

Intellectual and Developmental Disabilities

Scaling Up a Peer-Mediated Program Statewide: Lessons Learned Through Peer to Peer

--Manuscript Draft--

Manuscript Number:	IDD-D-21-00062R1
Article Type:	Perspectives
Keywords:	peer partner programs; peer-mediated interventions; autism spectrum disorder; intellectual disability; scaling up
Corresponding Author:	Erik W. Carter, Ph.D. Vanderbilt University Nashville, TN UNITED STATES
First Author:	Amy Matthew, Ph.D.
Order of Authors:	Amy Matthew, Ph.D. Maureen Ziegler Margie Mayberry Jamie Owen-DeSchryver, Ph.D. Erik W. Carter, Ph.D.
Manuscript Region of Origin:	UNITED STATES
Abstract:	Peer-mediated interventions are a powerful and practical way of promoting the social relationships, learning, and inclusion of students with disabilities. We describe one state's efforts to scale up a research-based, peer-mediated program called Peer to Peer throughout Michigan. Among the more than 700 schools that now offer this program, as many as 18,000 peers are involved in supporting nearly 5,000 schoolmates with autism and other developmental disabilities in their learning and relationships. We share our perspectives on eight key factors that have contributed to the growth and widespread adoption of Peer to Peer over the last 20 years. We discuss enduring challenges in this long-haul work and conclude with recommendations for future research focused on schoolwide peer-mediated programs.

Abstract

Peer-mediated interventions are a powerful and practical way of promoting the social relationships, learning, and inclusion of students with disabilities. In this article, we describe one state's efforts to scale up a research-based, peer-mediated program called *Peer to Peer* throughout Michigan. Among the more than 700 schools that now offer this program, as many as 18,000 peers are involved in supporting nearly 5,000 schoolmates with autism and other developmental disabilities in their learning and relationships. We share our perspectives on eight key factors that have contributed to the growth and widespread adoption of *Peer to Peer* over the last 20 years. We discuss enduring challenges in this long-haul work and conclude with recommendations for future research focused on schoolwide peer-mediated programs.

Keywords: peer partner programs, peer-mediated interventions, autism spectrum disorder, intellectual disability, scaling up

Multiplying Peer to Peer in Michigan:

Reflections on Scaling Up a Peer-Mediated Program Statewide

The courses students take, the extracurriculars they join, the activities they attend, the experiences they enjoy, and the relationships they develop can all contribute to their personal growth and preparation for the future (Carter & Draper, 2010). Yet many students with autism and other developmental disabilities still remain on the peripheries of these important educational opportunities. For example, studies regularly find that students with low-incidence disabilities have inconsistent access to general education courses (Morningstar et al., 2017), infrequent involvement in extracurricular activities (Agran et al., 2017), and more restricted relationships with peers (Petrina et al., 2014).

Peer-mediated interventions are a practical way of supporting students with autism and other developmental disabilities to participate more fully in all aspects of the educational experience (Harris & Meltzer, 2015). These interventions involve peers in providing academic, social, and/or behavioral supports to their schoolmates with disabilities. Peer-mediated interventions can vary in multiple ways, including the settings in which they are delivered, the ways in which peers are recruited and trained, the ways in which students work together, the ongoing involvement of adults, and their overall focus (Travers & Carter, in press). Yet, they all share the core component of involving fellow students as a primary avenue of assistance, instruction, encouragement, and/or friendship. Scores of studies document the effectiveness and feasibility of these interventions for improving a wide range of student outcomes (e.g., Brock & Huber, 2017; Watkins et al., 2015). In addition, research affirms that peers can also benefit academically, socially, and personally from their involvement (e.g., Travers & Carter, 2021). In other words, the research is clear regarding the positive and mutual impact of these interventions.

Schools and districts often establish schoolwide programs (e.g., Best Buddies High

School, Peer Buddy Programs, Unified Champion Schools) as a way of formally connecting students with and without disabilities in shared activities within and beyond the classroom. Schoolwide peer-mediated programs may be appealing to educators and administrators for several reasons. First, they provide a formal way of connecting larger numbers of students with disabilities to peer-mediated interventions within a particular school. Second, these programs are considered by educators and students to be both practical and acceptable (e.g., Carter & Pesko, 2008; Kamps et al., 1998). Third, schoolwide programs can be adapted to align with the needs, resources, culture, and commitments of individual schools (Ziegler et al., 2020). Fourth, their reliance on natural and ubiquitous sources of supports (i.e., peers) makes them a cost-effective approach. Finally, and most importantly, they have been shown to positively impact students with and without disabilities (Steinbrenner et al., 2020; Masked, 2021b, 2021c).

