

Student Voices: Recommendations for Improving Postsecondary Experiences of Students with Disabilities

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Abstract

Students with disabilities represent a growing population on college campuses for whom specific needs and preferences are associated. Student supports have increased in response to these changing student needs and demographics. Yet, campus-wide responsiveness to inclusion and actions that promote self-advocacy are needed to increase the rates of persistence and graduation among this underrepresented student group. For the present study, we asked students registered with the Disability Resource Center (DRC) at three large, public universities to suggest how colleges and universities could better support students with disabilities. Comments from 132 students were downloaded verbatim and analyzed via a content analysis approach by a three-member research team. Students expressed both satisfaction and dissatisfaction with several aspects of their university experiences, including disability and other campus services, faculty and advisors, and their perceptions of inclusion. Recommendations ranged widely, with comments on campus resources, academics, and the more general campus climate and levels of accessibility. These students provide concrete suggestions for colleges and universities who are interested in improving the experiences of students with disabilities and supporting their persistence to completion.

Keywords: Students with disabilities, student support, disability services, postsecondary education

Students with disabilities are a growing sub-group on college campuses (Newman, Wagner, Cameto, Knokey, & Shaver, 2010). These students have specific civil rights that pertain to equal opportunity and anti-discrimination mandates (Americans with Disabilities Act [ADA] of 1990 and its amendments; Rehabilitation Act of 1973 and its amendments: Section 504 and 508). To meet these civil rights, colleges and universities must provide access and reasonable accommodations to qualified students with disabilities (ADA, 1990 and its amendments; Rehabilitation Act of 1973 and its amendments). Gains in enrollment may be traced back to the social justice focus of these federal mandates; however, applicants with disabilities, despite meeting the same admissions criteria, continue to complete at lower rates when compared to their peers without disabilities (Newman et al., 2011). We lack full understanding of these disparities; however, the inequity in completion rates has been partially explained by lack of academic preparation,

limited access to career development opportunities, and minimal development of self-determination and self-sufficiency skills while in high school (Bassett & Kochhar-Bryant, 2006; Carter, Trainor, Cakiroglu, Swedeen, & Owens, 2010; Wagner, Newman, Cameto, Levine, & Marder, 2003).

For individuals with disabilities who are admitted to postsecondary institutions, satisfaction and persistence have been linked to perceptions of factors such as sense of belonging, self-advocacy and campus climate (Belch, 2004; Braxton, Hirschy, & McClendon, 2011; Fleming, Oertle, Plotner, & Hakun, in press). Promoting student persistence is a fundamental goal of postsecondary education leaders (Mamiseishvili & Koch, 2011). First year grade point average (GPA), participation in academic or social activities on campus, and use of certain accommodations have served as indicators of whether or not students with disabilities are thriving (Mamiseishvili & Koch, 2011). To promote persistence, further actions

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can be taken to actively encourage the involvement of students with disabilities in all campus activities along with the proactive institutional attention to accessibility to facilitate the ability of students to participate (Mamiseishvili & Koch, 2011). While the process of determining college choice is exceedingly complex (Perna, 2006); it appears that for students who have determined that they will pursue postsecondary education, factors related to fit, availability of relevant resources, and perceptions of belonging and acceptance influence selection, and satisfaction and persistence once enrolled (Nora, 2004). Unfortunately, current research does not disaggregate data for students with disabilities, who likely have some needs and preferences that are similar to all other students and others that are more specialized.

Several researchers have aimed to describe the experiences of students with disabilities in higher education, using a range of approaches and often employing qualitative methodologies. Researchers have been able to extract barriers from student experiences (e.g., Agarwal, Moya, Yasui, & Seymour, 2015; Dowrick, Anderson, Heyer, & Acosta, 2005; Marshak, Van Wieren, Ferrel, Swiss, & Dugan, 2010; West et al., 1993; Yssel, Pak, & Beilke, 2016); and they have included issues such as those related to the environment and lack of accessibility, attitudes of faculty/staff and peers, and limitations of the students themselves that hinder academic performance. Suggestions to address these problems included bringing greater attention to issues of physical accessibility, increasing awareness of disability campus-wide, and strengthening students own self-advocacy and preparation for transition and college.

Colleges and universities have been increasing student supports in response to changing needs and demographics. To date, disability services are largely focused on providing accommodations to students and assisting institutions of higher education to meet legal requirements for access. Moving forward, development of more responsive and connected support services to meet the needs of students with disabilities and promote their self-advocacy may improve rates of persistence and graduation among this underrepresented student group (Fleming et al., in press). The purpose of this exploratory study was to identify, from students themselves, what colleges and universities can do to improve the experience for students with disabilities. This information is critical to leaders of higher education, student support administrators, and

office of disability services staff. Researchers have sought to understand the experiences of students with disabilities in the higher education setting, but few have elicited direct suggestions from students on improvements on how to meet their needs. Additionally, the majority of the qualitative studies have had much smaller samples.

Method

Data were collected as part of a larger research effort, via an online survey disseminated through the Disability Resource Centers (DRC; sometimes referred to by other names such as the Office for Disability Services or ODS) at three large public universities. A contact at each university's DRC sent the survey link to students who had registered with their offices. Students were not offered any incentives to participate. A total of 325 students with disabilities completed the survey (Fleming, Oertle, et al., in press). The full survey included questions about campus climate, satisfaction with the university, and use of campus services and resources. We also asked the following open-ended question, in order to allow respondents the freedom to address any issue they felt important for improvement.

We are interested in your perspective on how your school could better support students with disabilities. Please provide any suggestions you have related to the campus, classes, general student support, or disability specific support that you think would be an improvement.

One-hundred and thirty-two students responded with their suggestions (40% of survey respondents; 132/325). Given the purpose of this qualitative study, we included comments from as many survey respondents as possible in order to determine common suggestions or recommendations that may shape/improve college and university responsiveness to this growing population. These data were analyzed to answer this overarching research question: What do students with disabilities suggest that colleges and universities do to improve their experiences?

Student respondents provided a range of answers with some comments topping 1,000 words. A couple of respondents remarked on the topic itself, saying that more work in this area is necessary and imploring us to read their whole response. For example, one

added “I am thankful for this survey so that maybe in the future more students like me can get the help and support that we need.” A few students followed up with emails to say how glad they were to be involved in this research effort or to express additional interest. Demographic characteristics of respondents are available in Table 1. Compared with the entire sample, students who chose to provide qualitative comments did not differ by gender, race or ethnic identity, disability type, year in school, satisfaction with their college choice, or reported grade point average. Students who provided comments were an average of three years older, and had experienced disability for an average of 4.5 years more.

Analysis Approach

We used inductive content analysis to analyze the students’ typed responses verbatim (Creswell, 2014). All three authors contributed to the content analysis either through coding (the first two) or serving as an auditor (third author). A four-step process was used: (1) identifying and defining broad themes; (2) identifying and defining categories within themes, (3) coding data, and (4) synthesizing the coded data in thick descriptions of the themes and underlying categories (see Figure 1).

