Postsecondary Students who have a Learning Disability: Student Perspectives on Accommodations Access and Obstacles

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Abstract
Students with Learning Disabilities (SLD) face unique challenges when entering postsecondary education after high school. A successful navigation of postsecondary context requires knowledge of one’s own disability and needs as well as access to what resources may be available at the institution. The purpose of this study was to gather SLD perspectives on accommodations use and obstacles they faced in gaining access to services. A total of 110 undergraduate students at a selective, four-year public University completed an online survey as part of a research subject pool requirement. The study collected information about the following areas: (a) accommodations use, (b) opportunities/barriers faced during transition, (c) knowledge students had regarding their disability and available services, and (d) self-advocacy strategies. Results indicated that this student population might not have used the University resources to the extent that they were available, pointing towards a potential need for greater awareness of campus resources. However, it was also true that students generally knew the implications of their disability and were utilizing many of the same resources that they did in high school. The article concludes with implications for education professionals who serve SLD.

Students with learning disabilities (SLD) comprise a small but growing proportion of the college-bound student population. In 2002, SLD comprised 9% of the national population of students attending college in the United States (Kurth & Mellard, 2006). Students with Learning Disabilities (SLD) face unique challenges when entering postsecondary education after high school. One of the largest challenges is ensuring that they obtain the necessary disability services needed to be successful in their postsecondary program. The effectiveness of high school transition teams in preparing SLD for college has been examined from the viewpoints of both secondary and postsecondary special education personnel (Janiga & Costenbader, 2002; Milsom & Hartley, 2005). Special education students’ views are an essential component of ensuring a successful postsecondary preparation and implementation of the transition process. The purpose of this study is to explore SLD perspectives on levels of access to accommodations and resources at a highly competitive, four-year, postsecondary institution.

Legal Context
There are three main legislative acts that affect how SLD access accommodations: (a) the Individuals with Disabilities Education Act (IDEA), (b) Americans with Disabilities Act (ADA), and (c) the Rehabilitation Act of 1973 (Section 504). Students making the transition between high school and college also make a shift between legislation that guides their eligibility and access to support services. There are significant differences between the IDEA, the law that governs special education in secondary institutions, and ADA, which applies to postsecondary institutions. Among these differences are the purpose of the law, how one is determined to be eligible for services, and to what accommodations eligible SLD are entitled. The Rehabilitation Act applies to students in both settings, but follows different principles and guidelines for receiving services.

Individuals with Disabilities Education Act. The Individuals with Disabilities Education Act (IDEA) first originated in 1975 as the Education for All Handicapped Children Act (EHA). Renamed in 1990 as Individuals
With Disabilities Education Act (IDEA), it has been reauthorized about every five years, the latest in 2006 (as Individuals with Disabilities Education Improvement Act, or IDEIA). IDEA specifically lists areas in which disabilities may occur, including a learning disability. The purpose of the law is to identify eligible students and provide services to them that are educationally focused and aimed at helping the student achieve academically to the best of their ability. These services are to be given at no cost to the student or their families. Once a child is determined to have a learning disability, schools are required to provide an Individualized Education Program (IEP) plan. When a student reaches high school, the role of this IEP plan is not only to identify and document current services, but also to articulate what the student’s postsecondary goals might be. As early as age 14 and no later than age 16, the IEP team must meet with the student (and parents) and lay out a plan for the transition from high school into the student’s chosen postsecondary setting, one of which may be college or a university.

**Americans with Disabilities Act.** When a SLD enters a postsecondary institution, or more specifically, when they attain the age of majority (18-years-old), they have the option to seek protection under ADA. Passed in 1990, the ADA is a federal civil rights law that protects all persons with disabilities from discrimination. Unlike IDEA, where the school is responsible for providing services, under ADA the student must initiate this process, and is not entitled to protection if they do not inform the school of their disability. Additionally, unlike IDEA, ADA does not provide explicit guidelines on how to determine if a person has a learning disability or who makes that determination. The ADA states that a person has a disability if the individual has a “physical or mental impairment that substantially limits one or more of the major life activities of such individual, the individual has a record of such an impairment; or is regarded as having such impairment” (Americans with Disabilities Act, 1990). Once a person is considered to have a learning disability under ADA they are entitled to accommodations that enable persons with disabilities to engage in activities at the same level as their peers without a disability. Unlike IDEA, ADA accommodations are not necessarily educationally focused. There is more flexibility in the kinds of services that can be obtained through ADA.

**Rehabilitation Act.** A precedent to later legislation such as the ADA (1990), the Rehabilitation Act of 1973 prohibited discrimination by federal agencies and by federally funded programs. Following the lead of reforms such as those initiated by Brown v. the Board of Education, the Rehabilitation Act was passed during the civil rights era and reflects the focus on access and inclusive participation in publicly funded institutions. Because most school districts and universities in the country receive federal aid, Section 504 of the Rehabilitation Act effectively covers all students in public education from discrimination or limited access to services on the basis of a disability. Section 504 has a broad definition of disability:

> Under this law, individuals with disabilities are defined as persons with a physical or mental impairment which substantially limits one or more major life activities. People who have a history of, or who are regarded as having a physical or mental impairment that substantially limits one or more major life activities, are also covered. Major life activities include caring for one’s self, walking, seeing, hearing, speaking, breathing, working, performing manual tasks, and learning. Some examples of impairments which may substantially limit major life activities, even with the help of medication or aids/devices, are: AIDS, alcoholism, blindness or visual impairment, cancer, deafness or hearing impairment, diabetes, drug addiction, heart disease, and mental illness. (United States Department of Health and Human Services, n.d.)

