not be used as a substitute for a well developed and individualized curriculum. Activities and curriculum for all individuals should be developed so that they are interesting and result in meaningful outcomes.
Self-management is not a tool to simply teach individuals to be compliant.

References and recommended reading:

