

Promoting Inclusion, Social Connections, and Learning Through Peer Support Arrangements

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Ensuring students with severe disabilities access the rich relationship and learning opportunities available within general education classrooms is an important—but challenging—endeavor. Although one-to-one paraprofessionals often accompany students in inclusive classrooms and provide extensive assistance, the constant presence of an adult can inadvertently limit the social interactions and engagement of adolescents with severe disabilities within high school classrooms. Peer support arrangements can be a practical and promising alternative to exclusively relying on paraprofessional delivered support. We draw on our recent partnership with schools implementing these interventions for more than 50 high school students with severe disabilities and involving more than 100 peers without developmental disabilities. This article outlines practical steps for establishing these interventions in inclusive classrooms.

For more than three decades, advocates of inclusive education have called on schools to meaningfully support the participation of students with severe disabilities within the breadth of learning and social opportunities that exist in any given school (Brown et al.,

1979; Ryndak, Jackson, & White, 2013). Although the response to this call has been slow and uneven, increasing numbers of students with severe intellectual disability, autism spectrum disorder, and multiple disabilities now attend general education classes (McLeskey, Landers, Williamson, & Hoppy, 2011). When supported well, participation in inclusive classrooms can increase access to interesting and relevant curricular content, shared learning opportunities, new peer relationships, and raised expectations (Agran, Brown, Hughes, Quirk, & Ryndak, 2014).

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Supporting inclusion at the high school level, however, can seem daunting. A challenging curriculum, large classes, heavy use of lecture, and

high expectations for student performance all raise questions about how best to support learning. The social landscape also changes dramatically as peer affiliations elevate in importance, classmates change from one period to the next, and adolescent interactions increasingly take place away from adults. Secondary educators need effective *and* feasible approaches for supporting the general education participation of students with severe disabilities in high school classrooms.

One common approach for supporting inclusion has been for individually assigned paraprofessionals to accompany students with severe disabilities to academic, elective, and related arts classes (see Table 1). Exclusive reliance on paraprofessional support can have unintended consequences (Giangreco, Suter, & Hurley, 2013). For example, the constant presence of a paraprofessional can unintentionally lead general educators to inappropriately defer instructional responsibility to these staff, physically separate students from collaborating with classmates, or foster dependence on paraprofessionals. Socially, peers may be hesitant to start a conversation when a paraprofessional is always present, they may assume the paraprofessional is there to provide all

Table 1. Research on Paraprofessional Supports

More than 400,000 paraprofessionals work with school age children receiving special education services under the Individuals With Disabilities Education Act (IDEA). The impact of these staff-delivered supports, however, depends entirely on how paraprofessionals are trained and utilized. When provided high-quality training and guidance to implement specific strategies for a specific purpose, their support can have a very positive influence on outcomes for students with severe disabilities (Brock & Carter, 2013). However, most paraprofessionals receive very little formal training and ongoing guidance (Carter, O'Rourke, Sisco, & Pelsue, 2009). As a result, some descriptive studies have indicated the presence of paraprofessional support in inclusive settings can be associated with poor social outcomes and lack of access to the general education curriculum (Carter, Sisco, Brown, Brickham, & Al-Khabbaz, 2008; Feldman, Carter, Asmus, & Brock, in press). Such data highlight the critical need for schools to carefully reflect on how they involve paraprofessionals to support the inclusion of students with disabilities. Absent thoughtful planning, strong training, and ongoing guidance, paraprofessional supports are unlikely to improve student outcomes. Training paraprofessionals to support implementation of peer support arrangements is one way of equipping them to deliver focused support strategies within inclusive settings and has the potential to benefit the entire class with their presence.

of the assistance the student might need, or they may ask questions of the paraprofessional rather than talking directly to the student.

