

PROVIDING COLLEGE READINESS COUNSELING FOR STUDENTS WITH AUTISM SPECTRUM DISORDERS:

A DELPHI STUDY TO GUIDE SCHOOL COUNSELORS

This study used the Delphi method to examine school counselors' roles for providing equitable college readiness counseling for students with autism spectrum disorders (ASD). Participants included an expert panel of 19 individuals with experience and knowledge in postsecondary transition for students with ASD. Expert participants identified 29 tasks of school counselors for providing equitable college readiness counseling to students with ASD, such as encourage student involvement in the transition planning process, collaborate with parents, and conduct workshops for students with ASD and their parents about college transition. This article provides practical implications and recommendations based on the study results.

Providing college ready students in K-12 schools is an essential component of elementary and secondary education (Conley, 2010). Several national organizations, such as the American School Counselor Association (ASCA) and the National Association for College Admission Counseling (NACAC), have identified the role of school counselors for providing college readiness counseling for high school students. ASCA described the role of school counselors in *National Standards for School Counseling Programs* as providing all students access to school counseling programs through academic, personal/social, and career development (Campbell & Dahir, 1997). ASCA also provides a framework for providing evidence-based, comprehensive school counseling programs through the ASCA National Model (ASCA, 2005).

In 2006, NACAC identified four actions that promote effective college readiness counseling. The first action step is to set high expectations and provide access to counseling for all students to prepare for postsecondary education or work (NACAC, 2006). The next action step is to make counseling more accessible by maintaining or increasing counseling staff and improving student-to-counselor ratios (NACAC). This task may be difficult because many of the student-to-counselor ratios are well above the NACAC and ASCA recommendation of 250:1 (NACAC; ASCA, 2005). Action three is to refine counselor roles and responsibilities to ensure that counselors spend time providing direct services, rather than inappropriate administrative tasks, and the final ac-

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tion is the continued development and assessment of the counseling program priorities and outcomes (NACAC).

The College Board's National Office for School Counselor Advocacy (NOSCA) created a guide for school counselors to increase college and career readiness. The NOSCA goal is to "promote the value of school counselors as leaders in school reform, student achievement and college readiness" (NOSCA, 2010, ¶1). NOSCA supports school counselors in providing equitable access to education and rigorous academic preparation for all students (NOSCA). By using the eight components of college and career readiness counseling as a framework, school counselors can infuse equitable college readiness counseling in elementary, middle, and high schools.

through activities such as individual and group counseling, advocacy, establishing and implementing accommodations and modifications, and making referrals to other specialists (ASCA).

National legislation also has shaped college readiness programming for students with disabilities in their transition to postsecondary education. The Individuals with Disabilities Education Act (IDEA) of 2004 mandates that "students with disabilities must have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for further education, employment and independent living" (IDEA., Pub. L. No. 108-446, § 601(d)). This law also requires that students in special education be

with more early intervention programs and evidence-based practices to support students with ASD, more students with ASD view postsecondary education as an option (Graetz & Spampinato, 2008). Supporting the general growth and success of students with ASD is the responsibility of school counselors, through advocacy, leadership, consultation, and collaboration (Gibbons & Goins, 2008).

Autism Spectrum Disorder

Students with ASD face unique academic, social, and institutional barriers to accessing postsecondary education. College readiness and transition services are essential components for positive postsecondary outcomes. Therefore, a comprehensive understanding of the transition process for this population is especially important.

Diagnosis. Creating a single definition for ASD is a difficult task due to the range, or spectrum, upon which symptoms present, and generic characteristics of ASD may not apply to all individuals with the diagnosis. Therefore, "ASD is a term that is used as an organizing rubric for a series of lifelong neuropsychiatric disorders including autism, Asperger Syndrome, and Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS)" (VanBergeijk, Klin, & Volkmar, 2008, p. 1360). However, several common characteristics exist, including difficulties in receptive and expressive language, challenges with reciprocal communication, impairment in general social skills, restricted and repetitive behaviors, and challenges in executive functioning (Aderon & Durocher, 2007; Graetz & Spampinato, 2008). Students with ASD also may experience sensory difficulties, such as sensitivity to tastes, noises, or touch, which can lead to clumsiness, stiff gaits, or other atypical behaviors (Gibbons & Goins, 2008).

