

HHS Public Access

Author manuscript

Psychol Sch. Author manuscript; available in PMC 2015 July 30.

Published in final edited form as:

Psychol Sch. 2013 November; 50(9): 888–898. doi:10.1002/pits.21716.

Connecting Youth and Young Adults with Autism Spectrum Disorders to Community Life

Erik W. Carter, Michelle N. Harvey, Julie Lounds Taylor, and Katherine Gotham Vanderbilt University

Abstract

Equipping youth with autism spectrum disorders (ASD) to flourish during and after high school is central to the purpose and practice of special education. However, many students with ASD are leaving high school without the preparation and connections needed to engage meaningfully in their communities. This article reviews research-based approaches for connecting adolescents with ASD to life beyond the classroom by describing promising practices for fostering inclusion in postsecondary education and community activities. Recognizing that relationships are at the core of community life, emphasis is placed on fostering social connections as an essential aspect of helping young people with ASD thrive in these settings. We conclude with suggestions for school staff to support the successful transitions of young people with ASD.

Keywords

transition; autism spectrum disorders; community participation

One principal purpose of public education in the United States is to equip students to transition seamlessly and successfully to adulthood. For students with autism spectrum disorders (ASD) and other disabilities, this emphasis on preparation for life after high school remains one of the central thrusts of transition education. Specifically, the Individuals with Disabilities Education Improvement Act (IDEA) of 2004 states that an overarching purpose of special education is to "prepare [students with disabilities] for further education, employment, and independent living" (Public Law 108-446). Put simply, an essential focus of secondary services and supports must be on equipping adolescents and young adults with ASD to thrive in their schools, workplaces, and communities.

Among the early catalysts for crafting explicit bridges between high school and valued adult outcomes was a series of longitudinal and follow-up studies revealing that most students with disabilities left high school without the preparation and connections needed to engage meaningfully in their communities (e.g., Blackorby & Wagner, 1996; Hasazi, Gordon, & Roe, 1985). A fulfilling career, a college education, involvement in civic activities, supportive friendships, and a good place to live—all remained out of reach for large numbers of young adults with disabilities who had received special education.

Consequently, transition services were mandated in 1990 and later strengthened in 1997 when the IDEA was reauthorized.

Presently, federal law defines transition for students with ASD (and all other disabilities) as a "results-oriented process...focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to postschool activities, including post-secondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation" (IDEA, 2004; §300.43). In other words, the quality and impact of secondary schooling can be judged, in part, by the extent to which young people with ASD transition successfully to life in their community. State departments of education are now mandated under Indicator 14 to report on the percentage of young people who receive special education and have been (a) enrolled in higher education within one year of leaving high school; (b) enrolled in higher education or competitively employed within one year of leaving high school; or (c) enrolled in some other postsecondary education or training program (20 U.S.C. 1416(a)(3)(B)).

This increased emphasis on accountability for post-school outcomes is pushing schools to carefully consider the design and delivery of secondary and transition services for students with disabilities, including youth with ASD. A growing number of studies confirm the experiences and supports students with disabilities receive during adolescence can powerfully shape the opportunities and outcomes in their early years after high school (e.g., Carter, Austin, & Trainor, 2012; Chiang, Cheung, Hickson, Xiang, & Tasi, 2012; Migliore, Timmons, Butterworth, & Lugas, 2012). Researchers, policymakers, and practitioners are intensifying their efforts to identify the particular skills, supports, services, and linkages that will best position students with disabilities to thrive as members of their communities. Through these efforts, the field is steadily accruing a better understanding of promising and effective practices for promoting successful transitions to adulthood (Test, Fowler, et al., 2009).

For adolescents with ASD, efforts to design and deliver high-quality transition services and supports take on even more necessity when considering the pervasiveness of disappointing outcomes for students served under the special education label of autism. Young adults with ASD as a group are far less likely than most of their peers receiving special education services to access meaningful opportunities for postsecondary education, civic engagement, employment, and peer relationships in the early years after high school (Newman, Wagner, Cameto, & Knokey, 2009). Although students served under the special education category of autism comprise an extremely diverse group of young people, a common core of social, communication, and behavioral characteristics can lead to their community connections being especially elusive or frustratingly fragile. Absent intentional and coordinated efforts spanning school and community contexts, many adolescents with ASD will struggle to connect to individualized experiences that might enable them to flourish as adults.