Applied to schools, Section 504 requires schools at both the secondary and postsecondary level to provide necessary accommodations for students with disabilities. Adequate access to curriculum is the central question when a school or district is asked to provide services to a student with a disability. The Rehabilitation Act does not require that the student be designated as a special education student in order to receive these services, nor does it require the district or university to pay for these services, particularly if it would cause an undue burden on the institution. In this way, the Rehabilitation Act is a less codified legislation than other avenues for receiving accommodations in public schools. The long-term impact of the Rehabilitation Act was, in part, to put language into place that includes students with disabilities into larger educational reforms.
Planning for Postsecondary Education

IDEA requires that the student be an active participant in the transition process from the secondary to postsecondary setting. For example, student presence is required at all IEP transition meetings and it is preferred that students take an active role in the formation of their IEP. The intent is to provide students with critical knowledge and information that prepares them to advocate for themselves when they reach college. Knowledge of disability, knowledge of postsecondary support services, and the ability to self-advocate have been identified as contributors successful high school to college transitions for SLD (Milsom & Hartley, 2005).

Potential obstacles to transitions. Within the transition experience there are many potential obstacles that may hinder a successful transition from secondary to postsecondary institutions. The first obstacle can be at early stages of the transition process. The reauthorization of IDEA required that students be present and actively involved in their IEP meetings (Hammer, 2004). When students do attend their meetings parents report that they understand the meeting better and feel more comfortable expressing their opinions, while teachers are more likely to express the SLD interests, talents, and requirements. Both parents and teachers feel more optimistic about the IEP meeting with student attendance. However, a majority of students historically do not have the opportunity to participate in the formation of their IEPs (Reusen & Bos, 1994). Research investigating rates of student participation in the IEP process indicate that 35% of states failed to invite students to participate in their IEP meetings (Williams & O’Leary, 2001).

The effects for a student can be felt over time; only about half of students ever attend their IEP meetings (Mason, Field, & Sawilowsky, 2004). Even if students are able to attend their IEP meetings, active involvement by the student in IEP formulation is still difficult to achieve (Mason et al., 2004). Although research (Martin et al., 2006) has shown that 40% of special education teachers believe that SLD participate in their IEP meetings “a lot”, in reality students only talk for about 3% of the meeting time. It is not surprising that Mason et al. (2004) found that only 34% of IEP team members reported that they were satisfied with the level of student involvement in IEP meetings. Students who do attend their meetings have many opportunities where they could become involved, such as expressing their interests and closing out the meeting. However, without prior preparation for these meetings, students often feel lost and do not understand what’s going on, contributing to their conceptualization that the IEP meeting is a meaningless activity (Martin et al., 2006).

From a service provider perspective, Janiga and Costenbader (2002) researched college administrator satisfaction with the bridge between services in high school to the postsecondary setting. This research found that administrators were not satisfied with the overall transition services secondary students were provided, with the average satisfaction score rating 2.8 out of 10 (Janiga & Costenbader, 2002). Specifically, administrators felt that students (a) lacked self-advocacy skills; (b) entered postsecondary institutions without an understanding of the difference between high school and college in class size, instructional time, teaching and examination methods; (c) didn’t understand their own strength and weaknesses and the specific accommodations that they need; (d) couldn’t function independently without relying on parents or special education teachers; and (e) disability assessments lacked adequate documentation for specific accommodations.

Participants in this study felt that students’ lack of involvement in their transitional IEP may contribute to potentially lower levels of academic preparedness to enter their chosen postsecondary institution and, more relevant to this discussion, an unawareness of the accommodations they may need to succeed in such an institution (Janiga & Costenbader, 2002). University faculties also cite their own level of disability knowledge as inadequate. Faculty report that they feel that they do not have an adequate understanding of disability law, enough of an understanding of specific learning disabilities (LD) to create accommodations for students, and that they aren’t accustomed to working with the disability offices at their institution (Murray, Flannery, & Wren, 2008). Overall less than 18% of faculty reported that they were knowledgeable about section 504 of the Rehabilitation Act; 50% reported being familiar with ADA (Thompson, Bethea, & Turner, 1997).

Level of knowledge. When student knowledge of disability, disability law, and accommodations are examined, research has found that students know more about the services that their special education program provides than about what is on their IEP, or knowledge about their specific disability. Schreiner (2007) asked high school SLD who were about to graduate to compose classroom situations where they may encounter difficulties because of their LD and then explain how they
would communicate their needs and find help. Essays were scored on realism about possible difficulties, adequacy in telling others of their difficulty, and adequacy in seeking help. The average score of these students was 18.22 out of 36 points, with no students scoring above 22.41 points. Schreiner (2007) suggests that the poor performance of SLD on this task indicates a lack of self-awareness and self-advocacy skills. Similar findings have also been reported by Cummings, Maddux, & Casey (2000), who found that SLD may not be effective advocates because they lack understanding about their strengths and weaknesses, and are inadequately prepared to communicate these to their universities.

