Welcome to this teaching exceptional children podcast. I’m Lorraine Sobson, publications manager for the Council for Exceptional Children. Today I’m talking with Sarah Negro, an assistant professor at George Mason University’s College of Education and Human Development. Sarah is a co-author— with Sarah Hooks, Dawn Fraser, and Kyena Cornelius— of a recent article in TEC entitled "Whole-Group Response Strategies to Promote Student Engagement in Inclusive Classrooms." Sarah, thanks for joining me!

Sarah: Thank you so much for having me.

Lorraine: Let's get started. Why do teachers need a continuum of strategies to keep students with disabilities engaged during whole-group instruction?

Sarah: I think there's probably two main reasons for why teachers would need a continuum of strategies. First, students have individual needs within every classroom. It requires a variety of strategies to meet the needs of individual students and to provide an appropriate level of support for every child. Second, teachers need a continuum of strategies that include both proactive and reactive strategies because—even when we’re being proactive as teachers and we’re trying to plan ahead for every little thing—there's always going to be something that comes up, whether it's an off-task behavior or an unanticipated occurrence by a student that's going to require a teacher to be reactive. This could include something like following through on a classroom behavior system or redirecting the student back on track. By having both proactive and reactive strategies within your continuum, you can address the needs of the students throughout the lesson.

Lorraine: You did just reference an example of a reactive strategy. Could you give us some more examples of both proactive and reactive strategies to explain the differences?

Sarah: Sure. When I’m saying proactive strategies, what I mean is our strategies that we use as teachers when we’re planning instruction, things that we are building in ahead of time to anticipate our students’ needs so that we do not have to stop instruction during the lesson. These are things like building in opportunities to respond using proximity to our students, building in movement—student movement—into the lesson, including opportunities for students to choose how they might demonstrate their learning or understanding—all of these things can be planned for ahead of time. The goal with proactive strategies is that instruction does not have to be stopped, that the learning continues.

On the other end of the spectrum are reactive strategies. This is where a [teacher] has to react to an off-task behavior. In these instances, instruction has stopped and the teacher must do something to get students back, focused on the content that they’re...
learning. This could be something like reminding students of class expectations, modeling appropriate behaviors, or identifying a student that can model the correct behavior and then asking the individual who is off task to demonstrate themselves on-task behaviors.

These are necessary strategies that teachers are going to have to use but, again, in an ideal situation we want to limit the number of reactive strategies that we’re using because, each time we’re reacting to a student’s off-task behavior, that means as teachers, instruction has stopped. The more proactive strategies we can include, the hope is that the less reactive strategies we will need to use.

Lorraine: What are whole-group response strategies?

Sarah: Using ... whole-group response strategies is one approach to increasing students’ opportunities to respond and demonstrate on-task behaviors. There are different ways of going about it, but whole-group response strategies can include things like using a dry erase board or flash cards or e-votes [or] hand signals or even post-it notes.... All the students in the classroom are responding to one prompt given by the teacher.

In these examples, all the students are engaging and responding to the prompt, rather than the teacher asking just one student at a time, where each student might only have an opportunity to answer one or two questions throughout the entire lesson.

Lorraine: I would like to talk a little bit more about the specific strategies that you mentioned. For example, how can hand signals be used to check comprehension?

Sarah: So, one type of proactive strategy using whole-group responding is by building in comprehension checks. Using hand signals—students can hold up fingers corresponding to their perceived level of understanding about a given topic. For example, if you have the students in math class with you and you’re teaching them a math concept, you would plan specific points in the lesson to stop teaching math and to say "Okay, class. We’re doing a comprehension check. Hold up the number of fingers that correspond to your current level of comprehension." This is called a scaled response system. Students would hold up four fingers to show that "I totally get it and I'm ready to explain this to a peer." If you can explain what you have learned, that's demonstrating the highest level of understanding.

