LISTENING TO THEIR VOICES: FACTORS THAT INHIBIT OR ENHANCE POSTSECONDARY OUTCOMES FOR STUDENTS' WITH DISABILITIES

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Although an increasing number of students with disabilities are considering postsecondary educational opportunities, many of these students find the challenges daunting as compared to their secondary educational experiences. The purpose of the qualitative case study reported herein was to learn more about students' perceptions of services received in college in order to develop a clearer understand of how to better ensure positive outcomes. Fifty-nine students with various disabilities and six disability resource coordinators from five two-year community colleges and three four-year universities participated in the study. Three major themes emerged from the data, including: (a) capitalizing on student self-determination skills, (b) implementing formalized planning processes, and (c) improving postsecondary support. The author developed a preliminary framework based on the analysis of the data. This framework included three key factors that contribute to the success of students with disabilities in postsecondary institutions; (1) self-determination, (2) planning efforts, and (3) postsecondary supports. The article concluded with recommendations for improving postsecondary outcomes for students with disabilities.

While attendance by students with disabilities in postsecondary institutions has increased in past decades (National Center for Educational Statistics, 2006), only 12% of individuals with disabilities graduated from college (Dowrick, Anderson, Heyer, & Acoster, 2005). Research suggests that high school experiences of students with disabilities do not adequately prepare many of them for postsecondary success (Bangser, 2008). Inadequate transition planning while in secondary school is one reason for the low graduate rate (Gill, 2007), indeed; Kochhar-Bryant, Bassett and Webb (2009) refer to the transition from secondary to postsecondary settings as a *transition cliff* for young people with disabilities (p. 23). Key differences between secondary and postsecondary educational settings include the roles and responsibilities of support staff (e.g., those of disability specialists in postsecondary settings versus those of special education teachers in secondary settings), legal protections for students with disabilities, and greater demands for students' self-reliance (Mellard, 2005). Another major difference between secondary and postsecondary services for students is a shift of responsibility from special educators and parents to the students themselves with regard to obtaining information and advocating for services.

The article examined some of the challenges many students with disabilities encountered in postsecondary educational settings through a qualitative case study. First, a brief overview of these challenges and supports reported from other researchers are presented. Then, through an analysis of the case study findings, a preliminary framework was developed that included supports needed to facilitate students' success. The article concluded with suggestions from students in the study to educators to aid in improving outcomes of students with disabilities as they transition into postsecondary education. The ultimate purpose of this article was to offer effective strategies on how to support students' with disabilities in their transitions from secondary to postsecondary educational experiences and improve their chances of success.

Challenges in Postsecondary
Even though students with disabilities have gained increased access to higher education, significant access and retention barriers continue to plague these students in postsecondary institutions (National Council on Disability, 2003; Stodden, 2001). For over a decade, researchers have been examining

challenges for students with disabilities in their transition to postsecondary (see Fairweather & Shaver, 1991; Lehmann, Bassett, & Sands, 1999; Wagner & Blackorby, 1996) in an effort to mitigate those challenges and increase their access and retention. These barriers fall into categories: architectural/access, programmatic, informational, and attitudinal (Garrison-Wade, 2007; Lehmann, Davies, & Laurin, 2000).

Architectural impediments that students with disabilities encounter include inadequate access to public transportation, university facilities, and technology. Hart, Zafft, and Zimbrich (2001) reported transportation-related issues for students with disabilities learning to use public transportation; needing support to identify and arrange for transportation, such as car pooling with other college students; and obtaining travel vouchers, accessible transportation, and driving lessons. Once students overcome the architectural hurdles preventing their presence in the learning environment, they may face programmatic barriers. These include support services that are either unavailable or inadequate to assist students in meeting academic and nonacademic responsibilities (Dowrick et al., 2005; Stodden & Conway, 2003). Additionally, informational barriers impede students' capabilities to succeed in the higher education environment. Important information to which students may have limited access includes their knowledge about differences in federal law between secondary and postsecondary services (Skinner & Lindstrom, 2003), the types of campus services available to them, and how to access those services (Getzel, 2005; Gill, 2007). Most importantly, students lack the information and preparation necessary to meet the academic expectations of postsecondary institutions (Kochhar-Bryant et al., 2009). Indeed, many students are not prepared emotionally or academically to handle the rigorous college work load (Mellard, 2005). Finally, students may experience attitudinal challenges, such as negative attitudes among faculty toward students with disabilities (Garrison-Wade & Lehmann, 2007; Mellard, 2005); misperceptions about their skills and abilities by faculty, staff, and their nondisabled peers (Kochhar-Bryant et al., 2009); and professors and school personnel who lack sensitivity concerning students' needs (Burgstahler, Crawford, & Acosta, 2001; Carney, Ginsberg, Lee et al., 2007; Garrison-Wade & Lehmann, 2007).

