TEC Podcast #8 "Self-Management Strategies to Support Students With ASD," Margaret Schulze, *TEACHING Exceptional Children, 48*(5), pp. 225–231.

Lorraine:	Welcome to this *TEACHING Exceptional Children* podcast. I'm Lorraine Sobson, Publications Manager for the Council for Exceptional Children. Today I'm talking with Margaret Schulze, a teaching associate in the Department of Special Education at the University of Washington, Seattle. Maggie's the author of a recent article in TEC entitled "Self-Management Strategies to Support Students with ASD." Maggie, thanks for joining me!
Maggie:	Thanks, Lorraine. It's a pleasure to be speaking with you.
Lorraine:	Can you discuss what *self-management* and *self-management procedures* are? What are our goals for teaching them?
Maggie:	Sure. Self-management is really just what it sounds like: It's how we learn how to manage our own behavior. Self-management is a set of procedures that students can be taught to apply to their own behaviors to change those behaviors. Essentially, students are taught to observe, assess, and subsequently modify their behaviors. For example, we may have a student that blurts out quite a bit in class rather than raising a quiet hand.
	We can work with that student to help her notice when she's engaging in those behaviors and help her monitor that and count those behaviors and hopefully decrease the number of times she blurts out and increase the number of times she raises a quiet hand. Essentially, our goal is to have students internalize these strategies such that they can successfully manage their own behavior and not rely on outside adult cueing and prompting to do so.
Lorraine:	Now, in the article, you recommend that before [starting] self-management instruction, teachers choose a data collection system. How do they go about choosing such a system?
Maggie:	Yeah, that's a great question. The choice of what data collection system to use is really dependent on the target behavior we are monitoring. The first thing we need to do is choose [the] target behavior and really, really clearly define it. *On task* is a great example. We throw the term *on task* around quite a bit, but what on task looks like for me might be different than what it looks like for you and what it looks like for the student.
	We need to start by defining what that looks like. That could be, for one particular student, eyes on paper, pencil moving, quiet mouth. We want to keep in mind that when we're choosing a target behavior, we want it to be positive. We want the student to focus on the positive pro-social replacement behavior that we're trying to increase.

Once we've established that target behavior, then we choose the data collection system.

I talk about a few different systems in the article. One is *event recording*, which essentially is a frequency count of behaviors. The teacher or paraprofessional is marking every time a behavior occurs. This is good for discrete behaviors that are easily counted. The example of raising a quiet hand in the classroom, that's something that we can easily count. The para or teacher can make a mark on a Post-it note, on a data form, [or] can move a paperclip from one pocket to the other. It's very straightforward to use.

The thing with event recording is we need to keep in mind that the period of time we're observing needs to be the same. If, for example, we have 55 minutes one day to observe and take event recording data and we have 60 minutes the other day, we need to convert that to a rate so that we're comparing apples to apples. We do that by taking the number of times the behavior occurs and dividing it by the amount of time we observed.

Another data collection system I talk about in the article is called *time sampling*. This is a better data collection system for behaviors that have a longer duration that are more ongoing…. For this particular system, a large chunk of time, maybe 50 minutes, a 50-minute math period, is divided into smaller intervals like 5-minute chunks. In a strategy called *momentary time sampling*, the teacher observes the student at the end of each of these 5-minute chunks and notes if the student is engaging in the behavior.

It's been 5 minutes. I look up. Is the student on task? If so, I mark a plus. If the student is off task, I put a minus. Then we take the total number of pluses for the period and divide it by the total number of intervals, multiply it by 100, and this gives us an estimate of the amount of time that the student was on task. This is really helpful so we don't have to watch the student intently for the whole 50-minute period. It gives us an estimate of how often he or she was on task.

Lorraine: Now, self-monitoring is the most commonly used self-management intervention for students with autism spectrum disorder. Can you tell us about it? For example, why is it so popular?

Maggie: Self-monitoring has been called the cornerstone of self-management because it's relatively straightforward to use, it's very effective, and it really gives tangible results to students. It includes two components. The first is self-observation, where the student is examining her own behavior to see if the behavior's occurring. The second is self-recording. That's where the student is really marking whether or not the behavior occurred after she determines if it occurred.

In general, the strategy is best for behaviors that are frequent—so the student can really get that feedback and practice monitoring—and observable, so both the teacher and the student can see them. Self-monitoring … can and should be a collaborative process between the teacher and the student, when possible. For example, the student can help figure out, "How do we define the target behavior that we're looking at?"