Peer Support Arrangements as an Evidence-Based Alternative

Peer support arrangements represent a practical and promising approach for supporting students with severe disabilities access to the rich learning and social opportunities that often exist within inclusive secondary-school classrooms. Over the past 4 years, we have partnered with 21 high schools across two states on a research project evaluating the impact and acceptability of peer support arrangements as an alternative to an exclusive reliance on paraprofessional-delivered support in inclusive classrooms (see Carter et al., in press). *Peer support arrangements* involve one or more peers providing academic, social, and other support to their classmates with severe disabilities (Carter, Cushing, & Kennedy, 2009). Peers without severe disabilities work alongside the student, promote participation in class activities, interact about their class work and other topics (when appropriate), and encourage social connections with other classmates. Paraprofessionals (or special educators) shift to a *facilitative* role in which they provide ongoing feedback, assistance, and encouragement to students as they work together and learn from the general education

teacher. As students gain experience and confidence in their interactions, paraprofessionals gradually fade their close proximity and assume a broader support role within the classroom.

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Peer support arrangements differ somewhat from other peer-mediated interventions in their focus and logistics (Carter, Asmus, & Moss, 2014). First, they emphasize support of both academic and social engagement. This differs from peer tutoring, which adopts a more instructional focus on academic skill building, and peer buddy programs, which tend to emphasize social and leisure activities. Second, peer support arrangements are individually tailored interventions that involve a small number of peers rather than an entire class (e.g., cooperative learning groups, classwide peer tutoring). Peer support arrangements can usually be implemented without changing instructional approaches for the whole class.

Multiple studies have demonstrated the social and academic benefits of peer support interventions for participating students with and without disabilities. Students with severe disabilities who participate in peer support arrangements may have more social interactions, access a wider range of social supports, maintain or increase their academic engagement, spend less time in close proximity to paraprofessionals, and develop more friendships (e.g., Brock, Biggs, Carter, Catey, & Raley, 2015; Brock & Carter, 2015; Carter, Moss, Hoffman, Chung, & Sisco, 2011; Carter, Sisco, Melekoglu, & Kurkowski, 2007; Jimenez, Browder, Spooner, & Dibiase, 2012). Peers also may benefit from involvement by developing new advocacy and support skills, deepening their commitment to inclusion, learning more about themselves, improving their attitudes and expectations related to people with disabilities, and forging new friendships (e.g., Carter et al., 2011; Carter et al., in press). For example, Cushing and Kennedy (1997) found that students who served as peer supports were more academically engaged when working with their classmates with severe disabilities than when working alone. In addition to these important indicators of intervention efficacy, feedback from educators and students suggests these approaches are worthwhile and relatively easy to implement within secondary school classrooms.

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Getting Started

Although peer support arrangements can be implemented by general educators or special educators, within our project they were most often facilitated by paraprofessionals. To set up and maintain a peer support arrangement tailored to individual student needs, these facilitators followed a series of steps. We emphasize, however, the importance of first securing buy-in from school administrators and the general educators in whose classrooms students are enrolled. For example, special educators might first meet with these staff to explain the rationale and goals for peer support arrangements, the ways in which students with and without disabilities will work together, and the guidance they will provide to paraprofessionals as they support students.

Step 1: Developing a Peer Support Plan

Develop a written plan that outlines how students, paraprofessionals, and others will work together effectively. Creating a Peer Support Plan (see Figure 1) involves identifying (a) the ways in which a student with a severe disability will participate in different class activities, (b) the specific supports peers will provide during each of these activities, and (c) the ways in which the paraprofessional and general educator will assist the students to work effectively together. This plan is

best developed by general and special educators with input from the paraprofessional or other members of the individualized education program (IEP) team.

Begin by observing how students participate and interact throughout the class period. If students with severe disabilities are doing vastly different things than their peers, think about how activities might become more aligned. The Peer Support Plan form divides a class into five segments: (a) the beginning of the class, (b) lecture or whole-group instruction time, (c) small-group or lab activities, (d) independent seat work, and (e) the end of class. Consider what the student could do at the beginning of class before instruction begins and write it down in the first column (e.g., pass out materials, converse with peers, get out class work). Refer to the student's IEP to see which goals could be addressed naturally during this time period, such as initiating interactions, making choices, or using a communication device. Next, identify ways peers could support the student in those activities in the second column (e.g., prompt him to copy down information from the board, help him get out his notebook, encourage him to greet a peer). Finally, list ways the paraprofessional or general educator could support the students as they work together (e.g., make sure her communication device is close by, offer ideas for how she might participate in a particular activity, answer questions raised by the peer). Repeat this process for each of the other class segments—list what the student will do, note how peers could support this involvement, and identify ways the paraprofessional can assist the students to be successful. Every educator involved in the class should provide input on the plan. Although this form is not intended to replace other planning efforts educators undertake to support inclusion, it does provide a starting point for thinking about shared activities and interaction opportunities available within a particular classroom.

