Five Steps for Developing **Effective Transition Plans** for High School Students With Autism Spectrum Disorder

Katherine Szidon, Andrea Ruppar, and Leann Smith

Lakeview High School is a mediumsized high school in a rural farming community. The staff at Lakeview meets at the beginning of each school year to discuss building-level professional development plans. This year, Lakeview's special education team has requested to focus its professional development time on improving special education services for students with autism spectrum disorder (ASD). The team is seeing an increasing number of students with ASD who are highly skilled academically yet have complex needs around social behavior, selfmanagement, and independent living—skills necessary for success in postsecondary environments. The team recognizes that this type of instruction does not seem to fit easily in the existing high school schedule, and the goals that the teachers write to increase student self-management skills and develop social awareness are difficult to implement. Yet, given the importance of these social, emotional, and communication skills, the team plans to work together to develop better programming for its students with ASD.

The Challenge of Transition Planning and IEPs for Students With ASD

Adolescence can be a stressful time for many students. During the high school years, young people work to develop new identities and make decisions about the future, including where they will live, what they will do (postsecondary education or career), and who will be their friends (Test, Smith, & Carter, 2014). For any student, these changes are difficult. For adolescents with ASD, the difficulty is greater because of their unique challenges. Specifically, students with ASD display both (a) persistent deficits in social communication and (b) restricted, repetitive patterns of behavior and interests that are significant enough to impair social, occupational, or other functions (American Psychiatric Association, 2013). That is, students with ASD experience greater social communication difficulties than what would be expected for other students their age. Adolescents with ASD also have higher levels of repetitive

behavior and restrictive interest than their peers with other disabilities, making transitions and coping with change more difficult (Smith, Barker, Seltzer, Abbeduto, & Greenberg, 2012). Anxiety may pose challenges when students engage in exploring, planning, and preparing for the future (White, Oswald, Ollendick, & Scahill, 2009). Similarly, limitations in social communication, a core feature of ASD, may make it particularly difficult for students with ASD to understand social situations and to express interests, needs, and goals about the future (Wehmeyer, Shogren, Zager, Smith, & Simpson, 2010).

For teachers, writing IEPs for students with ASD who are transitioning out of high school can pose unique challenges, as the specific needs of each student need to be taken into consideration. Students may demonstrate significant variation in their academic, language, social, and behavioral skills. For example, some students with ASD may read fluently but struggle to comprehend text. Other students may excel at standardized science assessments but have difficulty Although academic skills may be strong for some students with ASD. these same students often demonstrate significant challenges in their social and adaptive skills that can affect their independence. By planning for teaching and supporting these important skill areas, the team can develop a wellrounded plan for success in postsecondary settings.

completing lab assignments due to the social demands of working with other students in their class. A student with ASD might have a significant strength in music, but lack of hygiene may be a barrier to being accepted by peers in the school orchestra. The aspirations and interests of students with ASD can be extremely varied. Some students might want to plan for college, others for careers; some students will look toward increasing community engagement and exploring independent living options, and still others, a combination of these options (Shogren & Plotner, 2012). Further, students with ASD often have very intense and, at times, limited interests that can make it difficult to find an appropriate postsecondary goal that is a good fit. For educators to effectively plan for the range of outcomes expected from students with ASD, individualized and carefully tailored programming is required for students to make maximum gains.

Guidelines for Writing Transition Plans

The Individuals With Disabilities Education Act (IDEA; 2006) requires schools to develop transition plans for students with disabilities, beginning at age 16, if not before. The regulations define *transition planning* as a "coordinated set of activities" that help

students move from school into postschool activities (20 U.S.C. §1401[34]). For students with ASD, the transition planning process includes unique considerations.