**Accommodations in Postsecondary Settings**

After transition to college, SLD usually have a range of accommodations available to them. ADA and Section 504 mandate that services provided by postsecondary institutions must only provide students with an equal opportunity to learn, it does not require that schools provide accommodations that would provide equal results with non-disabled peers (Brinckerhoff, Shaw, & McGuire, 1992). Universities must provide an accommodation if it does not fundamentally alter the program of study and does not produce excessive financial or logistical hardship. If an accommodation is found to be unreasonable the university must only provide the most basic accommodation (e.g. providing a student with dysgraphia with a note taker instead of a course transcript) (Brinckerhoff, Shaw, & McGuire, 1992). A national survey of 98% of all institutions with at least one student with a disability provided a minimum of one support service. Reported accommodation rates varied: 88% of all institutions offered extended time, 77% provided tutors, 69% supplied note takers, 62% made class registration assistance available, 55% offered text on tape, 58% provided adaptive technology, and 45% made sign language interpreters available (Janiga & Costenbader, 2002).

However, many SLD students rate these accommodations as ineffective as often as 25% of the time (Kurth & Mellard, 2002). Kurth and Mellard hypothesized that many accommodations offered by universities are ineffective and inappropriate because they assign accommodations based on the student’s disability rather than understanding what a SLD will practically need in their classroom environment. From a SLD perspective, accommodations are often selected based on multiple factors, including the effectiveness and availability of the accommodation, as well as the amount of increased independence associated with the accommodation and the ease of use. Of these factors, effectiveness of the accommodation was reported as the most important by SLD (Kurth & Mellard, 2002). SLD students rated note takers, extended time on tests, adaptive technology, preferential classroom seating, and public transportation as being effective 80-88% of the time. Tutoring services, tape recorders, alternate test locations, taped text/notes, and mental health services were considered effective 64-78% of the time.

**Potential Barriers to Access**

Even if students receive effective accommodations, they still may encounter many obstacles in the course of their education. In fact, up to 86% of SLD may encounter some type of barrier in their postsecondary education (West et al., 1993). One of the major potential areas for the development of obstacles is faculty/SLD interactions. Research has found that faculty members consider themselves to have positive attitudes toward SLD and are willing to accommodate and advocate for SLD in their classes (Murray, Flannery, & Wren, 2008; Debrand & Salzberg, 2005). A high percentage (80%) of faculty wanted to know what their responsibilities are towards SLD and many want to give additional time and help to SLD (Salzberg et al., 2002).

Yet, even if faculty members do report mainly positive interactions with SLD, students often do not feel the same way. Interviews conducted with SLD indicate that they often lack a sense of belonging (Kurth & Mellard, 2002). SLD sometimes felt that faculty either believes that they are incompetent and must “help” them succeed, or that SLD should not be enrolled in their classes altogether. Additionally, some students felt that they have difficulty accessing academic information because their professors do not know how to properly accommodate them, that faculty are unwilling to provide specific accommodations, or that the accommodation provided by the university was unsubstantial (e.g. a note taker whose handwriting was illegible). Finally, some students feel discriminated against whether in only perception or in reality (Kurth & Mellard, 2002). The potential barriers SLD face are important to understand as they highlight the need at the high school level for high quality transition services that create SLD with high levels of self-awareness and self-advocacy.
skills. At the college level, it illustrates the need for effective and adequate accommodations, and faculty education and support for working with SLD.

**Study Objective**

Previous studies looking at transition services for SLD focused mainly on how high school and college counselors view the transition process (e.g., Milsom & Hartley, 2005). Under the ADA, students are ultimately responsible for ensuring that they receive the services they need so it is important to ask the students directly their perspectives on accessing accommodations, when needed. This study explores the possible effects of key variables that could influence how SLD access services once in the university setting: student level of knowledge about their disability; transition services provided by their high school programs; skills to advocate for themselves in a college setting; and their experiences with peers, faculty, and administration at the postsecondary level.

The context of this study is the student experience accessing resources in a highly competitive, four-year research-intensive university. This population is important because, in secondary institutions, high-achieving SLD were competing with a peer group composed of varying academic abilities. However, once they reach college, SLD compete with other high achieving students and a higher level of academic competence will be expected of them (Dexter, 1982). In this competitive environment, even high achieving SLD may find themselves with academic difficulties that they never experienced before. Three research questions guide this study:

1. Are there differences between the accommodations and services SLD received in high school and what they now receive in this university setting?
2. What opportunities or barriers did SLD face in the accessing services at the university?
3. What level of knowledge do SLD have regarding their disability, available services, and strategies for self-advocacy?

**Method**

**Population and Sample**

Participants were undergraduate SLD who were enrolled in an education department subject pool at a large, public, research one University. Undergraduate enrollment at the University is 37,459 students. The University is highly selective in its student admissions process. Students who are in the top 10% of their class have automatic acceptance to a state university, including the study site. In 2008, 81% of students at the University were admitted under the 10% rule, with a mean GPA of 3.08 and mean SAT of 1219. The student body is diverse, with 51% White/Non-Hispanic, 20% Hispanic, 20% Asian/Pacific Islander, and 6% Black/Non-Hispanic. The department subject pool from which this sample was drawn was made up of 1,297 students, with similar ethnic distribution as the overall undergraduate enrollment at the University (Lavergne & Walker, 2008). A total of 1,161 students utilized disability services at the University in 2007, with roughly equal proportions of men and women. However, the ethnic distribution of students accessing services was more heavily skewed towards students who were White (70%), with lower proportions of Asian (7%) and Hispanic (14%) than in the overall student population. Of the 1,161 students who accessed University services, 15.7% had a specific learning disability (Shultz-Hampton, 2008).

A total of 110 participants completed the study. Unless otherwise indicated, all results in this study are reported as a percentage of the 110 participants. We first asked participants when they were diagnosed with a learning disability. Students responded across a wide range of time periods. Roughly a third, or 28% of students, were diagnosed before 7th grade. Another 43% were diagnosed either in middle (7th-8th grade) or high school (9th-12th grade). A small percentage, 5%, indicated that they were diagnosed in college. About a sixth of students (16%) were not sure when they were diagnosed. The remainder of the students (7%) indicated that they did not receive a formal diagnosis of a learning disability.