Step 2: Selecting and Inviting Peer Partners

Selecting effective peer partners (i.e., the classmates who participate in these interventions) is integral to the success of these support models. Someone who is motivated to get to know the student, who is excited to work together, and who will stay involved throughout the semester is ideal. As you observe the class, notice who already interacts with the focus student (i.e., the student with severe disabilities) or has an existing relationship. Other considerations might include identifying peers who would be positive role models of particular behaviors, have interests in common with the focus student, or who have good social skills. Ask students with severe disabilities who they would like to get to know better in class, sit next to, and work with on class assignments. Get suggestions on possible peers from the general educator, the paraprofessional, or others who know the focus student well. Have teachers make a general announcement about the opportunity to be a peer partner and invite students to contact them outside of the class to share their interest in getting involved. Whatever your approach, keep an open mind about who might work well. Although high-achieving students can be excellent at providing these supports, it can also be a beneficial experience for students who are themselves struggling in the class or are more socially reserved. Research suggests these students may actually increase their engagement and grades when serving in this role (Cushing & Kennedy, 1997). In addition, consult with a school administrator to determine whether and how permission from parents of students with and without disabilities will need to be obtained.

Once potential peers have been identified, extend the invitation in person. Involving more than one peer disperses responsibility and allows peer partners to balance completing their own work with supporting the

Figure 1. Peer Support Plan.

Peer Support Plan

Stephen is a fun and imaginative young man. Earth Science is a great class for him to work on some of his goals such as choice making, initiating and responding to peers, and improving his writing skills. Stephen loves to write with markers, use the computer, spell, and talk about food processing.

At the beginning of class...

<i>Stephen could...</i>	<i>Peers could...</i>	<i>The facilitator could...</i>
<ul style="list-style-type: none"> • Get out materials for taking notes from the board • Converse with peers about a social topic • Say hello to peers 	<ul style="list-style-type: none"> • Prompt Stephen to get out his notebook and copy down information; remind him we do this once every day • If he arrives late, let Stephen copy down the board information from your notebook • Ask Stephen about his day, his hobbies, or his latest culinary adventures • Make sure to greet him when he arrives to class 	<ul style="list-style-type: none"> • Encourage peers to engage Stephen in conversation and provide some conversation starters if peers are uncertain • Offer peers ideas for Stephen’s participation and answer any questions peers may have • Look through class materials to see if any adaptations or modifications may be needed

When there are lectures or whole-group instruction...

<i>Stephen could...</i>	<i>Peers could...</i>	<i>The facilitator could...</i>
<ul style="list-style-type: none"> • Highlight key words and ideas in the PowerPoint handouts • Write those key points in his notebook • Periodically compare his notes with those of his peers • Attend to the teacher as he presents information and leads discussion 	<ul style="list-style-type: none"> • Prompt Stephen to highlight relevant information on the handout • Occasionally summarize key points to make sure Stephen is following along • Briefly review points the teacher emphasized to the class • Prompt Stephen to pay attention if he seems distracted 	<ul style="list-style-type: none"> • Make sure Stephen and his peers have the handouts • Watch for body language that indicates Stephen is stressed • Check in to review the accuracy of Stephen’s notes • Work with the general educator or special educator to identify any needed adaptations or modifications for Stephen

When there are small-group or lab activities...

<i>Stephen could...</i>	<i>Peers could...</i>	<i>The facilitator could...</i>
<ul style="list-style-type: none"> • Listen and follow directions • Ask questions of specific peers who are sitting at his table • Make a choice about which parts of the lab activity he would like to take the lead on • Record all required subject matter in calendar or planner 	<ul style="list-style-type: none"> • Involve Stephen as much as possible in the lab by modeling key steps, checking for understanding, and asking for his input • Provide Stephen with choices about which aspects of the activity he will take the lead on • Ask Stephen directly to do something specific 	<ul style="list-style-type: none"> • Observe to make sure Stephen remains involved in and contributes to his group • Redirect Stephen’s questions to one of his peer partners • Offer suggestions to the peers in Stephen’s group if they are uncertain what he can do • Look for signs Stephen may engage in challenging behavior, particularly if he is unsure of what is coming up next

(continued)

Figure 1. (continued)

When there is independent seatwork ...