Step 1: Identify Transition Goals

In designing a transition IEP, the team should begin by considering the student's needs in the areas of postsecondary education, employment, and independent living. Formal transition assessments can provide essential guidance for the team. Numerous assessments are available to measure adaptive and social skills in high school students and can provide school teams with a current level of functioning. For example, the National Secondary Transition Technical Assistance Center (NSTTAC) provides several resources for teams searching for appropriate transition assessments in a variety of domains (see Walker, Kortering, Fowler, Rowe, & Bethune, 2013). In addition, Virginia Commonwealth University's Autism Center for Excellence (2014) lists a number of language tests that provide information about communication and social engagement in order to help teams design interventions for students with ASD.

Using the data from a transition assessment, the IEP team can identify postsecondary goals. An important part of this process is determining future environments the student will access, considering the skills necessary to be successful in those environments, and assessing the student performance on skills in those areas. One common error in transition assessment and goal writing for students with ASD is the failure to consider and assess student challenges in core areas that are associated with autism (Ruble, McGrew, Dalrymple, & Jung, 2010). Although academic skills may be strong for some students with ASD, these same students often demonstrate significant challenges in their social and adaptive skills that can affect their independence. By planning for teaching and supporting these important skill areas, the team can develop a well-rounded plan for success in postsecondary settings.

After conducting assessments, the IEP team should use the information gathered to create appropriate, measureable postsecondary goals and develop transition services (including courses of study) necessary for the student to meet the goals. Specifically, federal regulations stipulate that measurable postsecondary goals must be developed in the areas of training, education, and employment. If appropriate, the team may also develop goals for independent living (20 U.S.C. § 1414 [d][1][A][i][VIII]).

Step 2: Link Postsecondary Goals With IEP Goals

Once the team develops measurable postsecondary goals in education, employment, and independent living areas, annual IEP goals can be written. At least one IEP goal should align with and support each of the student's postsecondary goals. There should be a clear connection between postsecondary goals (to be achieved after graduation) and IEP goals (to be achieved in an academic year). A common error in transition IEP writing is to have measurable postsecondary goals and measurable IEP goals with no link between the two. This is especially problematic for students with ASD, for whom generalization of skills is particularly difficult. Team members, students with ASD, and their families all need to see a clear link between the goals learned in high school and postschool aspirations. High school teams should research the skills needed for the desired career and identify areas where students with ASD might struggle. In this way, the IEP document helps train students in the skills necessary for postschool success. For examples of aligned IEP and postsecondary goals, see Table 1.

Step 3: Troubleshoot and Adjust Transition and IEP Goals

A high-quality transition IEP is built on measurable goals. To be useful after graduation, skills should be generalizable to postsecondary employment, education, or independent

Table 1. Aligned Annual IEP and Postsecondary Goals

Postsecondary goal	Annual IEP goal
Upon completion of high school, Chris will enroll in a community college to study computer-aided drawing.	Given instruction in word-processing and keyboarding skills, Chris will accurately type 15 words per minute in four out of five opportunities across one semester of data (in order to prepare him to study computer-aided drawing after graduating high school).
After graduation from high school, Tonya will independently use community transportation, including public buses, taxis, and the ride-share system.	Given instruction in bus riding, Tonya will complete the steps necessary for her to arrive at five identified community destinations with 100% accuracy across five consecutive opportunities (in order to prepare her to independently ride community transportation after she graduates high school).

Note. IEP = individualized education program.

living. IEP goals need four key components: (a) the student's name, (b) an observable skill that the student will improve, (c) the conditions under which the skill should be performed, and (d) a criterion for reaching the goal. However, depending on the goal, a teacher might have difficulty with any of the last three components. To assist IEP teams with troubleshooting transition and IEP goals, we present three potential pitfalls in writing transition IEP goals: (a) goals that amount to only passive participation, (b) goals that are too specific to a particular curriculum, and (c) goals that measure only episodic events.

Passive participation. Identifying supports that will help students succeed in school is an important priority when planning a transition IEP. Equally important is to distinguish between the goal and the supports needed to reach a goal. Consider the following example:

Chris's special education teacher has noticed that Chris struggles with organization. As a result, Chris fails to bring his homework back to school. She knows that Chris aspires to attend a community college to study computer-aided drawing and will need to build good organizational skills to stay on top of his college courses. She includes the following goal in his IEP: Chris will continue to take a study hall to allow for time during the school day to complete work and to maintain his study and organizational skills (revisiting what he currently uses and

make improvements where necessary), every quarter as his schedule allows.