The auditor reviewed the process and results of each stage, and the research team reached consensus through active dialogue prior to moving on. For example, with an intentional focus on revealing student suggested improvements, the data were reviewed independently by the first two authors when the broad themes were initially identified and written definitions for the themes were drafted. Then, after independent review of the themes and definitions, the two authors met, and used active dialogue and data review for evidence to confirm and/or dispute interpretations to build consensus and authenticity (Bohm, 2004; Isaacs, 1999; Whittemore, Chase, & Mandle, 2001). A written report was crafted capturing the results (i.e., the broad themes and supporting definitions). Next the auditor received the written report and met with the first two authors for debriefing. The auditor performed peer debriefing to establish credibility (Creswell & Miller, 2000). This debriefing provided support by challenging the assumptions and questioning the coding, analysis, and interpretations (Lincoln & Guba, 1985). The process of preliminary data analyzing, dialoging and data reviewing, interim report writing, auditing, and peer debriefing was repeated in each step and con-

ducted over a span of several months. Throughout the process, team members were encouraged to consider their own biases and expectations as they related to the data and process (Whittemore et al., 2001). The process is described in more detail in the procedures section of this paper.

Biases and Expectations

All three authors have backgrounds in rehabilitation services (i.e., counseling; administration) and education. In addition, our experience working in postsecondary education ranges from six to sixteen years in a variety of roles such as educators, program directors, support services staff, and researchers. We expected that students would suggest improvements to disability services (more resources), express negative comments about instructors, and share specific examples of both positive and negative experiences with general campus access and in all areas of support for college students registered with their respective office of disability support services. Given our backgrounds, we consider ourselves to be student-focused and inclusive. However, each of us has faced challenging situations regarding access and accommodations. Our overall bias is that universities need to do a better job of supporting students with disabilities, particularly in providing a welcoming, universally accessible, and accommodating environment for students. Furthermore, universities need to enhance training to staff and faculty to maximize the success of students with disabilities.

Procedure

The qualitative comments were downloaded verbatim out of the online survey software (Qualtrics) into an excel file. The first two authors reviewed all comments separately and proposed broad themes reflected in statements. These themes were discussed and adjusted through a group process, where themes were finally agreed upon by all three authors. Definitions were developed, reviewed, and accepted by all three authors prior to coding. Once the themes were defined, the first two authors independently coded data into these broad themes. Then, coders met and discussed differences until consensus was reached on coding decisions. The third author served as an auditor, reviewing the codes and identifying any disagreement. All three authors met to discuss the auditor’s review and peer debriefing, and data were recoded as necessary until all parties agreed. Within the broad

themes, the first two authors reviewed the coded data separately and generated categories. These categories were discussed and agreed upon using a group process, and once consensus was reached authors generated definitions to use for further coding. These categories were checked by the auditor (third author) prior to coding. Data were coded into the categories by the first and second authors independently. Coders met to review classifications and addressed areas of inconsistency until agreement was reached on coding decisions. The third author audited these codes and all three researchers met to address areas of discrepancy. The auditor suggested revisions to the categories and recoding of some data. More specifically, some of the data that the first two coders had perceived as a respondent being dissatisfied with student supports were more accurately framed as “growth areas,” or services that the students wished they had, but were not offered. Through these group discussions, all three authors reached agreement on all data within themes and categories. The auditor also reviewed and provided feedback on the descriptions in the results as a final check. As a result of this final check, the category names were adjusted to reflect the nature of the suggestions made by the participants in response to our question prompt.

Given the natural overlap between disability services, the academic experience, campus resources, and the campus environment (e.g., academic accommodations are implemented in the class setting through the instructor and instructors set classroom expectations) we made efforts to minimize any double coding in the data, focusing on the part that was most central. However, some responses were lengthy and contained separate statements about these themes and categories and thus were coded into more than one theme or category.

Results

Campus Resources, Academics, and Campus Environment were the three main themes that emerged in response to the research question: “What can colleges and universities do to improve the experience of students with disabilities?” Each main theme contained several underlying categories, with more specific suggestions or feedback stemming from the student’s experiences at their own college or university. The main themes as well as categories are displayed in Figure 2, and the corresponding narratives with students’ comments are presented from most to least.

Campus Resources

Nearly half of the students provided comments related to campus resources (65 of the 132 students providing comments or 49% of respondents). Colleges and universities must provide access and reasonable accommodations to qualified students with disabilities in order to adhere to federal legislation (Marshak et al., 2010). Campus resources, including disability services, are often made available as a mechanism to provide reasonable accommodations. Disability service availability varies widely by institution, and may include academic services (i.e., advisement and counseling, course load adjustments, priority registration, assistive technology, tutoring, reader and/or scribe, interpreter, and assistance with arranging accommodations with instructors); mobility (i.e., accessible transportation, priority parking, ensuring accessible spaces); housing or residential support (i.e., accessible housing, arrangement of supports for daily living needs); or other areas (Dutta, Kundu, Schiro-Geist, 2009). Additionally, campuses generally have student support services that are available to all students, not particular to students with disabilities, such as career preparation, academic supports, personal counseling, health promotion and medical care, transportation (to on and off campus locations), and leisure / recreational opportunities.

Comments related to campus resources comprised the largest theme. Comments were coded into four categories within this broad theme. These categories included: (a) ways to improve disability services (35 comments by 25% of respondents), (b) requests for additional resources or suggested growth areas (20 comments or 15% of respondents), and (c) increase visibility and connectedness of campus resources (19 comments or 14% of respondents).

Ways to improve disability services. Comments that reflected a suggestion based on an observation or experience with disability services were coded into this category (35 comments). Thirty-three individuals (25%) provided responses in this area. The comments were relatively balanced between individuals reflecting positive (14 comments) and negative (21 comments) experiences. Two respondents whose comments described both positive and negative experiences were coded accordingly.

Dissatisfaction: Areas for improvement. The negative comments reflected student dissatisfaction with the services provided through the DRC or experiences with other campus resource staff. The sources of dissatisfaction noted by the respondents were that the

services were “unhelpful,” “lacked individualization,” or that staff lacked expertise in dealing with students with a particular type of disability issue or student population (e.g., veterans, individuals with chronic pain). Other student comments reflected a perception that staff treated them unfairly or with bias. One student explained a lack of individualized services, “Actually tailoring the accommodations to the individual needs and severity of the individuals own disability, rather than giving us cookie cutter plans,” and another student suggested, “create more accommodations that most importantly can be personalized since no student's disability is just like another.” Another student reported mixed experiences with the DRC,

There are times where they are very supportive and hold good discussions with me. But then there are times where I feel like I am being judged and my evaluator doesn't believe what I am saying. This has caused me to stop going to the DRC and look for alternative help.