If they hold up three fingers, they may be saying "I understand the content"; two fingers, "I think I understand the content"; one finger, "I do not get what's going on right now in class." This quick comprehension check where everyone in the class holds their fingers up allows the teacher to get a global view of what's going on in the classroom at that moment. The teacher can then make on-the-spot instructional decisions, such as “I need to circle back and revisit this concept. I need to explicitly teach a vocabulary term here” or, maybe, “I’m going to have to reteach this at a later time with additional support” or “there’s only a few students who are really struggling so I think I might pull them for a guided instruction or I might pair those students up later on with students who are confident on this material” or “everyone gets it and I can move on.”
This type of scaled response system allows teachers and students to have ongoing two-way communication using hand signals. It doesn't require any verbal response from students that can then lead to off-task behaviors or conversations that can draw other students off task.

The other thing that you should take into consideration is the classroom environment. Sometimes students may feel uncomfortable [about holding] up hand signals in front of their peers because they don't want their classmates to know that they don't understand the material. An easy thing to do in this situation is to ask all of the students to put their heads down and hold their hands up during the comprehension check. This is a quick little addition to the strategy that would allow you to make students feel more comfortable to give honest answers; comprehension checks are only as useful as the responses you're receiving. If the responses are honest, it will really be more formative for you as a teacher.

Lorraine: I really like that type of comprehension check. It seems like it would be easy to implement and also, like you said, help inform instruction. You also mentioned response cards, which similarly doesn't seem to require a verbal response. Could you explain what those are and what kinds of students or situations it might be best used in?

Sarah: Sure. Response cards can be used for so many situations in whole-group instruction. Remember that no matter what type of classroom or setting the teacher is working in, whole-group instruction is the most common form of instruction. So, we have to think of ways that we can increase students’ opportunities to respond. Whole-group response cards is a great way to do that. In this example, all of the students would be holding up a response in some way. This could be a flash card [or] if you have e-votes in your classroom or poll everywhere in your classroom, the students can do live-stream polling up to the smartboard to show their responses anonymously. The idea here, again, [is that] every student is responding to every prompt.

As you noted, ... these are non-verbal responses. This is particularly useful for students who struggle to express themselves verbally or in writing because, if the objective of the question is to check their understanding of a topic, then it's not necessarily important that they're able to express themselves verbally or in writing to do that. If they're able to show that they understand the information using the response card, you have a better, more accurate understanding of their comprehension because you've eliminated them having to struggle with that expressive language.

Lorraine: When you were describing the hand signals, you mentioned the teacher wants to get an accurate read on what the actual comprehension was. Using the response cards, we've described how to implement it, but how does the teacher use the information that she gets from the responses?

Sarah: This is a really important piece. Not only are we wanting to focus on having every student participate, but we also, as teachers, need to know what do we do with that information? Response cards—which are the low-tech version of this live polling or e-voting—are something that helps a teacher to understand comprehension of the
students at that moment. Typically, you would use close-ended, high-frequency prompting when you're using response cards. Again, the students don't have to write or speak and this will help the class to move at a brisk pace. Many teachers say that they struggle with pacing in their lessons; by using these response cards, you can still get through the number of prompts that you were hoping to, but at a quicker pace than if students were vocalizing their answers. Another thing to consider is that if you're going to use several close-ended questions, as a teacher, you should plan ahead of time what those questions are going to be.

You want to consider what the objective of the lesson is and plan for the types of questions that will help you and your students to accomplish those learning objectives. This will help the lesson to move more smoothly. In the example where the teacher is using close-ended questions and the students are holding up response cards, the teacher can check for understanding of the material, but not necessarily understand students’ thought process or critical thinking. That's not the purpose of the whole-group responding in this example.

Lorraine: You've been talking about how you need to use close-ended questions for things like the response cards and the comprehension checks. Another whole-group response strategy that you discuss in the article is … through writing. Can you describe what that is?

Sarah: Absolutely. The whole-group response through writing is another opportunity for all of the students to be able to respond to all prompts. The difference here is that the prompts don't have to be close-ended like they were with the response cards. The students can work through different types of problems to show their thinking or justify their answer in writing. An easy way to think about this is with dry erase boards. Having every student with a dry erase board, asking them a question and then, every student writes their answer on the dry erase board.

This allows the teacher to build in wait time for all students because you're always going to have those eager beaver students who want to raise their hand immediately after figuring the question and have themselves not thought about processing what the question is asking—and definitely not giving their peers time to think through the question either. By using the whole-group responding with writing, this is a way for the teacher to address the needs of many students to take extra time to think critically and provide their reasoning to probes.