If it's an interval-type system where the student is looking at her behavior every few minutes, [the teacher] can say, "Okay. I think we'll start with 2-minute intervals or 5-minute intervals." The student can help design the form. If there's going to be a reward linked to doing particularly well getting a certain number of intervals where [she's] on task, the student can help choose that reward. There's a lot of ways to involve the student.

The other thing to consider with self-monitoring is how the student will be cued, if we're using that interval-type system. For example, if the student chooses that every 5 minutes, she's going to mark if she's on task, how will she know that 5 minutes has passed? Now, the teacher could prompt her every 5 minutes, but that's pretty intensive. One great tool that I recommend in the article is called the MotivAider. The MotivAider is available at habitchange.com.

The MotivAider is about the size of a beeper and the student can wear it on her clothes and set it for an interval. We may say, okay, so it's a 5-minute interval. We set the motivator, we walk away, and after 5 minutes, the motivator will vibrate very quietly, very unobtrusively. It just cues the student that, "Hey, 5 minutes have passed, so check yourself. Were you on task this period? Are you on task right now?" Then she can mark yes or no, I was on task or I was not on task. It's a great tool and it takes teacher prompting out of it. Other students around her don't notice because it's very quiet.

The other thing I wanted to mention is that, even though the system may seem straightforward, students don't learn this by osmosis. We need to take some time to sit down with the student and explain the system, do some modeling and role-play about what the expected behavior looks like and how we use the system, how we use the MotivAider, etc.

Finally, we need to think about, how do we fade the system? Ultimately we want the student to internalize this. As his or her self-management skills improve, we can think about increasing the length of the interval, increasing the length of the session, or taking away some of these visual supports—like, for example, maybe remove the form and just start with a verbal check-in. Those are a couple different ways [to] fade the system.

Lorraine: You've been talking about how a student would self-monitor and mark if they're on task or not. It leads into my next question about goal setting. What is goal setting, and how does this fit into this program?

Maggie: Goal setting is simply having the student set a target for behavior change. Just like when we—or I guess I should say, I—set a target for how often I go to the gym and strive to meet that goal, in goal setting, we work with the student to set a goal to improve his behavior. This could mean increasing the number of words a student writes in a story, the number of words read correctly, or the percentage of time that a student is on task during an academic block.

There are a number of behaviors we can target with goal setting. It's really important with goal setting to first establish … the student's baseline performance to find out

where the student [is] performing currently. We want to set a goal that's reasonable for the student, that we know the student can meet with some support. We want to know what can the student realistically achieve?

You know what? The student can be part of this discussion as well. "Where do you think you can go? How many words do you think you can read correctly?" Finally, the [teacher] should work with the student to figure out, "What are the steps required to reach this goal?" An example of this would be a long-term writing project.

We know some students with autism spectrum disorder have executive functioning deficits. Having a long-term writing project may be challenging for them, so how can we break down the steps needed to achieve the goal of completing the writing project to help them reach that goal? Also, we need to consider that part of this is ensuring that we are encouraging persistence towards achieving that goal. Sometimes attaching a reward to achieving that goal is really helpful for some students as well, because then they have that extrinsic motivation *and* the intrinsic motivation that setting the goal provides.

Lorraine: Would you explain the steps for self-instruction and provide an example of when this might be useful for students?

Maggie: Sure. *Self-instruction* involves having a student verbalize, overtly or covertly, the steps of a task. The student is literally prompting himself through a series of tasks to promote behavior change. This can include talking through the steps of a math problem, talking through tasks that he must plan, or even using coping statements like "I can do this. I need to keep going. I can achieve this."

If a teacher uses self-instruction as a strategy, the task really needs to be defined clearly for the student. In the math example, if the student is going to talk himself through a series of steps to solve a problem, those steps need to be clearly defined by the teacher. ["Step 1 is…, Step 2 is…, Step 3…."] Then, the adult needs to teach the self-instruction system.

This would involve modeling by the teacher. The teacher is walking through the steps of the math problem and verbalizing what the steps are as she engages in it, then the student can do the steps of the math problem while the teacher, again, verbalizes the steps. Then we have the student verbalize the steps while he engages in the math problem.

Maybe the teacher's whispering the steps along with him until finally the teacher is able to step back completely and the student is able to verbalize … as he walks through the math problem steps on his own. It's great to also reinforce either verbally or with some sort of tangible reward when the student actually engages in this behavior, [for example] "Really nice work talking through the steps of this math problem while you completed it."