Another student who reported a negative experience explained it this way,

I really wish that the disability services staff would realize that I am a strong student with significant academic goals. I am a math major with a 4.0 GPA currently taking a graduate math course in my junior year of undergraduate studies and keeping pace with the graduate students! I intend to go to graduate school and earn a Ph.D.

Others requested enhanced communication from the DRC during the school year to step in when needed, “Disability services should reach out more to the students that are registered. . . the advisor does not want anything to do with you if you have additional questions.”

Satisfaction: Actions to continue. Several (14 or 11%) students had positive comments related to their experiences with their campus DRC. Many expressed satisfaction with the type, amount, and timeliness of services received and used words like “helpful” and “caring” to describe interactions with staff. These comments reflect actions taken by disability services professions that students seem to really appreciate and value. For example, one student who was having trouble with campus accessibility and accommodations explained, “My disability center worker was

very good, always got back to me on serious issues and contacted my professors when needed.” Another student reported, “The DRC is amazing with their support. I have no issues with their services they have been kind and caring in every way.” A student who had requested a desk to help with back pain had this compliment for the DRC, “I was extremely impressed with the prompt and courteous service I received at the disability resource center, and how quickly a standing desk was placed in my lecture room. Thanks!”

Requests for additional resources and suggested growth areas. Since the question was phrased asking for recommendations, it was expected that many students would provide suggestions for additional services that they believe would be beneficial, or growth areas for services that already exist. Twenty students (15% of respondents) provided comments in this area. Suggestions for additional services included: (a) access to counseling (adjustment to disability, or additional sessions with the counseling center) and other supportive type of services (e.g., recreation, career); (b) greater availability of testing accommodations including private and quiet rooms and proctoring sites; and (c) increased attention from faculty and staff across the university. Others suggested that the DRC itself needed additional resources to provide services that are already offered in a faster and more comprehensive manner. One respondent would like to see accessible sports and recreational opportunities on campus, “If you don't already have sports and recreational opportunities for people with disabilities, you should consider adding some to your campus activities.” For students who are newly diagnosed, a student suggested that the DRC might expand supportive services, “being diagnosed in college is a tough experience that I never understood my disability, and I feel the university could provide more support to those [who] for the first time come to understand why they have weaknesses in different areas.” Another suggestion related to expanding disability awareness on campus, “the greatest benefit would be to have more support groups and trainings for people with disabilities and for non-disabled individuals to learn more about as well.” Other students called for enhanced resources, “having more resources to hire more people in the Disability Resource Center (DRC) would be nice it seems that there is not enough people during finals, registration and the first month of classes”, and “they need more rooms for accommodation, and ones with better sound proofing!”

Increase the visibility and connectedness of campus resources. Comments that reflected a need for greater knowledge of services available (and how to access them) and closer working relationships between staff from various campus resources were coded in this category (19 comments, or 14% of respondents). Students noted that the information about what constitutes a disability and would make one eligible for accommodations, as well as what accommodations and services are available to students with disabilities was unclear, unknown by many, and underutilized. The common suggestion was to make this information simple to digest and widely available so that more students may benefit. Increasing the visibility of the office of disability resources among campus resources and instituting connections with other services (e.g., career, counseling, tutoring) increases the number of college and university staff who are aware of disability resources on campus and may refer students. Likewise, disability resources may refer students for support that falls outside of their direct focus area but would complement other supports provided. Several noted that once they became aware of the services and accommodations that their experience with the university improved. Some student comments reflected a continued limited understanding of services and accommodations that are available. A few students lamented that they did not know about the services when first enrolled, “I wish I would have known about the disability services sooner in my college career. They have been a great help. Without their accommodations my teachers would not have taken my disabilities seriously.” Another explained how receiving disability services during this degree effort have made a difference:

My DRC adviser was very helpful and knowledgeable once I finally found out there was a DRC. She helped me find funding and get the accommodations in place. Her help and the help of a great academic adviser (who has also been great about my disability) is why this time I am leaving college with a degree and not just having to take a break. The support I have received have been the key for me being successful this time. I just wish I would have known about the services sooner and it would have saved me a lot of time... I didn't register when I first enrolled because I didn't realize it was a service that was available. If I would have known I would have taken advantage of it earlier

and it most likely wouldn't have taken me so long to finish my degree.

Another type of comment in this area reflected difficulty and or frustration in locating services. For example, “It is rather difficult to know what services are offered or what I can do to help myself unless I were to go searching for it. After a long and complicated process, I was finally offered services.” Other students suggested that clarifying information that is available regarding accommodations would help, “Provide more clear information as to what accommodations can be made for certain disabilities. I feel many people who have disabilities do not know what kind of help they can actually get,” and

I would like to know and understand better ALL of the resources that I can use as a student with disabilities. I was very unaware who or what organizations I could turn to until this year. My advisor also did not know or understand any of these resources.

Along the same lines, a few students felt that locating resources would be easier if there was a closer working relationship between staff in the DRC and other campus services (e.g., the career center, the counseling center). For example,

I understand that these people [DRC staff] aren't counselors or therapists and that I should be using the Counseling Center instead of the DRC. But these two should be working hand in hand. It simply takes too much time and effort to coordinate activity between the two offices.

Another student suggested, “I do think there should be career services to help students with disabilities because we are at a disadvantage.”

Academic

A substantial portion of the student suggestions for improvement were in the area of academics (56 of 132 students providing comments or 42% of respondents). The academic experience crosses a few specific areas for students, including the course content, experiences with instructors, how courses are structured, and academic advisement. Dynamics such as class size, an in-person or online class, the extent to which the instructor is engaged and tries to get to

know students, and the students' aptitude for and interest in classes can all impact student perceptions. For students with disabilities who are requesting accommodations, an additional layer is that the student must bring documentation of approved accommodations from the college or university disability services office to the instructor to negotiate accommodations (Garrison-Wade & Lehmann, 2009; Palmer & Roessler, 2000). For some students, this is the first time that he or she has to self-advocate in this area (Banks, 2014; Cory, 2011). Faculty and staff vary in their experience with and knowledge of classroom accommodations, as well as their attitude towards students requesting them and students with disabilities in general (Lombardi, Gerdes, & Murray, 2011; Marshak et al, 2010). Comments were coded into three major categories within this broad theme, including: (a) improve experiences with instructors and advisors (35 comments or 27% of respondents), (b) improve access to accommodations (28 comments or 21% of respondents), and (c) develop methods of instruction and clarify classroom expectations (17 comments or 13% of respondents).

Improve experiences with instructors and advisors. Faculty and staff have an important role in improving the experience of students with disabilities. Comments that reflected an observation, suggestion, or experience related to instructors or academic advisors were coded into this category (35 comments). Comments could reflect a positive, negative, or neutral position, although far more comments reflected a negative interaction (27) than a positive one (7). One comment reflected both a positive and negative experience (e.g., some interactions have been positive, others negative), and two were neutral and posed simply as suggestions. Comments reflecting negative experiences with instructors or advisors described feeling as though the instructor was inflexible, had a negative attitude towards students with disabilities, did not provide the requested accommodations, or was not supportive. For example, a student reported,

With interactions I have had with certain professors on this course I have felt a feeling of great judgment, and expressions or questioning of my character as to my intentions in seeking some extra help. I feel they thought I was just looking to work the system to improve my grades, or for easier curriculum adjustments to get better grades.