Support Factors
Research on experiences of students with disabilities in postsecondary education also yields information about what support factors are essential for these students to be successful. Key support factors include self-awareness, self determination and advocacy, self management, adequate preparation for college, and assistance technology. Hallahan and Kauffman (2006) define self-determination as *the ability to make personal choices, regulate one's own life, and be a self-advocate* (p. 538). Researchers have long advocated the importance of students with disabilities developing self-advocacy and self determination skills. Stodden and Conway (2003) state self-advocacy and self-determination skills are important skills for students with disabilities to have prior to their postsecondary experience. Furthermore, Skinner, and Lindstrom (2003) encourage students' with disabilities participation in postsecondary preparation programs and developing self-advocacy skills.

Current research confirms the importance of students with disabilities developing self-determination and self-advocacy skills (Getzel & Thoma, 2008). Self determination is viewed by some researchers as a common characteristic present in students who successfully enter and complete college (Finn, Getzel, & McManus, 2008). A study conducted by Anctil, Ishikawa, and Scott (2008) offers a model of academic identity development for college students with disabilities from the integrative self-determination of persistence, competence, career decision making, and self-realization. The researchers' findings revealed evidence of self-determination as a predictor of transition success. Carney et al., (2007) also confirm a need for students themselves to increase self-advocacy skills. Hadley (2006) states, *students with learning disabilities who do not self advocate have a very difficult time adjusting to college life* (p.10).

In addition to support in developing self determination and self advocacy, students with disabilities need support in self management, college preparation, and exposure to assistive technology to augment their learning. Getzel (2008) presents four characteristics of support services that effectively help students to persist and remain in college; (a) services that develop students' self-determination skills, (b) services that teach self-management skills, (c) services that expose students to assistive technology, and (d) services that and promote career development by providing internships or other career-related services. Garner (2008) found similar results in her study of three postsecondary students with learning disabilities. She also stresses the importance of students having planners to manage their schedules and assignments, and the development of self-advocates skills. Similarly, through a content analysis of literature on support factors, Webb, Patterson, Syverud, and Seabrooks-Blackmore (2008) found five skills students need to acquire. These skills include: (a) becoming more self-determined, (b) developing

self-advocacy and social skills, (c) having strong academic preparation, and (d) understanding the accommodations they need and becoming familiar with assistive technology. Webb and colleagues concluded that students with disabilities were unprepared for postsecondary academic requirements and learning strategies; they lacked strategies around effective studying and note-taking, time-management, test-taking, and information retention necessary for academic success.

As illustrated in the literature review, researchers have already found key factors that support students with disabilities' positive outcomes in postsecondary institutions. This study contributes to the existing body of evidence on the importance of student self-determination and pre-college preparation program in postsecondary outcomes. Additionally, the author recommends improvements in postsecondary supports to facilitate successful outcomes for students with disabilities including architectural accessibility, academic accommodations, mentoring supports, and responsive financial aid policies. This study models other studies (Lehmann et al., 2000; Quick, Lehmann, Deniston, 2003; Stodden & Conway, 2003; Toma & Getzel, 2005) that incorporated authentic voices of students who had first-hand experiences with the challenges of pursuing a postsecondary education and supports needed for positive college outcomes. These voices offer common sense solutions to enhance other students' with disabilities postsecondary outcomes.

Method
This research project was part of a larger study involving the Exceeding Expectations Model Demonstration Project (EEP). EEP implemented a demonstration model for increasing the access and retention of students with disabilities in postsecondary institutions in five states: Colorado, Idaho, Iowa, South Dakota, and Wyoming (Lehmann & Davies, 2001). The project incorporated a four step process-oriented model addressing: 1) students' concerns in regards to access and retention in postsecondary education by providing vital information and strategies for preparation for the postsecondary educational system, 2) key secondary educators were targeted to receive training and support to facilitate students' readiness for the postsecondary educational experience, 3) postsecondary institutions (support personnel, instructors, etc.) were given support and encouragement to create an environment conducive to serving students with disabilities; thereby, minimizing the attrition rate, and 4) the project developed products and strategies for enhancing students' access and retention in postsecondary institutions. This qualitative study used a single case (embedded) design with the EEP as the single case; the various sites were embedded units (Yin, 2003). The primary source of data collection included student focus group discussions and disability resource coordinators individual in-depth interviews. The study was conducted in five two-year community colleges and three four-year universities in five Midwestern states.

