IDENTIFYING COMPONENTS OF EFFECTIVE COLLEGE TRANSITION PROGRAMS FOR STUDENTS WITH LEARNING DISABILITIES

by

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(Under the Direction of Jennifer Lindstrom)

ABSTRACT

Despite multiple state and federal regulations, many students with learning disabilities remain unprepared to transition successfully from high school to college. The purpose of this literature review, therefore, was to begin to identify some of the components of programs that have been shown to be helpful for these students. A total of 11 studies were reviewed, six that had addressed programs at colleges or universities. Findings suggested the potential effectiveness of teaching students self-awareness, self-advocacy, their legal rights, and specific learning strategies. Findings also suggested the positive impact of supportive relationships between students and disability services employees.

Keywords: learning disabilities, college students, transition programs, self-awareness, self-advocacy, legal rights, learning strategies, supportive relationships

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CHAPTER 1

RELEVANCE AND IMPORTANCE OF TRANSITION PROGRAMS

The need for a college degree for employment has become increasingly important. As of 2014, the unemployment rate of workers with a bachelor's degree was 3%, compared to an 8.3% unemployment rate for those with only a high school diploma. When considering individuals with disabilities, the contrast is even starker. The unemployment rate of individuals with disabilities with a college degree was 8.3%, compared to an 11.3% unemployment rate for individuals with disabilities who do not have a college degree (U.S. Bureau of Labor Statistics). Furthermore, there is a stronger positive correlation between level of education and employment rate for individuals with disabilities than those without (Stodden, Whelley, Chang, & Harding, 2001), indicating that there may be an even greater need for a college degree for a person with a disability. In addition to a disproportionately higher unemployment rate, individuals with learning disabilities also struggle to finish college. The college completion rate of students with learning disabilities is 41%, compared to 52% for students without learning disabilities (National Center for Learning Disabilities, 2014).

The National Center for Learning Disabilities (2014) reports that students with learning disabilities attend two year or community colleges at a rate more than double the general population, while students with learning disabilities attend four-year colleges and universities at almost half the rate (21%) of the general population (40%). Further, only 17% of these students with learning disabilities received accommodations and services at the postsecondary level because of their disability, compared to 94% in high school. In short, students with learning

disabilities attend four-year colleges and universities at about half the rate of students without learning disabilities, and only 17% of the 94% of students who received learning disability accommodations in high school received them in college.

With college enrollment rates rising as a whole, the rates for historically underrepresented students has risen as well: minority students, older students, and students with disabilities (Sparks & Lovett, 2009). It is encouraging to observe an increase in the number of students with disabilities, including learning disabilities, enrolling in college. However, students with learning disabilities are still enrolling at lower rates than students without learning disabilities (Sparks et al., 2009). Gregg (2007) described three limitations for this discrepancy. First, students with learning disabilities are not as likely to receive college preparatory curricula in high school. Second, there is a small amount of research available to help guide these students to programs in which they are more likely to succeed (i.e., 2-year colleges). Lastly, some students who received special education services in high school will not qualify for services in a college setting, due to different documentation and eligibility requirements.

There are differences between high school and college in almost every way imaginable, especially for students with learning disabilities. One of the many examples is in how a professor/instructor finds out whether a student is registered for disability services. In high school it is the responsibility of the teachers and other school personnel to find out which students have a learning disability and what accommodations they need, while in college the student has to disclose this information to his or her instructors (Stodden et al., 2001). As a result, many students come to college unprepared to be their own advocate. According to results of the National Longitudinal Study (NELS) of High School and Beyond, which identified the student and parent involvement of the transition process for students with learning disabilities, a

significant number of participants felt like they were “no good” or “useless at times” (Smith, English, & Vasek, 2002). Statements like these suggest a lack of self-confidence as a self-advocate, which was defined as student’s being equally aware of their strengths as their weaknesses, and able to communicate need for academic or physical accommodations (Smith et al., 2002). Further results of the study suggested disability support offices need to take a bigger role in shifting from parent-advocacy to self-advocacy, and parents need to help teach their children self-disclosure skills.

Another major difference between disability services in high school and college is the documentation that is required to determine eligibility for services. Documentation needed in high school settings is often not sufficient for a student to register for services in a college setting (National Joint Committee on Learning Disabilities, 2007). Students making a transition between these settings often lack the documentation necessary to be eligible for services, thus delaying access to services. Further, in high school, the school is responsible for identification and evaluation of the disability; in college, the student must present documentation and self-identify as having a disability (Gil, 2007). So for high school students, because the school is responsible for identifying whether a student has a learning disability, it is not out of the realm of possibility that the student may not be aware that s/he has a disability. Further, even if the student is aware of his/her learning disability, there is no guarantee that s/he understands the nature and implications of having a learning disability, particularly in the college setting.

Characteristics of Students with Learning Disabilities and ADHD

The National Center for Educational Statistics (2011) reported that approximately 11% of undergraduate students in 2011-2012 had a disability (it was not specified what percentage had a specific learning disability or ADHD). The American Psychiatric Association’s (APA)

Diagnostic Statistical Manual – 5th Edition (DSM-5, 2013) defines Specific Learning Disorder as difficulties learning and using academic skills. This includes diagnoses of reading, mathematics and written expression, as well as shortcomings in general academic skills (APA, 2013). Attention-Deficit/Hyperactivity Disorder (ADHD) is defined as a behavioral condition that makes focusing on tasks and routines very difficult. Individuals with ADHD show a persistent pattern of inattention and/or hyperactivity that interferes with functioning or development (APA, 2013). Two subtypes categorize ADHD: Inattention and Hyperactivity and Impulsivity. Refer to Appendix A for the complete list of diagnostic criteria for each of these disorders.

Barriers to Success

In addition to the differences in documentation requirements, once students are in a postsecondary setting they have to be able to self-advocate for their own services. This issue also relates to the issue raised above – if students know (or do not know) they have a learning disability/what that disability is, how are they prepared to request their own accommodations? As Gil (2007) stated, in K-12 settings it is the responsibility of the school to identify whether students have a learning disability. This oftentimes results in students being un- (or under-) informed of their disability and accommodation needs. Once students reach the postsecondary setting, it becomes their responsibility to self-identify as a person with a disability and request accommodations. The academic accommodations a college approves is determined on a case-by-case basis by the disability resource center at each postsecondary institution. Some examples of accommodations include priority registration, reduced course load, providing note takers, recording devices, and extended test-taking time (Types of College Support Services, 2014). Since it is the students' responsibility to seek out the disability resource center and make sure

they are getting the services they need, these centers do not have to require students use the services or engage in routine communication with the coordinators.

Relationships between the student and the faculty and staff are of vast importance, especially for students with learning disabilities. However, these relationships also differ from those in the high school setting. The laws protecting students with disabilities are less stringent in postsecondary institutions (this will be discussed in more detail later in this chapter), resulting in less accountability and oversight of faculty in the postsecondary setting. Unfortunately, this could make students more susceptible to unaccommodating professors. Fuller, Healey, Bradley, and Hall (2004) reported that even when staff knew of students' disabilities, they were not always open to making accommodations. Fuller et al. (2004) found that when students encountered professors who did not make an effort to help or accommodate their students with learning disabilities, the students were more hesitant to ask for help and felt as though they were not smart.

Cawthon and Cole (2010) performed a study at the University of Texas to examine perspectives of administrators who worked with students with learning disabilities about the accommodations they used. When interviewing administrators, they found a belief that students with learning disabilities were ultimately unprepared to make the transition from high school to college. Administrators stated that students lacked the ability to self-advocate for their necessary accommodations and services, and they could not function independently without relying on parents or teachers for support. Students also did not have a basic understanding of their own disability, as well as their strengths and weaknesses and the specific accommodations they needed. Cawthon and Cole (2010) concluded that students needed better knowledge of their

disability, awareness of support services, and the ability to self-advocate to make a successful college transition.

To further reveal how students with learning disabilities are often unprepared for college life, results of a 2009 study performed by Lindstrom, Downey-McCarthy, Kerewsky, and Flannery underscored the importance of two of the four components previously mentioned - identifying as an individual with a disability and submitting disability documentation to the disability resource center to become eligible for services. However, putting these steps into action requires self-advocacy skills. Identifying a disability and disclosing such personal information can be intimidating, especially to students who may have faced discrimination for their disability (Lindstrom et al., 2009). As part of Lindstrom et al.'s 2009 study, the disability resource staff also connected students to other college services and programs available (i.e., financial aid, tutoring, advising, English as a Second Language programs). These additional services acted as another support system for the students; all of these services made the students more likely to complete their programs of study (Lindstrom et al., 2009).