Team members, students with ASD, and their families all need to see a clear link between the goals learned in high school and postschool aspirations.

If Chris does nothing, the goal will automatically be met. Instead, taking study hall should be part of the support he receives to meet the goal of completing work and improving his organizational skills. Chris's teacher should reword the goal to ensure that the specific skills she wants him to improve—checking his assignment notebook, completing assigned work, and crossing out completed assignments—are targeted for instruction. A revised goal could read, In study hall, Chris will improve his organizational skills by (a) checking his assignment notebook at the beginning of each study hall and (b) crossing out completed assignments in his assignment notebook with 90% accuracy across three consecutive weeks of data collection. This goal identifies study hall as the context in which he will address the goal of organization. By specifying the context, Chris's team will ensure that Chris continues to participate in study hall, where he will work on a goal that will enhance his participation in postsecondary education.

Too specific to curriculum. Many teachers rely on a specific, published curriculum to support their instruction. Similarly, some schools may have adopted schoolwide behavior programs to support student behavior. When writing IEP goals, it can be helpful to consider the outcome of participating in a curriculum or program to ensure that a targeted transition skill will be generalized beyond the teaching setting.

For example, Tonya, a senior, aspires to work in the animal care field after she graduates from high school. She reports that she has difficulty following verbal directions. Consequently, she becomes frustrated and verbally lashes out at teachers and paraprofessionals. As part of her behavior intervention plan, Tonya participates in a point system for using appropriate language, displaying good listening behaviors, and staying in class (rather than leaving partway through). Her case manager has written the following goal: Tonya will earn an average of 7 positive points each day.

Although these behaviors are important for her future employment goals, the point system is implemented only at school. This goal is too specific to a curriculum and not generalizable to postschool outcomes. A revised goal could read as follows: When Tonya does not understand what to do in class, she will use a self-monitoring checklist consisting of the following options: (a) reread directions on the



board, (b) check with a neighbor, or (c) raise her hand to request assistance, and select an appropriate strategy to obtain help, with no more than one teacher prompt per class period across 6 weeks of instruction.

By using a self-monitoring checklist that includes these strategies, Tonya will develop problem-solving skills. Moreover, a self-monitoring checklist could be used in a workplace as an appropriate support to maintain employment.

Episodic events. When identifying postschool goals, it is important to determine skills that (a) will enable the student to fully participate in adult life and (b) can be measured over time. Some activities might help students reach goals but happen only once.

For example, Caleb's teacher thinks engaging in a career exploration activity will help Caleb identify his personal goals and enhance his self-determination. She writes the following goal: *Caleb will participate in a career exploration assessment to identify possible career goals.*

A week after the IEP meeting, Caleb's teacher administers the assessment. Caleb identifies three different office jobs he would like to try. The goal has been met; it is episodic and cannot be measured over time. Had the assessment occurred prior to the IEP meeting, Caleb's teacher could have written a goal that would promote his attainment of career goals. The following is an example of a goal that would measure Caleb's ability to complete writing tasks in an office setting as well as in his academic classes: During writing tasks using a laptop computer, Caleb will increase his typing fluency from six to 30 words per minute across three consecutive trials by April 2015. This goal includes conditions ("during writing tasks using a laptop computer") and a criterion ("30 words per minute . . . by April 2015"), and it can be measured over time.

Step 4: Provide Opportunities to Teach Skills

Once critical skills have been identified, however, high school staff members might experience difficulty identifying where to incorporate the specially designed instruction into a student's school day. This can be especially tricky for students with ASD, as their unique profile of strengths and learning needs makes it difficult to plan a course of study without having gaps in instruction. For students with a full load of academic instruction, finding time to offer adaptive skill development or social curriculum may require creative

planning and difficult decision making on the part of the IEP team.