Lorraine: We've been talking about how the student self-monitors progress toward a goal or toward a target behavior. What is *self-graphing* and when is this most useful?

Maggie: *Self-graphing* is a great strategy to allow a student to really see her progress toward a goal, for example. Actually, there was a 2002 issue of *TEACHING Exceptional Children* where Gunter and colleagues had a great article that detailed how to establish computer-based graphing for students wherein students have a folder on a computer with graphs they can access. [Note: see TEC vol. 35, no. 2, 2002.] They can enter their own data and the graph will update immediately. For example, I've seen this used with teachers who are working on fluency, on basic math facts. The students can enter the number of problems solved correctly during timing and actually see their progress.

You can tie self-graphing to a self-management strategy. For example, with the self-monitoring, the student can shade in the number of boxes commensurate with the number of intervals where she was on task. She can do that every day and see how her engagement increases. In general, adding a self-graphing component can be a really nice motivator for students to be able to see—tangibly see—the progress they're making with their behavior.

Lorraine: Well, it seems as if some of these other various strategies could also be combined. Is that true?

Maggie: Absolutely. As I said before, self-graphing is often added to other self-management strategies. That is, how can we graph a student's progress toward a goal? Or how can we visually represent how a student's behavior is improving using a self-monitoring system? Also, students can set goals associated with self-monitoring systems. For example, a student may decide that her goal will be to be on task during math at least eight out of 10 intervals.

She may set a goal to raise a quiet hand rather than blurting out and then take data on her own performance. Those are just a few examples about how strategies can be combined. It's really about individualizing the system to promote student success. There are enough self-management strategies that we can really play with that and see what's most effective for the student.

Lorraine: Maggie, the majority of students who receive special education services spend most of their day in a general education setting. Can self-management techniques be used in gen ed settings?

Maggie: I'm really glad you asked that. Self-management strategies can and should be used in general education settings. There's ample research behind the use of self-management strategies to indicate that these are highly effective procedures for students with disabilities. As such, it's incumbent upon teaching professionals to utilize these strategies when possible for students who might benefit from them.

If a general education teacher has a student with disability in his class that may benefit from a self-management procedure, he can work with a special education teacher to

collect data on a target behavior, design a self-management system, and teach the system to the student. If we can pinpoint specific areas where a student may be struggling, a system that is both useful for the student and manageable for the gen ed teacher can be created.

I have a vignette in my article. You have a student who dislikes a certain subject like math, and she tends to check out. A self-management system can be established for that period of time, which is a non-preferred subject for her, math, to help increase her time on task. It'll take a little bit of work up front to teach the system and create the system.

That time will come when the teacher is no longer required to prompt the student continuously to stay on task—because that takes a lot of time too, right? Especially given the fact that tools like MotivAiders exist, [self-]cueing devices for the students, I feel that self-management strategies really can be feasibly implemented in general education settings at this point, even given the competing demands the gen ed teachers face. This can and should be used.

Lorraine: What other tips do you have for teachers wanting to improve students' self-management?

Maggie: We need to remember as educators that we want our students to be successful not only with academic content but also in their ability to be productive and independent members of society. As such, we need to be mindful about the skills we teach. It can happen that students with disabilities become dependent on adults to complete tasks, or teachers feel overwhelmed with the amount of prompting or cueing they're giving a student to complete tasks or stay engaged.

Just like we scaffold academic learning, we need to think about how to scaffold behavior skills. Teachers and parents should encourage students to complete tasks independently. If students struggle with this, use one of these self-management procedures to help with the scaffolding. If students are requiring multiple prompts to get through certain tasks, think about why and how we can reframe this not as a behavior problem, but more as an opportunity for skill development.

Special educators can ensure paraprofessionals assigned to students are mindful that the student should be supported but not become dependent on them. I know some teachers use terms like *self-managers* to promote and reinforce students' independence in completing classroom routines and tasks. That's great.

In general, we know students with disabilities are included in general education settings and we know that there are some skill issues that arise given the nature of certain disabilities such as executive functioning deficits for some students with autism spectrum disorder. As with any skill deficit, teaching is required and self-management procedures are a great way to do this.

Lorraine: Those are great tips. Thank you so much for talking with me today, Maggie!

Maggie: Thank you, Lorraine. It was a pleasure.

Lorraine: Maggie's article, "Self-Management Strategies to Support Students with ASD," appears in volume 48 of *TEACHING Exceptional Children*. *TEACHING Exceptional Children* is a publication of the Council for Exceptional Children. To learn more about CEC, visit cec.sped.org.