We then asked participants whether they knew what diagnosis process was used to determine their learning disability. A total of 30% of students indicated that they were diagnosed using an IQ discrepancy model and 14% checked the Response to Intervention option. However, 1

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1 An IQ Discrepancy Model is a method of diagnosing a specific LD; diagnosed if there is at least a Standard Deviation be-
even with these designations, the majority of participants (71%) indicated that they were not sure about their diagnosis. Students were more certain about the kind of LD that they had. Only 15% were unsure as to the nature of their LD. Participants could check more than one kind of LD in their responses. Most were related to a reading or language processing skill. A total of 32% indicated that they had a listening or auditory comprehension disability, 35% had a reading (e.g. decoding, comprehension, fluency) disability, 16% had a writing disability (e.g. spelling, sentence structure), and 8% had a mathematics disability (e.g. computation, problem solving). In addition to LD, some students indicated that they had disabilities such as ADHD (10%), bipolar (3%), or anxiety (1%).

**Recruitment**

Participants were recruited from an undergraduate Educational Psychology Subject Pool (SP) at the University. Recruitment occurred during the 2007-2008 and 2008-2009 academic years. The SP was composed of students from four undergraduate classes: Individual Learning Skills, Human Sexuality, Adolescent Development, and Introduction to Statistics. As part of their course credit, students had the option of either participating in research studies or completing an alternate essay assignment. At the start of the recruitment process, students filled out an SP screening questionnaire. Researchers were allowed to include questions that related to the specifics of the needed samples. The researchers in this study included information about the grade level of the student and whether they self-identified as a SLD. Students who indicated that they had LD and who were sophomores or older were invited to participate in the survey.

**Survey Instrument**

The data for this study was collected in the form of an online survey. The survey was piloted before the main study to estimate the length of participation (about 15 minutes). The survey format included multiple choice questions, Likert scale, check-list questions, and open-ended questions. The survey was administered through Survey Monkey at http://www.surveymonkey.com/. Once students were recruited via the University SP, participants were provided the link to the online survey.

Students provided a unique identifier (student ID) that both allowed for follow-up with participants if there were questions and to verify that each person completed the survey only once. After they were finished, students received an e-mailed receipt for their participation that was used to document fulfillment of the course requirement. Students had approximately six weeks to complete the study.

The survey (see Appendix A) asked participants to provide information about the accommodations and services they received a) in high school and b) during their undergraduate experience (thus far). This information was gathered using both a checklist and open-ended questions. To gather accommodation information, students were provided with a list of common accommodations and asked to check if they received those accommodations in high school and if they had received these accommodations in college. To gather information about transition experience, students were asked to answer a series of open-ended question about experiences in the transition.

**Analysis**

We used a mixed-methods approach to data analysis for this study. Data analysis for each of the research questions is as follows:

1. Are there differences in the accommodations and services SLD received in high school and what they now receive in college?

The questions related to specific services only provided descriptive data. Results from both checklists, one for high school and one for college, were analyzed in summative form (percent of respondents indicating each type of accommodation or service). Results were analyzed using the Chi Square method to determine if accommodations and services used in high school were used to the same extent at the University. There were also several open-ended questions about services or accommodations. After all responses were reviewed, they were independently coded by two researchers on a set of content themes that emerged from the data. The coding process was repeated until there was 100% agreement on coded categories. Results were aggregated in summative form (i.e. percent of respondents addressing each topic).
2. What opportunities or barriers did SLD face in accessing services at the university?

This research question was answered using the open-ended questions in the second portion of the survey about experiences at the University. After all responses were reviewed, they were independently coded by two researchers on a set of content themes that emerged from the data. The coding process was repeated until there was 100% agreement on coded categories. Results were aggregated in summative form across the categories of opportunities and barriers.

3. What level of knowledge did SLD have regarding their disability, available services, and strategies for self-advocacy?

This research question was answered using descriptive data from questions regarding the transition preparation process. Results from both checklists were analyzed in summative form (i.e. percent of respondents indicating each type of preparation activity).

Results

Accommodations and Services

Figure 1 summarizes the accommodations and services SLD receive in high school (HS) and now at the University (only those with statistical differences in overall frequency are shown in the Figure). Students were presented with 16 accommodation options and asked to indicate which accommodations they received in each institution and who provided them. The source

![Figure 1 Mentoring Model](image-url)
of service varied widely across the kinds of accommodations or services.

Statistical analyses about the frequency of accommodations or services are collapsed across all sources of the service. A significant difference was found between use in high school and college in nine of the 16 accommodations that were surveyed. The direction of that difference, however, depended on the specific accommodation or service. Students were more likely to have an assistive technology accommodation in HS (13% vs. 10%), $X^2 (1, N=110) = 58.199, p<.05, \phi=.727$. Alternate format tests were more often given as an accommodation in HS (7% vs. 5%), $X^2 (1, N=110) = 21.628, p<.01, \phi=.443$. Use of a tutor was more prevalent during HS (32% vs. 29%), $X^2 (1, N=110) = 35.849, p<.05, \phi=.571$. Physical Therapy was more common as an accommodation when students were in HS (7% vs. 5%), $X^2 (1, N=110) = 61.752, p<.01, \phi=.749$. For all of the above, even with statistical significance, the actual percentage difference was quite small.