Prevalence. The Centers for Disease Control and Prevention (CDC) estimated that 1 in 88 children in the United States have an ASD (CDC, 2012). Another trend is that males are diagnosed more commonly than

DESPITE LEGAL REQUIREMENTS THAT PROMOTE EQUITABLE EDUCATION, THE PERCENTAGE OF STUDENTS WITH DISABILITIES ATTENDING POSTSECONDARY SCHOOLING IS LOWER THAN THAT OF THE GENERAL POPULATION.

According to NOSCA, to ensure effective services, school counselors must consider the context of the school, understand their cultural competence and provide materials in a culturally sensitive manner, incorporate multi-level interventions (student, school, family, and community levels), and use data to determine inequities and inform practice (NOSCA).

To address the need for equitable counseling, initiatives have been established to specifically support students with disabilities. For example, working with students with disabilities has been defined through an ASCA (2004b) position statement, which supports the academic, personal/social, and career development of this population through comprehensive school counseling programs. Further, the publication states that school counselors support students with disabilities through the transition process from K-12 to postsecondary options

provided transition services, including the development of a transition plan that uses an outcomes-based, student-centered approach (IDEA). The intent of this law, among other objectives, is to better prepare students for postsecondary education.

Despite legal requirements that promote equitable education, the percentage of students with disabilities attending postsecondary schooling is lower than that of the general population (National Longitudinal Transition Study-2 [NLTS-2], 2007). This pattern is especially concerning for students with autism spectrum disorders (ASD). More specifically, 70.1% of high school graduates attended postsecondary education (Bureau of Labor Statistics [BLS], 2010), while 58% of students with ASD received some type of formal education after high school. Only 22% of students with ASD reported enrolling in a four-year college (NLTS-2, 2009). However,

females, with prevalence rates of approximately one in 54 males and one in 252 females (CDC, 2012).

The prevalence of ASD has increased during the past decade, with more high-functioning individuals being diagnosed (California Department of Developmental Services, 2003). Adreon and Durocher (2007) suggested this may be due to an increased ability to recognize and diagnose the disorder at younger ages. This increase in the number of students with the diagnosis suggests that school counselors must be familiar with the characteristics of ASD as well as strategies to work with this population (Gibbons & Goins, 2008).

College Readiness for Students with ASD

Empirically based research on college readiness for students with ASD has not yet been adequately examined in the literature. The closest equivalent is a Delphi study conducted by Milsom and Dietz (2009) to determine the competencies that comprise college readiness for students with learning disabilities. The study resulted in a compilation of 60 factors that contribute to college readiness for students with learning disabilities. The highest rated among these factors was confidence, the belief that the student can succeed. The top items, including willingness to self-advocate, self-determination skills, and knowledge of personal strengths and weaknesses, related more to personal characteristics and attitudes than to academic ability. Milsom and Dietz highlighted parallels between the factors of college readiness identified in this study and the school counselor's involvement outlined in the *ASCA National Standards for Students* (ASCA, 2004a).

Although empirical research on transition for students with ASD is limited, the literature has explored barriers to college readiness and access and transition services for students with ASD (Geller & Greenberg, 2010; Glennon, 2001; Graetz & Spampinato, 2008; Hughes, 2009; VanBergeijk et al., 2008). Although many students

with ASD are intellectually capable of a rigorous postsecondary curriculum, some will require accommodations and supports from the higher education institution. Specific challenges identified in the literature include time management and changing schedules, social relationships, social skills, living arrangements, executive functioning skills, organization, graphomotor difficulties, anxiety, and sensory integration dysfunction.