Despite these attractive features, there are still few examples of these programs being brought to scale or implemented in widespread ways. Within the field of special education, calls to ensure that schools implement practices that actually work are intensifying (e.g., Horner et al., 2019; Klingner et al., 2013). Although some examples of district and regional adoption have been described in the literature (e.g., *Kentucky Peer Support Network Project*, *Metropolitan Nashville Peer Buddy Program*), statewide implementation of peer-mediated programs has been more elusive. One notable exception has been the *Peer to Peer* program, which is now being implemented in more than 700 urban, suburban, and rural schools across Michigan. More than 18,000 peers are involved in supporting over 4,800 schoolmates with autism and other developmental disabilities in their learning and relationships. The experience of expanding this program has implications for other states interested in addressing the educational needs of students with autism and other developmental disabilities through peer-mediated approaches. The purpose of this article is to summarize the lessons we have learned from implementing a

research-based, peer-mediated program known as *Peer to Peer* on a statewide basis. We provide an overview of the program and its history, propose factors we think have promoted its widespread adoption, describe some of the complexities of this work, and conclude with recommendations for future research.

Brief History of *Peer to Peer*

The origins of *Peer to Peer* are found in a single Michigan school district in 1990. A core group of special education staff were concerned about the social isolation of students with autism. Clarkston, a small district of 7,000 students, had a center-based program that served nearly 100 students with autism and they wanted to increase integration within typical schools and classrooms. They began identifying and training peers without disabilities to serve as role models, academic supports, and interaction partners to students with disabilities. Over time, the program shifted its emphasis from reverse mainstreaming toward supporting students with disabilities as full members within typical school and classroom activities. As the program was established, other districts expressed an interest in adopting similar approaches.

Since 2001, the START (Statewide Autism Resources and Training) Project has been funded by the Michigan Department of Education's Office of Special Education to improve the educational programming and quality of life for the burgeoning number of students with autism. At the time, educational placements were often restrictive and most schools felt ill-prepared to serve these students. The START Project looked for a pivotal practice that could have a broad impact on students' learning, social relationships, daily living skills, and preparation for life after high school. The peer-mediated program developed in Clarkston Community Schools offered a way of integrating effective practices and promoting access to the least restrictive environment. The START Project helped establish additional demonstration sites as a way to build capacity and commitment in this area of peer-mediated supports.

The *Peer to Peer* model evolved over subsequent years as additional programs were launched. Although visiting an existing program helped other schools catch a vision for inclusive practices, some still struggled to initiate their own programs in the absence of additional guidance. In response, the START Project created an initial training module that outlined the steps needed to start a new program. When this too was found to be insufficient, the project developed an implementation manual that incorporated program materials for replication (e.g., informational brochures to recruit students, training materials for staff and administrators, resources describing how to implement case conferences, sample syllabi and course materials, a description of activities to support program maintenance). Soon after, START staff began offering technical assistance directly to interested schools. In 2012, support for *Peer to Peer* was named as a funded priority for the state's 16 Regional Collaborative Networks, which further increased interest statewide. As the number of programs multiplied, an informal network of program coordinators emerged and a formal community of practice was launched in 2017.

Description of the *Peer to Peer* Program

Peer to Peer is a schoolwide peer-mediated program that invites and equips peers without disabilities to actively support their schoolmates with disabilities socially and academically throughout the school day. Although students with autism are the more frequent participants in the program, students with intellectual disability, multiple disabilities, and/or behavioral challenges are often involved as well. Core components include:

- Recruiting multiple students who voluntarily agree to serve as “peer partners”
- Equipping peer partners with relevant skills, knowledge, and strategies through trainings
- Connecting peers with students who would enjoy and benefit from their support
- Creating regular opportunities for students to spend time together in classrooms,

cafeterias, playgrounds, extracurricular activities, and other school events

- Engaging peers in group problem solving and advocacy through “case conferences”
- Monitoring the program’s implementation and impact.