In addition to the differences previously discussed, some college students with disabilities are also unprepared for the more rigorous academic demands they will face due to a lack effective study skills and test taking strategies. Reaser, Prevatt, Petscher, and Proctor (2007) used the Learning and Study Strategies Inventory, a diagnostic and prescriptive instrument designed for use with college-aged students, to learn more about the learning and study strategies of students with ADHD. Results showed that these students had the most difficulty with time management, concentration, selecting main ideas, and test strategies. Reaser et al. (2007) recommended ADHD coaching for students with ADHD to teach them how to compensate for these weaknesses.

In a similar study examining study skills and habits, Stamp, Banerjee, and Brown (2014) found that when students are made aware of the exact nature of their ADHD, they could understand how it impacted their academics and discover which issues they actually had control over. For instance, participants were taught ways to change their mindset into believing that they could overcome their limitations, such as creating less distracting study environments (Stamp et al., 2014). Educating students on how their disabilities affected their executive functioning could help them adapt to those limitations. One student stated that learning about her strengths and weaknesses in an environment outside of an academic classroom helped her explore what she was good at and the kinds of things she needed to compensate for her limitations, such as keeping an agenda to remember appointments (Stamp et al., 2014).

IDEA and Section 504 of the Rehabilitation Act

The laws protecting students in high school differ from those that affect postsecondary institutions. The Individuals with Disabilities Education Act (IDEA) and Section 504 of the Rehabilitation Act require public schools to make education available and accessible to all children, regardless of disability (U. S. Department of Justice). Both IDEA and Section 504 ensure that students with learning disabilities receive a free and appropriate education with specialized instruction and intervention (Lindstrom & Lindstrom, 2011). IDEA requires schools to develop Individualized Education Programs (IEPs) for children diagnosed with learning disabilities. The IEPs should address the specific needs of the student. For example, IEPs for two students with the same disability could look similar but not identical, as they should be specific to the needs of the student.

A 504 Plan, in contrast, provides services and changes to students' learning environment to meet their individual needs. This is different from an IEP in that an IEP provides

individualized instruction and intervention, whereas a 504 Plan ensures appropriate accommodations and accessibility (Understood.org). Under IDEA, there are 13 categories for which a student can be found eligible, and the disability must affect the child's educational performance and/or ability to learn from the general education curriculum. Eligibility under Section 504 requires a child to have any type of diagnosed disability, which can include learning or attention issues, and the disability must interfere with the child's ability to learn in a general education classroom (Understood.org).

Another difference between an IEP and a 504 plan relates to transition. An IEP must include a transition plan for the student after high school, in which the student must help develop beginning at age 14. This transition plan is supposed to cover job skills and daily life skills and can include teaching the student how to manage a checking account, schedule doctor's appointments, and finding internships (Understood.org). A 504 Plan does not require a transition plan.

The Americans with Disabilities Act (ADA)

After high school, students with disabilities are no longer covered under IDEA. The law that pertains to students in postsecondary settings is the Americans with Disabilities Act Amendments Act of 2008 (ADA AA, 2008). The ADA AA (2008) states that it is the responsibility of the individual to ensure they are getting the services that they need to accommodate the disability (Cawthon et al., 2010). This means that although it was the legal responsibility of K-12 school personnel to identify students with disabilities and provide them services, once a student transitions to college it becomes his or her responsibility to self-identify as a person with a disability and request accommodations (Stodden et al, 2001). Students with disabilities are protected from discrimination under ADA AA in any public institution,

establishment, or agency that receives federal funding (i.e., not just in schools). Testing services, restaurants, businesses, and almost anyplace receiving federal funding must adhere to ADA AA. Schools and organizations are required to provide "reasonable accommodations" to anyone with a disability. If a school is not following ADA AA, complaints can be filed with the U. S. Department of Education or the U. S. Department of Justice (Understood.org). Because of ADA AA, it is illegal for a professor/instructor to deny a student registered for disability services reasonable accommodations. One of the main purposes of ADA AA is to make education *accessible* to students with disabilities.

To clarify what is considered to be a "reasonable accommodations", a university would not be expected to change academic requirements needed for instruction being pursued by a student with a disability, but the university may be required to make modifications to enable students with disabilities to meet the requirements. Modifications may include length of time permitted for the completion of a degree, substitution of courses, and adaptation of the manner in which specific courses are conducted. The "adaptation of the manner in which specific courses are conducted" refers to the academic accommodations students could receive (Association for Higher Education on Disability, 2008). Some examples of accommodations include priority registration, reduced course load, providing note takers, recording devices, and extended test-taking time (Understood.org). Since it is the students' choice and responsibility to seek out the disability resource center and make sure they are getting the services they need, disability resource centers do not have to require students use the services or make routine communication with the coordinators.

Documentation Requirements

As previously discussed, the documentation that is sufficient in secondary settings may be inadequate in postsecondary settings. There are differences between disability resource offices across colleges and universities, including the type of documentation they require. Schools may have different requirements as to how "current" documentation needs to be (e.g., 3 versus 5 years) (Lindstrom & Lindstrom, 2011). Lindstrom and Lindstrom (2011) noted that although IDEA requires a Summary of Performance (SOP) to assist in transitioning the students to postsecondary schools and work, the SOP is not required to include any data necessary for postsecondary eligibility. The combination of differences from high school, and differences across colleges, can make the transition especially difficult from students with learning disabilities.

Under IDEA, public schools are urged to use research-based interventions (e.g., RTI) (Lindstrom & Lindstrom, 2011) as a way to determine disability eligibility. Research-based interventions, such as RTI, reduce the number of students who become eligible for psychoeducational testing and data. However, IDEA does not require evaluations for students exiting special education at graduation (Lindstrom & Lindstrom, 2011). Thus, many students do not have evaluations that meet the current documentation requirements at different postsecondary institutions. If the student does not have a current evaluation from the school when they graduate they are oftentimes left with no choice but to seek out a private psychoeducational evaluation. This lack of consistency can create difficulties for students as they try to transition from high school to college, and thus the student is often unprepared for the demands the college setting will have.

The Association for Higher Education and Disability (AHEAD) uses a three-tier system to provide disability documentation guidance. Sources of disability documentation include student self-report, medical documentation, and a third party (i.e., teachers, parents). This information is all taken into consideration and weighed equally (AHEAD, 2008). However, this three-tiered system is intentionally vague. Since there is not a single requirement as to which type of medical professional is necessary to verify a disability (i.e., psychiatrist, pediatrician, general practitioner), it can become inconsistent as to how the disability resource center "interprets" the information they receive. While some students may submit an evaluation by a clinical psychologist as recent as six months old, another student may submit documentation from a pediatrician as much a six years old, and both students could be deemed eligible for the same services and accommodations at the same institution.

Purpose of Literature Review

The purpose of this literature review is to describe and report the effectiveness of the various types of transition programs that have been used with students with learning disabilities in high school and college. As was pointed out earlier in this chapter, despite transition laws and guidelines, many students with learning disabilities are left unprepared adjusting to college. The literature review aims to compare current transition plans in high schools and colleges to identify the components of an effective program, based on empirical research, so that it can be replicated.

As the subsequent chapters will explore, there are some transition programs already in place at colleges and universities designed to increase the success among college students with learning disabilities. While these programs are few and far between, their effectiveness will be evaluated to determine which components of such programs are most effective. Recommendations will be provided, based on empirical findings, as to what the ideal transition

program would look like. There will be an emphasis on four main components: promoting self-awareness and self-advocacy; informing students of their legal rights; teaching academic strategies; and forming supportive relationships.

CHAPTER 2

REVIEW OF HIGH SCHOOL TRANSITION PROGRAMS

This chapter will focus on transition programs designed for secondary students with learning disabilities. To identify relevant studies, two different online searches through the University of Georgia's Galileo website were done using PsycINFO, Education Research Complete, ERIC, and Psychology and Behavioral Abstracts Collection. The goal of this chapter was to determine what has been done to help students with learning disabilities transition from high school to college in a high school setting; as opposed to what should be done. The search terms used were *learning disabilities, transition, high school,* and *college.* The terms *autism* and *developmental or intellectual disabilities or mental retardation* and *suggestions* were excluded. Results were filtered to only include articles published between 2005 and 2015, in a scholarly (peer reviewed) journal, linked full text, excluding dissertations. When exact duplicates were removed, there were 21 results. Three of these 21 studies were included in this review because they were the only ones that focused specifically on providing transition services from high school to college for students with learning disabilities. In an effort to locate more studies, a second search was conducted using the terms *learning disabilities, transition,* and *IEP.* The same filters in the first search were used, yielding 13 results. Three studies from the second search were included in this review for the same reasons previously described. A total of six studies were selected for inclusion for review. They were chosen because all of the studies examined factors contributing to successful transitions, examined correlational data on courses of study and post-school outcomes, or involved implementing an intervention designed to help students

prepare for college. Studies making suggestions for successful transitions were not included, as they did not involve any participants.