Participants
Fifty-nine students and six Disability Resource Coordinators (coordinators) volunteered to participate in the study. The only student selection criterion was that they had to have received support services at a participating EEP site. The level of services and support provided to students varied at each participating institution; however, all the institutions provided special accommodations, tutoring, vocational rehabilitation, student focused meetings, technology assistance, academic coaching, career counseling, other counseling services, and self-advocacy training. The student participants were males (n = 29) and females (n = 30). Eighty-nine percent were White, of non-Hispanic origin. The highest minority representatives were Hispanic/Latino (5.5%). Participants' ages ranged from 18 to 56, with 19 as the mode. Eighty-four percent were enrolled as full-time students. Respondents' enrollment statuses were as follows: 27 students in two-year junior colleges, 18 students in four-year universities, and 14 students in community colleges (four of these students were in a high school to college transition program). In terms of disabilities, students' self-identified types of disabilities varied from cognitive, intellectual, physical, or multiple disabilities, including: 49% (n=29) learning disability, 27% (n=16) multiple disabilities, and 24% (n=14) various physical impairments (e.g., hearing, orthopedic, speech and language, and vision) .

The researcher formally collected data from six coordinators and informally talked with nine additional site coordinators regarding activities and services available to students with disabilities at their institutions. Of the six coordinators, five were female and one was male, and only one was not Caucasian. To be included in the study, coordinators were required to have at least two years experience working with students with disabilities. Years of experience ranged from three to 17, with a mean of eight years.

Data Collection and Analysis
The researcher conducted nine focus group discussions with postsecondary students with disabilities at the participating sites. The group sizes ranged from three to eleven students. The main purpose of the sessions was to determine if students perceived they were receiving adequate support and the training needed to promote their postsecondary success. Refer to table 1 for the focus group questions. The coordinators responded to interview questions regarding their perceptions of students' needs during college. Refer to Table 2 for a list of interview questions.

Next, the researcher coded all qualitative data collected line-by-line using the constant comparative analysis process (Strauss & Corbin, 1998). This process involved reviewing data to compare information collected from interviews and focus groups. Interview and focus group questions provided the initial coding organization. Open codes were grouped into axial codes. Axial coding involved linking the open codes together. In the final step, selective coding, explicated themes were developed and compared. A second researcher reviewed the data to verify the original coding by confirming (or disconfirming) themes.

Table 1. Students' Focus Group Questions

Focus Group Questions

1. Who helped you decide to apply for college?

2. What barriers did you encounter in applying for college?

3. What high school experiences, and or resources prepared you for college?

4. How could your high school have helped you to better prepare for college?

5. What skills and training do you think students need prior to entering college to be successful?

6. What do you know about the services on your campus that provide accommodations to students with disabilities?

7. Discuss your level of satisfaction with these services.

8. What has been the most important help you have received so far in college?

9. Which support and/or resources have been the most helpful?

10. What barriers have you encountered in completing your postsecondary (College) program?

11. Tell me about specific experiences, positive and/or negative, that you have had regarding disability-related access issues with faculty and staff in high school and/or at college.

12. Share any information you think could be helpful to faculty and staff, students, and Exceeding Expectations project to better provide services and activities to assist students with disabilities.

Table 2. Disabilities Resources Coordinators' Interview Questions

Interview Questions
1. Tell me what goals do you consider to be most useful in preparing students with disabilities for postsecondary education opportunities?

2. What goals do you consider to be least beneficial in supporting students to successfully complete college?

3. Which interventions do you consider to be most useful in preparing students with disabilities

for postsecondary education opportunities?

4. Which interventions do you consider to be least beneficial in supporting students to successfully complete college?

5. What ongoing concerns do you have regarding supporting students with special needs entrance into postsecondary education?

6. In an ideal world what would the best way to support students with disabilities in their transition from high school to college?

7. How is your site or situation unique in any way that may influence how you   perceive these issues?

8. What has the Exceeding Expectation Grant Project done for your transition program?

9. What support do you need from the Exceeding Expectation Project?

10. What other thoughts would you like to share about your project?

Findings
Three themes emerged from student identification of factors that inhibited or enhanced their prospects for postsecondary success. These themes were (a) capitalizing on student self-determination skills, (b) implementing formalized planning processes, and (c) improving postsecondary support. Participants offered a bleak picture of their high school experiences and their entrance into and progress towards successful completion of postsecondary education as is shown in the quotes below.

Capitalizing on Student Self-determination
Facilitating postsecondary educational success involved capitalizing on students' self determination by creating high expectations. The attitudes and characterizations secondary teachers, postsecondary instructors, and families held concerning these students were important because they influenced these students perception about their capabilities. Low expectations, lack of understanding of students' disabilities, and self-awareness impacted some students' ability to capitalize on their self-determination skills. The quotes below demonstrate how three students managed their challenges by having exhibiting strong self-determination skills.