Depending on its size, a single school’s program might involve as many as 20-100 peers in supporting between 5-25 students with disabilities. Step-by-step procedures for establishing a program are described in Ziegler et al. (2020). Implementation manuals, fidelity measures, and other supportive materials are all available freely on our START project website (<https://www.gvsu.edu/autismcenter>).

At each school, the program is overseen by a core team of 3-5 staff, at least one of whom (e.g., special educator) is designated as having primary responsibility for daily coordination. This team secures principal and resource support; publicizes the program to students, staff, and families; addresses scheduling and logistical issues; and reflects on the program’s delivery and impact. The program coordinator oversees recruitment, provides training for peers and staff, manages schedules, arranges case conferences (i.e., problem-solving meetings led by staff and peers), serves as teacher of record, and maintains communication with administrators. The design of the program differs based on school level. Most middle and high schools adopt a state-approved credit course that incorporates curricular and experiential elements designed to increase the knowledge, attitudes, and skills of peer partners. In elementary schools, shared experiences are usually embedded throughout the day in less formal ways or during specific activities (e.g., class projects, field trips, recess).

After determining which students with disabilities to involve in *Peer to Peer*, peers are recruited through a variety of avenues, oriented to their roles and participating staff, and provided any relevant training (e.g., disability etiquette, confidentiality, basic support and instructional strategies, approaches for providing feedback). The specific responsibilities of peers

vary depending on multiple factors, including the needs and preferences of the students they support, the settings and activities during which students work together, and their own capabilities and confidence. For example, peers might support students within a general education classroom by sharing materials, collaborating on a group project, or conversing about their schoolwork. Within an extracurricular club, peers might talk about a shared interest, provide practical support, or work jointly on a task. Elsewhere, peers might eat lunch with students, play together at recess, or meet for school-sponsored activities (e.g., school plays, athletic events). In some cases, peers are paired with a single student for a particular class or activity; most often, peers support multiple schoolmates throughout the school day. The involvement of general or special educators, paraprofessionals, and related services providers also varies and can include modeling strategies for peers, identifying inclusive activities, implementing needed accommodations and modifications, and addressing emerging challenges.

Schools are encouraged to collect and reflect on data regularly when implementing *Peer to Peer*. This includes using fidelity checklists that delineate key components related to staff preparation and participation, program development, program implementation, and data collection at either the elementary or secondary levels. It also includes gathering program feedback from students and peers, from their parents, and from the educators who support them. This information is used to design and refine program features so they are acceptable, feasible, and relevant to present needs. For example, members of the core team might (a) survey, interview, or observe students and peers, (b) review student journals and course assignments, (c) solicit insights from parents and school staff; and/or (e) review extant student data (e.g., attendance, grades, behavioral referrals). Within these parameters, however, the program can be tailored based on the needs and culture of a particular school or district.

Eight Factors Supporting Statewide Adoption

We attribute the steady growth and widespread adoption of *Peer to Peer* to a combination of factors. In this section, we share our perspectives on eight factors we consider to be especially important for scaling up peer-mediated programs. Each factor is described briefly in Table 1.

Strong Research Support

Educators and administrators have long been encouraged to use scientifically proven practices in their schools and classrooms. Calls to adopt evidence-based practices have been particularly pronounced within the field of special education (e.g., Odom et al., 2005). Addressing the needs of students with disabilities—especially those with more extensive support needs—is best accomplished by using approaches that have been shown effective in rigorous studies. Hundreds of studies have documented the impact peer-mediated interventions (e.g., peer networks, peer support arrangements, peer tutoring, peer mentoring) can have on the learning and social relationships of students with autism and other developmental disabilities (e.g., Carter, 2021; Steinbrenner et al., 2020). Moreover, these interventions were highlighted within early reports of the National Professional Development Center on Autism Spectrum Disorders (Odom et al., 2010) and the National Autism Center (2009), as well as detailed within freely available online training modules (e.g., Autism Focused Intervention Resources & Modules, NCAEP; Autism Internet Modules, OCALI). *Peer to Peer* incorporated many of these individualized intervention approaches to meet the needs of multiple students with disabilities across the school day. Appealing to a strong empirical foundation for the program was key to securing the interest and buy-in of many administrators and educators. Moreover, parents were now in a position to advocate for the program in their local schools by referencing it as a research-based practice.