The purpose of this article is to review some of what has been learned to date about effective approaches for connecting youth and young adults with ASD to life beyond the classroom. Our focus will be on highlighting promising and recommended practices for connecting transition-age students to postsecondary education and other community activities (employment is addressed separately in another article in this special issue). Recognizing that relationships are what makes the difference between being *in the community* and being

part of a community, we also emphasize fostering social connections as an essential aspect of helping young people to thrive in their communities. Throughout, we discuss the potential contributions of school psychologists and other school staff to the successful transitions of young people with ASD.

Connecting Youth and Young Adults to Postsecondary Education

Postsecondary education is highly valued within the United States, with more than 66% of male and 74% of female high school completers enrolling in college directly after high school (Aud, KewalRamani, & Frohlich, 2011). The potential economic and social benefits of higher educational attainment are myriad, including improved career prospects, higher lifetime earnings, access to greater social capital, and increased learning opportunities (Baum, Ma, & Payea, 2010; Trainor, 2008). Postsecondary education represents an attractive progression for adolescents with ASD for these same reasons. Although available research is limited, postsecondary educational participation is presumed to contribute to more favorable outcomes for young adults with disabilities in the areas of employment, self-determination, and independence (Hart, Grigal, & Weir, 2010). This particular post-high school pathway also reflects the aspirations of increasing numbers of adolescents with ASD and their families. For example, Shogren and Plotner (2012) found that attending a two- or four-year college was a primary post-school goal for 23% of high school students with autism, while attending a postsecondary vocational training program was a goal for 19% of students with autism.

Yet, conversations about postsecondary education for transition-age students with ASD remain in relative infancy. Fewer than half of young adults with ASD attend postsecondary educational programs (Chiang et al., 2012; Taylor & Seltzer, 2011), and the rates of completion for those who start a program are quite low. Up to six years after leaving high school, only 46% of young adults with autism had attended any type of postsecondary school (Sanford et al., 2011). Specifically, 33% of students in this nationally representative sample had attended a two-year or community college; 20% had attended a vocational, business, or technical school; and 16% had attended a four-year college or university¹. In addition to addressing prominent barriers to postsecondary educational entry, it is also clear that effective strategies are needed to support successful matriculation. Sanford et al. (2011) reported postsecondary completion rates of 35% for young adults with autism, a rate that is substantially lower than the 51% completion rate of similar-aged peers in the general population. Fortunately, legislative, policy, and university support for postsecondary educational opportunities and students with ASD appears to be growing (Hart et al., 2010; Papay & Bambara, 2011).

The pathway to college and other postsecondary training opportunities is clearly forged during secondary school (although the foundation is laid even earlier than high school). Connecting youth with ASD to key experiences—both on and off campus—throughout high school ensures they graduate with the skills, aspirations, transcripts, and supports needed to make college a viable choice. For example, early coursework and diploma track decisions

¹Enrollment in more than one type of schooling was possible.

can later influence which postsecondary alternatives remain open to a student. Similarly, the grades, college entrance scores, and resumes students accrue can also expand or restrict their available options. While the design and delivery of a student's secondary plan experiences may be influenced by multiple factors (e.g., presence of an intellectual disability, adaptive behavior deficits, family expectations and resources, and available school and community offerings), several important elements for equipping interested youth with ASD for postsecondary education have been articulated in the literature.

First, transition team members—including school psychologists—can play a key role in helping youth with ASD develop career-related aspirations, formulate appropriate educational and training goals that will transition students into those preferred careers, identify relevant postsecondary learning environments, delineate critical admissions requirements, and determine the particular postsecondary support services and accommodations students will need to succeed (Fives, 2008). As restricted interests are common in ASD, team members will likely want to pay particular attention to any interests expressed by the student with ASD that are unusual in intensity and that could be directed into a program of study (e.g., studying car repair for a student who is intensely interested in cars). The most effective method of career guidance will likely differ based on the individual characteristics and preferences of the students with ASD. School psychologists can promote the identification of these interests by assisting students who may benefit from more individualized counseling, mentoring, and instruction to help them identify their own interests, strengths, and needs to prepare for college.

Second, decisions about postsecondary possibilities delayed until the final year of secondary school may come too late for many adolescents with ASD. Not surprisingly, academic performance during high school is a significant predictor of postsecondary educational participation for students with ASD (Chiang et al., 2012). Thus, students must be steered toward a course of study and equipped with sufficient academic supports to ensure their adequate preparation. When school staff have low expectations of postsecondary involvement or success for students with ASD, they may be unlikely to promote these preparatory experiences. In addition, students with ASD should be encouraged to participate in college fairs, campus visits, and other off-campus experiences to increase their awareness of whether and how college might be a viable option. Also important is the family's involvement in these experiences to encourage their support of the student's postsecondary education goals. Moreover, connecting students to targeted extracurricular, community, and civic activities may assist them in building a well-rounded portfolio that enhances their appeal to admissions committees. Because social impairments are a hallmark of ASD, additional preparation might be necessary to ensure students with ASD have a positive experience in extracurricular activities. School psychologists might work closely with families to encourage support of extracurricular and community involvement.