I've learned that you have to rely on yourself before you learn to rely on others. You learn how to do things by yourself first before having other people doing things for you. I've known for most of my life that when I have to do things by myself, I have to believe in myself and actually do what I want to do. Just follow your dreams.

I hate it when people tell me I can't do something because then it makes me want to do it even more. It increases my motivation. I will go at it until I actually succeed in doing what I want. I'll push my way through. I've been in school for ten years. I'm just taking it one step at a time.

There is no shame. We're our own self-advocate. We need to go out and learn to do these things ourselves and be independent. That's something that each one of us wants to be. We want to take care of ourselves. I tried everything that the college has to offer and there is no program to help me with my disability. I have to figure it out on my own.

When students' self determination was not fully encouraged by their teachers and families, or capitalized upon, it eroded students' self-confidence and ability to succeed as illustrated in the following quotes:

My teachers let me slide through classes. I had some teachers who wanted me to succeed, go on and make it through college, and they were more than willing to give me oral exams or give me extra time on the test. But I also had teachers who would say not to worry about the test. Then there were others who said not to bother because I wasn't going to make it.

My step-mother and brother really teased me about the way I talk, so if I don't know you, I don't really speak up because I'm scared.

Many students in the study had similar experiences at the beginning of high school which further decreased their self-confidence   Students were not explicitly asked to reflect upon their earlier educational experiences; however, one student stated:

My peers were mean and called me retarded. High school was really hard. I didn't want to go and I hated it during my junior year, I didn't care. I knew they didn't know what they were talking about. It took a while to get over it. They were really mean to me. My parents told me not to listen to them but it was hard not to.

Low expectations. Students shared that, over time, low expectations of others and a lack of understanding about their disability by others and by themselves contributed to self doubt and marginalization. The attitudes students found the most difficult to overcome involved the secondary educators' low expectations of them. One student stated:

The expectations need to be the same, both for students with disabilities and students without, and making sure to help those students reach the expectations we have set for them. There are instances where we tell the student with disabilities it is okay ...foreign language is really difficult for you. So don't worry about taking foreign language. If we expect less of the students, we will get less. If we expect a lot, we will get a lot.

Students were just as hurt when their high school peers vocalized teachers' attitudes. Participants reported that teachers had low to no expectations for them: *...Then there were others [teachers] who said not to bother because I wasn't going to make it.*

Being branded by teachers as someone who *...wasn't going to make it* seemed to give peers permission to deprive them as well. According to one participant, *My peers were mean and called me retarded. High school was really hard. I didn't want to go and I hated it...* The majority of the participants echoed this student's sentiment. These taunts left students feeling unsure about entering college and fueled fear and self doubt: *The biggest problem was that I was afraid I couldn't achieve.* Another student stated: *It's quite frequent when I get overstressed and over tired. So I was very much afraid that I would spend the money, come here, do the entire stressful thing, and basically get nothing out of it.*

Lack of Understanding. Dowrick, Anferson, Heyer, and Acosater (2005) state postsecondary faculty need to become better educated about disability needs and rights of accommodation. Additionally, the authors identified negative attitudes toward and low expectations of people with disabilities as a concern. Their findings were confirmed by students in the present study who arrived at college to find that some faculty lacked understanding of their disabilities. Several students identified instructors' ignorance, lack of training, refusal to accept differences, and prejudices as impeding their success. These students felt stigmatized. They reported thinking that others saw them as being the problem rather than merely having a problem. One student illustrated how others perceived her: *People [college instructors and fellow students] think it's their [the students with the disabilities] fault. They're having identity issues. They're not working hard enough or applying themselves.* Many student felt stigmatized and alienated from their peers, as illustrated in one student's comments: *They thought I was a freak because I wore hearing aids.* Additionally, students believed that others perceived their disabilities as a way to avoid work: *If people can't see your disability, they assume it's not there or that you're exaggerating.* These students internalized others' perceived beliefs, and thus began to further doubt their abilities to succeed: *To me there was definitely a fear of having to drop out for health reasons or falling behind in classes because of some sort of cognitive problem.*

 Student self-awareness. Once in postsecondary education, students' limited awareness about their abilities and needs compromised their willingness to ask for help and advocate for themselves. Disability Resource Coordinators considered students' poor academic preparation and lack of self awareness a significant deterrent to academic success. According to a coordinator:

Students are not knowledgeable enough about their disabilities. They have no idea the effect of the disability on their learning and they may not even know the types of accommodations they need. They don't know how to request those accommodations.