Multiple Dissemination Pathways

The research to practice gap has been a longstanding concern within the field of special

education. The extent to which educators are familiar with evidence-based practices and fluent in their delivery remains uneven (e.g., Knight et al., 2019). To build the awareness and capacity of schools to launch and grow new *Peer to Peer* programs, we focused on multiple avenues for disseminating information about the program and its implementation. We presented regularly about the program at numerous state conferences and organizational meetings, including those aimed at families, teachers, school leaders, and superintendents. As interest swelled, we also began convening our own statewide training event focused on *Peer to Peer* support as a strategy to increase opportunities for students with ASD to access general education settings and curriculum. The specific steps for developing a program were represented in the training, including aspects of recruitment, training, and implementation. These state-level trainings consistently fill to capacity with 200 participants and often have waiting lists. Staff who attend the statewide training assemble a core team and secure administrator support for the program.

Given our large state, we soon recognized the need to create local learning opportunities led by area educators who had experience with the program. Adopting a train-the-trainer model enabled us to develop a cadre of local experts who could equip schools in their region to implement the program, as well as offer more geographically feasible trainings. Additionally, regional *Peer to Peer* coordinators were established to support the development of programs district- or county-wide. The coordinators now participate in additional training opportunities, support data collection, advocate for the development of additional programs in the local region, and partner with other organizations such as Unified Champion Schools. Finally, the COVID-19 pandemic has led us to offer virtual trainings that have enabled a much larger number of schools across the state to access trainings. In the future, we anticipate offering both in-person and virtual peer to peer trainings as well as equipping local trainers to offer the training in various formats.

Creation of Implementation Materials and Fidelity

As the number of schools implementing *Peer to Peer* expanded, so too did the need to manualize all aspects of the program. School teams wanted specific guidance on how each component (e.g., program development, recruitment, training, scheduling, activity planning, curricular decisions, case conference meetings, evaluation, program growth) should be carried out in their district. Moreover, they wanted access to practical resources (e.g., promotional materials, permission forms, activity ideas, data collection tools) they could readily use and adapt. This led to the creation of two parallel versions of a *Peer to Peer Program Playbook*—one focused on elementary schools and the other on secondary schools. Both manuals have been revised multiple times over the years to incorporate new ideas and evolving conceptions of this peer-mediated program. As we began to see wide variations in implementation among the burgeoning number of implementing schools, we recognized the importance of also developing fidelity checklists for *Peer to Peer*. Regular reflection on implementation fidelity is key to (a) ensuring programs remain aligned to recommended and research-based practices, (b) informing our initial training and subsequent technical assistance, and (c) enabling more rigorous program evaluation (Cook & Odom, 2013). One ongoing challenge has involved striking the right balance between standardizing programs and allowing sufficient flexibility for schools to individualize their programs based on the needs of students and culture of their school. This is especially important given the heterogeneity among students with autism and other developmental disabilities. This requires a clear delineation of which core components can be adapted or omitted. These program manuals and fidelity tools provide the framework for all trainings.

Provision of Technical Assistance

The transition from initial training to actual implementation in local schools is often difficult. Applying new strategies or programs within contexts as distinctive, complex, and fluid

as local schools is complex work. Studies caution against an exclusive reliance on one-shot training as the primary avenue for promoting high-quality implementation of effective practices (e.g., Brock et al., 2017). Early on, we observed teams leaving our *Peer to Peer* trainings with great enthusiasm and specific ideas, only to struggle to ever get started or derail at the onset of early difficulties. We began offering technical assistance as a way of providing coaching, problem-solving, and other assistance to interested schools who needed additional guidance beyond the training. We initially allocated one part-time staff to serve as an implementation coach to schools across the state. However, teams were first required to attend the training, assemble a team, secure administrator support, and complete a short application. These requirements ensured there was sufficient commitment and prior preparation to benefit from the technical assistance we offered. Schools and districts that received this individualized support were much more likely to launch and sustain their *Peer to Peer* programs. As we developed and improved program implementation manuals, we noticed that requests for technical assistance diminished. The majority of programs are able to launch in the absence of technical assistance. In addition to formal support from the START project, schools can now also access informal support from within their Regional Collaborative Networks or from district consultants who are involved with their own *Peer to Peer* Programs.