Others agreed, the biggest problem that I have encountered is that teachers are either not aware or not willing to willing to make necessary help available in their classes," and "it starts with instructors, I worry that they think I'm working the system because I have disabilities that are not obvious, like blindness." Another student stated,

The majority of professors are seemingly incapable of comprehending that their methods of learning do not work for everyone, so they teach in a way that caters to their own style of learning and refuse to believe that they should change anything about their teaching methods.

This same student noted that the DRC is not in position to help because of the independent nature of individual instructors, "the Office of Student Disability Services does not help much because they are powerless to influence the choices of professors related to their teaching methods, grading policies, and general attitude."

Several students described positive interactions with instructors and/or advisors, and these comments reflected gratitude towards faculty and staff who are accommodating and made efforts to be helpful to students. For example, "the testing center has been great about making my accommodations as well as my professors," and "there are a few exceptional professors who would go far and beyond expectations to help me in more ways than I can thank them."

Improve access to accommodations. Twenty-eight comments (21% of respondents) related to an experience with accommodations. These comments described requests, availability, and implementation of accommodations in class, on assignments, or for testing situations. In this category, nearly all of the comments related to experience with accommodations were negative (only one was positive). Complaints included accommodations taking too long to be implemented (and thus negatively impacting class performance), accommodations that are not individualized (e.g., related to disability type rather than personal situation), not available (e.g., no space in testing rooms), or encountering resistance from instructors. For example, one student noted, "It is most difficult to be placed and utilize [the University's] methods to place a workable arrangement for my disabilities. I have suffered academically because of the frustration, stress, and down time." Another noted problems getting physical accommodations met:

I had to send photos of our facility cubicles to the DRC because they do not meet the federal guidelines. I am very unhappy with our campus coordinator and our accommodations for those with disabilities or any that need special assistance and study help.

Other students noted lack of availability and wait times for accommodations, “getting things like audio versions of text books can take a few weeks,” “I am continually frustrated at having to beat my head against a wall to get any help in accessing course materials whatsoever, only to get a D- or fail,” and “I require note takers, but a lot of the time they never find someone for me, or the person isn't reliable about getting them submitted. Also teachers often (all of the time) forget to submit extra time for online tests/quizzes.”

Develop methods of instruction and clarify classroom expectations. Seventeen comments (13% of respondents) were about classroom instruction and course expectations, often sharing experiences or making suggestions to improve courses for students with disabilities. Several students expressed that the course format or method of instruction was incompatible or undesirable for their preferred learning style. Others noted that the instructor did not outline expectations to their satisfaction, and several students who are part of an online program expressed feeling disconnected or that the distance version was missing some of the features of the campus program, for example, a student noted,

In his classes I feel completely lost and unsuccessful. In all of my other classes I am passing fine but in his classes he does not clearly outline the expectations and how we will be graded so I end up failing his classes.

Another added that pacing can be a challenge,

The way math is taught is hard for someone like me with a math learning disability. They move through the information much too quickly for me, I can hardly keep up. I am smart enough to do it and to understand it; I'm just a little slow. It's almost impossible for me to pass if I go to school full time because of how long it takes me to do my homework.

Similarly, a student lamented, “physiology doesn't have any direction or outline so I have felt lost all semester.” One student complimented the distance classes as being helpful to ameliorate some disability issues that would have impeded his or her participation in live classes,

Online works really well for me because if I've seized and can't drive that day it's ok because I don't have to drive to class anyway I can just download it. The exams for the programs are usually open a week so if I can't take it the first day it's ok I have 6 more.

Campus Environment

Traditional foundations in education have focused on the needs of a core group of students, which has led to educational settings and methods with a homogeneous, core group in mind creating an environment full of barriers for many students (Hitchcock, Meyer, Rose, & Jackson, 2002). One student summed this point up perfectly, “in general, the school is geared toward the ‘normal’ mainstream student and hasn't taken the time to help or get to know students with disabilities.” Reflecting their experiences with environmental barriers, over a quarter (35) of the 132 student comments were for campus-wide environmental improvements. These comments were observations, suggestions, or difficulties with aspects of the campus environment, and were coded into two broad categories. These categories were: Increase disability awareness to promote inclusive attitudes (19 or 14% of respondents) and advance universal access and general accessibility (16 or 12% of respondents). With the exception of only two comments, no other comments were double coded within these broad categories. The two exceptions were made because these were lengthy comments that contained related but separate ideas.

Increase disability awareness to promote inclusive attitudes. Societal attitudes have limited people with disabilities resulting in low expectations and exclusion (e.g., Rubin & Roessler, 1995; Siperstein, Norrins, Corbin, & Shriver, 2003). Implicit biases toward others in our environments and lives have been repeatedly demonstrated and are pervasive. However, the consequences of these implicit biases can be minimized to create and maintain inclusive environments through educational initiatives, restructuring the decision-making process, and protecting against known

biases (Goldin & Rouse, 2000; Hagemann, Strass, & Leibing, 2008; Payne, 2006). The student voices shared in this study exposed attitudinal bias and expressed a lack of and/or limited disability awareness in their campus environments. Nineteen comments (14% of respondents) were coded under this category. These student comments were related to contextual and cultural sensitivities regarding disability definitions, causes, abilities, barriers, and choices. This category also contained expressions related to one's sense of belonging or how they felt they were treated as a student who has a disability, and the personal consequences of these experiences. Moreover, comments coded under this category were calls for responsiveness to disability diversity and inclusion.

As a whole, students' comments described negative attitudes using words such as "*ignored*," "*insignificant*," "*misjudged*," "*overlooked*," and "*no voice*" to express their perceptions of students with disabilities on their campuses. One student wrote, "this university. . . does not care about people with disabilities nor is it supportive of people's goals in life if they are disabled (sic). They are very judgmental and doubtful of one's abilities if one [has a] disability." Another student wrote,

I was disheartened when I was told I should avoid provoking my professors' resentment by not asking for specific treatment due to my illness. That greatly discouraged me from pursuing support from them. I was told about this problem of resentment when getting testing at the Counseling and Psychological Services center. It made me afraid of how many of those with whom I interact on campus believe I am faking or exaggerating. Being told this, and being told that indulging in support services would fuel a surrender to the debilitation caused by my illness, added shame and guilt to asking for help.

These comments were not only directed toward the attitudes of the professors and staff but toward the campus at large as well. Referencing attitudes experienced when working with campus disability services, one student wrote, "The fact that they [disability services] also told me I couldn't keep my service dog on the grounds, makes me very uncomfortable. I feel like I don't have a voice at all in this school. I feel like my problems are not being taken seriously."