Another coordinator noted that when students do talk about themselves it is about their weaknesses and not their strengths:

When students come, I ask them what their strengths are. They have no idea. But when I ask what some of the challenges are or what some of their difficulties are, they say, I cannot spell. I cannot write. I cannot do math. I cannot, cannot, cannot, *becomes the sentence they give rather than,* I may not be able to spell, but I have a lot of ideas.

However, despite a general lack of self-awareness, these students described their own fortitude and persistence as driving forces in entering postsecondary education. Several students explained that they reacted to others' lowered expectations by approaching life as a series of challenges. One student shared a similar motto that emphasized persistence:

I hate it when people tell me I can't do something because then it makes me want to do it even more. It increases my motivation. I will go at it until I actually succeed in doing what I want. I'll push my way through. I've been in school for ten years. I'm just taking it one step at a time.

Implementing a Formalized Planning Process
Students and coordinators identified college preparation as a major high school system weakness. One student states, *During my junior and senior years in high school, my English classes were pretty much jokes. There weren't any writing classes.* Academic planning for college was inadequate, as well, because students were not required to take requisite college preparatory classes, as evident by this student statement: *Geometry wasn't easy. It was just because I didn't have a very strong finance and math background when I left high school. When I came here, I just had the basic levels.* Further, students were confused about how high school and college environments differed in delivery of supports and service obligations. Even if they knew the support services that existed for them, they would not know (1) what they needed, and (2) how to access them. Students; general lack of knowledge about college and about their own needs diminished their potential for having positive successful experiences, as illustrated by the following statement: *There was nothing to help me transition into college and I had to kind of feel myself around blindly, trying to figure out.*

Some students assumed that college support would be like the high school special education services they received. One student stated, *I thought my freshman year here would be easy. I thought the classes would be all accommodated.* Students' naiveté extended beyond their assumptions. One coordinator characterized students she served as barely being able to function independently:

When they get to the postsecondary environment, especially those students who come and live in the dormitories, they might not be ready to face the challenges before them. They don't know how to live with people. They don't know how to make sure boundaries are set. They don't know how to study. They don't know how to ask for what they need. They always rely on their parents to do it and the parents are always willing to do it.

Clearly, setting boundaries for themselves and others, preparing for rigorous college classes, and asking for what they need to better address their academic and personal responsibilities are necessary steps that students must take in order to move away from home and into communal housing situations. It is essential for these students to self-advocate to professors for their learning related needs (Hadley, 2006).

Students reported they were not prepared for the rigors of college classes: *I wasn't prepared. I expected to fail. In fact, I'm very surprised I haven't.* When asked to elaborate on their perceptions about their level of skills, many students indicated they were not trained adequately in mathematics or English prior to coming to college. One student stated, *I wasn't prepared for math and English. History was no problem but I was behind in math. I had to start at the bottom and work my way up.* In fact the majority of students who participated in the study had not taken advanced or college preparatory courses in high school. Repeatedly, students said their high school classes were not challenging and did little to prepare them for college. Students used terminology such as *watered-down*, *dumb, dumb, math*, *too easy*, and *slide through classes* to describe their secondary classes. In addition, students described how being placed in lower level high school math and English courses put them at a disadvantage as they began their college experience. Most took developmental courses upon admission effectively removing them from the major they chose to pursue, or they earned low grades in classes for which they had no preparation.

Coordinators confirmed students' impressions; they emphasized students' lack of academic preparation as a primary problem, particularly during their first year of college. Specifically, they noted that students lacked study skills, mathematical skills, and writing skills. Coordinators believed that students anticipated that the college courses would be easy and that they would receive highly structured support showing them how to complete course requirements. One coordinator stated:

Many students I've met with will tell me their high school experience was a joke. They really did not prepare well. They got extra credit for some work and they wonder why they are not going to get those types of extra credits within the university.

In contrast, families' vision for their children's future bolstered students' self confidence: *I grew up believing I could do anything....* that led to college becoming a viable future option. Family members were the first to say, it's really important for you to go to college.

Improving Postsecondary Support
The abilities of some of the institutions in this study to welcome and support students with disabilities were questioned. The areas reported by students with the most systemic issues were accommodations, architectural accessibility, and financial assistance. These issues must be addressed in order to improve postsecondary supports for students. On a positive note, students revealed the mentoring they received from Disability Services as most helpful in improving their postsecondary supports. The following statements present students' experiences in each of these areas.

Accommodations. Students described the complexity of their accommodation experiences as ranging from the faculty's incomprehension of the essential support provided by the disability resource programs to over accommodating. For example:

I would say that professors need to believe you. I have a disability. I'm pretty forthright, if someone wants to ask me a question, I'll answer it. I'm fairly open in talking about stuff but when they just assume that I'm lying, I can't get accommodations.