VanBergeijk et al. (2008) suggested that, without adequate preparation, students with ASD would “predict-

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ably fare far worse than neurotypical students in their transition to university” (p. 1362). The authors suggested students with ASD, their parents, and support personnel consider the size of the university, campus disability awareness, accommodations available, campus resources, and housing options when choosing a college or other postsecondary institution (VanBergeijk et al.). Adreon and Durocher (2007) identified planning considerations for the postsecondary transition of students with ASD. These considerations included characteristics of the school, such as atmosphere and housing options. Adreon and Durocher also expressed the importance of other skills, such as knowing how to disclose the disability appropriately, requesting accommodations, identifying social supports, and identifying strategies to assist the transition process. Independent living skills, such as personal hygiene, waking up and getting to class without prompt, and knowing who to contact in an emergency, must be also addressed prior to the transition to postsecondary education. Further, Geller and Greenberg (2010)

recommended specific components of transition planning for students with ASD, including social skills development, social thinking skills, life skills, sex education, appropriate workplace behavior, experiential education opportunities, work experiences, support for postsecondary education, and the fostering of leisure interests.

Purpose of the Study

Students with ASD have unique educational, personal/social, and career development needs, and school counselors are tasked with support-

ing the progress and success of these students (Gibbons & Goins, 2008). School counselor support is particularly important in the realm of college readiness counseling, especially as more and more students with ASD are seeking to attend postsecondary education (Graetz & Spampinato, 2008). However, based on an extensive literature review, little information is available on the school counselor's role for providing college readiness counseling specifically for students with ASD. Therefore, this study sought to explore the following research question: how can secondary school counselors provide equitable college preparation counseling to students with ASD?

METHOD

Participants

To adequately investigate equitable college preparation counseling for students with ASD, the authors needed to choose expert participants who were able to provide informed and diverse perspectives. Therefore, purposive sampling was used to identify experts

in the field of college readiness and transition for students with ASD (Jenkins & Smith, 1994). Related experience on the topic, specific knowledge on the topic, the ability to contribute meaningfully, and willingness to revise initial statements to reach consensus were necessary for participation (Hsu & Sandford, 2007).

For this study, the authors identified and recruited experts based on publication and presentation records and experience working with students with ASD during the college transition and/or while in college. More specifically, the following requirements were used to identify potential participants: all individuals who had published articles

tion coordinators. From the sampling frame, a larger representation of directors of postsecondary support programs for students with ASD agreed to participate in the study than would be expected by a 50% participation rate. Specifically, 22 directors were asked to participate and 14 agreed. In all other aspects, the participants appeared to be representative of the sampling frame. The participants were from various geographic locations across the United States: Alabama, Arizona, California, Connecticut, Florida, Minnesota, New Jersey, New York, Ohio, Pennsylvania, Tennessee, and Texas.

Descriptive statistics were used for the demographic characteristics of

problem” (p. 3). This method enables a group of experts from a geographically diverse area to reach consensus (Stone Fish & Busby, 2005). Furthermore, the Delphi technique assists in identifying what could or should be best future practice (Miller, 2006).

The Delphi procedure includes several rounds (also referred to as waves or phases) in which participants respond to open-ended and/or Likert scale items. The first phase includes an exploration of the subject, with participants contributing pertinent information regarding the issue. The second phase involves understanding how the group views the issues, such as agreement or disagreement, meaning of relative terms, importance of issues, and feasibility of responses (Linstone & Turoff, 1975). The third phase exists to explore any significant disagreement among the participants, including underlying reasons for such differences. If reasonable consensus is achieved after round two, the third round becomes the last phase, in which all previously gathered information is analyzed and given back to the participants for final consideration (Linstone & Turoff). Delphi studies that have been conducted in the fields of counseling and therapy have concluded after three rounds, suggesting consensus was established for most items after round two (Jenkins & Smith, 1994; Milsom & Dietz, 2009).

By using Delphi methodology, the authors collected information for this study from participants until consensus, leading to a comprehensive overview of the school counselor’s role in providing college readiness counseling for students with ASD. This technique was beneficial because it allowed participants to reassess their initial responses throughout the study (Hsu & Sandford, 2007). This method also provided respondent anonymity that is not available in a focus group or other face-to-face design. Other shortcomings of group dynamics, such as influence of a dominant participant, noise, and pressure to conform, were reduced by using the Delphi technique (Dalkey, 1972).

ALTHOUGH MANY STUDENTS WITH ASD ARE INTELLECTUALLY CAPABLE OF A RIGOROUS POSTSECONDARY CURRICULUM, SOME WILL REQUIRE ACCOMMODATIONS AND SUPPORTS FROM THE HIGHER EDUCATION INSTITUTION.

about college readiness for students with ASD in the past five years, all individuals who direct postsecondary college support programs for individuals with ASD in the United States, and/or individuals who specifically advertise counseling services for students with ASD in postsecondary transitions. Based on these criteria, the authors identified 44 experts as potential participants.