Third, multiple postsecondary options are currently available for students with ASD, including both traditional and recently emerging models (Hart et al., 2010). Dual enrollment programs, for example, enable students with ASD to enter college while concurrently in their final years of IDEA-funded special education services. Such options enable students to continue accessing school-based services and supports as they navigate college life.

Individual campus-based programs have also been initiated by many institutions of higher education, geared specifically for students with intellectual disability, autism, and other developmental disabilities. Finally, individuals and their families may negotiate with existing postsecondary programs to ensure access and accommodations are available to support participation. School psychologists and other team members can help students and their families understand and navigate this range of options along with understanding the financial implications of each.

Fourth, schools should design learning opportunities to equip adolescents with the knowledge, skills, and attitudes needed to successfully navigate campus life. This may be particularly important for students with ASD, who are more likely than their peers to have difficulties in adaptive behaviors (e.g., personal hygiene, communication) as well as executive functioning skills (e.g., planning). Systematic and ongoing instruction should be directed toward those skills most critical to success in college, yet typically challenging for students with ASD to demonstrate. For example, skills related to self-management, decision-making, problem solving, socialization, and technology use may be beneficial to address early on within the secondary curriculum (Carter, Lane, et al., 2013). Instruction might also focus on independent living skills, considerations around disability disclosure, requesting academic supports and accommodations, and recruiting social and natural supports (Adreon & Durocher, 2007). It is important to note that even "higher functioning" students with ASD, who do not have an intellectual disability, have difficulties in some of these practical skills and would likely benefit from this type of training.

Connecting Youth and Young Adults with ASD to Community and Civic Life

Discussions about effective high schools have often centered on the importance of promoting access to rigorous academic curricula that open new postsecondary and career possibilities. Increasingly, emphasis also is being placed on ensuring adolescents experience a broad range of learning opportunities that have relevance to other aspects of their current and future lives. Thus, conversations about services for transition-age youth with disabilities increasingly advocate rigor and relevance as essential components of high-quality educational experiences (National Collaborative on Workforce and Disability for Youth, 2009). When secondary learning opportunities build upon and deepen students' strengths and interests, provide links to experiences in authentic community settings, and teach youth the knowledge and skills needed to be active citizens, transition education is presumed to be more engaging for students in general. As many adolescents with ASD have intense "circumscribed" interests that can co-opt their attention (Klin, Danovitch, Merz, & Volkmar, 2007), building upon students' own interests may be particularly relevant to motivating community involvement in this group. While these special interests are not easily incorporated into every learning experience, their inclusion in planning for a student's own future seems both appropriate and necessary. Moreover, integrating talents and special interests into curricula can be an effective practice in educating youth with ASD.

It is perhaps equally important that adolescents with ASD receive gentle yet persistent encouragement to explore topics and activities outside their areas of strong interest. Behavioral inflexibility and impaired social motivation are commonly associated with

autism spectrum disorders, and contribute to the challenge of forging meaningful connections between individual and community. In contrast, equipping youth to assume valued adult roles in their communities often necessitates providing early experiences for students to sample varied community activities and roles, to learn the skills and attitudes needed to be participate meaningfully in preferred activities, and to establish strong and durable supports in those selected settings. Most secondary schools and communities are replete with opportunities for all youth to access relevant learning experiences that foster community and civic connections. Too often, youth with ASD are altogether absent from these opportunities or are not meaningfully engaged (e.g., Carter, Ditchman, et al., 2010; Taylor & Seltzer, 2011). However, reports of extracurricular school and community involvement in this population set a precedent that such activity is possible and justifies encouragement among students with ASD. For example, according to parent reports, 30% of youth with autism participated in organized school activities outside of class during the previous year (Wagner, Cadwallader, Garza, & Cameto, 2004). Shattuck, Orsmond, Wagner, and Cooper (2011) found that 35% of adolescents with ASD performed volunteer or community service, 31% took lessons or classes outside of school, 16% were involved on a sports team, and 9% were involved in a performing group. While these numbers represent a discrepancy from those found among peers without ASD, they offer hope that the majority of individuals with ASD can be moved in this direction with adequate family, school, and community support. A more nuanced issue is that, even when youth with ASD are involved in recreational and leisure activities, such activities may be undertaken in isolation or lead to few durable community connections (Hendricks & Wehman, 2009). Therefore, the transition team must pay particular attention to helping students build and maintain relationships (e.g., with peers, coaches, supervisors) within these activities to provide reinforcement for sustaining this community involvement. Participation in faith communities and youth groups may also be fairly limited for youth with ASD (Ault, Collins, & Carter, 2013). For other dimensions of community life—such as independent living, political participation, and leadership activities—relatively little is known about the involvement of youth and young adults with ASD.

