
Lorraine: Welcome to this Exceptional Children podcast. I'm Lorraine Sobson, Publications Manager for the Council for Exceptional Children. Today, I'm talking with Matthew Brock, an assistant professor of special education at Ohio State University. Matt and Erik Carter recently published a research article in Exceptional Children entitled “Efficacy of Teachers Training Paraprofessionals to Implement Peer Support Arrangements.” Welcome, Matt! Thanks for joining me today.

Matthew: Thanks so much for inviting me to do this. It's a real privilege to talk to you and your readers.

Lorraine: The article we're going to discuss today focuses on effective inclusion of students with disabilities in the secondary setting. Matt, could you give us an overview of the study as a whole? And then describe the particular focus of the article?

Matthew: Sure. Big picture: We know that general education classrooms are a very valuable context for intervention for students with disabilities. The best place for students to access the general education curriculum is in a general education classroom. The best place to practice communication and social skills is with peers who model these skills well.

I should start by saying that when I talk about students with severe disabilities, I'm talking about students who have a diagnosis of intellectual disability or autism and are eligible for the state's alternate assessment. While we know that the general education classroom can be a valuable context for intervention, we also know that planning effective inclusion for these students, especially students in middle and high school can be challenging.

Descriptive studies have shown us that without well planned supports, adolescents with severe disabilities who attend general education classrooms rarely interact with their peers, and they don't always participate in what's going on with the general education curriculum. Fortunately, peer support arrangements are one possible avenue for improving the general education classroom context for students with severe disabilities. Peer support arrangements usually involve a paraprofessional or another adult facilitating the peer support arrangement by inviting peers to provide support, drafting a peer support plan in coordination with a certified teacher, meeting with peers to orient them to their new roles, and then facilitating peer support as needed on an ongoing basis during class. The idea is that paraprofessionals shift their roles from providing only direct support to the student with the disability to more of a facilitative roll where they're working alongside peers.
The specific ways that peers provide support really depend on the context of the classroom and the characteristics of the student with the disability. Supports are designed both to promote social interaction with peers and participation in class activities. There's growing and pretty robust evidence at this point that peer support arrangements work. There's a great deal of evidence that's accumulated in recent years—including a randomized control trial that's [been] published in *Exceptional Children* in six single-case design studies, including the one I'm talking about today—that shows that this intervention is a really effective way to promote increased interactions between students with disabilities and their peers in general education classrooms.

The challenge is we know that it's effective, but we don't have a validated model for how we can do peer supports without a lot of help from researchers. All of the previous studies have involved either researchers actually implementing peer support arrangements themselves, or providing a lot of ongoing support and training to the paraprofessionals who are facilitating the arrangement. In the absence of a validated model, we need to figure out how we could actually make this work under typical conditions. In fact, there's a surprising lack of evidence for teachers training paraprofessional to implement any practice for students with severe disabilities.

In a recent review of the literature, I didn't actually find any other studies that looked at can teachers train paraprofessionals to implement something effectively with students with severe disabilities. Our goal in this study was to figure out, one, can teachers deliver effective training to paraprofessionals that enables them to implement peer support arrangements effectively? Two, does implementation of peer support arrangements result and improve social and academic outcomes for middle school students with severe disabilities?

Lorraine: How did the paraprofessionals go about facilitating the peer support arrangements?

Matthew: The peer support arrangements look the same as they have in previous studies. The difference in this case is that paraprofessionals implement them only with support from teachers instead of any outside help from researchers. The first thing they did was invite peers in the general education classroom to help provide support to the students with severe disabilities. There's a number of different ways that you can invite peers to provide support in most cases. In this particular study, on a day that the student with the disability wasn't in class, the paraprofessional just talked to the entire class and said, "Hey, this is a student that I'm supporting in this class. They're a really cool person. I think I can give you an opportunity to get to know them better and get to interact with them during class." We never had a problem with getting peers to volunteer.

The only problem we had was sometimes we had to say, "I'm sorry, we can only support three peers, so we're going to ..." or "Our slots are already full. We already have all the peers that we need." We were fortunate to have plenty of volunteers.
The second piece was, the paraprofessional oriented those peers to their new role. Before they had a meeting with those peers the paraprofessional sat down with the special education teacher because any instruction that's delivered by a paraprofessional should be done under the close supervision and guidance of a certified teacher. Together, the teacher and paraprofessional drafted a plan of some specific ways that peers might be able to provide support. The ways they provided support really depended on the kind of class that they were in and what was going on in the classroom.

We happened to be mostly in science classes, and we were in one math class. Different days’ instruction might look different. You kind of could imagine, thinking back to your time in middle school, that some days there's going to be more lecture. Some days there's going to be small-group work, maybe lab experiments. Other times, people might be working independently on a written assignment. The kind of support that we designed for our peers to provide really depended on what was going on.