One surprising comment was specific to supporting staff with disabilities going to school, writing "I did not receive support from HR." However, more commonly mentioned was wanting broadly "more awareness and consideration about people with disabilities," and "I think it is important to bring more awareness about the issues of college students with disabilities." One student noted a consequence of a lack of awareness of disability in the classroom, "I think teachers aren't always aware of what our disabilities are or why we need help." Students indicated that the "invisibility" of their disabilities was negatively impactful on the attitudes they encountered. Specifically addressing non-visible disability awareness, students wrote these statements, "Professors and teacher's assistants need to be further educated on non-visible disabilities." and "If you have a visible disability, everyone is very nice to you. If it's not visible, the world does not want to know that it exists." Psychiatric and mental health disabilities were given as examples of non-visible disabilities.

Suggestions for improvement included developing professors' awareness of "all disabilities not just the common ones such as ADHD," "training on how to deal with disabled students," "more support groups and trainings for people with and without disabilities" to learn more about each other, giving "professors write-ups about the disability . . . what it is and what can help," and "education about how to help those who are struggling to feel supported." One student wrote this suggestion, "allow caution and empathy to find a balance within the university community, but it'd be great to lose that extra measure of anxiety over asking for help."

Advance universal access and general accessibility. The sixteen comments (12%) that were coded under the category of universal access/accessibility were defined as comments related to the ease of getting around campus, transportation, parking, bathrooms, or other facilities. These campus spaces must be accessible due to the Architectural Barriers Act of 1968, the first piece of legislation to address physical barriers that prevented people with disabilities from accessing buildings. Expanding access, the ADA and the Rehabilitation Act and their Amendments ensured the civil rights of "qualified" students with disabilities to equal access to postsecondary education. Universal design is defined by the usability of products and environments by all people to the greatest extent without modifications, add-ons, or specialized designs.

The availability of ramps, elevators, curb cutouts, and signage with Braille and other languages in addition to English are all examples of universally designed architecture (Hitchcock et al., 2002; Pisha & Coyne, 2001). Yet the students in this study largely described accessibility negatively by using words such as “inadequate,” “completely inaccessible,” and “without equal access to this campus and its labs.” Three students specifically described inaccessibility related to the entry push buttons and ramps to building on campus. One distance student expressed inaccessibility related to the on-site facilities and access to academic advising using the word, “horrible” to describe both. Referring to strategies used to address commonly experienced classroom inaccessibility, one student described getting into class like this:

Many of my classes [are] on the 3rd floor and [the building] only has 2 freight elevators. I am unable to open the manual (heavy) exterior doors and injured myself in trying. This semester I have 2 classes in that building and the only option is to have the secretary assist me up to my class. Sometimes she is not available, so is unworkable on those days. I have the class teacher or student assist me back down the elevator. That works well.

Suggestions for improvement included “more parking,” “more unisex bathrooms...for transgender population to use,” considering disability accessibility intentionally in “the campus master plan,” having “sports arenas with better wheel chair student accessible seating,” “more [larger sized] chairs and tables” in the classrooms, and addressing the issues of mobility and logistics within and between buildings including the distance between bathrooms and classrooms, repairing sidewalks, and having Braille markings for room numbers and elevator panels. One student put it this way, “The facilities personnel could be more responsive to requests to repair such items as the sidewalks or putting Braille markings on room numbers or elevator panels.” This student adds, “All the computer labs should contain accessible computer technology.” Another student offered these suggestions to improve overall accessibility on-campus:

Both sports arenas need better wheelchair student seating. It actually currently does not even exist. The only wheelchair accessible seats are for full price ticket holders. I believe it is our right as a

student to be able to go to a basketball or football game regardless if we use a wheelchair. Also when new buildings are being built on campus the automatic door opener buttons needs serious thought put into them when they are being placed. I've had numerous issues with the buttons being totally unreachable.

Discussion

The purpose of this exploratory study was to identify, from students themselves, what colleges and universities can do to improve the experience for students with disabilities. The findings from this study are consistent with others reflecting barriers experienced by students with disabilities, including accessibility problems, negative attitudes of faculty and peers, and a need to address disability awareness (Agarwal et al., 2015; Dowrick et al., 2005; Marshak et al., 2010; West et al., 1993; Yssel et al., 2016). Taken together, the participants from our sample added to our understanding by providing suggestions for ameliorating some of these issues, as well as clarifying positive aspects of existing services.

Student respondents provided many suggestions for improvements, as well as commentary on their perceptions of the present state. The results were mixed—some students were generally satisfied with their experiences with instructors, advisors, and disability-related services. Others, however, expressed frustration with their experiences, were unsatisfied with how they were treated by university faculty and staff and peers, wished that different services were available, or that the process itself was changed. Themes emerged from the data related to campus resources, academics, and the campus environment, and students recounted their experiences and made suggestions in each of these three areas. These results have implications for student services and campus resources, and how colleges and universities can better respond to a growing number of students on campus reporting disabilities.

Students expressed both satisfaction and dissatisfaction with campus services and resources. The comments that were complimentary of staff and programs reflected a feeling of caring, individuality, and responsiveness to student needs. It was clear that the time and effort put forth by disability resources staff is recognized and appreciated by these students, and that when staff are able to implement accommodation

requests and order necessary equipment in a timely manner, students benefit. Students valued having a personal connection and someone who is available to answer questions and provide expertise when needed. On the other side, students who felt that their services were not individualized to their needs, interactions with staff were impersonal, and/or they were not treated with care or respect were unhappy with their experiences. Another source of negative experiences was the perception that faculty and staff viewed students as less competent because of disability status, and the wish that there was greater recognition for academic accomplishments and future goals. Some dissatisfied respondents described how they withdrew from the office, meaning that they did not utilize the services and handled their needs on their own terms. By some, this was presented with the acknowledgement that grades or personal well-being may have suffered as a result. A few students shared several experiences and contrasted service and encounters that they perceived as “positive” with those perceived as “negative” and attributed differences in academic performance to their experiences. While most disability service offices do satisfaction surveys or other evaluations regularly, students who have withdrawn may or may not participate in these data collection efforts and thus may not be counted among the voices heard. It is useful to have an opportunity that is external to the office and presumably unbiased for students to share their experiences as well.

These comments support the value of the disability resource office, as well as the importance of the work of individual staff working with students. There are no universally accepted requirements or professional preparation for disability support professionals, and consequently, professionals come to their positions with a range of education, experience, and understanding of and perspective on disability (Guzman & Balcazar, 2010). From an institutional standpoint, the Office of Disability services is often the most obvious point of contact on disability issues on campus. The model of disability most closely illustrated through services and resources contributes to the campus culture relative to disability. The *Journal of Postsecondary Education and Disability* released an issue in 2010 (Volume 23, Issue 1) where authors proposed a social justice perspective to disability services, and provided insights and recommendations on how the traditional model for services might be modified and reframed to promote social justice, remove

barriers to services that are maintained by eligibility processes based on the medical model of disability, and promote inclusion for all students (Guzman & Balcazar, 2010; Kroeger, 2010; Loewen & Pollard, 2010). When disability is considered as a negative, or a weakness that must be addressed (consistent with the medical model), discrimination and oppression of individuals with disabilities is continued (Loewen & Pollard, 2010). In our sample, students commented negatively about interactions with university staff, faculty, and peers that underestimated their potential, or stigmatized disability status. Shifting the approach of counselors from mitigating disability-related problems to facilitating equity and access requires a personal connection, presumption of competence, and person-centered approach, not unlike those complimented by student respondents.