Addressing these participation gaps is an important undertaking for school teams charged with addressing the educational needs of transition-age students with ASD. As one starting point, a school team might be organized to undertake an "opportunity mapping" process to identify the range of relevant activities (e.g., extracurricular activities, career development activities, volunteer experiences, youth development programming, other social and civic opportunities) currently available to any youth in the high school and surrounding community (Swedeen, Carter, & Molfenter, 2010). In addition to sharing this information widely with school staff, families, and youth themselves, school psychologists can examine the ways in which students with ASD—or other groups of students, such as students living in poverty or at risk for school failure—might be encouraged or supported to participate in these existing activities. Youth with ASD should be key players in making these decisions, as student buy-in is crucial for success. As necessary, motivation to take part in both the decision-making process and in the activities themselves initially might be stimulated by incorporating the students' interests and emphasizing that same-aged peers are taking similar responsibility. However, a clear plan must be in place for making the activities themselves

rewarding to students. By broadening the information-gathering process to include community members, civic leaders, families, and others, schools can assemble a comprehensive menu of potential transition experiences that could be drawn upon when planning for individual students. School psychologists can assist in identifying what community resources exist and providing input on the most successful ways to access these resources. Recent studies suggest community conversation approaches offer one effective and socially valid method for undertaking such efforts (Carter, Swedeen, Cooney, Walter, & Moss, 2012). This menu-based approach is also helpful to maintain flexibility and optimism within the transition team; if a certain activity does not prove to be reinforcing, the student can try out another.

The IEPs of students with ASD must include a statement of the supports provided for them to "be involved and progress in the general curriculum and to participate in extracurricular and other nonacademic activities" (IDEA, 2004). Transition planning teams should consider avenues through which a student's post-school goals might be furthered through connections to learning opportunities outside of the classroom. For example, involvement in extracurricular clubs can provide adolescents with ASD engaging contexts for exploring their interests, strengths, and preferences; affiliating with peers and adults who share interests; acquiring recreational, social, self-determination, and functional skills that provide lifelong enjoyment; and accessing social support and developing friendships (Carter, Swedeen, Moss, & Pesko, 2010). Similarly, service-learning and volunteer experiences can promote community engagement, enhance self-esteem and motivation, help students apply academic skills in real-life contexts, foster civic pride, nurture leadership development, and expand awareness of career and community opportunities (Carter, Swedeen, & Moss, 2012; Datillo, 2013). When well designed, inclusive service projects also place youth with ASD in valued roles that may enhance peer and community perceptions of the contributions of people with differences and disabilities.

Finally, assessment, planning, and instruction should focus on identifying the individual skills and supports needed to support meaningful participation in these out-of-class activities. For example, a number of salient barriers to extracurricular and service-learning involvement have been identified in the literature, including the attitudes of activity sponsors, low expectations among educators and/or parents, insufficient personal supports, limited opportunities for youth to make choices about desired involvement, insufficient instruction on social and collateral skills, and limited or inaccessible transportation (e.g., Carter, Swedeen, et al., 2010; Carter, Swedeen, & Moss, 2012). We would encourage those taking the lead in transition planning for students with ASD to start with this list and generate additional entries relevant to the individual and specific context, then systematically troubleshoot these obstacles with team input.

Social Supports and Connections for Youth and Young Adults with ASD

Relationships contribute substantively to a good life, both during adolescence and throughout adulthood (Rubin, Bukowski, & Laursen, 2009). Though the autism spectrum has long been associated with social disinterest and amotivation, a small but seminal study by Bauminger and Kasari (2000) found evidence for increased loneliness in children with

ASD. More recent findings suggest that the desire for social relations increases markedly in many individuals with ASD by adolescence and young adulthood (McGovern & Sigman, 2005), and that youth with ASD may develop heightened awareness of social isolation within this age period (Kuusikko et al., 2008). Through their relationships with peers, young people with and without ASD exchange emotional and social support, learn norms and values, build social capital, and acquire myriad skills. Such relationships not only provide personal enjoyment and buffer against loneliness, but they also influence overall quality of life. Although our article has focused thus far on connecting adolescents with ASD to an array of potentially beneficial community activities, there is a qualitative difference between being present in a community and having a presence in a community. We suggest this difference may depend in part on the development of valued relationships and a sense of belonging.