Using e-mail and United States Postal Service mail, the authors contacted identified experts individually and asked them to participate in this study. These potential participants were given an information form, which included information on the methodology. Of the 44 experts, 22 agreed to participate in the study. These individuals represented a variety of professional backgrounds, including directors of postsecondary support programs for students with ASD, directors of postsecondary disability services, representatives from national autism organizations, university/college faculty, private consultants, and transi-

tion coordinators. From the sampling frame, a larger representation of directors of postsecondary support programs for students with ASD agreed to participate in the study than would be expected by a 50% participation rate. Specifically, 22 directors were asked to participate and 14 agreed. In all other aspects, the participants appeared to be representative of the sampling frame. The participants were from various geographic locations across the United States: Alabama, Arizona, California, Connecticut, Florida, Minnesota, New Jersey, New York, Ohio, Pennsylvania, Tennessee, and Texas.

Procedure

To determine how secondary school counselors can provide equitable college counseling to this population, the authors used a Delphi methodology. Linstone and Turoff (1975) summarized this approach by stating that “Delphi may be characterized as a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex

RESULTS

Response Rate

Of the 22 who agreed to participate in the study, 18 (82%) experts completed round one (Table 1). Round two and round three were completed by 19 (86%) experts. In order to preserve participant anonymity, each round was sent to all 22 participating experts, not just those who completed the previous round.

Round One

Round one yielded 74 unique, individual responses. The authors reviewed and synthesized the responses in an effort to eliminate redundancy (Jenkins & Smith, 1994). Several items were collapsed under broader factors. For example, “exploration of major,” “encourage taking ACT/SAT,” “learning style survey,” “conducting college readiness assessments,” “support in applying for colleges,” and “teaching college vocabulary” were collapsed under the task *complete the college going and career exploration activities that are done with all students*. Likewise, items such as “encouraging other options to start college,” and “Trying a few courses as a ‘fifth year’ program if the student is on an IEP, with the assistance of a tutor or a life coach” were collapsed under the task *suggest alternate pathways to starting college*.

The authors kept as separate items any characteristics that could not be condensed. After the responses were reviewed and condensed, two experts in ASDs reviewed the items for clarity. Thirty-four unique characteristics of the school counselor’s role in providing college readiness counseling to students with ASD were established from the original 74 responses. These 34 characteristics were compiled into a Likert-type survey.

Round Two

Participants were asked rate their level of agreement on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*) with the 34 college readiness counseling tasks of secondary school

TABLE 1. RESPONSE RATE OF EXPERT PARTICIPANTS

	N	% of Total Experts Participating
Total Experts Identified	44	
Total Experts Participating	22	
Total Completing Round 1	18	82%
Total Completing Round 2	19	86%
Total Completing Round 3	19	86%

Note. N = number of participants; % = percentage

counselors. Twenty-five of the school counselor’s tasks reached consensus after round two. Acceptable consensus was defined as a median rating of at least 6.00 and an interquartile range of 1.50 or less (Jenkins & Smith, 1994). Participants were given the opportunity to provide additional comments about the school counselor’s role in providing equitable college readiness for students with ASD.

counseling-specific items had reached consensus.

Overall Results

To obtain the final list of characteristics of the school counselor’s role in providing equitable college readiness counseling for students with ASD, the authors combined the items that reached consensus during round two with the items that reached consensus

SCHOOL COUNSELOR SUPPORT IS PARTICULARLY IMPORTANT IN THE REALM OF COLLEGE READINESS COUNSELING, ESPECIALLY AS MORE AND MORE STUDENTS WITH ASD ARE SEEKING TO ATTEND POSTSECONDARY EDUCATION.