State-Level Investment

The demonstrated commitment of the Department of Education's leadership has also had a substantial influence on the trajectory of program growth statewide. In the early years, schools and districts had to identify on their own how best to integrate *Peer to Peer* within their existing curriculum. In the absence of a formal course offering, fewer opportunities were available for adolescents with and without disabilities to spend time together in the midst of an already

crowded secondary school curriculum. Recognizing the impact of and interest in this program, the state established an approved elective course associated with *Peer to Peer* in 2010. Although district boards of education still had to approve the curriculum locally, the process for doing so was now much easier and the state's endorsement of this experience carried much weight. The inclusion of *Peer to Peer* within the course catalog promoted awareness of the opportunity among students, as well as provided time and incentive within the school day to participate. The state's commitment is also reflected in its investment of time and finances. State representatives have had a presence at START project trainings, conferences, and leadership days. Likewise, state-funding of the START project is intended, in part, to support the implementation and growth of *Peer to Peer*.

Collaborative Structures

The growth of *Peer to Peer* also revealed the need to establish structures that enabled teams to more easily connect and collaborate with others across the state who also were implementing the program. Recognizing the limits of our own availability and resources amidst the burgeoning number of implementing schools, we looked for new ways of convening and connecting people for mutual support, strategy sharing, and problem-solving. Three primary avenues for supporting collaborations emerged. First, the state's sixteen Regional Collaborative Networks bring together diverse stakeholders to address local needs related to serving students with autism. *Peer to Peer* has been named as one of five priority areas for these networks, ensuring that goals related to regional growth of the program are addressed.

Second, we launched a summer "think tank" in 2014 as a way of soliciting input from educators, school leaders, and students on how *Peer to Peer* could be improved and expanded (with follow-up in 2016). For both events, invited participants had active roles in *Peer to Peer*

programming in their region and were selected based on their passion and innovative ideas that had resulted in excellent implementation. Participants brought resources, tools and creative energy to share with START and other attendees. These resources became the springboard for the expanded guidance manuals (i.e., *Peer to Peer Playbooks*) START later created.

Third, we established a statewide “community of practice” in 2017, which provides a forum for exchanging program ideas and information, collective problem solving, and mutual encouragement. By strategically inviting participants from across the state, each implementing district gained access to a named point of contact for their needs related to program implementation. Each of these contexts for collaboration served to promote greater awareness of *Peer to Peer* throughout the state, while also creating some healthy peer pressure for new schools to become involved. Finally, as parents became aware of the availability of *Peer to Peer* in other districts, they could see the value in this social opportunity for their own child, which led to conversations in their local district about starting a program. Parents often became collaborative partners in supporting the programs through PTA and PAC involvement, volunteering for events, and assisting to coordinate extracurricular activities.

Local Impact Data

Although peer-mediated interventions and programs have strong research support, educators still need local data to address the ways students with and without disabilities are being impacted by their involvement in *Peer to Peer* at a specific school. Such information can be key to convincing parents, educators, and school or district leaders to support program adoption and expansion. We have long encouraged schools to collect multiple forms of data (e.g., surveys, interviews, reviews of journals and assignments) from the breadth of program stakeholders (e.g., students with disabilities, peer partners, parents, teachers, paraprofessionals). Moreover, we

incorporated example data collection tools and ideas within the implementation manuals, as well as addressed program evaluation explicitly within training and technical assistance. Some programs have used these data when meeting with school administrators, superintendents, and school boards to build awareness and support for their programs. Others have presented their data to foundations and community organizations when requesting financial support. Data showing the positive benefits for peer partners who are themselves at-risk for school failure have been particularly influential among school leaders. For example, our own analyses of the experiences of peers involved in programs at eight diverse high schools found that peers overall experienced significant increases in their attendance and grades, as well as decreases in behavioral referrals and suspensions (Masked, 2021c). Likewise, surveys and interviews of peers in both middle and high schools identified an array of social, academic and personal benefits that peers attributed to the program (Masked, 2021a; Masked, 2021b).

Courage

A final factor is less tangible, but no less important. We have seen first-hand that investing in new programs requires certain postures. It takes considerable courage for educators to advocate for new ways of serving students, particularly when these ways challenge prevailing practices in their schools. Launching *Peer to Peer* requires special educators to assemble a core team, appeal to principals for support, collaborate with new colleagues (e.g., general educators, school counselors), assume added responsibilities, work with new groups of students, and champion the program within and beyond their schools. Each of these roles brings the risk of failure, requires learning new skills, and necessitates raising one's own expectations. Many *Peer to Peer* team members speak first-hand of the challenges they have faced in convincing their colleagues that students with autism and other developmental disabilities deserve meaningful access to the same breadth of social and learning experiences as any other student in their school.