In the absence of a clearly scheduled time and plan for direct teaching, students may receive inadequate amounts of instruction and practice time needed to acquire the new skill, with a low likelihood of generalization. Ongoing evaluation of student needs and high school offerings is one way to help support a flexible curriculum that can adapt to the unique and varied needs of students with ASD. Once an IEP goal has been developed, careful consideration should be given to where the skill can best be taught within the student's school day. For instance, it may be necessary to add a communications class as an option for students who need individualized instruction in social skills. Schools might also institute an organizational check in class at the beginning or the end of a school day in order to support students who need help with executive function activities like homework planning and organization of their work and school schedules. Electives that teach skills such as meal preparation, personal finance, and career readiness, can be highly beneficial for students with ASD, particularly those for whom other classes in functional skills may be inappropriate. As teams consider adding these courses for students with ASD, it is useful to remember that students might benefit from having academic course work spread out longer than the traditional 4-year high school experience, consistent with IDEA, to access additional courses to prepare them for all of their postsecondary goals. Changing course offerings can be difficult and may be outside the control of IEP teams in some districts. In the absence of targeted courses, teams will need to creatively work together to determine how to integrate generalization of social and other skills within current class parameters while advocating for other options for the future.

Step 5: Evaluate Progress

A well-crafted transition IEP should provide the team with valuable

Figure 1. Missing Homework Data Collection Survey

Please indicate:	
A) missing assignments over the past 4 weeks.	
B) late assignments over the past 4 weeks.	
C) How frequently do you provide individual reminders to Jake to turn in assigned work?	
Never Daily Weekly During Progress Reports	
D) Describe any individual support you are providing to help Jake locate and turn in assigned work	

information about student progress toward realizing postsecondary goals. If the IEP goal has been written in a manner that is observable, and the performance conditions and criteria are well articulated, data should be easy to collect. Unfortunately, high school teachers of students with ASD might not always have effective and precise data collection systems that can inform students' ongoing progress toward goals. For example, standardized academic scores may not be collected frequently enough to inform instructional changes, or they may not capture social and adaptive skill development. Further, a teacher might decide to measure progress based upon general impressions of student performance or global observations rather than targeted data collected over time. Imprecise data collection systems may make it difficult to detect error patterns and accurately measure skills. Without a careful analysis of the pattern of social and adaptive skill acquisition, teachers risk over- or underestimating their students' skill levels, leading to future problems engaging in desired postsecondary goals. The following example demonstrates the importance of appropriate data collection to inform instructional support:

Jake's special education teacher learns that he is forgetting to turn in homework in his mathematics and English classes. To gain more information about what might be happening, she sends out an e-mail to all of his teachers asking them to provide information on his behavior and the frequency with which they gave him reminders. (See Figure 1 for

an example of her data collection survey instrument.)

Once data were collected across the school day, including the level of teacher prompting, the special education teacher found that in all classes, except math and English, Jake's teachers were reminding him daily and assisting him to turn in his work. His special education teacher realized that Jake was having significant problems with organization, and he required instruction and support in completing and turning in assigned work. With more comprehensive data, the IEP teacher and team designed a measurable goal to increase Jake's independence in work completion. The team knew this skill would become increasingly important as he transitioned to postsecondary education.

Conclusion

Planning for the incorporation of successful transition supports for high school students with ASD requires IEP teams to consider the unique needs of these students. The five steps outlined in this article can provide IEP teams guidance when identifying appropriate postsecondary goals, developing transition activities to support the goals, and aligning those goals with the annual IEP. With a solid plan in place, teams can work toward developing instructional opportunities to foster skill development and effectively evaluating progress for their students with ASD. Teams that follow these steps ensure increased support for students with ASD as they move toward their postsecondary goals.