Yet, such relationships are especially elusive for youth and young adults with ASD, even when they spend time in the same settings and activities as others. Numerous studies indicate the social interactions and associations most youth experience during and after high school may be less common for young people with ASD without intentional efforts (Liptak, Kennedy, & Dosa, 2011; Shattuck et al., 2011). Among high school students with autism, only 6% were reported to frequently see friends outside of school, 94% never or rarely received telephone calls from friends, and only 24% got together with friends outside of formal groups at least once each week (Wagner et al., 2004). Orsmond, Krauss, and Seltzer (2004) reported that almost half (46%) of the 235 young people with ASD (ages 10–47) in their study had no same-age friends with whom they had a reciprocal relationship. Although social-related challenges may be central to the label of ASD, the development of friendships and supportive relationships remain intensely important for several reasons, including providing continued social learning opportunities, emotional health protection, and indeed, because youth and their families identify these as priority areas for support and instruction.

High schools are intrinsically social contexts, as are most workplaces and postsecondary programs. Thus, an emphasis on equipping students with the skills, opportunities, connections, and supports that contribute to the development of relationships should accompany efforts to help students access rigorous, relevant learning experiences (both in and outside of the classroom) as part of comprehensive transition programming. Although considerable empirical attention has focused on interventions to enhance the social competence and peer connections of children with ASD, much less work has been conducted within secondary and postsecondary contexts (Carter, Sisco, Chung, & Stanton-Chapman, 2010). Research suggests efforts to foster social relationships that enhance community participation should incorporate three intervention emphases.

First, interventions should focus on building social and communication skills that can increase or improve the quality of their interactions with peers, co-workers, supervisors, community members, and others. This focus involves providing explicit instruction in discrete skills (e.g., conversational turn-taking, initiating interactions) or clusters of skills (e.g., cooperation skills, assertion skills) to students individually or in groups to facilitate and/or enhance interpersonal interactions. For example, Shattuck and colleagues (2011) found that difficulties in conversational ability and social communication were significant

predictors of limited social participation. To be most effective, this instruction should target the specific skills needed to promote a students' success within or connections to others in a particular classroom, workplace, or other community setting. Because there is relatively little empirical evidence for specific social skills interventions in this age-group of students, teams may have to avail themselves of convenience resources or to adapt social skills instruction based on small-scale studies or those from other populations of interest (cf., Carter, Sisco, et al., 2010; Taylor et al., 2012; Walton & Ingersoll, 2013).

Second, interventions can concurrently focus on equipping others in a setting with the skills, opportunities, and confidence to interact socially with their co-worker, classmate, teammate, or partner with ASD. When peers evidence hesitation or initial uncertainty about how to interact with someone who has ASD or communicates in atypical ways, providing basic information and guidance may increase their confidence and capacity to seek out and maintain interactions. As one of the key school staff members who assess and address the school environment regularly, the school psychologist can assist other teachers in equipping students without disabilities to interact positively with peers with ASD. Often, these efforts focus on providing accurate and relevant information about particular disabilities generally (e.g., Asperger syndrome, intellectual disability) and/or about an individual youth specifically (e.g., students' interests, strengths, communication style). Peer-mediated intervention approaches typically incorporate efforts to teach classmates specific strategies to provide social and other support effectively (Carter, Sisco, & Chung, 2012).

Third, interventions should also address the roles of adults in fostering socially supportive environments in which interactions are encouraged and social skills can be practiced and reinforced. Even when adolescents with disabilities strengthen their social-related skills and peers receive needed information and guidance, students with ASD may encounter limited opportunities to interact and develop relationships with others in many school, work, and community settings. Thus, the steps educators and other professionals take to create opportunities for students to work with their peers and to facilitate interactions can establish the conditions under which friendships are most likely to form.

Implications for School Psychology Practice

Connecting adolescents with ASD to community experiences that will launch them seamlessly and successfully toward adulthood is a central task of secondary and transition education. Research clearly demonstrates that the efforts school staff, service providers, families, and others make to support meaningful community participation can have a long-term impact on both the proximal outcomes and long-term trajectories of these important members of our schools and communities. In this article, we selectively reviewed the recent literature to highlight the importance of and promising approaches for connecting youth with ASD to college and community activities, as well as the social relationships that make these activities worth pursuing. We conclude with key themes within this area that school psychologists, particularly in their role as a promoter of home-school-community collaboration, can address.