Visibility of disability services was also a recurring theme in the responses, as was the perception of attitudes toward disability on campus and need for disability awareness. These issues may be interrelated. Several respondents noted that they were not aware of the services when they first enrolled, and the general theme in those comments was that they wished that they were aware sooner. Comments reflected a belief that accommodations or other services have been valuable, and for many have helped them earn better grades and continue enrollment. Even among students in our sample who are currently registered with the Office of Disability Services, there seemed to be some continued confusion about what services were available, what accommodations they could request, and other information that would be valuable to them. This leads us to believe that in the general student population there is probably even less understanding of these supports and the process for becoming involved. Possible actions that Disability Support Offices might consider is working along with the admissions office to make sure that all students receive information and that it is part of recruiting materials. Making this information known to all sends the message that disability is welcomed and appreciated on campus, and that everyone is involved in addressing issues of access (Funckes, Kroeger, Loewen, & Thornton, n.d.). The name of the office or resource that addresses disability and accommodations and how it is advertised sends a message to all students and community members about how disability is conceptualized and valued. When the office is separate and apart from other student support services on cam-

pus, that sends a message that students with disabilities are a “special case” and must be treated differently than others; this view is potentially stigmatizing.

Student comments regarding their experiences with instructors/advisors, and the process of accessing accommodations was particularly troubling. While some students shared positive experiences, these were greatly outnumbered by those sharing negative experiences. It is possible that the phrasing of the question discouraged respondents from thinking of positive experiences, it is striking, nonetheless, that so many respondents recounted negative events. This finding is consistent with other findings in the literature, highlighting negative interactions with faculty and staff and difficulty accessing accommodations among the greatest barriers to college students with disabilities (Agarwal et al., 2015; Dowrick et al., 2005; Hong, 2015; Marshak et al., 2010; Yssel et al., 2016). Students in our studies, as well as those cited, consistently recount experiences where faculty and staff doubt their fitness for academic programs, question integrity (i.e., accommodations are ways to cheat or gain an advantage), and deny accommodations even though they have been approved through the DRC. These negative experiences take a toll on students, and may interact with feelings of competence and self-worth. The response is often that students need self-advocacy and self-determination skills, which are useful and important, but only focusing on the students fails to acknowledge the role and responsibility of faculty and staff; implying that negative interactions and denied accommodations are the students’ problem – not the university’s. Faculty knowledge of disability and laws regarding access and accommodations may influence attitudes toward students with disabilities and willingness to accommodate. Interactions with students who have invisible disabilities (e.g., mental health, learning, attention) may result in an increased difficulty understanding than is the case working with students who have visible disabilities (e.g., physical or mobility related, sensory). This visible versus invisible disability dichotomy was raised by several respondents. Institutional support and efforts to educate faculty about these issues may lead to an improved classroom climate for students with disabilities (Baker, Boland, & Nowik, 2012).

Respondents made several suggestions for growth areas that universities might consider in their efforts to better support students with disabilities. Several suggested the DRCs themselves need additional funding

and resources to be able to fill their roles more effectively. Long wait times, difficulty arranging accommodated exams, and lack of individual attention from a counselor were provided as examples of the consequences of inadequate resources. In addition to what is typically available, some respondents offered areas that they would appreciate some additional support. Suggestions for additional services included access to counseling (adjustment to disability, or additional sessions with the counseling center), designated resources for students with disabilities that are typically available to all students (recreation, career counseling, and preparation), improved facilities to advance universal access, and increased attention to disability from faculty and staff across the university. Since students with disabilities pay the same fees as all other students, ensuring that these other resources – particularly those related to health promotion, recreation, and career development – are designed so that students with disabilities can participate right alongside their peers is a serious equity issue (Devine, 2013).

The results of this study, while interesting, must be understood within the context of a few limitations. First, our sample was recruited through outreach through DRCs and all respondents were volunteers. While their comments were in many ways consistent with the current literature in this area, we cannot generalize their responses to all students with disabilities, especially those who are not registered with the Disability Service Office. Additional studies should target students who have not self-identified with their college or university to find out more about their needs and suggestions. The analysis performed by our research team was pursued carefully, however, as with any qualitative approach, alternative interpretations of the results may have been drawn by other researchers. We attempted to be transparent about our biases and expectations by sharing them with each other during coding, and with the reader in the manuscript itself. Future work with other participants and different research teams is needed to check and extend our findings.

Conclusions and Future Areas of Research

Participants provided suggestions for how colleges and universities can better address the needs of students with disabilities. Recommendations ranged widely, with comments on campus resources, academics, and the more general campus climate

towards disability and level of accessibility. Some students complimented DRC staff and faculty and advisors for their attention and efforts to work with them, while others raised concerns about how well their university is prepared to accommodate students with disabilities. These comments provide concrete suggestions for colleges and universities who are interested in retaining qualified candidates with disabilities. Future areas of research might include focusing on the suggestions of students with particular types of disabilities (e.g., mental health, learning, physical or health related) to get a better understanding of patterns of need for students with particular disability-related issues. Assessing the university more comprehensively for campus climate related to disability would also serve as an important basis of comparison for these student perceptions.