Evidence-based practices are always implemented by people—and people who must have the courage of their convictions to pursue substantially new ways of serving their students.

Challenges and Complexities

Supporting the growth of *Peer to Peer* has been a complex endeavor. We have encountered several challenges that can impact implementation of this schoolwide program. First, program adoption requires initial awareness at the local level. A single teacher, parent, or principal is typically the catalyst for proposing a program at a particular school. This has required pursuing multiple avenues for disseminating information about *Peer to Peer*, as discussed previously. Yet there are more than 890 public school districts and 4,300 schools in Michigan. High rates of turnover and attrition among teachers require a continuous investment in awareness building. The pathways to informing parents of children with disabilities, however, are much less clear. Presentations at parent conferences and disability organizations are likely to reach only a small subset of families. Expanding *Peer to Peer* to the next 700 schools will require new and creative strategies for marketing the program.

Second, any thriving program requires strong buy-in from the core team and administrators. This has not always been easy to secure at the outset. When schools are unable or unwilling to allocate resources or time to this role, programs may struggle to launch. Likewise, although many principals are quick to recognize the promise of *Peer to Peer* for their school, others need more convincing. This has required addressing the cost-effectiveness of the program, describing experiences and outcomes from other implementing schools, exploring how the program aligns to their school improvement plan, or involving students and families in advocacy. Another consideration is how *Peer to Peer* connects to other initiatives being implemented in the school and whether it will compete for time or resources. Addressing potential apprehensions and aligning *Peer to Peer* to school improvement activities and other initiatives at the outset has

proved helpful.

Third, maintaining program quality requires sustained attention. In the absence of strong program leadership and regular team reflection, local *Peer to Peer* programs can drift from their intended design. We have seen programs begin to omit important program components or incorporate additional features that are incongruous with its primary purpose. The development of the implementation manual and fidelity tools have been critical here. However, many schools still need reminders to regularly evaluate and refine their program in light of these benchmarks. Likewise, we have seen programs in which the relationships among students with and without disabilities become more hierarchical than reciprocal. Reorienting the ways in which these schools equip and support students as they spend time together is important. START has developed materials to help school staff understand that *Peer to Peer* is a participation model, rather than a helper model. Peers are not trained as “mini-paraprofessionals,” but are engaged in authentic friendships, supporting their peers with disabilities in meaningful and naturalistic ways.

Fourth, maintaining a high-quality program that will have longevity within a school building requires that it become systematized and standard practice for students with social support needs. Reliance on a single or small number of highly motivated staff to keep the program going is risky since, as with many school initiatives, their continuation is uncertain at best unless the program becomes part of the school culture, embedded within school plans, and part of the curriculum. This means the building staff—from teachers to administrators, recess monitors to bus drivers, and coaches to parents—need to understand and adopt the program as an expected component of school programming. Involving the broader school and families in training, activities, and celebrations makes it part of the culture of the school community.

Recommendations for Research

The continued growth of peer-mediated programs could be accelerated through new areas

of exploration. First, school teams are quick to describe the myriad ways in which students with disabilities are impacted by their involvement in the program. These include the acquisition of new skills and knowledge, the development of new friendships, increased involvement in school activities, and greater enjoyment of school. Most schools take steps to document the difference the program has made in at least some of these areas. But the longer-term impact of peer-mediated programs has received less attention. Most students with disabilities participate in the program across multiple years. How does the accumulation of experiences, support, and instruction they receive impact the long-term trajectories of students? The paucity of more extended evaluations of educational programs is a pressing need in the field of special education. Future studies are needed that follow cohorts of students who do and do not participate in *Peer to Peer* to examine the ways it shapes their in- and post-school outcomes over time.

Second, the prominence of peers in peer-mediated programs also raises important questions about their experiences and outcomes. End-of-year surveys find that many peer partners report substantial personal growth (e.g., advocacy skills, self-awareness, responsibility), greater understanding of disability and diversity, and new relationships. Such peer-focused outcomes are congruous with those identified elsewhere in the peer-mediated literature (e.g., Travers & Carter, 2021). However, this area of impact warrants an even closer look. Future studies are needed to examine the impact of *Peer to Peer* on the academic, behavioral, and school engagement outcomes of participating peers. For example, some participating schools have documented noticeable increases in attendance and grades for participating peer partners, particularly at-risk peers, as well as decreases in their behavioral referrals (Masked, 2021c). The indirect impact on schoolmates who are not themselves involved in peer-mediated programs is also of interest. Although these programs are often proposed as another way of improving overall school culture, this issue has not been studied.