There were some greater differences in accommodations and services that were more frequently received at the postsecondary institution than in high school. Students at the University (11% vs. 6%), were more likely to receive the accommodation of a classroom assistant, $X^2 (1, N=110) = 29.571, p<.001, \phi=.518$. Students at the University (35% vs. 26%) were more likely to receive the accommodation of extended time in college, $X^2 (1, N=110) = 13.332, p<.01, \phi=.348$. Separate settings for tests was also more common as an accommodation at the University (45% vs. 27%) $X^2 (1, N=110) = 17.798, p<.001, \phi=.402$. Students in college (28%) were more likely to attend individual counseling than they were in HS (19%), $X^2 (1, N=110) = 100.6, p<.001, \phi=.956$. Lastly, other accommodations (i.e. reduced course load, priority registration, etc.) were given to students attending college (6%) at a greater rate than when they were in HS (4%), $X^2 (1, N=110) = 71.689, p<.05, \phi=.807$.

### Opportunities and Barriers

The second question addresses what opportunities or barriers students face in the transition between high school and college. Results detailing information gathered from students regarding opportunities and barriers students faced in college are shown in Table 1. The left side of the table gives the overall question stem and the percentage of students who responded that they had interacted with various members of the University community or, for the last item, experienced obstacles. On the right hand side of the column is the distribution of explanations for their responses. These are the themes that arose in the content analyses for each item.

Results shown in this table indicate that there was an overall low level of interaction between students and college faculty and staff. About a third (32%) of students had contacted their faculty, mostly in order to ask for letters of recommendation for jobs, graduate school, or other competitive endeavors. More students (48%) had contacted the Office of Students with Disabilities (OSD) about their learning disability, most with the task of obtaining accommodations. Very few SLD (2%) participated in other OSD activities or received academic counseling (2%). In addition, very few students contacted residential life (2%), learning center (5%), or academic counseling within their department or college (2%) about their learning disability. As far as interaction with peers, about a third (32%) indicated they had shared information about their LD with friends or colleagues.

The last question asked students to indicate where they had faced obstacles in obtaining services at the University. About a fifth (21%) noted that they had indeed had difficulty obtaining accommodations services related to their LD. There was a range of challenges noted by participants in this survey. Two categories of responses were related to faculty, specifically, with 5% noting that faculty members were unwilling to accommodate and 2% noting the challenges of scheduling time with faculty. Two additional categories were related to other institutional aspects of the University, including 1% noting a refusal by the University to provide a specific accommodation and 1% saying it is hard to get a counseling center appointment. The remaining categories address other specific difficulties, such as getting a test set up (2%), getting to a doctor’s appointment (2%), or getting an evaluation (2%). Only 3% of all students commented on the academic rigor as a challenge to their obtaining services and only 2% indicated that they did not know that services might be available.

### Student Knowledge

The third question asks what level of knowledge students have regarding their disability, available services, and strategies for self-advocacy. As described earlier, results indicate that almost 84% of students were able to identify their learning disability and when they were diagnosed. They were less confident as to how the
Table 1

Opportunities and Barriers in Obtaining University Accommodations and Services

<table>
<thead>
<tr>
<th>Have you...</th>
<th>Yes N = 110</th>
<th>Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interacted with faculty about your Learning Disability?</td>
<td>32%</td>
<td>25%: Provide accommodation letters</td>
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<tr>
<td></td>
<td></td>
<td>3%: Discuss Strategies for Studying</td>
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<tr>
<td></td>
<td></td>
<td>4%: Informed of disability</td>
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<tr>
<td></td>
<td>43%</td>
<td>31%: Met in order to receive accommodations</td>
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<tr>
<td></td>
<td></td>
<td>3%: Discuss available assistance</td>
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<td></td>
<td></td>
<td>2%: Academic Counseling</td>
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<tr>
<td></td>
<td></td>
<td>3%: Took exams in office</td>
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<tr>
<td></td>
<td></td>
<td>2%: Participated in OSD activities</td>
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<tr>
<td></td>
<td></td>
<td>2%: Multiple</td>
</tr>
<tr>
<td>Interacted with other administrative staff about your Learning Disability?</td>
<td>7%</td>
<td>5%: Learning Center</td>
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<tr>
<td></td>
<td></td>
<td>2%: Academic Counselor</td>
</tr>
<tr>
<td>Interacted with other students about your Learning Disability?</td>
<td>32%</td>
<td>20%: Informed peers about disabilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5%: Asked for work completion strategies</td>
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<td></td>
<td></td>
<td>2%: Emotional support</td>
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<td></td>
<td></td>
<td>2%: Asked advice for getting accommodations</td>
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<tr>
<td></td>
<td></td>
<td>1%: Joined Study Groups</td>
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<tr>
<td></td>
<td></td>
<td>2%: Asked for note takers</td>
</tr>
<tr>
<td>Interacted with residential life staff (dorm R.A.s, etc.) about your Learning Disability?</td>
<td>2%</td>
<td>1%: Informed resident life staff about disabilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1%: Dorm resident made fun of disability</td>
</tr>
<tr>
<td>Experienced obstacle(s) to obtaining accommodations or services for your Learning Disability?</td>
<td>21%</td>
<td>5%: Professors unwilling to accommodate</td>
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<td></td>
<td></td>
<td>2%: Professors were hard to schedule with</td>
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<td></td>
<td></td>
<td>1%: U refused to provides specific accommodation</td>
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<td></td>
<td></td>
<td>1%: Hard to get counseling center appointment</td>
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<td></td>
<td></td>
<td>2%: Difficulty in getting/paying for an evaluation</td>
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<td></td>
<td></td>
<td>2%: Difficulty setting up extended tests</td>
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<td></td>
<td></td>
<td>2%: Not aware services were available</td>
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<td></td>
<td></td>
<td>2%: Difficulty getting to doctor’s office</td>
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<tr>
<td></td>
<td></td>
<td>3%: General school difficulties (i.e. work was hard)</td>
</tr>
</tbody>
</table>