I had one professor who was over accommodating. He like gave it away too much. He gave me excessive time. It was just kind of funny. Once in a blue moon you'll find someone who goes overboard. It's like him opening up the door for me and pulling out the chair for me. I can do that myself.

Some faculty were perceived by the students as having negative attitudes because of their unwillingness to accommodate students. A sense of powerless was detected in students' remarks about these instructors. They usually wanted to avoid these instructors' classes even if the course was important to their majors. One student stated, *There were two teachers … who refused to help. They really made it virtually impossible for anybody with a disability to pass*.

Architectural Accessibility. Students identified physical accessibility (e.g. architectural barrier) concerns in relation to transportation and conveniences taken for granted by most other students. The following statement by one student participant summarizes the level of frustration with barriers within a classroom building: *I had a three hour lab my first semester and unfortunately there was no handicap restroom*. In addition to inaccessible restrooms, many students remarked about the lack of public transportation available to take them from one part of campus to another, or even to the dining hall.

Financial Assistance. Finances were another major obstacle. Students were concerned about funding needed for special services/resources, medical needs, transportation, housing, and special equipment to enhance learning. Several students indicated the financial aid they had received was based on a traditional four-year college completion schedule. However, many students anticipated taking longer to complete college because they had to take prerequisite courses that were either not provided or that they had not taken in high school. Further, many had to retake courses not passed initially.

Mentoring support. Students spoke highly about the assistance they received from disability services. Staff in these offices acted as mentors, advocates, and guides within the postsecondary institution. For example, counselors advised students on how to become more assertive as illustrated in the following statement from one student participant:

T. [disability counselor] has been a big help to me. I've come to him and say hey, what do I do about this? He says, This is what you do. *I go to my teachers, this is the deal. I've got to have this done; otherwise I'm not going to succeed.*

This statement also illustrates how effectively coordinators advocated for students; *I get a lot of support from them [disability resource coordinators]. Some of the accommodations I get are early registration. I also get my courses moved to places where I can access the classes.*

In addition to advocacy, the coordinators offered emotional support to students, leading one participant to say, *They gave me the confidence to go on.* The importance of this level of emotional support was most evident in this student's comment: *If B. [disability coordinator] hadn't come to my rescue, I probably would have left school. I was so close to leaving and walking out.*

Discussion
The findings of this study align with the literature review that discusses the challenges for students with disabilities in postsecondary as architectural/access (Hart et al., 2001), programmatic (Dowrick et al., 2005; Stodden & Conway, 2003), informational (Getzel, 2005; Gill, 2007; Skinner & Lindstrom, 2003), and attitudinal (Burgstahler et al., 2001; Carney et al., 2007; Mellard, 2005). The architectural and accessibility barriers identified by student participants ranged from difficulties accessing their classes, to lack of accessible bathrooms, to one professor refusing to use a microphone which prevented the student from hearing the lecture. Student voiced programmatic barriers as a major challenge as many expected the same supports and services in college as they received in high school. Many students were perplexed by the services that they ultimately received in college and thereby uncertain of how to get the services needed to support their learning. In addition, some students didn't know how to access the new services and/or may have been embarrassed to seek the services. Other findings suggest that many students with disabilities are unprepared for their college experiences. The lack of preparation in mathematics, English, and other college prep classes really hindered learning and introduced an informational barrier for many of the students in the study. Previous research in the area of college preparedness in students with disabilities supports the current study's findings (Getzel, 2008; Gill, 2007; Kochhar-Bryant et al., 2009; Mellard, 2005; Rattin, 2001).

Another major challenge for many of the students in the study was an attitudinal barrier. The findings suggest that some postsecondary faculty had negative attitudes toward students with disabilities and lacked understanding of their needs and their rights to special accommodations and other supportive services (Burgstahler et al., 2001; Dowrick et al., 2005; Lehmann et al., 2000). The study findings also suggest that students lack the skills necessary to self-advocate for the services needed to help them to be successful. Researchers from other studies (Dowrick et al., 2005; Garner, 2008; Lehmann et al., 2000; Skinner & Lindstrom, 2003; Stoddon & Conway, 2003) agree that students with disabilities need to advocate for the services needed to support their success. *Self determination* was revealed in the present study as an area needed to support students' success. Anctil et al. (2008) study showed evidence of self-determination as a predictor of transition success. According to Garner (2008), *self-advocacy skills are crucial to early academic develop* (Garner, 2008, p.9). To address these issues, *planning efforts* for postsecondary should be coordinated early in secondary school (Dowrick et al., 2005; Stodden & Whelley, 2004). Students need to be aware of the *postsecondary supports* necessary and to develop self-advocacy and self-determination skills to enhance their postsecondary outcome.