Round Three

Participants were asked rate their level of agreement on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*) with the 9 items regarding the school counselor’s role in college readiness counseling for students with ASD that did not reach consensus after round two. During round three, participants were given the median and interquartile ranges that were obtained from round two. An explanation of median and interquartile range was provided. Participants were asked to consider these scores in rating the items. For any item on which participants remained outside of consensus, they were asked to provide a short explanation. After round three, four out of the nine remaining school

in round three. Overall, 29 out of 34 items reached consensus (Table 2). By using the guidelines outlined by Jenkins and Smith (1994) for accepting consensus, only the items that had a median of at least 6.00 and an interquartile range of 1.50 or less were retained.

The level of consensus was used to organize the 29 items comprising the school counselor’s role in college readiness counseling for students with ASD. Items that received the highest degree of consensus are shown first, followed by the items that still reached acceptable consensus but that participants rated slightly lower, or that had a larger spread of scores. Items that did not reach acceptable consensus are not included on the final list.

TABLE 2. FINAL LIST OF SCHOOL COUNSELORS' ROLES IN COLLEGE READINESS FOR STUDENTS WITH ASD BY CONSENSUS

Item	Median	Interquartile Range	Round Consensus Reached
To provide equitable college readiness counseling to students with ASD, secondary school counselors should...			
1. Encourage student involvement in the transition planning process	7	0	2nd
2. Ensure the Individualized Education Program is realistic and moves the student toward independence	7	0	2nd
3. Collaborate with parents	7	0.5	2nd
4. Conduct workshops for students with ASD and their parents about college transition	7	0.5	2nd
5. Advocate beginning the postsecondary transition planning process as early as possible	7	0.5	2nd
6. Inform students and parents about the legal differences between high school and college (IDEA versus ADA)	7	1	2nd
7. Encourage and coordinate visits to college campuses, including disability services	7	1	2nd
8. Inform students, parents, and staff about transition to college experience workshops	7	1	2nd
9. Learn about services and accommodations provided through postsecondary disability services programs	7	1	2nd
10. Learn about college support programs specific for students with ASD	7	1	2nd
11. Help students understand their disability	7	1	2nd
12. Promote college going as an option for students with ASD	7	1	2nd
13. Complete the college going and career exploration activities that are done with all students (i.e., goal setting, major and career exploration activities, learning styles inventories, college assessments, college vocabulary, SAT/ACT, applying to college, application essays)	7	1	2nd
14. Know student independence levels and discuss implications for college	7	1	2nd
15. Foster self-advocacy skills	7	1	2nd
16. Suggest alternate pathways to starting college when appropriate	7	1	2nd
17. Discuss non-academic aspects of college with students and parents (i.e., dormitory living, health services, dining halls, etc.)	7	1	2nd
18. Make the college and career exploration process more concrete (i.e., sample college schedules, college syllabi, textbooks, and accommodations examples)	7	1	2nd
19. Coordinate “college student for a day” experiences (i.e., high school student experiences all aspects of college life for one day)	7	1.5	2nd
20. Connect the student with key postsecondary support personnel before leaving high school	6	1	2nd
21. Focus on student strengths	6	1	2nd
22. Remain connected with the student through the transition process	6	1	3rd
23. Coordinate peer connections with other students with ASD who want to go to college	6	1	3rd

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Item	Median	Interquartile Range	Round Consensus Reached
To provide equitable college readiness counseling to students with ASD, secondary school counselors should...			
24. Teach time management strategies, organization skills, study skills, and learning strategies	6	1	3rd
25. Create a collection of multimedia materials on college going for students with disabilities	6	1	2nd
26. Work with faculty to allow students to demonstrate learning in alternate ways	6	1	3rd
27. Practice appropriate self-disclosure of the disability with students	6	1.5	2nd
28. Encourage students with ASD to complete academic tasks independently	6	1.5	2nd
29. Arrange for a panel of students with ASD who are in college to speak about their experiences	6	1.5	2nd

Note. Median = measure calculated by arranging all of the scores from lowest to highest and finding the middle score; Interquartile range = the numerical difference between the middle 50% of scores. (An interquartile range of 1.00 or less suggests that the middle 50% of participants responded similarly. A larger interquartile range suggests there is a greater variation in responses.)

