



Early Findings From

The Center on Secondary Education for Students with Autism Spectrum Disorders

Vanderbilt University

Project Background

The *Center on Secondary Education for Students with Autism Spectrum Disorders* (CSESA) is a five-year project funded by the U.S. Department of Education to develop a comprehensive program to meet the needs of high school students on the autism spectrum (csesa.fpg.unc.edu). Researchers from six universities—including Vanderbilt—are collaborating with schools, families, community members, and adolescents with an autism spectrum disorder (ASD) to develop an effective, comprehensive intervention for high schools focused on the following areas:

(a) social competence; (b) transition and families; (c) academics; (d) personal responsibility, independence, and self-management; and (e) professional development.

In the fall of 2012, our team at Vanderbilt held nine focus groups involving more than 60 parents, educators, administrators, community advocates, and service providers. We also interviewed 35 youth and young adults with ASD. We asked them to tell us what “social success” means to them, to describe how high schools are addressing the social-related needs of students with ASD, and to provide feedback on a proposed model for promoting social competence and peer relationships in high school. Based on their feedback, we revised our initial model and piloted peer networks with six students in three high schools in the Metropolitan Nashville Public School system during the spring of 2013. These groups met weekly during lunch or advisory periods throughout the semester. The goal of our study was to increase social engagement and peer interactions among youth with and without ASD.





Peer Network Interventions

Schools already offer numerous opportunities for students to develop relationships with their peers both in and outside of the classroom (e.g., working together in small groups, eating lunch with peers in the cafeteria, hanging out between classes, participating together in extracurricular activities). Through these interactions with peers, students learn age-appropriate social skills, access emotional supports and practical assistance, and are encouraged to be involved in various activities. Perhaps most importantly, however, friendships with peers foster a sense of belonging, enhance school satisfaction, and contribute to improved quality of life (Carter et al., in press).

Peer networks offer a promising and practical approach for building social connections among students with and without severe disabilities in middle and high schools (Haring & Breen, 1992). A peer network involves establishing a group of three to six peers who meet formally and informally with a student with ASD while receiving guidance and support from an adult facilitator. At weekly group meetings, students have conversations, participate in mutually enjoyable activities, practice appropriate social-related skills, and plan times to connect during or after school. Throughout the semester, students look for ways to grow the network or further increase the focus student's involvement in extracurricular and other school activities.

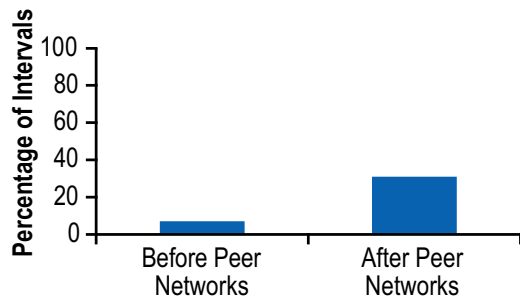
Research Design

Six male students with ASD between the ages of 14 and 18 participated in our study—2 were African-American, 2 were European-American, and 2 were Hispanic. A special education teacher and three paraprofessionals served as the facilitators of the peer networks and helped determine social-related goals for each student that could be addressed during group meetings (i.e., initiating conversation, increasing engagement in peer interactions, not interrupting peers in conversation). The facilitators recommended one to four peers to be part of each group. These “peer partners” were students who did not have ASD, who demonstrated appropriate social skills, and who facilitators anticipated would get along well with the student. The student with ASD, facilitator, and peers all participated in a brief orientation meeting before the networks began.

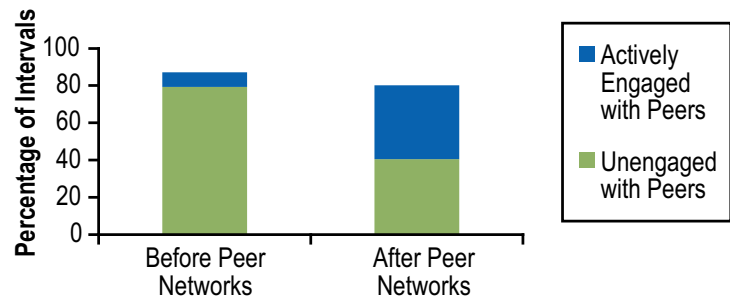
Two networks met during a 30-minute advisory period in either a general or special education classroom. Four of the networks met in the cafeteria during a 30-minute lunch period. During each meeting, students participated in at least one activity or conversation together that were jointly identified by the students and facilitators. Some activities included board games, iPad games, eating, discussing current events or school events, and card games.



Peer Interactions



Social Engagement



We collected data before and after the peer network was in place. Specifically, we observed students' social interactions, social engagement, and success in meeting their social-related goals. We also measured the support behaviors of facilitators and peers (e.g., prompts to interact with others, encouraging other peers to interact with the student, explicitly teaching or modeling specific social skills, and praising communication attempts).

Pilot Findings

Before students with ASD were part of a peer network, they were socially unengaged during 79% of the observations and socially engaged with peers just 8% of the time. On average, they interacted with a peer just 7% of the time and initiated conversations very rarely. Once peer networks were established, social unengagement reduced to just 43% of the time and social engagement increased to 40% of observations. Moreover, interactions with peers increased to 48% of intervals and initiations increased slightly. See Figure above.