Maybe the [target] student's strength isn't going to be ... reading the instructions or writing in the lab notes what happened, but they can do a really nice job of listening to a peer read through the instructions and actually carrying out the experiment. It might look really different if the students are listening to a teacher lecture, so a peer’s role in that situation might be taking notes for the student, encouraging the student to listen, encouraging the student to answer questions, or at the end of a lecture just turning to their peer with the disability and summarizing the key takeaway points. The paraprofessional would make that plan with the licensed teacher. Then, the purpose of that initial orientation with peers would be primarily to actually share that plan and say here's some specific ways you're going to be able to support your peer with a disability during class.

There's also some specific steps that we ask them to follow that kind of gives peers the idea that your job isn't to be a teacher, your job is to support this person the way that you would support a friend, that you would support a peer. It looks different than a teacher–student relationship. Also during that meeting, we share information about the student with the disability. It's going to be helpful to the peers as they communicate with them. A number of the students with severe disabilities use augmentative or alternative communication, which your readers might know is called AAC for short. That basically means they communicate in other ways besides talking. That might mean that they use technology, like a computer, or a tablet, or a device that they can push a button, and it would emit a word or a message. It might mean that they point to picture or they use sign language.

Because some of these students are using different ways to communicate, peers aren't always confident in how to communicate with them. They might be really excited and interested in talking with them, but they simply might not have the experience of communicating with someone who uses AAC before. Part of our job in the orientation meeting, the job of paraprofessionals is to explain to them, this is how this student communicates. Here's some things they really like talking about. Here's some interests
that you might share that you can have a conversation with them about. Helping guide them to understand how to communicate effectively.

After paraprofessionals have oriented peers to their roles, then the next step is the paraprofessionals facilitate on a daily basis to help peers provide that support. That might involve suggesting something for them to do in the classroom. Praising them when they’re doing something really well, or in other cases just providing information or a suggestion that they might not have thought of on their own, so they can help support that student with the disability more effectively.

Lorraine: When you’re talking about the training of the students, you are touching on some components of the intervention that you discuss in the article, which are modeling, performance feedback, and accountability. I’d like you to sort of address the importance of each of these components, and describe why it’s important to have all three, and how they work together to ensure success of the intervention.

Matthew: Sure. I pulled modeling, accountability, and performance feedback from the broader paraprofessional training literature. Because there weren’t any published studies on [training] paraprofessionals to implement peer support arrangements, I thought what do we know about effectively training paraprofessionals to do anything? Those are the three strategies that real stood out in the review. Conceptually, it makes sense that those would be important. When something is modeled for someone you actually demonstrate how you go about implementing all of the steps that are associated with peer support arrangements. Actually walking them through, this is what it looks like. In our training we used video modeling because we thought that was one of the more effective ways to give paraprofessionals a really clear picture of this is what it’s going to look like when you’re facilitating in a classroom.

The second piece of performance feedback deals with a teacher observing the paraprofessional, and then sharing feedback about here's some things that you did really well, and here's some things that you could do even better the next time that you implement. Something that is a challenge for special educators is observing and providing effective feedback to paraprofessionals because special educators are spread really thin and they supervise a lot of paraprofessionals who are often taking many students many different places in the school. We tried to make that as feasible as possible for them to do. We gave teachers the option of, would you like to arrange a time that you can actually go physically to the classroom for a half an hour to observe, or if you're not able to do it at that time, let's just collect a video tape of the class.

Then, you can watch it at your convenience maybe during your prep or before and after school. That way, either way you get a nice snapshot of what's going on in the classroom and you can provide that feedback to the paraprofessional. Performance feedback is probably the most thoroughly researched professional development tool that we have in special education. We know that it works really well not just for training paraprofessionals, but for training teacher too. It makes sense that it’s effective because you're providing specific information about this is what you're doing really well, and this
is specifically what you need to change or improve for next time to do even better, so individualized feedback for that person.

The third piece, accountability, is a more conceptual piece because this study and others that have involved training paraprofessionals are single-case design studies. They involve researchers coming in and observing repeatedly over time and (whether) the paraprofessional [is] changing what they're doing, or ... teaching differently, or ... providing support differently. It's just human nature to react differently when you know someone's going to come watch you later and see if you're doing what you were trained to do. The observation piece of performance feedback goes hand [in hand with] accountability because the paraprofessional knows not only am I going to try to do this, but my supervising teacher is going to see how I'm doing, so I need to make sure that I'm putting all these pieces from the training into place....