<i>Stephen could...</i>	<i>Peers could...</i>	<i>The facilitator could...</i>
<ul style="list-style-type: none"> • Take notes on highlighted words and definitions • Complete readings using the adapted text 	<ul style="list-style-type: none"> • Ask Stephen what the highlighted word is and its meaning; share answers if Stephen is unsure • Ask Stephen where he is in his reading • Share their notes with Stephen, if allowed by the teacher • If they finish their own work, they can help Stephen complete his work by providing prompts, asking questions, or providing brief summaries of important content 	<ul style="list-style-type: none"> • Prompt Stephen to identify the highlighted word, to write the definition, and keep working until the teacher says time is up • Work with the general educator or special educator to identify any needed adaptations or modifications for Stephen

At the end of class...

<i>Stephen could...</i>	<i>Peers could...</i>	<i>The facilitator could...</i>
<ul style="list-style-type: none"> • Say good-bye to peers • Put away his materials • Meet someone new in the class with an introduction from his peer partners 	<ul style="list-style-type: none"> • Prompt Stephen to put away his materials • Say good-bye to Stephen • If appropriate, walk with Stephen to his next class • Introduce Stephen to someone else in the class he does not yet know 	<ul style="list-style-type: none"> • Provide assistance as necessary • Be the time keeper and prompt peers when to remind Stephen to pack up • Provide feedback, praise, and suggestions to peers about this class or preparing for the next day

Other ideas and suggestions:

focus student. Introduce yourself, share why you thought of them for this role, and briefly highlight the purpose of the intervention (e.g., involving the focus student more actively in class activities and helping him or her meet more classmates). Ask if they would be willing to sit next to, get to know, and provide

occasional support to the student. Assure them that you will orient them to their roles and provide ongoing assistance as they work together. If they want to participate, set up a time to meet with them outside of class. We have found it is rarely difficult to find adolescents who are interested in getting involved in this way.

Step 3: Orienting Students to Their Roles

Before starting the intervention, hold an orientation meeting so peers can learn more about their roles and the supports you will provide to them. Although these sessions are most often led by the special educator or

paraprofessional, it can be beneficial to involve the general educator as well. This meeting helps foster rapport among the students and the paraprofessional who will be working with them. It also ensures peer partners are confident and competent in their roles.

Although high-achieving students can be excellent at providing these supports, it can also be a beneficial experience for students who are themselves struggling in the class or are more socially reserved.

Most orientation meetings in our project were held during a study hall, at lunch, or after school. They lasted about 30 to 60 minutes and involved the following topics:

- Explain the reasons you are implementing peer support arrangements
- Provide background about the student’s interests, strengths, and communication preferences
- Share your broad goals for the intervention
- Emphasize the importance of confidentiality and using respectful language
- Talk through any expectations specific to the classroom
- Walk through the written Peer Support Plan, highlighting the roles of peers
- Model any support strategies related to using communication systems or technology
- Offer ideas on how to provide encouragement and feedback in appropriate ways
- Give guidance on when and how to seek assistance from educators
- Address any questions or concerns of the peers
- Discuss next steps for launching the peer support arrangement

Provide peers with an opportunity to share their own ideas for the Peer Support Plan. Adolescents can be especially insightful about how to enhance participation and social connections. Emphasize that your primary goal is to promote shared learning and new relationships, and not tutorial relationships. Students should provide support as a classmate, not as a mini-teacher (e.g., tackling behavioral challenges, addressing grooming or hygiene issues, or developing assignments). In addition to orienting peers, talk with the focus student about how peers will be more involved in his or her learning. Some students with severe disabilities receive almost all of their instruction from paraprofessionals and may need guidance to turn first to their peers for support.