According to surveys completed at the end of the semester, all facilitators and participating peers strongly agreed they would be interested in participating in a network again in the future and that the student with ASD benefited socially from having a peer group. Facilitators agreed the amount of time required to use the strategy was reasonable and that they could use the strategies

they learned in this project with other students in the school. One facilitator stated, "I especially liked the interaction and the interest other students in the school exhibited." Peers said their partner benefited socially from being part of a peer network group and they themselves benefited socially from being involved. One peer noted, "I think he is more able to talk in conversation with people outside of [the group]." Parents and students with ASD all responded positively when asked if the student with ASD liked spending time with group members and if the student with ASD would like to be involved in a peer group again in the future. The students with ASD named the network members as their friends and wanted to continue hanging out with them.

Implications for Schools

- Peer networks are a relatively easy (and free) way to address the social-related support needs of adolescents with ASD
- Students with and without ASD benefit socially from participating in peer networks
- Peer networks substantially increase social engagement and foster social connections

Strategies for Addressing Social Competence in Schools

As mentioned previously, we conducted nine focus groups with educators, administrators, parents, and community providers. The following themes emerged across focus groups as being important elements in promoting social competence and reflect considerations for schools implementing a social competence intervention:

- Begin intervention and awareness efforts as early as possible to ensure positive outcomes
- Ensure strong support exists among school leaders and promote schoolwide commitment
- Make sure intervention and/or programming efforts have the buy-in of all stakeholders, including educators, parents, peers, and students with ASD
- Reflect on the school's capacity and make sure intervention efforts are sustainable in terms of funds, staffing, and implementation consistency
- Actively promote awareness and positive views about disability (and ASD specifically) throughout the school and community
- Involve families in meaningful ways responsive to the strengths and needs of each family
- Identify each student's individualized social-related needs, strengths, and goals using meaningful assessment procedures
- Consider how issues of privacy and disability disclosure will be addressed with and by the student with ASD
- Decide with a planning team how the intervention will be implemented, by whom, and with what variations
- Decide on avenues for recruiting peers and qualities they should possess
- Orient peers to their roles and responsibilities within any intervention efforts
- Consider the various contexts in which interventions will be implemented and how opportunities for students to interact with one another will be designed
- Make sure students with ASD receive effective instruction to build social competence
- Consider how generalization of social outcomes will be addressed at the beginning of and throughout intervention efforts



Next Steps for Our Project

During the 2013-2014 school year, we will continue to support educators in creating peer networks for students with ASD. In addition, we will assist them in establishing peer support arrangements in inclusive classrooms and a group-based program for students who would benefit from more intensive social skills instruction. We will also help educators address the transition- and employment-related needs of students and their families. This support will include:

- Training on ASD for school staff
- School and community resource mapping
- Transition planning with teachers
- Work-based learning experiences
- Self-advocacy for student IEP meetings
- Family education/support groups

Further Reading

- Carter, E. W., Asmus, J., Moss, C. K., Cooney, M., Weir, K., Vincent, L., Born, T., Hochman, J., Bottema-Beutel, K., & Fesperman, E. (in press). Peer network strategies to foster social connections among adolescents with and without severe disabilities. *TEACHING Exceptional Children*.
- Carter, E. W., Cushing, L. S., & Kennedy, C. H. (2009). *Peer support strategies: Improving all students' social lives and learning*. Baltimore, MD: Paul H. Brookes.
- Carter, E. W., & Hughes, C. (2013). Teaching social skills and promoting supportive relationships. In P. Wehman (Ed.), *Life beyond the classroom* (5th ed.; pp. 249-268). Baltimore, MD: Paul H. Brookes.
- Carter, E. W., Sisco, L. G., & Chung, Y. (2012). Peer-mediated support strategies. In P. A. Prelock & R. McCauley (Eds.), *Treatment of autism spectrum disorders: Evidence-based intervention strategies for communication and social interactions* (pp. 221-254). Baltimore, MD: Paul H. Brookes.
- Hughes, C., & Carter, E. W. (2008). *Peer buddy programs for successful secondary school inclusion*. Baltimore, MD: Paul H. Brookes.

Related Research

- Carter, E. W., & Kennedy, C. H. (2006). Promoting access to the general curriculum using peer support strategies. *Research and Practice for Persons with Severe Disabilities, 31*, 284-292.
- Carter, E. W., Moss, C. K., Hoffman, A., Chung, Y., & Sisco, L. G. (2011). Efficacy and social validity of peer support arrangements for adolescents with disabilities. *Exceptional Children, 78*, 107-125.
- Carter, E. W., Sisco, L. G., Chung, Y., & Stanton-Chapman, T. (2010). Peer interactions of students with intellectual disabilities and/or autism: A map of the intervention literature. *Research and Practice for Persons with Severe Disabilities, 35*, 63-79.
- Carter, E. W., Sisco, L. G., Melekoglu, M., & 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.
- Carter, E. W., Cushing, L. S., Clark, N. M., & Kennedy, C. H. (2005). Effects of peer support interventions on students' access to the general curriculum and social interactions. *Research and Practice for Persons with Severe Disabilities, 30*, 15-25.
- Haring, T. G., & Breen, C. G. (1992). A peer-mediated social network intervention to enhance the social integration of persons with moderate and severe disabilities. *Journal of Applied Behavior Analysis, 25*, 319-333.



VANDERBILT KENNEDY CENTER
FOR EXCELLENCE IN DEVELOPMENTAL DISABILITIES

Vanderbilt Kennedy Center, Vanderbilt University CSESA Contacts:

Erik Carter, Associate Professor
Dept. of Special Education
erik.carter@vanderbilt.edu

Jenny Redding Gustafson,
Project Coordinator
Dept. of Special Education
jenny.gustafson@vanderbilt.edu