Following the step-by-step process, Lakeview High School's special education team first realized that its transition assessment options did not accurately measure the core skill areas associated with ASD. The team used the resources at NSTTAC as a guide to add more information in its assessment process. The staff members selected the Vineland Adaptive Behavior Scales (Vineland II; Sparrow, Cicchetti, & Balla, 2005) and the Autism Social Skills Profile (ASSP; Bellini, 2006) to help them survey adaptive and social skills. They also discovered that the counseling office had a license for a software program that gave students and teachers access to career-planning resources. The software package included assessments of interests, allowed students to selfreport their abilities, and matched this information to careers based on an occupational database that was specific to their state. The team now had a much better sense of students' unique interests and abilities.

Armed with better information, the team was able to connect assessment data to postsecondary goals. The team realized that many of the students lacked the adaptive skills required to succeed in postsecondary environments. *In response, special education staff wrote* some new measurable annual goals, aligned to the students' postsecondary goals that targeted the independent living skills, organization, and social communication necessary to navigate college and the community successfully. The team explored creative ways to offer these skills through three new courses taught by the special education staff: one that targets self-management and independence, one that addressed social communication, and one that offered practice navigating community settings. Through regular progress monitoring, the team was able to track student data on adaptive and social skills, and make appropriate adaptations to instruction in order to better prepare students with ASD for postsecondary success.

References

American Psychiatric Association. (2013). Diagnostic and statistical manual of

- mental disorders (5th ed.). Arlington, VA: Author.
- Bellini, S. (2006). Building social relationships: A systematic approach to teaching social interaction skills to children and adolescents with autism spectrum disorders and other social difficulties. Shawnee Mission, KS: AAPC.
- Individuals With Disabilities Education Act, 20 U.S.C. §§ 1400 et seq. (2006 & Supp. V. 2011).
- Ruble, L. A., McGrew, J., Dalrymple, N., & Jung, L. A. (2010). Examining the quality of IEPS for young children with autism. Journal of Autism and Developmental Disorders, 40, 1459-1470.
- Shogren, K. A., & Plotner, A. J. (2012). Transition planning for students with intellectual disability, autism, or other disabilities: Data from the National Longitudinal Transition Study-2. Intellectual and Developmental Disabilities, 50, 16-30.
- Smith, L. E., Barker, E. T., Seltzer, M. M., Abbeduto, L., & Greenberg, J. S. (2012). Behavioral phenotype of fragile X syndrome in adolescence and adulthood. American Journal on Intellectual and Developmental Disabilities, 117(1), 1-17.
- Sparrow, S. S., Cicchetti, D. V., & Balla, D. A. (2005). Vineland Adaptive Behavior Scales (2nd ed.). Circle Pines, MN: American Guidance Service.

- Test, D.W., Smith, L.E., & Carter, E. W. (2014). Equipping youth with autism spectrum disorders for adulthood: Promoting rigor, relevance, and relationships. Remedial and Special Education, 35, 80-90.
- Walker, A. R., Kortering, L. J., Fowler, C. H., Rowe, D., & Bethune, L. (2013). Age appropriate transition assessment toolkit (3rd ed.). Retrieved from http://nsttac .org/content/age-appropriate-transitionassessment-toolkit-3rd-edition
- Wehmeyer, M. L., Shogren, K. A., Zager, D., Smith, T. E. C., & Simpson, R. (2010). Research-based principles and practices for educating students with autism: Self-determination and social interactions. Education and Training in Autism and Developmental Disabilities, 45, 475-486.
- White, S. W., Oswald, D., Ollendick, T., & Scahill, L. (2009). Anxiety in children and adolescents with autism spectrum disorders. Clinical Psychology Review, 29, 216-229.
- Virginia Commonwealth University Autism Center for Excellence. (2014). Formal assessments. Retrieved from http://www.vcuautismcenter.org/ta/ communication/formal.cfm

Katherine Szidon, Professional Development Specialist, Waisman Center; Andrea Ruppar, Assistant Professor, Department of Rehabilitation Psychology and Special Education; and Leann Smith, Associate Scientist, Waisman Center, University of Wisconsin-Madison.

Address correspondence concerning this article to Katherine Szidon, Waisman Center, University of Wisconsin-Madison, 1500 Highland Ave., Madison, WI 53705 (e-mail: szidon@waisman.wisc.edu).

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