To be considered for inclusion, the studies had to have high school age participants, diagnosed with learning disabilities. The studies could include students with other disabilities, but participants with learning disabilities had to account for over half of the total participants. Only one study was included that did not have high school aged participants; it was included because the focus was on the success of a postsecondary transition program. A major limitation of these search results was that most articles about transitioning students with learning disabilities were about making a transition from high school to work rather than a transition from high school to college. The studies that did relate to making a transition to college provided tips and suggestions, but they were not empirical studies examining the effectiveness of a particular intervention or program.

The studies reviewed below focused on student involvement in the transition process, gender and cultural influences, and the implementation of self-advocacy training. "Student participation" is defined as including the student in the transition planning. "Gender and cultural differences" is defined as studying the influences of gender or culture as it pertains to the transition process. "Self-advocacy training" is defined as training students to advocate for their own services.

Student Participation

There were three studies that focused on including students in their own transition planning. The first was a longitudinal study designed to observe whether there was a correlation between students' transition services and their post school outcomes. The second study focused

on student involvement in creating a Summary of Performance. Finally, the third study assessed student involvement on IEP planning.

Daviso, Denney, Baer, and Flexer (2011) examined the correlation between transition services and post school outcomes. Daviso et al. (2011) used data from the Ohio Longitudinal Transition Study (OLTS) to determine whether the courses of study and transition services for students with learning disabilities were related to their post school outcomes. The OLTS included 416 participants, all of whom had an IEP. The survey was administered in the spring semester of their final year of high school. Over 80% of students indicated on the survey that they anticipated post school employment, and over 70% planned to participate in postsecondary education (this was a non-duplicated count; some students chose both working and postsecondary education).

Findings of this study revealed a correlation between the students' courses of study and their post-school goals; students who participated in vocational education and general curriculum electives only were more likely to choose employment only as a post-school goal. Students who attended regular high schools, participated in general curriculum academic classes, and passed all areas of the proficiency tests were more likely to identify postsecondary education as a post-school goal. It was also discussed that the participants in OLTS had a higher rate of postsecondary educational goals compared to participants who were included in the National Longitudinal Transition Study-2 (NLTS2, 2005) (70% and 54%, respectively). This increase suggests that there may be an increasing trend in postsecondary education goals, leaving the traditional transition planning focused on employment to be re-evaluated (Daviso et al., 2011).

A benefit of this study was that there were correlational data between what classes the students had taken, what their goals were, and the satisfaction of their services. By making this

correlation, it was easier to identify positive relationships among these variables. However, a limitation of this study was that it was only a correlational study. While it is encouraging to identify specific factors associated with post-school outcomes, it cannot be determined if there is actually any causality. This study was also included only high school students in the state of Ohio. Thus, the results may not generalize to other states (Daviso et al., 2011). Further, by only surveying graduating students, they were not able to include students who dropped out of high school or students without an IEP. Had the researchers been able to interview the students who dropped out early, they might have been able to gain more insight as to what students were unhappy with, and what could have been done to prevent dropping out.

Similarly, Izzo and Kochhar-Bryant (2006) also examined student participation in the transition process. Izzo et al. (2006) discussed two case studies of students with learning or intellectual disabilities who were exiting high school and had a Summary of Performance (SOP). An SOP contains a summary of the student's academic and functional performance, and recommendations on how to assist them in meeting postsecondary goals. One participant, Tykiah, had a learning disability with a postsecondary goal of college, and the other student, Steve, had an intellectual disability with a postsecondary goal of supported employment. (This review will focus solely on Tykiah, who has a learning disability.) According to Izzo et al., (2006), the college Tykiah chose to attend was heavily influenced by what accommodations would be provided. Getting extended time on tests, a note-taker, and not needing additional documentation were crucial considerations for her. Because she wanted to attend college, her SOP described her postsecondary goals.

The "Academic Content Area" in her SOP was especially important because she wanted to attend college. Information about the current essential accommodations and assistive

technology used in high school was described. This included a breakdown of her disability, a reading processing disorder, and how it affected her academically. A recommendation for suggestions as to which accommodations the student should receive was made. Lastly, a student perspective was given on which accommodations she believed were and were not effective. From developing her own SOP, Tykiah learned how to better explain her disability and how it affected her academic performance. She used it when meeting with disability offices at potential colleges.

Since this was not an intervention, there were no specific benefits or limitations described. However, Izzo et al. (2006) showed a simple way to teach students about their own disabilities while helping them prepare for college. This is not only simple, but also cost and time effective. Developing an SOP with student input did not require employing and training a specific staff for implementation. A limitation of this study was that there were no empirical data to determine if SOP planning truly taught her more about her own disability and how to explain it. This conclusion was based solely on Tykiah's and her teachers' opinions.

Martin et al. (2006) also examined the level of involvement students had in their educational planning. Martin et al. (2006) observed 109 middle and high school IEP meetings in southwestern states. Participants included special education and general education teachers, family members, administrators, support staff, and students with disabilities. Seventy-eight percent of the students had learning disabilities. Data were taken during each meeting using 10-second interval momentary time sampling. Whoever was talking (i.e., special education teacher, parents) when the interval ended was recorded.

Of the 627 participants who attended IEP meetings, 90% completed a post-meeting survey. According to the results of the survey, 40% of special education teachers indicated that

students participated *a lot* (Martin et al., 2006). The momentary time sampling observations revealed that students talked for about 3% of the time during IEP meetings, compared to 51% for special education teachers. This disconnect suggests that even if students are present, they may not be active members in planning, implementing, and understanding of accommodations. About a third of the students expressed their opinions or discussed the goals. Questions about transition received the lowest scores on the survey (Martin et al., 2006).

Since this study was conducted in southwestern states, the results may not be generalizable to other regions of the country. However, a strength of this study is that some aspects can still be generalized to other states, because federal law requires every IEP to contain the same content, including a transition plan. Another limitation was that there was no discussion of satisfaction or improved outcomes by having the student discuss post-school goals in their IEP meetings. Had those data been available, they would have provided more information about the extent to which IEP meetings and transition plan were successful. Based on the overall results, it appears as though the students' opinions and goals were not given adequate consideration.

Gender and Cultural Differences

Two of the studies reviewed focused on the extent to which gender and culture may influence the transition process and post-school goals. The first study reviewed focused on the experiences among females with disabilities and their transition goals. Next, a study about the influences on the postsecondary goals of American Indian students with disabilities will be discussed. The results of these studies provide very different points of view on the transition process, bringing attention to some overlooked cultural and gender-related factors in educational expectations and experiences.

Hogansen, Powers, Geenen, Gil-Kashiwabara, and Powers (2008) studied the influence of gender on the transition goals and experiences of female students with disabilities. There were 146 participants: 67 female students with disabilities, 34 parents of the students, and 45 professionals who worked with them. Sixty percent of the students had learning disabilities. Focus groups were established for participants, in which they were interviewed about the students' transition experiences in general and their transition experiences as females. The primary goals students chose were: (1) having a career, (2) getting an education, and (3) starting a family. The female students' parents wanted identified similar goals, but had less desire for their daughters to start a family in young adulthood.

Overall, some parents and educators viewed the goals of their daughters/students to be unrealistic, such as college and family goals. Parents were very supportive of self-determination training, especially in having more involvement in IEP planning. The students did stress the importance of having supportive people who believed in them. Further, many students said that support from others served as protection against negative perceptions and expectations related to the gender and disabilities (Hogansen et al., 2008). It was also noted that this finding is in congruence with the belief by the American Association of University Women, that women are confronted with different expectations from teachers, family, and friends compared to males. Students also described a disconnect between their interests and academic needs and their special education programing, stating that teachers tended to pay more attention to male students to manage disruptive behaviors.

This study was a qualitative case study, so the findings may be biased and may inaccurately describe the participants' experiences. The fact that participants were interviewed in a group setting was also a limitation, since their answers could have been understated for fear of

embarrassment, or could have been skewed to fit social norms. Group facilitators encouraged the different points of view to try to control for this limitation. A benefit of this study was that the researchers gathered a rare point of view. By having young women discuss the differences in their services as they relate to their disability is an interesting aspect that needs to be addressed further in the literature.

Applequist, Mears, and Loyless (2009) explored factors influencing postsecondary transitions for American Indian students with disabilities. All participants were American Indian, received services under IDEA, and had transitioned from high school. Nineteen of the 35 participants (54%) in the initial interview were diagnosed with a learning disability. Although at the time of the initial interview, 83% of the participants were enrolled in or had completed postsecondary education, the focus of the interview was on the experiences of the participants during high school. In the follow up interview, 79% were attending school or working, and 21% were unemployed.