First, meaningful connections to the community are certainly possible for young people with ASD. Although the outcome studies cited in this article emphasize the numbers of youth and young adults for whom particular experiences have remained out of reach, these same studies demonstrate there are also many students who are successfully engaged in community life. Our own experiences working with high schools suggest that for any given young person with ASD who is on the peripheries of community life, there is another young person with similar needs and strengths for whom such connections have been made and supported. As Giangreco, Carter, Doyle, and Suter (2010) noted in their commentary on educational inclusion, this may suggest that the outcomes transition-age youth experience have as much or more to do with the opportunities and supports adults provide as they do the characteristics of a student. At the same time, it is also clear these community connections generally do not happen automatically or without intentional efforts, and the secondary school experiences most youth with ASD encounter are likely to be insufficient. As a key responsibility of the school psychologist is to "strengthen connections between home, school, and the community" (NASP), school psychologists can help youth and their families navigate opportunities and resources in the community that may address their individualized strengths, challenges, and limitations.

Second, the IDEA (2004) places meaningful assessment at the foundation of effective transition planning by requiring the IEPs of youth include "appropriate measurable postsecondary goals based on age-appropriate transition assessments related to training, education, employment, and, where appropriate, independent living skills" (§300.320(b)). Individualization is a hallmark of special education and ongoing, high-quality assessments are the key to tailoring transition services and supports to meet the unique needs of individual students with ASD. To align community experiences with students' individual annual and post-school goals, it is important for students to have a prominent voice in their own transition planning. Yet, Shogren and Plotner (2012) reported that 45% of youth with autism were considered by their teachers to have participated "very little" or "not at all" in their own transition planning (compared to 23% of youth with other disabilities); an additional 23% of youth had not even attended their own transition planning meetings (compared to 5% of youth with other disabilities). Because adolescents with ASD may experience difficulties in the areas of goal setting, self-awareness, self-knowledge, and decision making (Carter et al., 2013), building students' self-determination capacities can equip them to take a more active role in advocating for community opportunities and selfdirecting their supports. School psychologists can encourage family support of their child's self-determination and leadership skills in preparation for this meeting.

Third, families of adolescents with disabilities identify recurring challenges with understanding and navigating a very complex system of services and supports related to employment, college, and community life. For example, parents may be unaware of how social security benefits are impacted by wages earned from community employment and, as a result, perceive employment as disadvantageous. Despite the availability of numerous employment-related supports in every state, many parents do not know they exist or are unclear about how to access them. Often, educators are also unaware of these resources or uncertain about how best to connect youth and families to the constellation of formal and informal services and supports existing in their communities. As one of the primary sources

of information for families of transition-age youth, this lack of knowledge directly impacts the opportunities families know about and ultimately pursue. Thus, the efforts school psychologists make to map available opportunities and supports, familiarize themselves with entry and eligibility requirements, and communicate this information to families can be instrumental in linking youth to life beyond the classroom.

Fourth, the expectations of families, educators, and others can play a prominent role in shaping the opportunities and outcomes of youth and young adults with ASD (Chiang et al., 2012). For example, Carter, Austin, and Trainor (2012) found that high school students with significant intellectual disability or autism whose parents expected them to work were five times as likely to have paid, community employment in the early years after graduation. Similarly, the expectations of educators and service providers significantly influence the employment opportunities available to students during adolescence and beyond (Carter, Ditchman et al., 2010), and in the most extreme cases, a "self-fulfilling prophecy" can thwart certain students from achieving their desired goals or realizing potential abilities. Yet, too many families struggle to envision a future for their adolescent with ASD that involves competitive employment, college, or community engagement. Moreover, many secondary transition programs do not reflect a strong commitment to preparing adolescents with ASD for competitive work or postsecondary education. Schools, families, and communities should work in tandem to ensure every youth with ASD hears the message—from a very early age and from multiple people—that they have an important place in and critical contributions to share within their community.

High school is an opportune time to equip youth with ASD with the experiences, learning opportunities, and social relationships that can launch them well to adulthood. For the more than 378,000 students with autism served under the IDEA (U.S. Department of Education, 2011) across the United States, the efforts school staff, service providers, families, and communities make throughout and after high school holds such important potential to make a real difference in the lives of young people with disabilities.