DISCUSSION

Items that Reached Consensus

The expert participants came to consensus on 29 of the 34 original items identified as school counselors' roles in providing equitable college readiness counseling to students with ASD. Roles and interventions included in the final list suggested a variety of factors that align with the ASCA National Model (ASCA, 2005) and NOSCA's eight components of college and career readiness (NOSCA, 2010). Following round three, all but five of the original items were retained (85%), suggesting agreement that school counselors be included in the transition process for students with ASD through the activities defined by the panel. Using logical analysis, the retained items can be delineated into five activity categories: early-initiated, collaborative transition process; collaboration; information outreach; professional development; and individualized counseling.

The category of school counseling services that raters identified as most important was an early-initiated, collaborative transition process. The following items support the school counselor's involvement in this arena: *encourage student involvement in the transition planning process; ensure the Individualized Education Program is*

realistic and moves the student toward independence; and advocate for beginning the postsecondary transition planning process as early as possible.

These items are in alignment with ASCA's position statement on students with special needs. It states that school counselors have a role in "providing assistance with developing academic and transition plans for students in the Individual Educational Program (IEP) as appropriate" (p. 44). Early transition preparation with student involvement also may prevent what Halpern identified as the "period of floundering," which may happen to students with disabilities without appropriate planning and support (1991, ¶10). These findings support Kallio and Owens' (2007) contention, "the key to successful transition to postsecondary education is early planning" (p. 8).

Results also suggest that collaboration is a component of the school counselor's role for providing college readiness counseling for students with ASD. Items retained included: *collaboration with parents, work with faculty to allow students to demonstrate learning in alternate ways, and connect students with key postsecondary support personnel before leaving high school.* These items are congruent with ASCA's (2005) view that the school counselor's role includes "collaborating with related student

support professionals (e.g., physical therapists, occupational therapists, special education, speech and language pathologists) in the delivery of services" (p. 44). More specifically, the item *collaboration with parents* is in agreement with the ASCA National Model (ASCA, 2005) in that "school counselors are a vital resource to parent or guardian education" (p. 25).

Another role for school counselors suggested by these results is information outreach. The participants retained items that suggest the school counselor has a responsibility for promoting college going to students and their families, such as: *conduct workshops for students with ASD and their parents about college transition; inform students and parents about the legal differences between high school and college; and inform students, parents, and staff about transition to college experience workshops.* Several items retained by the experts may be useful in promoting college readiness during information outreach for students with ASD, including: *encourage and coordinate visits to college campuses, complete college going and career exploration activities that are done with all students, discuss non-academic aspects of college with students and parents, coordinate "college student for a day" experiences, coordinate peer connections with*

other students with ASD who want to go to college, arrange for a panel of students with ASD who are in college to speak about their experiences, and create a collection of multimedia materials on college going for students with disabilities. These results support the suggestions for school counselors included in the College Counseling Sourcebook (2010).

Results also indicate that school counselors may need further professional development or have to person-

with ASD, know student independence levels and discuss implications for college, suggest alternate pathways to starting college when appropriate, focus on student strengths, remain connected with the student through the transition process, practice self-disclosure of the disability with students, and encourage students with ASD to complete academic tasks independently. One expert provided clarification on the individual counseling school counselors can do, stating that

to promote college readiness for all students.

Items retained that are specific to students with ASD. Although many interventions may be useful for all students, the results also suggest that different interventions or intervention modifications may be necessary to address the accessibility of material to students with ASD. To support this, one expert participant stated:

Services provided for “all” students are usually not sufficiently implemented with students with disabilities (esp. ASD) by school counselors to be effective in isolation. These students often have difficulty generalizing the use of information and need to have it demonstrated, explained or used in a contextual setting—so counselors can collaborate with other school and postsecondary personnel to create these experiences.

For example, school counselors can *make the college and career exploration process more concrete*. Instead of learning about the expectations of college through discussion, the results indicated that having hands-on experiences manipulating sample college schedules, college syllabi, and textbooks would make the material more accessible to students with ASD. This approach might benefit not only students with ASD, but also other students who need or prefer visual representation and concrete learning activities.