This study took place over the course of five years. While in high school, the students with learning disabilities were either in general education classrooms full-time or most of the time, with pull-out services. Participants indicated that although they were familiar with their IEP, they did not consider themselves to have been an active participant in their meetings. Applequist et al. (2009) noted that person-centered planning and self-determination are not taught to all American Indian students because self-determination is not compatible with native beliefs. Although self-determination is relevant in some tribes, there is more focus on the importance of independence.

The lack of student participation in IEP meetings is discouraging considering its effectiveness in the transition process, as revealed in the previously reviewed studies. Had these

students been able to receive more self-determination training, such as self-advocacy or self-awareness, they might have been better prepared for college. Having only participants of American Indian culture in southwestern states was both a limitation and a benefit. The influence of native beliefs cannot be generalized to many other cultures, especially considering the differences among tribes within the American Indian culture itself (Applequist et al., 2009). This was also a benefit because it brought attention to the fact that even though practices such as self-determination training have proven to be successful (Applequist et al., 2009), such practices may not be acceptable in every culture. This stresses the importance that a transition plan should be individualized for every student. Teachers and support staff need to take into consideration cultural differences and family values when creating a transition plan; keeping in mind that just because they know a strategy will likely help a student, does not mean it is appropriate for that particular student.

Self-Advocacy Training

The following study was different from the previously reviewed studies because the focus was on explicitly teaching a skill – self- advocacy – that students would need as they make a transition, as well as throughout their college careers. Usually when self-advocacy is taught to students they are already in college (more on this in Chapter 3), making the study presented below both unique and beneficial.

As mentioned in Chapter 1, self-advocacy is crucial for success at the postsecondary level. However, many students are unprepared to be their own self-advocate, making this a skill that should be taught prior to starting college. Prater, Redman, Anderson, and Gibb (2014) performed a study in which they taught high school students with learning disabilities how to self-advocate for their own accommodations. The self-advocacy training involved four lessons,

taught to three special education English classes. These 80-minute classes were comprised of 8 – 15 students and were held every other day. Self-advocacy behavior was taught as recognizing that an accommodation was needed, promptly requesting that accommodation, and implementing the accommodation (Prater et al., 2014). The effectiveness of the intervention was evaluated by gathering data on four students in the general education classroom. Originally six students were included, but two of them never requested accommodations (one student did not believe he needed them, the other did not need them because his teacher embedded accommodations in class instruction for all students), leaving four students available for observation.

Results of this study showed that all four students increased the number of accommodations they asked for after the training. Prior to the study, one participant needed six academic accommodations but did not request any. After the training, he was determined to need eight accommodations and was requesting them all. The remaining three students were requesting all their needed accommodations by the end of the study. The general education teachers completed a questionnaire after the training to ask about the value of the training and about students' abilities to self-advocate. Every teacher stated their students benefitted from the study and they wished more students could get the training. All students agreed that they were more successful when they requested their accommodations.

Although the students and teachers appeared to have been pleased with the outcomes of this study, there were still limitations. Even though teachers said their students benefitted from the study and were more successful, there were no empirical data to back up that statement. Follow-up data were only taken on four students of the original six participants. By only taking data on four students, it is difficult to determine whether the self-advocacy training was truly successful because since there are no data for the remaining students. While teachers said the

training improved their overall success, there were no data to prove it. It was also never discussed how they determined which accommodations would be successful.

Summary and Conclusions

Overall, there are some limitations of the studies reviewed that need to be discussed. First, the studies reviewed above were limited in scope. Most studies were conducted in western states (with the exception of one, in Ohio). It would have been beneficial to include studies that were performed with participants in other geographic regions. Second, while it was important to examine the role of gender and culture on the transition process, the factors examined by Applequist et al. (2009) reflected only a small sample of the cultural differences that can potentially affect individuals' experiences during the transition process. It should be taken into consideration that although the findings from this study were eye opening, there are still other differences (i.e., religious and cultural beliefs) that need to be considered when creating a transition plan.

Finally, a limitation of this chapter is that these studies included only participants with IEPs, leaving students with 504 plans unrepresented. None of the studies reviewed in this chapter discussed why they did not include participants with 504 plans. Had more information been available as to how those students prepare for college (since 504 plans do not include a transition plan), and how successful they have been at transitioning from high school to college, there could have been more information to determine what else could be done. Since students who had 504 plans in high school likely attend college at equal or higher rates as those with IEPs, it is important to include such students in studies exploring effective transition programs.

Thus far, Chapters One and Two have identified the many differences between high school and college disability services, the differences in laws protecting individuals with

disabilities in high school and college, what has been shown to help those students make a successful transition, and what factors may influence their post-school goals. Chapter Three will focus on transition programs available for postsecondary students with learning disabilities.

CHAPTER 3

REVIEW OF COLLEGE TRANSITION PROGRAMS

This chapter will focus on transition programs offered to students after they have graduated high school but prior to entering college, or during their freshman year. The purpose of the studies reviewed below was to survey, evaluate, and/or implement a course or program designed to teach students how to be more successful in college. Programs described were conducted either the summer before college started or during the participants' first year. Some programs could be taken more than once. Due to the nature of a pre-college preparation program, as opposed to programs implemented during students' first year of college, only qualitative analyses could be used to determine the most beneficial aspects such programs. In general, success of the programs was determined by improved grade point averages, pre- and post-test measures, and/or participant rated satisfaction. A limitation of these studies is that they relied heavily on participant feedback to draw conclusions on which parts of the programs were most helpful. While student feedback should be considered, more quantitative data is needed to draw more tenable conclusions.

To identify relevant studies, another online search was performed. The PsycINFO, Education Research Complete, ERIC, and Psychology and Behavioral Abstracts Collection databases were used. Search terms included *learning disabilit** or *ADHD* or *dyslexia*, *preparation* or *transition programs, college students* or *postsecondary*. The terms *transition, high school, learning strategies, educational technology, self-advocacy,* and *academic achievement* were also used in combination with the ones previously mentioned. Those results

were limited to scholarly (peer-reviewed) journals, academic journals, linked full text, and published in English between 2005-2015. Only studies that included college-aged students diagnosed with learning disabilities were considered for inclusion.

Academic or *college success* and *vocational rehabilitation* or *transitional programs* were added to the search terms to locate relevant studies. Using the aforementioned filters and search terms yielded 17 studies. However, only five of these 17 studies were selected for the review because they were empirical or experimental. Three studies of the five focused primarily on "strategy instruction" which is defined as a semester-long intervention teaching learning strategies. Two studies focused primarily on "transition", which is defined as providing help to students making a transition from high school or community college to a four-year institution. These studies were chosen because they implemented a semester-long didactic learning course teaching students learning strategies and/or about their own disabilities. The studies coded as "strategy instruction" are different from the studies coded as "transition" because they take place over an entire semester, rather than during the summer or during their first year.

Transition

Two studies were considered to be transition interventions (Rothman, Maldonado, & Rothman, 2008; Harrison, Areepattamannil, & Freeman, 2012), meaning that the intervention was delivered either the summer prior to entering college or during the participants' first year of college. Both studies described below involved similar interventions to increase students' knowledge of their legal rights (e.g., ADA AA) as well as improve basic living skills. Below is a summary of both studies.

Rothman et al. (2008) evaluated the effectiveness of a transition program for incoming college freshmen with learning disabilities during one week in the summer. The program was

offered at SUNY Albany and offered workshops that focused on the skills needed to succeed in college – self-advocacy, study skills, disability services, accommodations, independent living, and registration. In addition, the program addressed important skills students would need after completing college, such as how to become more independent and assertive. Twenty-seven students who participated in the pre-college program provided feedback on what they valued the most about their experience in the summer transition program. When asked to evaluate which components of the program had the biggest impact on their career success, self-advocacy and social skills were the top answers. Self-advocacy and ADA rights were ranked as the skills participants learned the most about (Rothman et al., 2008).

It is worth noting that the success of the program was measured by student self-reported data. Although participants of this study indicated that the program helped them make a successful transition to college, there were no quantitative data to support that claim. Rothman et al. (2008) stated that getting feedback from workshop leaders and past participants would have provided additional information, which would be helpful, especially if they were able to measure graduation rates and years it took to complete a degree, as compared to students with disabilities who did not enroll in the program. By obtaining additional quantitative data, success of the program would have more validity. Many of these participants were also still enrolled in college when they returned the survey, making it difficult to determine whether the program was actually helpful or not. There was also a low response rate (21%) from the participants.