Step 4: Working Together During Class

Once students are familiar with their new roles, introduce them to one another if they have not previously met and rearrange seating as needed so they can work together. The paraprofessional or special educator usually stays in close proximity to the students during the next few classes to model how they can work together during different segments of class, to encourage appropriate social interactions, and to provide any other needed assistance. As the students gain experience working together, paraprofessionals look for opportunities to fade back their presence and direct support. However, they continue to actively monitor students’ interactions to ensure they all feel comfortable and effective in their roles.

What might peer support arrangements look like? You might notice the focus student walking to class with her peer partners while talking about their hobbies outside of school. While waiting for the bell to ring, peer partners may help the focus student get settled into her seat and pull out needed materials for class. Once the bell rings and instruction

begins, the peers occasionally lean over and quietly share an idea, answer a question, share notes, or offer encouragement. Table 2 includes examples of the wide range of supports we have seen peers provide to their classmates with severe disabilities (see Carter et al., 2009). Elsewhere in the classroom, the paraprofessional is assisting the general educator with organizing materials for an upcoming lab activity and checking on the progress of other students in the class. Although no longer always sitting next to the focus student, the paraprofessional still observes—and periodically checks in with—the students to make sure all is going well. As the class ends, the peers give the focus student a “fist bump” as they walk to lunch together. The explicit invitation for peers to get involved, the written Peer Support Plan, the orientation session for students, and ongoing monitoring and feedback from the paraprofessional or special educator together provide the catalyst for these new interactions and shared learning.

Stephen is a 16-year-old junior at Westley High School, home of the Wildcats. Having a diagnosis of autism spectrum disorder, he sometimes wears noise-blocking headphones and is fascinated by anything made of glass. He is a gifted speller, has a passion for food processing, and has recently shown an interest in science. His mother—along with Mr. Mays, his special education teacher—wanted Stephen to access more rigorous academic content and develop new peer relationships. Mr. Smitt’s Earth Science class seemed the perfect place to meet all of these goals. Although always present in the front of the class, Mr. Smitt noticed Stephen rarely talked with his classmates, and he always seemed to be playing catch up in class. Stephen’s paraprofessional, Ms. Miller, felt he was far too dependent on her assistance and prompts to participate. Together, the three educators decided to involve peers more actively in supporting Stephen.

Table 2. Social and Academic Supports Provided by Peers

Type of support	Examples
Academic-related supports	<ul style="list-style-type: none"> • Sitting next to the student during class • Helping the student pass out papers • Sharing notes • Highlighting important information shared by the teacher • Brainstorming answers to questions together • Inviting the student to join a group during small-group activities • Making sure the student has a clear role in any group activities • Asking the student how he or she is doing with an assignment • Asking clarifying questions, such as “What number are we on?” • Helping the student organize assignments and class materials • Reminding the student how to follow classroom routines • Helping the student check the accuracy of assignments and class notes • Paraphrasing lectures or rephrasing key ideas • Helping the student self-manage his or her learning • Offering additional examples of concepts or ideas • Demonstrating how to complete a particular problem • Highlighting important information on a worksheet • Reviewing course concepts the student is struggling to understand • Motivating and encouraging the student during difficult assignments • Redirecting the student when he or she is off task • Sharing class materials • Reading aloud a section of an assignment or text • Explaining how to do certain aspects of an assignment
Social-related supports	<ul style="list-style-type: none"> • Telling jokes with the student • Encouraging interactions with other classmates, when appropriate • Helping the student to “fit in” by learning social norms • Reminding the student to use his or her communication book or device (if appropriate) • Giving advice on personal matters • Reinforcing communication attempts • Talking with the student about shared interests, hobbies, or after-school activities • Walking with the student to the next class

Mr. Smitt and Ms. Miller reviewed the class roster and discussed a few students whom Stephen had shown an interest in or who they felt would benefit from getting to know him. They approached three students, two of whom agreed to get involved. Ms. Miller scheduled a time during lunch to meet with the students; to share more about Stephen’s interests, strengths, and support needs; to discuss how the peers might support him to be more actively involved in the social and academic milieu of the class; and to explain how she would support the students

throughout the semester. At the orientation meeting, Ms. Miller walked through the Peer Support Plan developed by Mr. Mays and Mr. Smitt. The plan outlined what Stephen could do during various segments of class, how the peers could support him in specific ways, and how the paraprofessional would provide ongoing feedback and encouragement. The two peer partners—Rory and Kayla—each shared their own ideas for how they could interact with and support Stephen. Ms. Miller and Mr. Smitt reminded the peers they were always

available if students had a question about what to do in class. They simply needed to raise their hand or give a glance.