Lorraine: We have been talking a little bit about tracking individual student response during these different strategies. Can you expand on how teachers then use the data?

Sarah: Absolutely. Again, it's really important that we're offering opportunities for all of our students to engage in the lesson. While we're doing that as teachers, we can be tracking their responses and using this information as a method for formative assessments or progress monitoring. We should be thinking, as teachers, about things like "How is today's lesson and the way that my students responded to the lesson going to inform how I plan for tomorrow?" Without any concrete data, it can be hard to ask those and answer those types of questions as teachers.
If you have a chart in front of you that you’re able to track your students’ responses to these whole-group probes then, you can look back at that chart and say "Gee, it seems like everyone was getting stuck on ... subtraction with substitution. Every time I ask a subtraction question with substitution, it seems like the majority of the students, through the comprehension checks, felt lost or on the whole-group responses were getting the question wrong. Tomorrow, I'm going to revisit that concept. I'm going to explicitly teach that first thing during the warm-up, and then we're going to check for our comprehension and then we're going to move on."

Another thing you can do with this information is to help to group your students or decide which students need guided instruction or which students are ready for independently accessing the curriculum because they are mastering all of the components, they feel confident with the curriculum and they are ready to be challenged. While you're targeting the whole group, you're also helping to individualize your instruction. Another very specific way that this can be used for special education teachers is through progress monitoring IEP goals.

If you're tracking your students during whole-group instruction and you're embedding whole-group response probes, you can also track, for example, how many times Eric correctly answered the math probe. If Eric was given 10 math questions and answered seven of them correctly, you now have a sentence that sounds like "Eric correctly answered 7 out of 10 math probes focused on subtraction with regrouping." If this is Eric's IEP goal, you now have data that you can use towards his IEP goal. At the same time, you are looking at everyone else in the class and how they're working on the same content.

When we think about including our students with disabilities, we don't want to exclude their individual needs, but we also want to think about what are feasible ways for teachers to meet Eric's individual needs—in this example while teaching the whole group. There are charts that go along with this article that can be accessed on the website. It's trackstudentlearning.weebly.com. All of the charts are free, customizable charts that teachers can download. They're Word documents so they're not difficult to edit, and they're meant to be useful and customizable for your own needs and your own classrooms as teachers.

There are charts that look like a classroom full of chairs. This is one that I think is really easy for teachers to use because, if you have your students sitting in the same seats every day, you can have a chart that looks like your classroom with seats. Each box represents one student’s seat. As you’re moving through the lesson, you can kind of jot notes down to yourself within the little desk, which is a box, and then at the end of the lesson you have this chart that has either anecdotal notes or [for example], every time you ask a whole-group response question and they hold up their response cards, you may have [made] a checkmark ... each time a student answered incorrectly—because we hope that there are fewer incorrect answers than correct answers.

You may have just jotted a checkmark down in the box of the students who were answering incorrectly. At the end of the lesson, you can go back and notice which
students were really struggling and which students were succeeding during the lesson. Those students who have few or no checkmarks in their boxes, you know that they’re ready to move on. Those students who have several checkmarks in their boxes likely need greater support. What I’m trying to get through to teachers in this example is that while we’re using good strategies, such as proactive teacher strategies, including whole-group responding that increase students’ opportunities for responses, we can also be progress monitoring our students. It’s two birds with one stone.

We can also be tracking their progress using templates or charts that work for our classroom so that at the end of the lesson, or at the end of the school day, we can reflect not only on memory, but on concrete data.

Lorraine: I’m glad you mentioned the online resources too because the article has lots of great graphics in it that show the charts and how you would use them and what the data will look like as you’re collecting it. I’m glad you added that in. Well, thank you so much for talking with me today, Sarah.

Sarah: Thank you, this has been really wonderful. I know my co-authors are really happy to be sharing this information and we welcome questions from our readers and we also encourage everyone to go to the website to use the customizable charts to make the article more meaningful for them.

Lorraine: Sarah’s article, "Whole Group Response Strategies to Promote Student Engagement in Inclusive Classrooms" 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.