There was agreement among participants that postsecondary education success or positive outcomes requires the following formula: supporting and capitalizing on student self-determination plus the provision of transition planning facilitate students' success within an institution. Additionally, institutions of higher learning need to examine potential architectural, programmatic, informational, and attitudinal barriers in their institutions and increase the knowledge of their personnel about disabilities to improve learning opportunities of students. These findings are represented in figure 1 in a preliminary framework for better understanding the dynamic relationship between these factors.

The preliminary framework presents three major factors that contribute toward success in postsecondary institutions for students with disabilities: self-determination, planning efforts, and postsecondary supports. Success in the framework is defined as having a positive postsecondary outcome that promotes completion of a postsecondary degree.
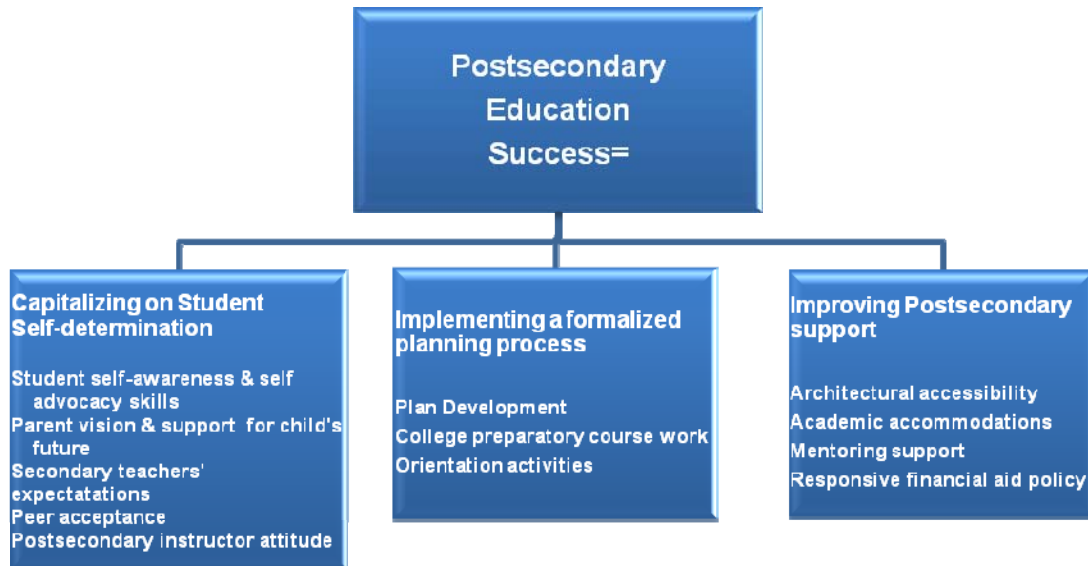
Figure 1. Preliminary Transition to Postsecondary Education Framework.

Self-determination. It appears that at least five areas must be addressed to facilitate the success of students interested in attending postsecondary education. First, students themselves need to acquire the skills associated with self-determination. According to Wehmeyer (1996), self-determination is *acting as the primary casual agent in one's life and making choices and decisions regarding one's quality of life free from undue external influence or interference* (p. 24). Specifically, according to these participants, self-awareness and self advocacy are inextricably linked to students' ability to request accommodations. This finding is supported by Gill (2007) who states that Self *determination is a key skill that can be developed to assist student with disabilities in becoming strong advocates as they move through their educational experience* (p.14.). As evidenced in an earlier study, students' lack of self-awareness made them feel helpless when faced with analyzing their accommodation needs and recognizing potential strategies that might lead to success (Lehmann et al., 2000). Quick et al. (2003) concluded that there is a continued need to teach and study self-determination skills at the postsecondary level. Furthermore, students voiced the importance of self-determination and self-advocacy as a key component of being successful in college.

Planning efforts. Both students and coordinators in this study confirmed there is a need to better prepare students for college. Coordinators saw preparatory activities as being the responsibility of secondary teachers, families, and students themselves. A formalized and structured process addressing the preparation needs of students may be one of the key ingredients for a successful college experience. Preparation activities, such as offering orientation workshops at the institutions of higher education, may help to alleviate some students' fears about attending college (Garrison-Wade & Lehmann, 2009). Planning crosses institutional boundaries, building venues for dialog, and offering a process for accountability. Clearly, participants in this study confirmed Johnson et al.'s, (2002) conclusion about the importance for all involved in supporting students to establish and maintain high academic expectations.