Acknowledgments

Partial support for preparation of this article was provided by a Projects of National Significance: Partnerships in Employment Systems Change grant from the Administration on Intellectual and Developmental Disabilities, Administration for Community Living, U.S. Department of Health and Human Services. We also acknowledge support from the National Institute of Mental Health (T32-MH18921; K01 MH92598).

References

- Adreon D, Durocher JS. Evaluating the college transition needs of individuals with high-functioning autism spectrum disorders. Intervention in School and Clinic. 2007; 42:271–279.
- Ault MJ, Collins BC, Carter EW. Congregational participation and supports for children and adults with disabilities: Parent perceptions. Intellectual and Developmental Disabilities. 2013; 51:48–61. [PubMed: 23360408]
- Baum, S.; Ma, J.; Payea, K. Education pays, 2010: The benefits of higher education for individuals and society. New York, NY: The College Board; 2010.
- Bauminger N, Kasari C. Loneliness and friendship in high-functioning children with autism. Child Development. 2000; 71:447–456. [PubMed: 10834476]

Blackorby J, Wagner M. Longitudinal postschool outcomes of youth with disabilities. Exceptional Children. 1996; 62:399–413.

- Carter EW, Austin D, Trainor AA. Predictors of postschool employment outcomes for young adults with severe disabilities. Journal of Disability Policy Studies. 2012; 23:50–63.
- Carter EW, Ditchman N, Sun Y, Trainor AA, Swedeen B, Owens L. Summer employment and community experiences of transition-age youth with severe disabilities. Exceptional Children. 2010; 76:194–212.
- Carter EW, Lane KL, Cooney M, Weir K, Moss CK, Machalicek W. Parent assessments of self-determination importance and performance for students with autism or intellectual disability. American Journal on Intellectual and Developmental Disabilities. 2013; 88:16–31. [PubMed: 23301900]
- Carter, EW.; Sisco, LG.; Chung, Y. Peer-mediated support strategies. In: Prelock, PA.; McCauley, R., editors. Treatment of autism spectrum disorders: Evidence-based intervention strategies for communication and social interactions. Baltimore, MD: Paul H. Brookes; 2012.
- Carter EW, Sisco LG, Chung Y, Stanton-Chapman T. Peer interactions of students with intellectual disabilities and/or autism: A map of the intervention literature. Research and Practice for Persons with Severe Disabilities. 2010; 35:63–79.
- Carter EW, Swedeen B, Cooney M, Walter MJ, Moss CK. "I don't have to do this by myself?": Parent-led community conversations to promote inclusion. Research and Practice for Persons with Severe Disabilities. 2012; 37:9–23.
- Carter EW, Swedeen B, Moss CK. Engaging youth with and without significant disabilities in inclusive service experiences. Teaching Exceptional Children. 2012; 44(5):46–54.
- Carter EW, Swedeen B, Moss CK, Pesko MJ. "What are you doing after school?" Promoting extracurricular involvement for transition-age youth with disabilities. Intervention in School and Clinic. 2010; 45:275–283.
- Chiang H, Cheung YK, Hickson L, Xiang R, Tsai LY. Predictive factors of participation in postsecondary education for high school leavers with autism. Journal of Autism and Developmental Disorders. 2012; 42:685–696. [PubMed: 21618065]
- Datillo J. Inclusive leisure for individuals with intellectual disability. Inclusion. (in press).
- Fives CJ. Vocational assessment of secondary students with disabilities and the school psychologist. Psychology in the Schools. 2008; 45:508–522.
- Giangreco, MF.; Carter, EW.; Doyle, MB.; Suter, JC. Supporting students with disabilities in inclusive classrooms: Personnel and peers. In: Rose, R., editor. Confronting obstacles to inclusion: International responses to developing inclusive schools. London, UK: Routledge; 2010. p. 247-263.
- Hart D, Grigal M, Weir C. Expanding the paradigm: Postsecondary education options for individuals with autism spectrum disorder and intellectual disabilities. Focus on Autism and Other Developmental Disabilities. 2010; 25:134–150.
- Hasazi SB, Gordon LR, Roe CA. Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. Exceptional Children. 1985; 51:455–469. [PubMed: 3987763]
- Hendricks DR, Wehman P. Transition from school to adulthood for youth with autism spectrum disorders. Focus on Autism and Other Developmental Disabilities. 2009; 24:77–88.
- Individuals with Disabilities Education Improvement Act of 2004. PL. 2004. p. 108-446.
- Klin A, Danovitch JH, Merz AB, Volkmar FR. Circumscribed interests in higher functioning individuals with autism spectrum disorders: An exploratory study. Research and Practice for Persons with Severe Disabilities. 2007; 32:89–100.
- Kuusikko S, Pollock-Waurman R, Jussila K, Carter A, Mattila M, Ebeling H, Pauls D, Moilanen I. Social anxiety in high-functioning children and adolescents with autism and asperger syndrome. Journal of Autism and Developmental Disorders. 2008; 38:1697–1709. [PubMed: 18324461]
- Liptak GS, Kennedy JA, Dosa NP. Social participation in a nationally representative sample of older youth and young adults with autism. Journal of Developmental & Behavioral Pediatrics. 2011; 32:277–283. [PubMed: 21285894]