They next discussed when and how the seating arrangement would be changed so the students could work together. Kayla would sit directly next to Stephen and Rory would be at an adjacent table just a few feet away. Ms. Miller would no longer sit directly next to Stephen. Instead, she would circulate around the classroom helping all students while periodically checking in with Stephen and his peer partners. At

first, Stephen still turned to Ms. Miller for direction, but she redirected his questions to Kayla or Rory. As the students got to know one another, Stephen soon began to listen to them, and interactions about their class work—and out-of-class interests—increased. Rory offered her notebook to Stephen when he needed more time to copy the daily weather information; soon he began requesting her notebook on his own when the information was removed from the board. Kayla gave him occasional reminders during lectures and helped direct him to the PowerPoint. Ms. Miller praised Kayla for providing support in such a positive way. Stephen—who often arrived late to class or left early—began arriving on time and staying until the closing bell. Now Stephen’s peer partners had time to introduce him to others in the class who were in their friendship circle. During lab activities, Stephen joined his peer partners’ group. This allowed Ms. Miller to fade her support, stepping in only to provide feedback or to help when Stephen became a bit agitated. For the first time, Stephen’s mother shared that he talked about students at school and referred to Kayla and Rory by name!

Near the end of the semester, every student gave a group presentation to the class. Stephen worked with his peer partners to practice his part. His presentation was impressive and challenged the views of classmates about what a student with autism could do. Stephen’s involvement in the class changed drastically that semester—from being present to having a real presence. In other words, Stephen became an active member of the class, and he was missed when he was not there. Peer support arrangements provided a formal way of creating new opportunities for shared learning and ongoing interaction.

Step 5: Facilitating Interactions and Support

As students work together, paraprofessionals or special educators shift to a more facilitative role by helping students to work together and

learn from the general educator. Table 3 displays a variety of ways this facilitation might be offered strategically and subtly. Each strategy is illustrated with examples of what these approaches might look like. In addition, check in with students regularly to see if they have questions, concerns, or new ideas. Find out what is and is not going well. Ask for suggestions to improve their interactions and offer praise and feedback generously. Approach students just before or after class to check in, or during natural breaks or transitions within the class period.

Examples of “check-in” questions for peer partners might include:

- How are you enjoying being a peer partner?
- What strategies are working well? What are you finding to be difficult?
- How can we better support you in this role?
- What impact do you think this is having on your partner? On yourself?

Example questions for the focus student might include:

- Are you enjoying spending time with ____ [names of peer partners]? Why or why not?
- What do you find to be helpful? Not very helpful?
- Would you like to keep working with these students?
- Are there other students in the class you also would like to get to know?

Be responsive to any concerns students raise and offer abundant praise for what they are doing well. Let peers know about the impact you are seeing through a brief comment or written note (e.g., “Joe was talking about you at lunch and asked when he’ll see you again”).

Step 6: Reflecting on Impact

Regular reflection on the implementation and impact of peer support arrangements is essential to ensuring the intervention is working as

intended. Check in regularly with students, review goals and strategies outlined in the written plan, and regularly collect data on student outcomes (e.g., frequency and quality of interactions, proximity of students to each other, and their level of academic and social support), educators and paraprofessionals are best positioned to make any needed adjustments. Conversations with parents and other school staff can also provide important insights into the benefits and challenges others are noticing.

As students work alongside their peers, they gain access to new opportunities to practice social and communication skills, decrease their reliance on paraprofessional support, participate more actively in class activities, and develop relationships that can contribute to a sense of belonging and overall well-being.