Harrison et al. (2012) investigated the effects of participation in the Learning Opportunities Task Force (LOTF) using pre- and post-test measures. A total of 969 students from 6 colleges and 4 universities took part in this study (Harrison et al., 2012); all had confirmed learning disabilities (which was not defined by the authors). LOTF was designed to

teach students self-advocacy skills, educational rights and responsibilities, living skills, how to establish a support network, how to seek assistance, and also provided one-to-one instruction on learning strategies (Harrison et al., 2012). Students could participate in this program for one-week during the summer prior to starting college, or throughout their first year of college. Participants were asked to take an exit survey when they finished the program. Among those who returned the survey, 82.9% of the students stated the program had contributed significantly to their academic success, 5.4% said it contributed somewhat to their success, and 11.7% did not provide a response (Harrison et al., 2012). Dropout rates of the participants in the LOTF programs were substantially lower than the rate for college and university students in general.

The observed decrease in the dropout rate made it easier to judge if the program was successful. The number of participants was also beneficial; by having 969 participants (47% women, 52% men) across 10 different postsecondary institutions, it is likely that the results of this study could be replicated in other places. Also, not all participants were in the same type of institution – some students were enrolled in 2-year colleges while others were at 4-year institutions. Further, some participants completed the survey when they were leaving school while others completed the survey immediately after their LOTF program ended. Such differences could be viewed as a limitation because it made it difficult to draw conclusions about whether the program was helpful in completing a degree, as students who had just completed LOTF had not had as many chances to apply what they had learned. However, variability among participants also proved to be beneficial because it provided more diverse, and authentic, perspectives.

Strategy Instruction

The three studies described below were considered focused primarily on strategy instruction (Allsopp, Minskoff & Bolt, 2005; Burchard & Swerdzewski, 2009; Parker & Boutelle, 2009). One of these programs was a didactic course for academic credit hours and others were supplemental to students' course loads. These programs used interventions over the course of a one semester, although some could be taken more than one semester.

Allsopp et al. (2005) taught individualized strategy instruction to 46 participants with ADHD. A mixed-methods quasi-experimental design was used. Strategy instruction was based on each participant's individual needs; instruction could focus on organizational skills, study skills, test taking skills, note taking, and/or difficulties with reading and writing. Participants typically met with their strategy instructor for 1-2 hours, 1-3 times a week. Together, the participant and instructor would modify existing strategies to fit the needs of the student. For example, when an instructor and participant chose the paraphrasing strategy RAP (R-read a paragraph or section; A-ask what main ideas are; P-put the ideas into your own words), the instructor added an addition step, "Q" (questions about the readings) (Allsopp et al., 2005). Strategy instruction lasted one semester, but it could be taken more than once. Independent use of strategies was judged by having the tutors use a Tutor Evaluation Form; a Participant Evaluation Form was used to evaluate the relationship between the strategy instructor and the student.

Results showed that for participants who indicated on their Tutor Evaluation Form that they independently used the strategies taught, their GPAs were significantly higher for the semester of intervention compared to their GPA prior to the intervention. For the participants on academic probation, significant differences were found between overall GPA prior to the

intervention (1.56) and the semester of intervention (2.04). Overall findings judged 25 students to have demonstrated improvement after one or two semesters of the individualized strategy instruction, while 21 students showed no change (Allsopp et al., 2005).

Due to the quasi-experimental design used, the results are difficult to generalize. Allsopp et al. (2005) suggested using a randomized comparison group design if ever replicated. Approximately one-third of the participants had received two semesters of the intervention, while the remaining two-thirds only received one semester of intervention. Thus, it could not be determined if the participants who received two semesters of intervention were different from the participants only receiving one semester of intervention. To attempt to control for this, statistical analyses were based on the outcomes of the first semester of intervention only, except when looking at the outcomes after one semester of intervention. Additionally, almost half of the participants showed no change following the strategy instruction.

Burchard and Swerdzewski (2009) evaluated the effectiveness of a didactic strategic learning course taught to 44 college students with learning disabilities. This course aimed to emphasize students' awareness of personal learning (metacognition) through the study of learning theory and application of specific learning strategies. The strategic learning course was a 16-week, three-credit academic course, covering learning theories, students' personal assessment of their learning styles, strengths and weaknesses, and application of strategy and theory. Strategies included note-taking, task analysis, time management, complex thinking, planning for writing, use of assistive technology for writing, editing tools and resources, techniques for reading textbooks and articles, and others (Burchard & Swerdzewski, 2009). Assignments required participants to apply the specific strategies to their own personal academic experiences.

The Metacognitive Awareness Inventory (MAI) tool was used to assess knowledge of cognition (awareness subscale) and regulation of cognition (regulation subscale). The authors of this study did not indicate which of the strategies (note-taking, task analysis, time management, complex thinking, planning for writing, techniques for reading textbooks and articles, etc.) taught as part of their intervention made the most impact, yet the comparison of pre- and post-test scores supported teaching learning strategies instruction to students with disabilities. Using the MAI, participants assessed their personal learning styles, preferences, strengths and weaknesses at the beginning and end of the semester. This was used for early evaluation of personal learning and application of learning theories. By giving the same assessment at the beginning and end of the semester, it made for a clear comparison of whether or not students had made any metacognitive gains. Although relying on student-reported assessments does not make the strongest case for determining success, using the same assessment to make pretest-to-posttest measures could demonstrate an actual improvement. However, a limitation of this study was that students were not taught anything about their own disabilities, yet were given a learning styles assessment. It is not necessarily crucial to give students a learning styles assessment without teaching them about their own disabilities, but by doing so it would have given students a chance to learn more about what it was they really needed help with. For example, had the participants been taught about ADHD, the students with ADHD might have realized specifically how it was impacting their lives and their schoolwork. Additionally, if all of the participants were given the opportunity to provide feedback, the answers on the assessment (and results of the study) could have been different.

Parker and Boutelle (2009) provided executive function coaching to 54 students with Attention Deficit/Hyperactivity Disorder (ADHD) and/or learning disabilities at Landmark

College (a 2-year postsecondary institution specifically designed to assist college students with ADHD, LD, and similar learning disorders). The coaching lasted for 1-hour each week, each semester. Participants described the executive function coaching as personalized, self-directed service, promoting their self-determination (Parker & Boutelle, 2009). The coaches worked with participants on goals set by the student, which generally included organization, time management, and academic/personal life balance (Parker & Boutelle, 2009). Coaches reportedly formed honest and trustworthy relationships with their students, and held them accountable for learning from their experiences. Students reported that these supportive relationships encouraged students' understandings of how they achieved goals, which included recognizing the executive function challenges they faced (Parker & Boutelle, 2009). These results were obtained using pre- and post-test measures.

The benefits and limitations of coaching were determined by student-reported data. Since coaching is a personal service, in which every participant is likely to have a unique experience, it is important to take students' opinions into account. However, that was the only way Parker and Boutelle (2009) measured success of the program. Also, only 7 of the 54 participants were interviewed to give feedback. The students interviewed after the study were selected because they were thought to be a purposive sample that reflected diversity in gender, length of time at Landmark College, cumulative GPA, regional origin, levels of self-determination, and degree of certainty about academic and career plans after they finished at Landmark College (Parker & Boutelle, 2009). Had all 54 participants been interviewed after the study, the findings may have looked different. There was no explanation given as to why only 7 participants were interviewed, just that they were a purposive sample. While those 7 participants may have reflected the diversities among all participants, their answers (and thus experiences) could have been very

different. Even though those participants indicated that the program was very helpful, it is difficult to determine if that was truly the case due to the limited number of participants who responded post-intervention.

Summary and Conclusions

These studies reviewed above implemented college transition programs for students with learning disabilities. Unlike the studies discussed in Chapter Two, these were performed in a postsecondary setting. Although student reports indicated that these programs helped ease their transitions from high school to college, there was limited empirical or quantitative data to support those claims. Compiling participants' graduation rates, GPAs while participating in a program and when they have finished a program (if applicable), and the grades students made when they applied what they had learned (i.e., test taking skills, academic strategies) would have led to more valid conclusions as to whether or not a transition program was beneficial to the participants.

A limitation of this chapter was that the studies included were limited in geographic scope. Had more data on college transition programs been available, especially in diverse areas, it would be easier to determine if results could be generalized. Something to take into consideration is the format in which the studies were performed. The studies coded as "transition" could be taken either the summer before entering college or during their first year; studies coded as "strategy instruction" were conducted during the participants' first (and sometimes subsequent) semester(s) of college. None of the authors or participants gave insight as to which format worked best. A strength of taking a transition course before starting college is that students would be able to learn needed skills before having to use them, making it easier to ensure students are equipped with correct and proper knowledge. On the other hand, a weakness

of this design is that students could forget the information they learned before they have an opportunity to apply it. A strength of taking a transition course during students' first semester is that the students would have more opportunities to implement what they have learned (i.e., academic strategies); a weakness is that students could get overwhelmed by this new information in addition to their course load. Since there was no explanation or opinions on which option was more beneficial, it is not possible to draw conclusions or provide recommendations as to which option is more effective.