Third, the success of any schoolwide program is never guaranteed. While many programs grow and thrive, others stagnate or eventually cease. Given the large number of peer-mediated programs that have been established in such wide-ranging settings and circumstances, research is needed to examine the various factors that contribute to successful adoption and expansion at the school and district levels. Our work with schools over the last two decades suggests the importance of having committed administrative support, a skilled building-level program leader, a functional building-level core team, and a district program coordinator for scale up. Studies could examine changes in program implementation fidelity over time in relation to variables like school demographics, resources, staffing, and supports. Likewise, in-depth case studies of high- and low-implementing schools could help identify features that differentiate the two.

Ensuring all students can participate meaningfully in the breadth of social and learning experiences offered by their schools is a critical—but complex—endeavor. The *Peer to Peer* program provides one practical avenue through which schools can expand opportunities for students with and without disabilities to spend time together within and beyond the classroom. We encourage other states and provinces to draw upon our experiences and recommendations as they consider how best to meet the educational needs of students with autism and other developmental disabilities in their regions and scale-up these programs for the broadest impact.

References

- Agran, M., Wojcik, A., Cain, I., Thoma, C., Achola, E., Austin, K. M., Nixon, C. A., & Tamura, R. B. (2017). Education and training in autism and developmental disabilities: Does inclusion end at 3:00? *Education and Training in Autism and Developmental Disabilities*, 52(1), 3-12.
- Brock, M. E., Canella-Malone, H. I., Seaman, R. L., Andzik, N. R., Schaefer, J. M., Page, E. J., Barczak, M. A., & Dueker, S. A. (2017). Findings across practitioner training studies in

- special education: A comprehensive review and meta-analysis. *Exceptional Children*, 84(1), 7-26. <https://doi.org/10.1177/0014402917698008>
- Brock, M. E., & Huber, H. B. (2017). Are peer support arrangements an evidence-based practice? A systematic review. *The Journal of Special Education*, 51(3), 150-163. <https://doi.org/10.1177/0022466917708184>
- Carter, E. W. (2021). Peer-mediated support interventions for students with autism spectrum disorders. In P. A. Prelock & R. McCauley (Eds.), *Treatment of autism spectrum disorders* (2nd ed.; pp. 315-352). Brookes.
- Carter, E. W., & Draper, J. (2010). Making school matter: Supporting meaningful secondary experiences for adolescents who use AAC. In D. McNaughton & D. R., Beukelman (Eds.), *Transition strategies for adolescents and young adults who use augmentative and alternative communication* (pp. 69-90). Brookes Publishing.
- Carter, E. W., & Pesko, M. J. (2008). Social validity of peer interaction intervention strategies in high school classrooms: Effectiveness, feasibility, and actual use. *Exceptionality*, 16(3), 156-173. <https://doi.org/10.1080/09362830802198427>
- Cook, B. G., & Odom, S. L. (2013). Evidence-based practices and implementation science in special education. *Exceptional Children*, 79(2), 135-144. <https://doi.org/10.1177/001440291307900201>
- Harris, K. R., & Meltzer, L. (Eds.) (2015). *The power of peers in the classroom: Enhancing learning and social skills*. Guilford Press.
- Horner, R. H., Ward, C. S., Fixsen, D. L., Sugai, G., McIntosh, K., Putnam, R., & Little, H. D. (2019). Resource leveraging to achieve large-scale implementation of effective educational practices. *Journal of Positive Behavior Interventions*, 21(2), 67-76. <http://doi.org/10.1177/1098300718783754>

Kamps, D. M., Kravits, T., Lopez, A. G., Kemmerer, K., Potucek, J., & Harrell, L. G. (1998).

What do the peers think? Social validity of peer-mediated programs. *Education and Treatment of Children, 21*(2), 107-134.

Klingner, J. K., Boardman, a. G., & McMaster, K. L. (2013). What does it take to scale up and sustain evidence-based practices? *Exceptional Children, 73*(3), 195-211.

<https://doi.org/10.1177/001440291307900205>

Knight, V., Huber, H. B., Kuntz, E., Carter, E. W., & Juárez, P. (2019). Instructional practices, priorities, and preparedness for educating students with autism and intellectual disability.