Other items retained also related specifically to students with ASD. Examples of such items include: *encourage and coordinate visits to college campuses, including disability services; know student independence levels and discuss implications for college; connect the student with key postsecondary support personnel before leaving high school; conduct workshops for students with ASD and their parents about college transition; and coordinate peer connections with other students with ASD who want to go to college*. These specific school

THE CATEGORY OF SCHOOL COUNSELING SERVICES THAT RATERS IDENTIFIED AS MOST IMPORTANT WAS AN EARLY-INITIATED, COLLABORATIVE TRANSITION PROCESS.

ally conduct informational research to more appropriately assist students with ASD. For example, the participants retained items such as: *learn about services and accommodations provided through postsecondary disability services programs; and learn about college support programs specific for students with ASD*. This level of knowledge is likely not included in school counselor preparation coursework, as it is not frequently required for state certification (ASCA, 2010). ASCA (2005) does support general professional development through in-service training, professional association membership, and post-graduate education.

Finally, results include items that specifically relate to the individual work a school counselor can do with students with ASD. Individual student planning is a component of the ASCA National Model (ASCA, 2005) and “consists of school counselors coordinating ongoing systemic activities designed to help individuals establish personal goals and develop future plans” (p. 41). The individual work component of the ASCA National Model is consistent with the results of this study, which includes the retention of items such as: *help students understand their disability, promote college going as an option for students*

it is also important to know how to fade individual supports for students throughout the transition process.

Items retained that relate to all students. Results of this study suggest that school counselors can employ many college readiness interventions for the benefit of all students, while still reaching students with ASD. For example, school counselors can: *encourage student involvement in the transition planning process; advocate beginning the postsecondary transition planning process as early as possible; and inform students, parents, and staff about transition to college experience workshops*. Specifically, the item *complete college going and career exploration activities that are done with all students* was retained by the participants.

Other retained items that apply to the general student population include tasks such as: *collaborate with parents, discuss non-academic aspects of college with students and parents, suggest alternate pathways to starting college when appropriate, coordinate “college student for a day” experiences, focus on student strengths, and remain connected through the transition process*. These findings suggest that school counselors can reach students with ASD by doing many of the interventions that are recommended

counselor interventions have not been described before in the literature as ways in which school counselors can promote college readiness for students with ASD.

Implications and Recommendations for School Counselors

The findings of this study provide a framework for school counselors to support students with ASD in accessing college. Results suggest school counselors can implement the activities retained by the expert participants. The authors provide the following recommendations to further support school counselors in providing equitable college readiness counseling for students with ASD.

To further augment an early-initiated, collaborative transition process, school counselors can offer parent education to enhance learning opportunities of students and their families (ASCA, 2005). Parents may provide vital information to school counselors about their child and his or her development. An expert stated, “the role of the parents is critical in preparing students for the independent skills necessary for college. They must be working as partners with school staff.”

School counselors can collaborate with other educators at both the secondary and postsecondary levels. For example, special educators and other support personnel might be an excellent resource for school counselors wanting more information about ASD. An expert participant advised that the school counselor could work in partnership with the speech language pathologist, who should play a critical role in helping students with ASD develop interpersonal skills. School counselors may also collaborate with postsecondary disability service providers and other postsecondary support staff. Although the results of the study suggest the importance of this level of collaboration, this is not currently standard practice for supporting students with ASD in attending college. One participant reminded school counselors, “This is not all one level’s responsibility. Encouraging partner-

ships between and among K-12 and Higher Ed staff is essential. Developing ways to ‘pass students from one mentor to another’ is ideal.”

Direct service school counseling activities may also support students with ASD. Again, some activities that school counselors can implement with all students may also impact college readiness for students with ASD, and vice versa. For example, college readiness interventions may include classroom guidance lessons about the application process, writing a personal statement, and financial aid (The College Board, 2010). Similarly, the results indicate school counselors can *foster self-advocacy skills and teach time management strategies, organizational skills, study skills, and learning strategies*. These tasks may be addressed through classroom guidance and small group interventions (ASCA, 2005). School counselors also may administer learning style and career assessments, such as the Myers-Briggs Type Indicator (Myers, 1962) and the Self-Directed Search (Holland, 1994), to increase student self-awareness.