Chapters One, Two, and Three have addressed the difficulties students with learning disabilities have transitioning from high school to college, and reviewed the current supports being implemented for high school and college-aged students. The next chapter will summarize the effectiveness of these programs and outline how an ideal program would look, given the findings of the research.

CHAPTER 4

SUMMARY OF FINDINGS AND RECOMMENDATIONS

This final chapter will summarize the findings of all of the transition programs previously reviewed. In Chapters One and Two there were a few components identified as the most effective in helping students with learning disabilities successfully transition from high school to college: promoting self-awareness and self-advocacy; informing students of their legal rights; teaching academic strategies; and forming supportive relationships. Below is a brief discussion of how these programs accomplished those things. A summary of the findings of the high school transition programs will be discussed first, along with how they relate to the current laws in place for IEP and 504 Plans. Second will be a discussion of the postsecondary transition programs and their relation to relevant laws. After discussing whether or not the programs were successful, a recommendation for an ideal program will be given based on the overall findings.

Summary of Findings Related to High School Transition Programs

The findings of the high school transition programs reviewed in Chapter Two were largely successful and/or informative, but there was not much consistency overall, which is not surprising given the variability of the studies. That is, including such diverse studies yielded very diverse results. Diversity was mentioned as something to consider when creating a transition plan, as it should, but had the studies had more similar findings it would have been easier to draw more definitive conclusions.

Daviso, et al. (2011) suggested a correlation between the courses of study and transition services to students' post school goals (i.e., employment or postsecondary education. Although

the correlation suggested the likelihood of selecting postsecondary education or full time employment when taking a specific curriculum (i.e., general education classes, vocational education), it did not explain why those students were enrolled in their curriculum. It would have been much more informative had Daviso et al. (2011) been able to report the severity of the disabilities and which curriculum students were enrolled in.

As mentioned in Chapter One, Cawthon et al. (2010) found that students needed knowledge of their own disability and the ability to self-advocate to make a successful transition. Two of the studies discussed in Chapter Two (Izzo, et al, 2006; Prater, et al., 2014) described ways to achieve these results. Izzo et al. (2006) found that having a student develop her own Summary of Performance (SOP) taught her about her disability and how it affected her academically. Although Izzo et al. (2006) had no empirical data to back up their findings; it appeared that student participation in their SOP's would be a relatively simple way to promote self-awareness. By involving the student, TyKiah, in her SOP she was able to use it as a reference when she visited colleges. This made TyKiah aware of the exact nature of her own disability and which accommodations she believed were beneficial. Since many students are often unprepared with the necessary documentation needed to register for postsecondary disability services, having a student-developed SOP could provide some of the information needed.

Supporting the components Cawthon et al. (2010) described for a successful transition, Prater et al. (2014) implemented self-advocacy training to high school students with learning disabilities. The intervention increased the number of accommodations students requested after the training. Self-advocacy was also mentioned in Chapter Three as something students had said they valued learning. Cawthon et al. (2010) had a small sample size of participants, but the

participants did appear to benefit from the self-advocacy training. If students were to be instructed how to advocate for their own services prior to beginning postsecondary education it could ease their transition.

Martin et al. (2006) observed that students had limited participation during their own IEP meetings, with students speaking about 3% of the time. With such a small percentage of student participation, it is hard to imagine that students were getting adequate opportunities to advocate for their own services. Applequist et al. (2009) also observed a lack of student participation in IEP meetings. Although the results of these studies did not provide any information pertaining to a successful transition from high school to college, they did provide information as to what could be hindering these students from being successful. Given the positive feedback from Izzo et al.'s (2006) study, involving students in their own IEP meetings and educational plans could increase their self-awareness.

While it would have been helpful for Applequist et al. (2009) to gather information about the impact of self-advocacy and self-determination, those are not skills compatible with their participants' native beliefs. For instance, many tribes focus more on independence rather than self-determination. So, the results of their study reflected more of a cultural impact. Similarly, Hogansen et al. (2009) provided a gender-influenced perspective of transition planning among their female-only sample. Many of the women interviewed stated that some of their high school teachers treated them as though they were incapable of accomplishing their goals. When interviewing parents and educators, some viewed the participants' post school goals as unrealistic, such as which college they wanted to attend or starting a family at a young age. It is not possible to know whether the parents and educators were underestimating the students'

potential, or if the students had a false perception of their abilities. However, it is important to respect these cultural and personal beliefs.

Summary of Findings Related to College Transition Programs

The transition programs designed for college-aged students had more consistent results. Since these programs essentially had similar components, it was easier to identify the intended outcomes. These results build upon what previous studies have described as qualities students with learning disabilities need to be successful in college.

Rothman et al. (2008) educated students on their disabilities by identifying their strengths and weaknesses and recognition of their executive function challenges. Informing students of their own disability, their legal rights, and the ability to communicate their rights taught students self-advocacy. This transition program began with a barbeque mixer for the participants. Workshops were led by successful professionals with disabilities to provide social support and role models, as well as examples of the benefits of self-advocacy. Participants rated social skills as very important to career success, thus having a social component to a transition program could better prepare participants for their future careers.

Harrison, et al. (2012) used individualized coaching to improve self-awareness. Through specific interactions and teachings in this program, including up-to-date assessments, students became more aware of how their disabilities impacted their social and interpersonal relationships, as well as their general life skills. Specific workshops and one-on-one tutoring were available to the participants throughout the duration of their program; they were geared towards improving self-awareness, as well as self-advocacy and learning strategies. Students were informed of their educational rights and responsibilities.

To develop individualized strategy instruction, Allsopp et al. (2005) first sent participants a questionnaire evaluating themselves in test taking, organization, study skills, note taking, reading, and writing. Learning strategies using systematic explicit instruction were then taught; using the context of the particular courses the students were taking (i.e., for writing, an intervention for finding the words to say what you mean was implemented). Allsopp et al. (2005) reported over half of their participants considered their relationship with the strategy instructor a critical factor for success. Students commented that their instructors valued them as individuals, and showed them how to apply the strategies to meet their individual needs and the specific course demands. For the participants who were on academic probation, 83% specified that their instructor had an important influence in their improvement (Allsopp et al., 2005).

Strategy instruction was also a beneficial aspect of Burchard et al.'s (2009) study. Learning strategies included time management, note-taking, editing tools and resources, research approaches, memory-improvement skills, as well as others. The approach of this course was to require students to intentionally apply the strategies to personal learning; for example, using a planner to demonstrate how a student broke down long-term assignments into manageable steps (Burchard et al., 2009). Class assignments required students to apply theories and strategies, including a creative research project that implemented research, reading and writing strategies. On each test, points were given for evidence of memory or test taking strategies used during the test, such as writing down a mnemonic strategy on the test paper.

Landmark College's (Parker et al., 2009) coaching program fostered self-awareness and established supportive relationships. Coaches formed honest and trustworthy relationships with their students, and held them accountable for learning from their experiences. Many participants continued using the coaching services partly because of the positive relationships with their

coaches. Participants described coaching as a personalized, self-directed service promoting self-determination, which was very personalized because coaches developed a better understanding of how they achieved goals.

Summary of Findings

Overall, the transition programs in high schools and colleges appear to focus on similar things but in different formats. Self-advocacy and self-determination were common components in both settings. In high school programs, there was a larger emphasis that students' cultural differences should be taken in to consideration, they should be educated on their own disabilities, and become more active in IEP meetings and transition planning. College programs had more of an emphasis on educating students of their rights, teaching academic strategies, identifying strengths and weaknesses, and establishing supportive relationships.

Recommendations

Preparing students with learning disabilities to transition from high school to college should begin during high school (Rothman et al. 2008). Based on the findings of the research in previous chapters, both high schools and postsecondary institutions should offer transition programs for students with learning disabilities. As Chapter Two discussed, students' needs are much too diverse to be limited to a one-size-fits-all type of program. A transition program in high school should be tailored to meet the students' specific disability and goals; a postsecondary transition program should help students adapt to the new atmosphere they are in. There should be some overlap of the components of both programs. Below is a recommendation for the ideal program in both settings.

High School Transition Programs

High school students with learning disabilities should be educated about their own

disabilities before they enter any type of postsecondary institution. Some of the studies in Chapters One and Two considered the importance of teaching students about their disabilities (Cawthon et al., 2010; Izzo et al., 2006; Stamp et al., 2014). These studies had different settings and participants, but the researchers all agreed students need to be taught how their disability affects them in their daily life, as well as their strengths and weaknesses. As previously stated, each student has very diverse needs that need to be addressed individually. Based on the findings and success of Izzo et al. (2006), students can be taught more about their disability through taking part in their SOP planning. A student-developed SOP would need to include a breakdown of the disability, how it affects students academically, recommendations for accommodations in college, and students' perspective on which accommodations were and were not effective. A student-developed SOP would have to be guided by a faculty member who was most knowledgeable about students' disabilities to ensure the student included relevant and accurate information. The SOP could also include necessary documentation (i.e., psychoeducational evaluation).