References

- Americans with Disabilities Act and its Amendments, Pub. L. No. 101-336, 104 Stat. 328 (1990).
- Agarwal, N., Moya, E. M., Yasui, N. Y., & Seymour, C. (2015). Participatory action research with college students with disabilities: Photovoice for an inclusive campus. *Journal of Postsecondary Education and Disability, 28*, 243–250.
- Baker, K. Q., Boland, K., Nowik, C. M. (2012). A campus survey of faculty and student perceptions of persons with disabilities. *Journal of Postsecondary Education and Disability, 25*, 309-329.
- Banks, J. (2014). Barriers and supports to postsecondary transition: Case studies of African American students with disabilities. *Remedial and Special Education, 35*(1), 28–39. doi:0.1177/0741932513512209
- Bassett, D. S., Kochhar-Bryant, C. A. (2006). Strategies for aligning standards-based education and transition. *Focus on Exceptional Children, 39*(2), 1-19.
- Belch, H. (2004). Retention and students with disabilities. *Journal of College Student Retention: Research, Theory & Practice, 6*, 3-22.
- Bohm, D. (2004). On dialogue. New York, NY: Routledge.
- Braxton, J. M., Hirschy, A. S., & McClendon, S. A. (2011). Understanding and reducing college student departure. *ASHE-ERIC Higher Education Report, 30*(3). Hoboken, NJ: Jossey-Bass.
- Carter, E. W., Trainor, A. A., Cakiroglu, O., Swedeen, B., & Owens, L. (2010). Availability of and access to career development activities for transition-age youth with disabilities. *Career Development and Transition for Exceptional Individuals, 33*(1), 13–24. <http://doi.org/10.1177/0885728809344332>
- Cory, R. C. (2011). Disability services offices for students with disabilities: A campus resource. *New Directions for Higher Education, 154*, 27–36. doi:10.1002/he.431
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publishing.
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory Into Practice, 39*, 124-130.
- Devine, M. A. (2013). Group member or outsider: Perceptions of undergraduates with disabilities on leisure time physical activity. *Journal of Postsecondary Education and Disability, 26*, 119-133.
- Dowrick, P. W., Anderson, J., Heyer, K., & Acosta, J. (2005). Postsecondary education across the USA: Experiences of adults with disabilities. *Journal of Vocational Rehabilitation, 22*, 41-47.
- Dutta, A., Kundu, M. M., & Schiro-Geist, C. (2009). Coordination of postsecondary transition services for students with disabilities. *Journal of Rehabilitation, 75*(1), 10-17.
- Fleming, A. R., Oertle, K. M., Plotner, A. P., & Hakun, J. G. (2017). Influence of social factors on student satisfaction among college students with disabilities. *Journal of College Student Development, 58*(2), 215-228.
- Fleming, A. R., Plotner, A. P., & Oertle, K. M. (2017). College students with disabilities characteristics and the academic environment: Predicting performance. *Journal of Postsecondary Education and Disability, 30*(3), 209-221.
- Funckes, C. Kroeger, S., Loewen, G., & Thornton, M. (n.d.). *Refocus. Project shift: administration and outreach*. Retrieved from <http://www.project-shift-refocus.org/about.htm>
- Garrison-Wade, D. F., & Lehmann, J. P. (2009). A conceptual framework for understanding students' with disabilities transition to community college. *Community College Journal of Research and Practice, 33*, 415–443. doi:10.1080/10668920802640079
- Getzel, E. E., & Thoma, C. A. (2008). Experiences of college students with disabilities and the importance of self-determination in higher education settings. *Career Development and Transition for Exceptional Individuals, 31*, 77–84.

- Goldin, C., & Rouse, C. (2000). Orchestrating impartiality: The impact of "blind" auditions on female musicians. *The American Economic Review*, *90*, 715-741.
- Guzman, A., & Balcazar, F. E. (2010). Disability service's standards and the worldviews guiding their implementation. *Journal of Postsecondary Education and Disability*, *23*, 50-64.
- Hagemann, N., Strass, B., & Leibing, J. (2008). When the referee sees red... *Psychological Science*, *19*, 764-768. doi:10.1111/j.1467-9280.2008.02154.x.
- Hitchcock, C., Meyer, A., Rose, D., & Jackson, R. (2002). Providing new access to the general curriculum: Universal design for learning. *Teaching Exceptional Children*, *35*, 8-17.
- Hong, B. S. S. (2015). Qualitative analysis of barriers college students with disabilities experience in higher education. *Journal of College Student Development*, *56*, 209-226.
- Isaacs, W. (1999). *Dialogue: And the art of thinking together*. New York, NY: Doubleday.
- Kroeger, S. (2010). From the special issue editor. *Journal of Postsecondary Education and Disability*, *23*, 3-4.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
- Loewen, G., & Pollard, W. (2010). The social justice perspective. *Journal of Postsecondary Education and Disability*, *23*, 5-18.
- Lombardi, A., Gerdes, H., & Murray, C. (2011). Validating an assessment of individual actions, postsecondary supports, and social supports of college students with disabilities. *Journal of Student Affairs Research and Practice*, *48*, 107-126. doi:10.2202/1949-6605.6214
- Mamiseishvili, K., & Koch, L. C. (2011). First-to-second-year persistence of students with disabilities in postsecondary institutions in the United States. *Rehabilitation Counseling Bulletin*, *54*, 93-105.
- Marshak, L., Van Wieren, T., Ferrell, D. R., Swiss, L., Dugan, C. (2010). Exploring barriers to college student use of disability services and accommodations. *Journal of Postsecondary Education and Disability*, *22*, 151-165.
- Newman, L., Wagner, M., Cameto, R., Knokey, A. M., & Shaver, D. (2010). *Comparisons across time of the outcomes of youth with disabilities up to 4 years after high school*. A report of findings from the National Longitudinal Transition Study-2 (NLTS2). Menlo Park, CA: SRI International.
- Newman, L., Wagner, M., Knokey, A. M., Marder, C., Nagle, K., Shaver, D., Wei, X., with Cameto, R., Contreras, E., Ferguson, K., Greene, S., & Schwarting, M. (2011). *The post-high school outcomes of young adults with disabilities up to 8 years after high school*. A report from the National Longitudinal Transition Study-2 (NLTS2) (NCSE 2011-3005). Menlo Park, CA: SRI International.
- Nora, A. (2004). The role of habitus and cultural capital in choosing a college, transitioning from high school to higher education, and persisting in college among minority and nonminority students. *Journal of Hispanic Higher Education*, *3*, 180-208.
- Palmer, C., & Roessler, R. T. (2000). Requesting classroom accommodations: Self-advocacy and conflict resolution training for college students with disabilities. *The Journal of Rehabilitation*, *66*(3), 38-43.
- Payne, K. (2006). Weapon bias: Split-second decisions and unintended stereotyping. *Current Directions in Psychological Science*, *15*, 287-291.
- Perna, L. W. (2006). Studying college access and choice: A proposed conceptual model. In J.C. Smart (Ed.) *Higher Education: Handbook of theory and research, volume XXI* (pp.99-157). The Netherlands: Springer Publishing.
- Pisha, B., & Coyne, P. (2001). Smart from the start: The promise of universal design for learning. *Remedial and Special Education*, *22*, 197-203.
- Rubin, S. E., & Roessler, R. T. (1995). *Foundations of the vocational rehabilitation process* (4th Ed.). Austin, TX: Pro-ed.
- Rehabilitation Act and its amendment, Pub. L. No. 93-112, 87 Stat. 355 (1973).
- Siperstein, G., Norrins, J. Corbin, S., & Shriver, T. (2003, June). *The multinational study of attitudes toward individuals with intellectual disabilities*. Washington, D.C.: Special Olympics, Inc.
- Wagner, M., Newman, L., Cameto, R., Levine, P., & Marder, C. (2003). *Going to school: Instructional contexts, programs, and participation of secondary school students with disabilities* (No. SRI Project P11182) (p. 212). Menlo Park, CA: SRI International: National Longitudinal Transition Study-2 (NLTS2).
- West, M., Kregel, J., Getzel, E. E., Zhu, M., Ipsen, S. M., Martin, E. D. (1993). Beyond section 504: Satisfaction and empowerment of students with disabilities in higher education. *Exceptional Children*, *59*, 456-467.