McGovern C, Sigman M. Continuity and change from early childhood to adolescence in autism. Journal of Child Psychology and Psychiatry. 2005; 46:401–408. [PubMed: 15819649]

- Migliore A, Timmons J, Butterworth J, Lugas J. Predictors of employment and postsecondary education for youth with autism. Rehabilitation Counseling Bulletin. 2012; 55:176–184.
- National Collaborative on Workforce and Disability for Youth. Guideposts for success. 2nd ed.. Washington, DC: Institute for Educational Leadership; 2009.
- Newman, L.; Wagner, M.; Cameto, R.; Knokey, AM. The post-high school outcomes of youth with disabilities up to 4 years after high school. Menlo Park, CA: SRI International; 2009.
- Orsmond GI, Krauss MW, Seltzer MM. Peer relationships and social and recreational activities among adolescents and adults with autism. Journal of Autism and Developmental Disorders. 2004; 34:245–256. [PubMed: 15264493]
- Papay C, Bambara LM. Postsecondary education for transition-age students with intellectual and other developmental disabilities: A national survey. Education and Training in Autism and Developmental Disabilities. 2011; 46:78–93.
- Rubin, KH.; Bukowski, WM.; Laursen, B., editors. Handbook of peer interactions, relationships, and groups. New York, NY: Guilford Press; 2009.
- Sanford, C.; Newman, L.; Wagner, M.; Cameto, R.; Knokey, AM.; Shaver, D. The post-high school outcomes of young adults with disabilities up to 6 years after high school. Menlo Park, CA: SRI International; 2011.
- Sciutto M, Richwine S, Mentrikoski J, Niedzwiecki K. A qualitative analysis of the school experiences of students with Asperger syndrome. Focus on Autism and Other Developmental Disabilities. 2012; 27:177–188.
- Shattuck PT, Orsmond GI, Wagner M, Cooper BP. Participation in social activities among adolescents with an autism spectrum disorder. PLOS One. 2011; 6:1–9.
- Shogren K, Plotner A. Transition planning for students with intellectual disability, autism, or other disabilities: Data from the National Longitudinal Transition Study-2. Intellectual and Developmental Disabilities. 2012; 50:16–30. [PubMed: 22316223]
- Swedeen B, Carter EW, Molfenter N. Getting everyone involved: Identifying transition opportunities for youth with severe disabilities. TEACHING Exceptional Children. 2010; 43(2):38–49.
- Taylor, JL.; Dove, D.; Veenstra-VanderWeele, J.; Sathe, NA.; McPheeters, ML.; Jerome, RN.; Warren, Z. Interventions for adolescents and young adults with autism spectrum disorders. Agency for Healthcare Research and Quality Comparative Effectiveness Reviews; 2012.
- Taylor JL, Seltzer MM. Employment and post-secondary educational activities for young adults with autism spectrum disorders during the transition to adulthood. Journal of Autism and Developmental Disorders. 2011; 41:566–574. [PubMed: 20640591]
- Test DW, Fowler CH, Richter SM, White J, Mazzotti V, Walker AR, Kortering L. Evidence-based practices in secondary transition. Career Development for Exceptional Individuals. 2009; 32:115–128
- Test DW, Mazzotti VL, Mustian AL, Fowler CH, Kortering L, Kohler P. Evidence-based secondary transition predictors for improving postschool outcomes for students with disabilities. Career Development for Exceptional Individuals. 2009; 32:160–181.
- U.S. Department of Education. 30th Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2008. Washington, DC: Author; 2011.
- Walton KM, Ingersoll BR. Improving social skills in adolescents and adults with adults and severe to profound intellectual disability: A review of the literature. Journal of Autism and Developmental Disorders. 2013; 43:594–615. [PubMed: 22790427]
- Wagner M, Cadwallader TW, Garza N, Cameto R. Social activities of youth with disabilities. NLTS2 Data Brief. 2004; 3(1):1–4.