While students are being taught about their disability, relevant documentation also needs to be obtained. Chapter One described the necessary documentation to register for disability services at a postsecondary institution and many high school students do not have current psychoeducational evaluations. Arranging up to date assessments and paperwork is something that needs to be addressed before students leave high school. Doing so can prevent delays of accessing accommodations from a disability resource center.

Self-advocacy is something high schools and colleges need to help students learn as well. Students with disabilities are more likely to experience problems building interpersonal relationships with faculty (Skinner & Lindstrom, 2003), and may encounter professors with

varying levels of tolerance towards providing accommodations. This is why students need to be prepared to be their own advocate; self-advocacy skills can protect students with learning disabilities against faculty and staff who are unwillingly to provide accommodations or assume they are unable to meet the demands faced in college (Merchant & Gajar, 1997). A student becomes a self-advocate when they understand their own disability, are aware of their legal rights, and can appropriately communicate their rights and needs (Skinner et al. 2003).

Teaching self-advocacy. To teach high school students self-advocacy, an example of a series of interrelated lesson plans, based on Prater et al.'s (2014) study, follows.

1. To begin self-advocacy training, each participant would be given an advance organizer summarizing that lesson's objectives. The teacher would model each skill, and then the students would practice. Appropriately requesting accommodations was defined as facing the teacher, making eye contact, requesting the accommodation, saying why they needed the accommodation, and thanking the teacher. The objectives of the first lesson would be to have students define self-advocacy and accommodations. The teacher would define self-advocacy and accommodations and explain how requesting their accommodations to their teachers was a form of self-advocacy.
2. The second lesson would focus on personal strengths and needs. The objectives would be to identify their strengths and needs to match one of the eight accommodations previously learned.
3. Lesson three would teach students steps for asking for accommodations. Objectives would be to have students' state the five FESTA steps (face the teacher, eye control,

state the accommodation, thank the teacher, use the accommodation) to request accommodations, and then accurately role-play the steps.

4. The fourth lesson would teach students how to appropriately ask for accommodations. Objectives of this lesson would be to have student role-play requesting accommodations using the five FESTA steps, and complete the accommodation checklist after implementing the steps.

College Transition Programs

Initially, upon entering college and participating in a transition program, students would need to identify their disability and strengths and weaknesses. Personal knowledge of one's own disability, as well as strengths and weaknesses, increases the likelihood of career success (Rothman et al., 2008). First, students should be taught about their disability and appropriate compensatory strategies (Harrison et al., 2012). With information from the students' psychoeducational evaluation, they should be advised how to find classes and majors that complement their strengths. For example, if a student had difficulty paying attention, an instructor might advise them to register for more seminars rather than lectures whenever possible (Stodden et al., 2001). This is not intended to take the place of academic advisors, but to supplement that service.

Self-advocacy would need to be addressed. Although students should be prepared to become their own advocates in high school, it should also be taught in a college transition program to ensure students are aware of what services are available (Rothman et al., 2008). To begin teaching self-advocacy students must be taught their rights protected under the Americans with Disabilities Act and how they differ from high school. For instance, in high school it was the school's responsibility to identify which students had a disability; in college, students must

disclose to their professor if they are registered for disability services. Students should also be provided with examples of discrimination and how to handle those situations. For example, if a professor denies giving the student the accommodations for which he or she is registered, how would the student handle that situation and whom would they seek out for help?

A method to teach self-advocacy using direct instruction, similar to the one described by Merchant et al. (1997) should be implemented. These steps are listed below:

1. The instructor will describe the target behavior to the students and provide written directions.
2. The instructors will demonstrate the behavior.
3. Students will be given the opportunity to ask questions.
4. Students will practice the behavior.
5. Peers and instructors will give the students feedback.
6. Students will repeat the task until it is mastered.

The target behavior referred to here is communicating to a faculty member that the student has a disability and asking for accommodations. Students do not have to explain to professors why they are registered for disability services or what their disability is. If they choose to, they need to be able to communicate the information effectively and accurately.

In Chapter One, Reaser et al. (2007) discussed the level and degree of study skills and academic strategies many students with learning disabilities lack when they begin college. To combat this deficiency, a model similar to the way Allsopp et al. (2005) taught participants such strategies is presented. Allsopp et al.'s model (2005) was chosen because it includes personalized learning strategies and modifications to existing strategies to meets the needs of the students. Allsopp et al. (2005) also provided very clear descriptions of how they taught the strategies.

Considering students with learning disabilities are most successful when their support is tailored to meet their specific needs (Stodden et al., 2001), it is essential for instructors to take what is being taught in the course and personalize it to each student. Explicit systematic instruction should be used to teach strategies, because it has been identified as one of the strongest evidence-based practices of instruction for students with disabilities (Allsopp et al., 2005). Since students with learning disabilities have difficulties applying learning strategies on their own (Allsopp et al., 2005), explicit systematic instruction can be used to show the students exactly how a strategy works. Instructors would show strategies specific to different types of assignments, including research papers, tests, and projects. Explicit instruction would include advanced organizers, modeling how the strategies are used, guided practice, independent practice to promote generalization, and monitoring student progress (Allsopp et al., 2005). Success of these strategies would be evaluated by student-reported satisfaction and the grades students make when applying the strategies in another class.

Finally, students need to be educated on the importance of supportive relationships. Rothman et al. (2008) reported mentored students have higher grade point averages and are less likely to dropout. The need for a supportive relationship between the student and his or her instructor is necessary not only for emotional support, but to help prevent against dropping out (Pyle & Wexler, 2012). Unfortunately there is no model explaining how to form a supportive relationship. Based on the relationships described by studies in Chapter Three, treating students with respect (i.e., respecting their cultural differences), personalizing services, and helping students identify their strengths (Allsopp et al., 2005; Parker et al., 2009)) can promote a supportive relationship between disability coordinator and/or instructor and students.

Conclusions

The recommendations made in this chapter are intended to increase the success among students with learning disabilities during the transition to college. A critical component of the recommendations is that they can be tailored to the unique needs of each student. Although having transition programs in both high school and college may not always be realistic, it is truly ideal so students are as prepared as possible to have a successful college career.

In Chapter One, a higher unemployment rate for people with disabilities, compared to those without disabilities, was noted. Madaus (2006) surveyed 170 college graduates about the transition from college to career; their responses lend further support to the recommendations provided in this chapter. Participants suggested components for a career transition program that would have enhanced the services they received in college, including mentoring programs (pairing upperclassmen with working graduates), internships, specific courses or seminars, ADA knowledge and follow-up with graduates (Madaus, 2006). Internships and following-up with graduates are not applicable components to a program designed for students transitioning from high school to college, per se, but the remaining suggestions were integrated into the ideal model described in the previous section.

Specific courses or seminars focusing on time management, self-advocacy, the ADA, and self-disclosure were the most common suggestions (Madaus, 2006). There were also recommendations that college programs spend more time helping students understand their strengths and weaknesses and then helping them to find matches related to majors and careers, with suggestions that this training should take place as early as freshman year (Madaus, 2006). These suggestions align with the self-awareness and self-advocacy components outlined previously. By helping students identify their strengths and weaknesses, it could also help them

make more informed decisions when choosing a major. Several participants also responded that the ADA was never discussed with them in college. Therefore, informing current college students of their legal rights under the ADA will not only help students understand their rights as a student, but also as an employee upon graduating from college (since the ADA also pertains to the rights of workers with disabilities in the workplace) (Madaus, 2006).

Findings from Madaus' (2006) study suggest students with disabilities need help with transitioning throughout their lives, not just in college. Providing students with transition services could enhance their overall college and professional careers. There are times of transition while still in college, such as moving from prerequisites to courses in a specific major, when applying for graduate school, and when applying and starting careers. Well-designed and implemented transition programs could also support students during these transition points as well.

References

A Guide to Disability Rights Laws. (n.d.). Retrieved May 28, 2015, from http://www.ada.gov/cguide.htm

ADA: Protecting Your Child's Civil Rights. (2014, February 14). Retrieved July 6, 2015, from https://www.understood.org/en/school-learning/your-childs-rights/basics-about-childs-rights/ada-protecting-your-childs-civil-rights

Allsopp, D. H., Minskoff, E. H., & Bolt, L. (2005). Individualized course-specific strategy instruction for college students with learning disabilities and ADHD: Lessons learned from a model demonstration project. *Learning Disabilities Research & Practice, 20*(2), 103-118.

American Psychological Association. (2013). Desk reference to the diagnostic Criteria from DSM-5 (5th ed., pp. 31-38). Washington, D.C.: American Psychiatric Association.