Lorraine: Well, I like the team approach that you've been discussing. You know, you have the teacher, you have the paraprofessional, you have the peers, you have the students with disabilities and the way it sort of works together and goes back and forth, flows back and forth. What I'm really excited about, though, is for you to discuss the results of your study and the intervention. What sort of changes in peer interactions did you find for the target students?

Matthew: For three of the four students we saw some really nice increases in the amount of interactions, both to their peers and from their peers, which was really exciting. If you look at the baseline data in our study, it's a little disappointing when we first started measuring what was going on before anyone was trained, just how rarely the students with severe disabilities were interacting with their peers, but we know from the larger literature that's not unique to our students, that's true in general, which makes it all the more exciting that with a relatively simple intervention like peer support arrangements we really saw those interactions take off as soon as the peer support arrangement went into place.

Lorraine: The results show that they increased their interactions. Now this is not, as you mentioned earlier, the only study that involves paraprofessionals implementing interventions. How is your study different from previous studies regarding training paraprofessionals to implement interventions?

Matthew: Previous studied training paraprofessionals who work with students with severe disabilities just involved those paraprofessionals being trained by researchers or a consultant who's coming into that setting. It's not a very sustainable model for us to expect researchers and consultants to train paraprofessionals everywhere. The more sustainable, natural way to do that in a typical setting is for supervising teachers to train paraprofessionals. That's what really makes the study unique: There aren't any previous experimental studies that show teachers actually training paraprofessionals who work with students with severe disabilities.
Lorraine: You've mentioned that your study really is unique in empowering teachers to deliver the training to the paraprofessionals. What types of recommendations would you offer for practitioners, for teacher educators, and for future research?

Matthew: Well, the big takeaway for special educators is that they can and should provide focused training to paraprofessionals who support students with severe disabilities in general education in classrooms. We saw pretty clearly from both this study and baseline data and other studies that without thoughtful peer supports put into place, students with severe disabilities would rarely interact with their peers and that simply seating students with severe disabilities next to their peers without some kind of intentional planning and adult facilitation isn't sufficient to ensure that students interact on a regular basis. If one of our desired outcomes of inclusion is to give students with severe disabilities increased opportunities to communicate and to practice social skills, we're going to need to really intentionally think about training paraprofessionals to implement interventions like peer support arrangements.

I want to emphasize to teachers that peer support arrangements should be supplemental to primary instruction and really closely supervised by both special education and general education teachers because those are the people that are ultimately responsible for a student's education. I also want to emphasize that peer support arrangements are only one piece of the puzzle when thoughtfully developing supports for a student with a severe disability in a general education classroom; there needs to be a more holistic plan in place that considers adaptations, modifications, and specific goals for the student that's in that classroom.

As for recommendations for teacher educators, being a former special educator myself and a teacher trainer now, I can say that we could do a much better job of helping our teachers learn how to effectively train and supervise paraprofessionals. I'm afraid that right now we probably do a better job teaching future special educators how to intervene directly with kids and probably not as good of a job about how to be an instructional team leader and to work alongside other adults. That's an area where we could improve. Based on descriptive literature where our special educators tell us that we could be improving. If we could do a better job of providing future teachers with those skills of both supervision and training of other adults, they can be effective team leaders. We know from this study and from previous studies that effective tools for training other adults include things like modeling and performance feedback. [We could do] a better job that of really clearly communicating to paraprofessionals by showing them these are the exact ... steps that you would do, this is exactly what this intervention would look like.

Then, providing performance feedback—here's some specific things you're doing really well, and here's some things that you might do differently in the future. We know that those specific tools are really effective for enabling adults to implement new interventions or supports.
You also asked about takeaways from researchers. I had mentioned earlier that this is the first study that looks at teachers training paraprofessionals to implement interventions for students with severe disabilities. That clearly means that we need a lot more replication. This is one possible way that teachers could train paraprofessionals, but there might be other ways that are more efficient or might be more feasible for teachers. There's a lot of work to be done in the future. This is just one possible model that we've tested in this particular study.

Lorraine: Well, it was an exciting study to read. I love when you mentioned that it's a part of a holistic approach to supporting a student with a disability. It's also approaching teacher education holistically and thinking about all the pieces and the skills that they need to have in the classroom. This was just a really great discussion, Matt, and I really appreciate you joining me and giving the readers sort of a glimpse, and helping them read between the lines of your article.

Matthew: Thank you so much for inviting me to talk with you today.

Lorraine: Matt's article, “Efficacy of Teachers Training Paraprofessionals to Implement Peer Support Arrangements,” is published in volume 82 of Exceptional Children, a publication of the Council for Exceptional Children. To learn more about CEC, visit CEC.SPED.org.