Table 1 Note. This table provides information on opportunities/barriers that students have faced in obtaining accommodations/services. The first column lists the specific survey question and the second is the percentage of students who answered yes to that question. The last column provides a break down of the specific content themes elicited for the yes responses. The denominator for all percentages is the total number of students in the study (N = 110).
I had an IEP
I have a copy of IEP
Academic goals
Instructional strategies
Team member responsibilities
Progress towards goals
Other

Figure 2 Note. This figure provides information regarding IEP and transition services (N = 110). Students were asked if they had an IEP (top row). If they did report having an IEP, students were asked to complete the remaining five questions (have a copy, IEP had academic goals, IEP had instructional strategies, IEP had team member responsibilities, IEP had progress towards goals, and Other).

diagnosis was made, with 71% indicating that they were unsure. Knowledge about specific services or accommodations also varied across the sample. IEP plans and transition goals were the first source of information we asked students about in this survey. Transition-related information they recalled being covered in IEP meetings is shown in Figure 2. Results indicate that 91% of students did not recall having an IEP at all. This is despite data that indicates that they did receive accommodations for which an IEP would have been necessary. Of those who could recall an IEP, a large proportion of students could not recall covering basic transition topics in their final IEP meetings, teacher responsibilities, or goals towards academic progress.

Discussion

Limitations
The results from this study provide a starting point for further discussion about the postsecondary transition experience for students with LD. The results from this study will be discussed in reference to the three research questions guiding this study from a provider and student perspective. The findings here must be viewed with caution, however, due to a number of limitations in the study design. The first limitation is that this is not a representative sample of SLD, either at the University or those leaving secondary education settings. The results are also limited due to the sampling frame. Participants represent a convenience sample obtained from a subject pool that was a part of their course requirements. We did not include the service providers on the campus in a parallel form of the survey. Additionally, the results here rely heavily on student recall of information from their primary and secondary school experiences. Participants may not have an accurate memory of their transition planning. Mitigating this limitation is the fact that many participants indicated that learning disability diagnosis occurred relatively recently in their school careers, thus IEP team experiences may be more salient for these late-diagnosis students. Lastly, it is possible that many students who participated in the study actively choose not to use their accommodations, either due to lack of need or other factors. Because these data draw from a single University, the findings here may be most appropriately considered as a case study rather than as a representative sample of SLD at four-year postsecondary settings. The discussion below must be viewed with
these limits and specifications in mind.

Accommodations and Services

Results regarding the accommodations and services that students received indicate, in most cases, some stability in the level of access to services between the high school and postsecondary setting. Seven of the 16 accommodations showed no difference in the number of students who received that accommodation in high school and in college. Of the nine accommodations that did show a significant difference, only four (assistive technology, tutoring, alternate format tests, and physical therapy) showed a decrease over the transition process. This is an interesting finding from a provider perspective because it indicates that generally students are receiving similar or more accommodations in college than they were receiving in high school. This result is surprising because it is contrary to what many might expect when students need to advocate for their own services after having the process facilitated by an IEP team. It could be that providers are simply offering SLD a “menu” of options based on their disability, rather than less and more specific educationally focused accommodations offered under IDEA (Brinckerhoff et al., 1992).

From a student perspective, it may be that students reported that they have more accommodations (e.g. extended time and separate setting) than they did in high school because the academic demands changed from high school to college. Previous literature has shown that students tend to utilize accommodations that they view as “effective” (Kurth & Mellard, 2002). The use of a classroom assistant, extended time, separate setting, individual counseling, and other services may be accommodations that are more salient and therefore are viewed as more “effective” by students in college than those in high school, resulting in students who were more proactive in obtaining these specific academic services.

The accommodations that decreased (e.g. physical therapy) may not be applicable to the kind of services that are a part of the (now) adult’s relationship with school staff. This idea is supported in that the accommodation identified in research (Kurth & Mellard, 2002) as the second most effective, extended time on tests, was also the accommodation most often reported by SLD. However, other accommodations reported to be highly “effective” in Kurth and Mellard’s (2002) study, such as note takers and use of adaptive technology, were reportedly accessed less by students. In Kurth and Mellard’s study, only 39% of students identified as having a LD. It may be that the accommodations viewed as the most “effective” to SLD are different than those which are identified by individuals with different disabilities attending other institutions. In sum, as the context of accommodations use changes, so does the use of specific accommodations.

Accessing Resources

Although there was an increase in accommodations and services from high school to college, results showed that students may have the opportunity to access even further support than they currently report. Only 43% of the students in this study indicated that they interacted with the OSD, most often to obtain accommodation letters to provide to faculty. Students who interacted with OSD were more likely to interact with their faculty about their LD (and vice versa). In addition, students who initiated contact with faculty and OSD reported that they were more satisfied with the overall services they received from the University. From a student perspective, it may be that low student utilization of OSD is a result of this population not needing to access their accommodations. In this study only sophomores and above participated. It may be that these students have found, in their first year on campus, that they are able to meet the University’s academic demands without accessing OSD, resulting in the low utilization of this office. Another explanation may be that SLD found the accommodations offered were inadequate or difficult to implement and as a result stopped utilizing OSD. Research has found that even effective accommodations that students identify as highly valued may be rendered useless by poor execution and implementation (Kurth & Mellard, 2002).