Sometimes adjustments need to be made for peer support arrangements to be most beneficial, making regular reflection crucial. High school students may be overscheduled, experience academic or personal distress, or struggle with their own social needs—all of which could impact their ability to be effective in their roles. An advantage of involving multiple peers is that having shared responsibility allows peers to vary in their own levels of engagement. The facilitator can also impact the efficacy of the peer support arrangement. Some facilitators may feel uncomfortable shifting away from a one-to-one support, working with a particular classroom teacher, exploring new ways to involve the focus student in class, or being directive with the peer partners. Frequent reflection and communication can, however, highlight any potential challenges and provide a

Table 3. Facilitation Strategies for Paraprofessionals

Strategy	Examples
Modeling ways to interact	<p>“Jasmine would be better able to play this game if you would show her how to match her cards.”</p> <p>“How does this game work? Oh, I see. You need to match the green cards to the green cards and put the red ones with the red ones.”</p>
Highlighting similarities	<p>“You and Eric might want to compare your essays. It looks like each of you have had pretty similar experiences.”</p> <p>“Wow! You both like dubstep music. Alan is into that . . . you should ask him about it.”</p> <p>“I overheard Monica say she also wanted to see that movie. Maybe you could go together.”</p>
Identifying strengths	<p>“It sure works great when everyone in a group is good at doing different things. How did each member help get your project done?”</p> <p>“You and Carlos will make great book report partners! You have a talent for writing, and Carlos has a talent for drawing. Together, you should end up with a super project!”</p>
Teaching interaction skills	<p>“Randy, let’s practice how you could call a friend on the phone and invite him to go to a movie.”</p> <p>“John isn’t looking. I don’t think he heard you. You could ask again. Make sure he sees you.”</p> <p>“What is another way that you could ask Patrick to borrow his ruler?”</p>
Interpreting behaviors	<p>“Mark, you talk aloud during math because it helps you think through the equations, right?”</p> <p>“That is usually a sign that Sarah is feeling a little anxious.”</p> <p>“When Brent hits his hand on the desk, he is letting us know that he is frustrated. He is working hard to learn other ways to let people know what he is feeling.”</p>
Redirecting peer interactions to students with disabilities	<p>“If you want to know how Jack is doing, just ask him yourself. Just make sure he can see you when you ask.”</p> <p>“I don’t know. He’s sitting right over there. I bet he’d tell you if you ask him directly.”</p>
Redirect student interactions to peer partners	<p>“See if you can get John to help you with this problem.”</p> <p>“Why don’t you ask Sam that question?”</p> <p>“Anita might be willing to check to see if your answers are correct.”</p> <p>“Hmm, I’m not sure what you should do next. Why don’t you ask your classmate what the assignment is?”</p>
Asking peers to help	<p>“Mary, will you please help Brian with his worksheet?”</p> <p>“If you point to and read the question, he can keep his place and answer.”</p> <p>“Would you be willing to be his partner and read out loud to him?”</p>
Increasing proximity	<p>“Brian, why don’t you go and sit with your lab group?”</p> <p>“Hmm . . . the group is about to start and you are still way over here!”</p> <p>“Uh, guys, I think you are missing someone . . .”</p>

means to develop solutions. As the number of paraprofessionals involved in these support models across the school increases, training and support for facilitators can be provided as part of staff training.

Concluding Thoughts

Peer support arrangements are a promising pathway for promoting inclusion, social relationships, and learning for adolescents with severe

disabilities within inclusive classrooms (Carter et al., 2014). As students work alongside their peers, they gain access to new opportunities to practice social and communication skills, decrease their reliance on paraprofessional

support, participate more actively in class activities, and develop relationships that can contribute to a sense of belonging and overall well-being. The potential benefits for peers, however, are just as powerful—improved attitudes, personal growth, a stronger commitment to inclusion, and new friendships. For educators and paraprofessionals committed to inclusive education, this intervention approach is worth adopting as one element of more comprehensive efforts to support access to the general curriculum for high school students with severe disabilities.