- Whittemore, R., Chase, S. K., & Mandle, C. L. (2001). Validity in qualitative research. *Qualitative Health Research, 11*, 522–537.
- Yssel, N., Pak, N., & Beilke, J. (2016). A door must be opened: Perceptions of students with disabilities in higher education. *International Journal of Disability, Development, and Education, 63*, 384–394. doi:10.1080/1034912X.2015.1123232

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Table 1

Demographics

| Characteristic | N | % |
|--------------------------------------|----------|----------|
| Gender | | |
| Male | 47 | 35.6 |
| Female | 85 | 64.4 |
| Race or Ethnicity | | |
| Black or African American | 5 | 3.8 |
| Asian | 2 | 1.5 |
| White | 118 | 89.4 |
| Hispanic or Latino | 2 | 1.5 |
| Native Hawaiann or Pacific Islander | 1 | 0.8 |
| American Indian or Alaska Native | 1 | 0.8 |
| Multiracial | 1 | 0.8 |
| Self-Identity | 2 | 1.5 |
| Primary Disability Type | | |
| Blind or Visual | 3 | 2.3 |
| Deaf or Hard of Hearing | 5 | 3.8 |
| Mobility | 7 | 5.3 |
| Brain Injury | 12 | 9.1 |
| Learning Disability or Attention | 47 | 35.6 |
| Intellectual Disability or Cognitive | 1 | 0.8 |
| Psychiatric or Mental Health | 34 | 25.8 |
| Chronic Health | 14 | 10.6 |
| Autism Spectrum | 6 | 4.5 |
| Other | 3 | 2.3 |
| Disability Duration | | |
| 5 years or less | 29 | 23.8 |
| 6-10 years | 23 | 18.9 |
| 11-15 years | 15 | 12.3 |
| 16-20 years | 15 | 12.3 |
| 21 years or more | 40 | 32.8 |
| Academic Status | | |
| Freshman | 15 | 11.4 |
| Sophomore | 24 | 18.2 |
| Junior | 31 | 23.5 |
| Senior | 39 | 29.5 |
| Graduate | 13 | 9.8 |
| Other | 10 | 7.5 |

(continued)

| Characteristic | N | % |
|--------------------------------|-----|------|
| First Generation Status | | |
| No | 114 | 85.7 |
| Yes | 19 | 14.3 |
| Age Categories | | |
| Under 21 | 30 | 22.7 |
| 21-24 | 37 | 28.0 |
| 25-29 | 23 | 17.4 |
| 30-34 | 12 | 9.1 |
| 35-39 | 8 | 6.1 |
| 40 and older | 22 | 16.7 |

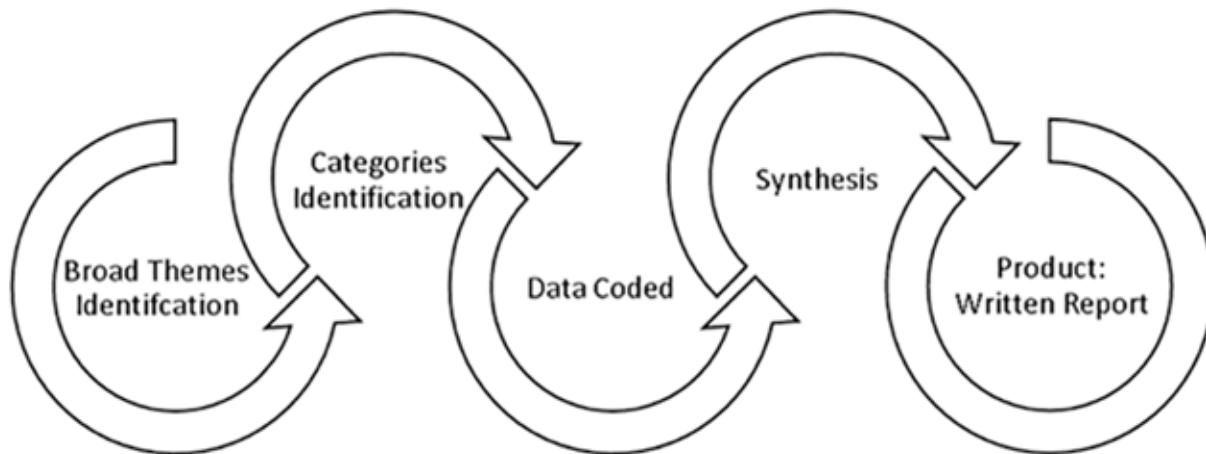


Figure 1. Steps in Content Analysis Process.

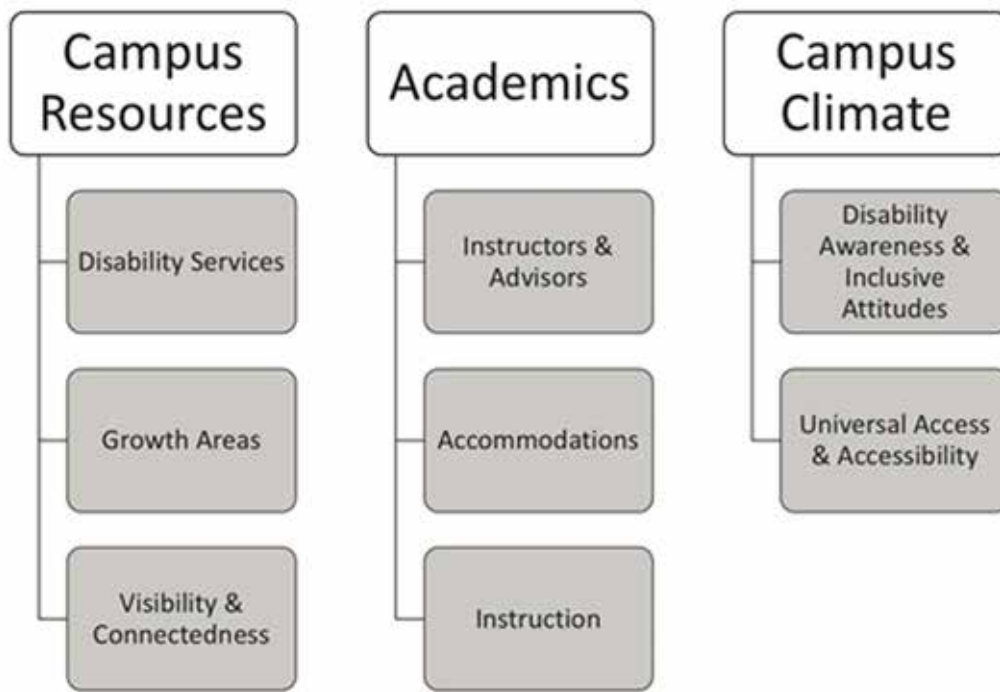


Figure 2. Themes and Categories for Improvement.