About a third (32%) of students interviewed had discussed their disability and necessary accommodations with faculty members. The majority of interactions among students and faculty regarding LD are more formal interactions, related to official requests for letters of accommodations, rather than informal meetings and discussions. The low percentage of interaction among students and faculty is potentially a concern for service providers as faculty members are in the best position to provide direct help and services to SLD. An additional concern is if students limit themselves to formal meetings (i.e. giving faculty a copy of accommodation letters) rather than interacting frequently and informally with professors (e.g. in office hours), the student may miss out on supplementary support that previous research (Murray
et al., 2008) has shown professors are willing to provide (e.g. advice about future plans or personal goals).

Again, a student perspective on these results may be that there is less of a desire or a need to contact faculty than one may assume. Previous research has shown that often SLD feel that faculty view them as if they do not belong, are incompetent, and that faculty do not possess the knowledge or desire to effectively accommodate them (Kurth & Mellard, 2002). This perception may drive SLD from approaching faculty for assistance.

However, it may be the case that these students do not feel that they need to inform the faculty of their disability. SLD may not be struggling academically, or may have already found ways to independently work in this new setting. Another explanation could be that classes are taught differently at the university level than in high school, with more group projects and untimed assignments (compared with timed class tests). They may have also have discovered alternative means of supplementary support (e.g. parents, classmates) and, as a result, do not need to interact with faculty about their disability unless they wish to access formal accommodations. In specific instances, such as a particularly demanding course, students might have greater academic difficulty that goes beyond their current support network or strategies. It may be that in such cases students are motivated to interact further with their faculty, resulting in the lower but still present 32% student-faculty interaction rate.

Obstacles

The next component of the study focused on what obstacles students had in obtaining their accommodations. A total of 21% of students surveyed indicated that they had encountered an obstacle to obtaining accommodations while at the University. A total of 13% participants reported obstacles that could be remediated such as setting up tests or getting an evaluation. A service provider might wonder whether, if more students interacted with faculty or OSD, would the number of students encountering obstacles be reduced? It may be that the low level of OSD utilization is itself an institutional obstacle and that service providers should do more to encourage their students to at least touch base with them, even if in the end they choose not to utilize services.

However, even though students noted a wide range of obstacles, relatively few students encountered each challenge. West et al. (1993) also found that the barriers students faced were varied, ranging from barriers associated with disability specific services and accommodations (e.g. lack of a ramp into a building), to being unaware of available services and to which ones they were entitled to, to non-disability specific barriers (e.g. lack of understanding and cooperation from faculty), and social and emotional barriers (e.g. feeling socially isolated, or as if they were an outcast). The variety of challenges found in our study indicated that students did not identify an overarching institutional obstacle. Rather, they viewed obstacles as dispersed and due to individual circumstances. Supporting this conclusion is the result that satisfaction with disability services was not significantly correlated with obstacles students faced. Even if students did encounter obstacles to obtaining accommodations, it did not appear to impact significantly their satisfaction with the services they received.

Knowledge as a Resource

Knowledge about one’s disability and educational needs is essential to a successful transition to a postsecondary setting. Unfortunately, from a service provider perspective, the overall finding in this study is that students have varying levels of knowledge in many aspects of having a learning disability. When looking at results for knowledge of disability, 84% of students could identify in what area they had a specific disability. This was an area of strength in this population. However, 70% of students were unsure as to the method by which their diagnosis was reached. When examining this question, we found that students lack knowledge of their IEP plans. All students in this study reported that they received at least one accommodation in K-12 that could have only been given through an IEP (or 504) Plan. However, only 9% of students indicated that they had an IEP (or 504) plan. From a provider prospective, this response seems to signify that a majority of the students questioned in this study lacked some basic knowledge about certain aspects of their disability and IEP process at their primary and secondary schools.

When looking at college preparation received by these students, 82% of students reported that they did not have a final IEP meeting in high school. Additionally, an average of 48% reported that they received no guidance on who to contact in the OSD at their university, what accommodations or services they may need from their university, how to document their disability for their university, or discuss their most recent evaluation. Of greatest concern to providers may be that only 2% of students discussed how to communicate to their University about what services and accommodations
they would need to be successful during their last IEP meeting. This indicates that SLD are potentially under-prepared to locate services, obtain services, and advocate for services once they reach college. Other research has found that many providers feel that SLD enter college with a deficit in knowledge about some aspects of their disability and that most administrators view this information as being necessary for the successful navigation of college (Janiga & Costenbader, 2002). It is possible that students without services in an academically rigorous setting would struggle until they begin to fail, and only then begin to search for the help they were entitled to and should have been informed about prior to the beginning of their college career.

However, from a student’s perspective, results could be interpreted differently. A total of 84% of students could identify their disability, and while method of diagnosis may be helpful for service providers to know, one could argue it’s not vital that students know this in order to receive services. The same might be said for IEP knowledge. On the whole, students reported information about the accommodations and services they received; in contrast with the diagnostic process, services were a salient component of the IEP process to participants. This finding is in line with other research (Schreiner, 2007) which discovered that students tend to know more about the services that their special education program provides than about what is on their IEP. While other IEP content specifics could be helpful for postsecondary providers, lack of this knowledge may not hinder motivated students from receiving basic accommodations. Finally, students reported low knowledge about final transition meetings. It may be that students attended the meetings but don’t remember it. This concept is supported in research conducted by Lehmann, Bassett, and Sands (1999) which found that if students are not prepared for their IEP meeting, they often feel lost, do not know what is going on, and view the meetings as meaningless. Another hypothesis is that that most SLD at the University are academically competent enough that the lack of transition information does not harm them.