While school counselors *teach time management strategies, organizational skills, study skills, and learning strategies*, they can also *make the college and career exploration process*

more concrete. Examples of concrete activities can be found in the *College Counseling Sourcebook* (2010). For instance, the book includes samples of high school graduation requirements, letter of recommendation requests, and a college application checklist. Chapter 11 contains specific information and activities for students with special needs, including a college readiness checklist, questions to ask colleges, and a list of accommodations typically provided in higher education (The College Board, 2010).

Implementing interventions outlined by the expert participants would require school counselors to be well versed in disability-related topics, including legal implications, advantages and disadvantages of self-disclosing the disability, knowing postsecondary support programs, and creating appropriate IEP goals with the planning and placement team. Having a working knowledge of these topics could prove challenging for school counselors, given the lack of disability and special education-specific pre-service coursework and practical experience that is required. The results of this study, coupled with the increasing prevalence of ASD diagnoses, suggest that more school counselor preparation in this area is needed and that information about the college transition for students with ASD would be appropriate professional development ventures for school counselors.

Limitations

Clarity of questionnaire items is a concern in the Delphi methodology. Misinterpretation of the survey items may be a limitation to this study. To account for this, the researchers attempted to craft each item in the round two survey to adhere as closely to the participant’s responses

SCHOOL COUNSELORS CAN EMPLOY MANY COLLEGE READINESS INTERVENTIONS FOR THE BENEFIT OF ALL STUDENTS, WHILE STILL REACHING STUDENTS WITH ASD.

as possible. Although effort was made to identify and include experts in the field of college readiness for students with ASD, as with any research study, researcher bias is a potential limitation of the Delphi method (Hsu & Sandford, 2007). Furthermore, the quality of responses is dependent on the expertise of the participants, and formally assessing those levels of expertise may be difficult (Hsu & Sandford). Although half of the invited experts participated in the study, the responses might have differed with

DIFFERENT INTERVENTIONS OR INTERVENTION MODIFICATIONS MAY BE NECESSARY TO ADDRESS THE ACCESSIBILITY OF MATERIAL TO STUDENTS WITH ASD.

the inclusion of those who did not participate.

Areas for Future Research

Given the results obtained from this study, numerous areas for future research exist. For example, no current, evidence-based school counseling interventions specifically target students with ASD. Data-based interventions are necessary for school counselor accountability in supporting students with ASD. Many of the expert panelists questioned how prepared school counselors are for providing services for students with ASD; therefore, further research might examine the role of counselor educators in preparing school counselors to work with students with ASD.

This study might also have implications for state certification requirements. Although ASCA (2004b) advises school counselors to support students with disabilities, each state has its own requirements for the quantity and depth of master's level special education coursework required for certification. According to the list of state certification requirements on the ASCA website, only 12 states require specific coursework in special education services for certification (ASCA, 2010). CACREP accredited programs require school counselor educators to teach counseling students to understand the affects of ability level on learning and development; however, no specific coursework or practical requirements about students with ASD exist (CACREP, 2009). Furthermore, no state currently requires school counselors to have any specialized training in ASDs for certification. In Connecticut, however, the State Board of Education recently passed new certification requirements that all educators must have a minimum of 20

hours in the design, assessment, and implementation of behavior support for students with ASD, effective in 2015 (State of Connecticut, 2010).

The study results also reveal the connection between the roles of school counselors and other student support personnel. Specifically, participants supported the collaboration between school counselors and speech language pathologists. Examining the ways in which school counselors and speech language pathologists can collaborate could help shape interventions not only for students with ASD, but potentially for the general student population as well. More clarification is also necessary on how school counselors and postsecondary disability service providers can collaborate to support students with ASD throughout the college transition process.

CONCLUSION

School counselors are a key component for the success of students with ASD throughout the transition to postsecondary education (Graetz & Spampinato, 2008). Results from this study provide guidelines for school counselors to provide equitable college readiness counseling to students with ASD. More specifically, results support the school counselor's involvement in an early-initiated and collaborative transition process for students with ASD. To effectively support students with ASD, school counselors need a wide breadth of disability-related knowledge, yet school counselors receive little preparation training in this area (ASCA, 2010). School counselors are encouraged to collaborate with students, their families, and other support personnel to increase college readiness. All in all, the results and

recommendations from this study provide a platform for school counselors and future researchers to create and examine evidence-based interventions for students with ASD. ■

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