Applequist, L. L., Mears, R., & Loyless, R. (2009). Factors influencing transition for students with disabilities: the American indian experience. *International Journal of Special Education, 24*(3), 45-56.

Association for Higher Education and Disability. (2008, January). *Disability documentation guidelines. http://ahead.org/affiliates/connecticut/documentation#F*

Burchard, M. S., & Swerdzewski, P. (2009). Learning effectiveness of a strategic learning course. *Journal of College Reading and Learning, 40*(1), 14-34.

Cawthon, S. W., & Cole, E. V. (2010). Postsecondary students who have a learning disability: student perspectives on accommodations access and obstacles. *Journal of Postsecondary Education and Disability, 23*(2), 112-128.

Daviso, A. W., Denney, S. C., Baer, R. M., & Flexer, R. (2011). Postschool goals and transition services for students with learning disabilities. *American Secondary Education, 39*(2), 77-93.

Fuller, M., Healey, M., Bradley, A., & Hall, T. (2004). Barriers to learning: A systematic study of the experience of disabled students in one university. *Studies in Higher Education, 29*(3), 303-318.

Gil, L. A. (2007). Bridging the transition gap from high school to college: Preparing students with disabilities for a successful postsecondary experience. *TEACHING Exceptional Children, 40*(2-), 12-15.

Government Relations. Retrieved from https://www.ahead.org/resources/government-relations#6

Harrison, A. G., Areepattamannil, S., & Freeman, J. (2012). Effects of the Learning Opportunities Task Force (LOTF) programs on postsecondary students with learning disabilities. *Exceptionality Education International, 22*(1), 55-69.

Hogansen, J. M., Powers, K., Greenen, S., Gil-Kashiwabara, E., & Powers, L. (2008). Transition goals and experiences of females with disabilities: Youth, parents, and professionals. *Exceptional Children, 74*(2), 215-234.

Izzo, M. V., & Kochhar-Bryant, C. A. (2006) Implementing the SOP for effective transition: Two case studies. *Career Development for Exceptional Individuals, 29*(2), 100-107.

Lindstrom, L., Downey-McCarthy, R., Kerewsky, S. D., & Flannery, K. B. (2009). Supporting students with disabilities in postsecondary education. *Human Service Education. 29*(1), 4-13.

Lindstrom, J. H., & Lindstrom, W. (2011). Assessment and documentation consideration for postsecondary students with learning disabilities. *Learning Disabilities: A Multidisciplinary Journal, 17*(2), 63-68.

Madaus, J. W. (2006). Improving the transition to career for college students with learning disabilities: Suggestions from graduates. *Journal of Postsecondary Education & Disability. 19*(1), 85-93.

Martin, J. E., Van Dycke, J. L, Greene, B. A., Gardner, J. E., Christensen, W. R., Woods, L. L., & Lovett, D. L. (2006). Direct observation of teacher-directed IEP meetings: Establishing the need for student IEP meeting instruction. *Exceptional Children, 72*(2), 187-200.

Merchant, D. J., & Gajar, A. (1997). A review of the literature on self-advocacy components in transition programs for students with learning disabilities. *Journal of Vocational Rehabilitation. 8*(3), 223-231.

National Center for Education Statistics. (2013). Fast facts: students with disabilities. Retrieved from http://nces.ed.gov/fastfacts/display.asp?id=60

National Center for Learning Disabilities. (2014). *The state of learning disabilities.* https://www.ncld.org/wp-content/uploads/2014/11/2014-State-of-LD.pdf

National Joint Committee on Learning Disabilities. (2007). The documentation disconnect for students with learning disabilities: Improving access to postsecondary disability services. *Learning Disability Quarterly*, *30*(4), 265-274.

Parker, D. & Boutelle, K. (2009). Executive function coaching for college students with learning disabilities and ADHD: A new approach for fostering self-determination. *Learning Disabilities Research & Practice, 24*(4), 204-215. doi: 10.1111/j.15405826.2009.00294.x

Prater, M. A., Redman, A. S., Anderson, D., & Gibbs, G. S. (2014). Teaching adolescent students with learning disabilities to self-advocate for accommodations. *Intervention In School And Clinic, 49*(5), 298-305.

Pyle, N., & Wexler, J. (2012). Preventing students with disabilities from dropping out. *Intervention in School and Clinic*, *47*(5), 283-289.

Rothman, T., Maldonado, J. M., & Rothman, H. (2008). Building self-confidence and future career success through a pre-college transition program for individuals with disabilities. *Journal of Vocational Rehabilitation, 28*(2), 73-83.

Reaser, A., Prevatt, F., Petscher, Y., & Proctor, B. (2007). The learning and study strategies of college students with adhd. *Psychology in the Schools, 4*(6), 627-638.

Skinner, M. E., & Lindstrom, D. D. (2003). Bridging the gap between high school and college: Strategies for the successful transition of students with learning disabilities. *Preventing School Failure. 47*(3), 132.

Smith, S., English, R., & Vasek, D. (2002). Student and parent involvement in the transition process for college freshmen with learning disabilities. *College Student Journal, 36*(4), 491-503.

Specific Learning Disorder. Retrieved May 24, 2015, from http://www.dsm5.org/Documents/Specific%20Learning%20Disorder%20Fact%20Sheet.pdf

Stamp, L., Banerjee, M., & Brown, F. C. (2014). Self-advocacy and perceptions of college readiness among students with ADHD. *Journal of Postsecondary Education & Disability, 27*(2), 139-160.

Stodden, R. A., Whelley, T., Chang, C., & Harding, T. (2001). Current status of educational support provision to students with disabilities in postsecondary education. *Journal of Vocational Rehabilitation, 16*(3/4), 189.

The Difference Between IEPs and 504 Plans. (2014, June 27). Retrieved May 28, 2015, from https://www.understood.org/en/school-learning/special-services/504-plan/the-difference-between-ieps-and-504-plans

Types of College Support Services. (2014, June 11). Retrieved July 6, 2015, from https://www.understood.org/en/school-learning/choosing-changing-schools/leaving-high-school/types-of-college-support-services

United States Bureau of Labor Statistics. (2014). *Employment status of the civilian noninstitutional population by disability status and selected characteristics, 2014 annual averages.* Retrieved from http://www.bls.gov/news.release/disabl.t01.htm.

United States Department of Labor. *Disability Employment Statistics.* Retrieved from http://www.dol.gov/odep/topics/DisabilityEmploymentStatistics.htm

Appendix A: DSM-5 Definitions of Specific Learning Disorder and ADHD

According to the American Psychiatric Association Diagnostic Statistical Manual – 5th Edition (APA DSM-5, 2013), a Specific Learning Disorder is defined as difficulties learning and using academic skills, as indicated by the presence of at least one of the following symptoms that have persisted for at least 6 months: inaccurate or slow and effortful word reading; difficulty understanding the meaning of what is read; difficulty with spelling; difficulties with written expression; difficulties mastering number sense, number facts, or calculation; difficulties with mathematical reasoning (American Psychological Association [APA], 2013). The affected academic skills are below those expected for the individual's chronological age. The learning difficulties begin during school-age years but may not become fully arise until the demands for those affected academic skills exceed the individual's limited capabilities (e.g., timed tests, reading lengthy reports for a deadline). The learning difficulties are not better accounted for by intellectual disabilities, other health related factors (e.g., mental disorders, visual or auditory acuity), language barriers, or inadequate instruction (APA, 2013).

The DSM-5 defines Attention Deficit/Hyperactivity as a persistent pattern of inattention and/or hyperactivity that interferes with functioning or development, as characterized by Inattention and/or Hyperactivity (APA, 2013). Children must have at least six symptoms from either or both the Inattention group and the Hyperactivity and Impulsivity group; adults (ages 17 and up) must present five symptoms. Below is a summary of symptoms of both Inattention and Hyperactivity and Impulsivity.

1. Inattention: often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities; often has difficulty sustaining attention in tasks or play activities; Often does not seem to listen when spoken to

directly; often does not follow through on instruction and fails to finish schoolwork, chores, or duties in the workplace; often has difficulty organizing tasks and activities; often avoids, dislikes, or is reluctant to engage in tasks that require substantial mental effort; often loses things necessary for tasks and activities; often easily distracted by extraneous stimuli; often forgetful of daily activities

2. Hyperactivity and Impulsivity: often fidgets with or taps hands or feet or squirms in seat; often leaves seat in situations when remaining seated is expected; often runs about or climbs in situations where it is not appropriate; often unable to play or engage in leisure activities quietly; is often “on the go”, acting as is “driven by a motor”; often talks excessively; often blurts out the answer before a question has been completed; often has difficulty waiting his or her turn; often interrupts or intrudes on others