Future Research

There is a great deal of future research that would be beneficial to SLD and those who serve them. One area that these findings could be extended is through a longitudinal study design. This study asked SLD to recollect their experiences with IEP teams and accommodations in high school. An alternative approach would be to begin documenting SLD experiences as they are completing middle school and high school years, and to follow them through to their postsecondary experiences. While some may matriculate at a four-year institution, others would take different paths. The variability in career planning and implementation may be a significant factor in how SLD access and use resources. A second area for future research is one on a local level, perhaps documenting the interaction between students and faculty when SLD request accommodations for classroom activities. This would provide a more nuanced perspective on how SLD approach, with OSD assistance, their faculty on such issues. Finally, the field would benefit from a clearer understanding of how high school SLD are coached in discussing their needs and rights during discussions about transitions to postsecondary settings. Research that studies the efficacy of various approaches, including those that focus on self-knowledge and advocacy, would aid in best-practices for high school IEP teams.

References

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Appendix

Survey Instrument

1. In what areas do you have a Learning Disability? (Please check all that apply)
   a. Language processing (listening, comprehension)
   b. Reading (decoding, comprehension, fluency)
   c. Writing (spelling, sentence structure, paragraph structure, fluency)
   d. Mathematics (computation, problem solving, fluency)
   e. I am not sure.

2. What grade were you in when you first received a formal Learning Disability diagnosis? (Please check one.)
   a. Kindergarten - 3rd grade
   b. 4th - 6th grade
   c. 7th - 9th grade
   d. 10th - 12th grade
   e. I am not sure.
   f. I never received a formal Learning Disability diagnosis. (exit survey)

3. What method was used to determine your Learning Disability diagnosis? (Please check all that apply.)
   a. IQ discrepancy model (scores on intelligence tests are higher than scores on proficiency in specific academic content area).
   b. Response to Intervention (students receive remedial instruction first, then receive diagnosis if this is not successful in raising achievement)
   c. Other (please describe) __________________________
   d. I am not sure.

4. Do you currently have any additional disabilities or diagnoses that may affect your college learning experience?
   a. Yes
   b. No
   c. If yes, please describe.

5. Do you know what the Americans with Disabilities Act is?
   a. Yes
   b. No
   c. Not sure
   d. If yes, describe its purpose and how it relates to you and your experience in college.

6. Did you have an Individualized Education Program (IEP) plan in high school?
   a. Yes
   b. No (if no, skip to question # 9)

7. Do you have a copy of your last IEP?
   a. Yes
   b. No
   c. I used to, but I don’t know where it is now.

8. What was on your final IEP? (Please check yes, no, or not sure for each item)
   a. Goals/objectives for academic achievement
   b. Instructional strategies to aid meeting academic goals
   c. Assignment of team members responsibilities in plan implementation
d. Methods for evaluation of progress towards goals

e. Other____________________

f. I don’t know

9. When was your last Individualized Education Plan (IEP), 504 plan, or Admission Review Dismissal (ARD) meeting in high school?
   a. Senior year
   b. Junior year
   c. Sophomore year
   d. Freshman year
   e. I don’t remember.
   f. I didn’t have one. (Skip to Question # 11)

10. In this last meeting, did you discuss any of the following? (Please check yes, no, or not sure for each item)
   a. Who to contact in the Office for Students with Disabilities at your college or university
   b. What accommodations or services you may need from your college or university
   c. How to document your disability for your college or university
   d. Your most recent evaluation
   e. Communicating to the University what services and accommodations you need to be successful

11. What types of accommodations or services did you receive in high school? (checklist with provided by school, provided by parents, provided by other source, and did not receive)
   a. Alternative format assignments
   b. Extended time on assignments
   c. Learning strategies or study skill assistance
   d. Note taker services
   e. Interpreter services
   f. Assistive technology
   g. Classroom assistants
   h. Tutoring (peer tutoring or other additional one on one instruction)
   i. Pull-out instruction (additional instruction with aide or other teacher)
   j. Alternate format tests
   k. Extended time on tests
   l. Separate setting for tests (reduce distraction)
   m. Individual counseling or therapy
   n. Support groups
   o. Physical therapy or functional training
   p. Other (Please describe)

12. What types of accommodations or services have you received while enrolled at the University? (checklist with provided by Office of Disabilities, provided by parents/self, provided by other University source, did not receive)

   (same list as above)

For each of the following, participants responded with Yes, No, and If yes, please describe.

13. Have you interacted with faculty about your Learning Disability?

14. Have you interacted with Office of Disabilities about your Learning Disability?
15. Have you interacted with other administrative staff (The Learning Center, Department administration, Dean’s office) about your Learning Disability?

16. Have you interacted with other students about your Learning Disability?

17. Have you interacted with residential life staff (dorm R.A.s, etc.) about your Learning Disability?

18. Have you experienced obstacle(s) to obtaining accommodations or services for your Learning Disability?

The final question in this section was answered on a 7 point Likert scale from strongly dissatisfied to strongly satisfied.

19. How satisfied have you been with the services you have received at The University?
   a. What has led to your level of satisfaction or dissatisfaction with services you have received? (please describe)