Focus on Autism and Other Developmental Disabilities, 34(1), 3-14.

<https://doi.org/10.1177/1088357618755694>

Masked. (2021a). *How do peers benefit from peer-mediated interventions? Examining impact within secondary and postsecondary programs*. Manuscript submitted for publication.

Masked. (2021b). *It “goes both ways”: The impact of peer-mediated interventions on peers*.

Manuscript submitted for publication

Masked. (2021c). *The reciprocity of peer-mediated interventions: Examining outcomes for peers*.

Manuscript submitted for publication.

Morningstar, M. E., Kurth, J. A., & Johnson, P. E. (2017). Examining national trends in educational placements for students with significant disabilities. *Remedial and Special Education, 38*(1), 3-12. <https://doi.org/10.1177/0741932516678327>

National Autism Center. (2009). *National standards report*. Author.

Odom, S. L. (2019). Peer-based interventions for children and youth with autism spectrum disorder: History and effects. *School Psychology Review, 48*(2), 170-176.

<https://doi.org/10.17105/SPR-2019-0019.V48-2>

Odom, S. L., Brantlinger, E., Gersten, R., Horner, R. H., Thompson, B., & Harris, K. (2005).

- Research in special education: Scientific methods and evidence-based practices. *Exceptional Children*, 71(2), 137-148. <https://doi.org/10.1177/001440290507100201>
- Odom, S. L., Collet-Klingenberg, L., Rogers, S., & Hatton, D. (2010). Evidence-based practices for children and youth with autism spectrum disorders. *Preventing School Failure*, 54(4), 275-282. <https://doi.org/10.1080/10459881003785506>
- Petrina, N., Carter, M., & Stephenson, J. (2014). The nature of friendship in children with autism spectrum disorders: A systematic review. *Research in Autism Spectrum Disorders*, 8(2), 111-126. <https://doi.org/10.1016/j.rasd.2013.10.016>
- Steinbrenner, J. R., Hume, K., Odom, S. L., Morin, K. L., Nowell, S. W., Tomaszewski, B., Szendrey, S., McIntyre, N. S., Yücesoy-Özkan, S., & Savage, M. N. (2020). *Evidence-based practices for children, youth, and young adults with autism*. The University of North Carolina at Chapel Hill.
- Travers, H. E., & Carter, E. W. (in press). A portrait of peers within peer-mediated interventions: A literature review. *Focus on Autism and Other Developmental Disabilities*.
- Travers, H. E., & Carter, E. W. (2021). A systematic review of how peer-mediated interventions impact students without disabilities. *Remedial and Special Education*. Advance online publication. <https://doi.org/10.1177/0741932521989414>
- Watkins, L., O'Reilly, M., Kuhn, M., Gevarter, C., Lancioni, G. E., Sigafoos, J., & Lang, R. (2015). A review of peer-mediated social interaction interventions for students with autism in inclusive settings. *Journal of Autism and Developmental Disorders*, 45(4), 1070-1083. <https://doi.org/10.1007/s10803-014-2264-x>
- Ziegler, M., Matthews, A., Mayberry, M., Owen-De Schryver, J., & Carter, E. W. (2020). From barriers to belonging: Promoting inclusion and relationships through Peer to Peer programs. *TEACHING Exceptional Children*, 52(6), 426-434.

Table 1
Eight Factors Supporting Statewide Adoption of Peer-Mediated Programs

Factor	Description
Strong research support	Appealing to the extensive research addressing the benefits of peer-mediated interventions for students with disabilities and their peers.
Multiple dissemination pathways	Pursuing numerous avenues for disseminating information about the program, its implementation, and potential benefits
Creation of implementation materials and fidelity	Crafting clear guidance on the essential and flexible features of the program in order to promote consistency and guide implementation
Provision of technical assistance	Ensuring schools and districts had access to coaching, problem-solving, and other assistance as needed
State-level investment	Securing the commitment, resources, and involvement of key individuals within the state's education department
Collaborative structures	Establishing avenues through which teams could easily connect and collaborate with others across the state who also are implementing the program
Local impact data	Collecting and sharing school- and district-level data addressing the ways students with and without disabilities are impacted by their involvement
Courage	Demonstrating resolve and dedication in advocating for new approaches for supporting students with disabilities that challenge prevailing practice