References

- Agran, M., Brown, F., Hughes, C., Quirk, C., & Ryndak, D. (Eds.). (2014). *Equity and full participation for individuals with severe disabilities: A vision for the future*. Baltimore, MD: Brookes.
- Brock, M. E., Biggs, E. E., Carter, E. W., Catey, G., & Raley, K. (2015). Implementation and generalization of peer support arrangements for students with significant disabilities in inclusive classrooms. *The Journal of Special Education*. Advance online publication. doi:10.1177/0022466915594368
- Brock, M. E., & Carter, E. W. (2013). A systematic review of paraprofessional-delivered interventions to improve outcomes for students with intellectual and developmental disabilities. *Research and Practice for Persons with Severe Disabilities*, 38, 211-221.
- Brock, M. E., & Carter, E. W. (2015). Efficacy of teachers training paraprofessionals to implement peer support arrangements. *Exceptional Children*. Advance online publication. doi:10.1177/0014402915585564
- Brown, L., Branston, M., Hamre-Nietupski, S., Johnson, F., Wilcox, B., & Gruenewald, L. (1979). A rationale for comprehensive longitudinal interactions between severely handicapped students and nonhandicapped students and other citizens. *AAESPH Review*, 4, 3-14.
- Carter, E. W., Asmus, J. M., & Moss, C. K. (2014). Peer support interventions to support inclusive education. In J. McLeskey, N. Waldron, F. Spooner, & B. Algozzone (Eds.), *Handbook of research and practice for effective inclusive schools* (pp. 377-394). New York, NY: Routledge.
- Carter, E. W., Asmus, J., Moss, C. K., Amirault, K. A., Biggs, E. E., . . . Wier, K. (in press). Randomized evaluation of peer supports arrangements to support the inclusion of high school students with severe disabilities. *Exceptional Children*.
- Carter, E. W., Cushing, L. S., & Kennedy, C. H. (2009). *Peer support strategies for improving all students' social lives and learning*. Baltimore, MD: Brookes.
- Carter, E. W., Moss, C. K., Hoffman, A., Chung, Y. C., & Sisco, L. (2011). Efficacy and social validity of peer support arrangements for adolescents with disabilities. *Exceptional Children*, 78, 107-125.
- Carter, E. W., O'Rourke, L., Sisco, L. G., & Pelsue, D. (2009). Knowledge, responsibilities, and training needs of paraprofessionals in elementary and secondary schools. *Remedial and Special Education*, 30, 344-349.
- Carter, E. W., Sisco, L. G., Brown, L., Brickham, D., & Al-Khabbaz, Z. A. (2008). Peer interactions and academic engagement of youth with developmental disabilities in inclusive middle and high school classrooms. *American Journal on Mental Retardation*, 113, 479-494. doi:10.1352/2008.113:479-494
- Carter, E. W., Sisco, L. G., Melekoglu, M. A., & Kurkowski, C. (2007). Peer supports as an alternative to individually assigned paraprofessionals in inclusive high school classrooms. *Research and Practice for Persons with Severe Disabilities*, 32, 213-227.
- Cushing, L. S., & Kennedy, C. H. (1997). Academic effects of providing peer support in general education classrooms on students without disabilities. *Journal of Applied Behavior Analysis*, 30, 139-151.
- Feldman, R., Carter, E. W., Asmus, J., & Brock, M. E. (in press). Presence, proximity, and peer interactions of adolescents with severe disabilities in general education classrooms. *Exceptional Children*.
- Giangreco, M. F., Suter, J. C., & Hurley, S. M. (2013). Revisiting personnel utilization in inclusion-oriented schools. *The Journal of Special Education*, 47, 121-132.
- Jimenez, B. A., Browder, D. M., Spooner, F., & Dibiase, W. (2012). Inclusive inquiry science using peer-mediated embedded instruction for students with moderate intellectual disability. *Exceptional Children*, 78, 301-317.
- McLeskey, J., Landers, E., Williamson, P., & Hoppey, D. (2011). Are we moving toward educating students with disabilities in less restrictive settings? *The Journal of Special Education*, 46, 131-140.
- Ryndak, D., Jackson, L. B., & White, J. M. (2013). Involvement and progress in the general curriculum for students with extensive support needs: K-12 inclusive education research and implications for the future. *Inclusion*, 1, 28-49.

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Support for this research came from the Institute of Education Sciences, U.S. Department of Education, through Grant R324A100391 to Vanderbilt University and the University of Wisconsin-Madison.

TEACHING Exceptional Children, Vol. 48, No. 1, pp. 9-18.

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