Postsecondary Supports. Participants in this study confirmed that networking and mentoring were critical for achieving college success. Terms associated with mentoring and networking were used interchangeably, but the key features reported related to receiving guidance and support to help navigate both personal and institutional barriers present for students with disabilities in higher education. This support included other students, coordinators, faculty, and parents. Other studies have emphasized the importance of parental involvement as a predictor of school success for students with disabilities (Dowrick et al., 2005; Eckes & Ocha, 2005). Getzel (2008) notes that students with disabilities benefit from faculty that have increased awareness and knowledge of the characteristics and needs of students with disabilities, and from faculty that incorporate concepts of universal design into their instruction and curriculum.

Recommendations for Supporting Students with Disabilities in Postsecondary Education
Both students and coordinators who participated in this study presented several strategies for improving students' with disabilities postsecondary education outcomes. Although these recommendations may echo what has already been presented in other research studies (e.g. Lehmann et al., 2000; Stodden & Conway, 2003; Webb et al., 2008), they do offer authentication to the existing knowledge base on support needed to enhance students' with disabilities postsecondary outcomes. The first of these recommendations is to establish high expectations for students with disabilities; specifically, encouraging these students to take rigorous classes within high school to meet the perquisite necessary for advance-level college course. Two students stated:

Students should avoid some of those easy classes to keep expectations high. Setting high expectations for students right away and informing parents of what needs to happen in order for students to be successful at the next level is important.

We should make sure expectations are high enough for every single student, within the high school environment, within the postsecondary environment, on the job, and even at home.

The second recommendation is to help students develop individual comprehensive transition plans that support access and successful postsecondary outcomes. These plans should include college campus visits and guidance counseling, that includes discussion about the courses students should take to prepare them for college. One student suggested:

If students are considering pursuing postsecondary education, they really are in need of intense transitional guidance before they enter the postsecondary setting, during the process of entering it, and after they enter the postsecondary setting. It's really important in making these plans to determine who is responsible for them so there is a clear continuity and students are getting the help they need to make that difficult transition.

This suggestion supports Gill's (2007) suggestion to schedule a *transition night* where representatives from area colleges and from school districts collaborate and disseminate vital information regarding student actively participate in IEP process to enhance self-determination skills. During these transition nights, students also should be encouraged to develop a portfolio or a *transition file* that includes copies of disability documentation, Transition IEP, high school transcripts, and other relevant information. Several coordinators offered the additional strategies to help with transition to college: *Mentoring, coaching, role playing are effective tools to enhance students' transition in college.* Additionally,

Monitor student progress (i.e. grades, IEP goals, attendance), maintain close connection with student's parents and high school, hold high standards (attendance, assignments, test prep, and communication), self-determination/self advocacy expectations (student led IEP; student interviews instructors every 4 weeks to monitor progress, student meets weekly with SAVE Coordinator to monitor progress, student responsible for writing quarterly reports sent to school), give more independence to students as they successfully progress, spend considerable time with students before they begin their first day of classes, have an extensive routine for Jr. year and Sr. year visits to college for students and parents, attend student's senior year IEP meeting at their high school and again spend time talking about postsecondary expectations and assist the as they develop goals. I hold a college orientation session and throughout the year, hold seminar sessions. Mentors for 2nd semester are aligned with new students.

The third recommendation illuminated by the current study is for parents, teachers, coordinators, and guidance counselors to empower students with disabilities to make their own decisions. Empowering students will help them each develop a strong sense of self as well as self-advocate skills. Yet, there is a fine line between empowering students and enabling them as seen by the student statement:

Another personal area with me, the one I feel very strongly about, is to try to make sure we're empowering students and not enabling them. That's kind of a fine line, but we should always try to work on empowerment.
To avoid this situation, educators and parents should not lower their expectations of students with disabilities; most students are very capable of making sound decisions on their own. They just need encouragement and strategies to cultivate self-advocacy skills.

Study Limitations
While there are no indications that participation with EEP influenced participants' responses, a broader sample may have yielded different results. Another limitation of the study is the lack of ethnic and racial diversity of the study's participants. A more diverse participants' pool may have yielded different types of challenges that were not presented in this study.

Conclusion
In conclusion, this study offered a preliminary framework that emphasized self- determination skills and coordinating, planning, and improving postsecondary support as key factors that may enhance postsecondary outcomes for students with disabilities. For this to happen, collaboration is needed to support students' progress towards college. Teachers, families, higher education personnel, and students all have a responsibility to contribute to the postsecondary educational success of students. Preparation seems to be a collaborative process that minimally involves students and their families, high school teachers and coordinators, and college faculty and staff. The findings that emanated from this study provided a framework for considering what a successful transition process to postsecondary education should resemble. However, the researcher acknowledges that the model is only preliminary and additional research is needed to test the validity of the model.

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