Author



Gregoria Barazandeh appointed to the Disability Services Center (DSC) Student Advisory Board Summer of 2002. Through her work at the DSC, she became aware of the difficulties students with disabilities have in discussing their needs with faculty. Her research on the subject led to the development of Disability Fact Handbook, which she has presented at a number of conferences, symposia and conventions. The Handbook has been well received, and Gregoria has been asked to revise it for other campuses within the UC system. In keeping with the themes of her research at UCI, Gregoria hopes to work as a public policy analyst and civil rights attorney, specializing in disability law.

Key Terms

- Academic Accommodations
- Americans with Disabilities Act (ADA)
- Disability Fact Sheet Handbook
- Hidden Disabilities
- Major Life Activity
- Section 504

Attitudes Toward Disabilities and Reasonable Accommodations at the University

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Abstract

The number of students with disabilities, especially those with "hidden" disabili-L ties, has increased dramatically. Federal regulations implementing Section 504 of the 1973 Rehabilitation Act and the Americans with Disabilities Act establish that reasonable and appropriate academic accommodations must be provided to students with disabilities to allow equal access to educational opportunities. Yet, despite current enforcement of regulations and statutes, persistent barriers remain in the academic environment for students with disabilities. These barriers include a lack of knowledge about disabilities, faculty and student misconceptions, negative attitudes, and insufficiency of effective educational tools. As a result, students with disabilities are not always given equal opportunity to use the accommodations that are available to them. This paper offers an overview of disability law, a preliminary literature review of research addressing the discrimination arising from social stigma and negative assumptions about disabilities, and a survey of students with disabilities at UCI to determine the perceptions of such barriers to learning. It includes a sample fact sheet for attention-deficit/hyperactivity disorder from the Disability Fact Sheet Handbook. The Handbook can be used by students and faculty to improve student/faculty communication and petter
modations for students with disabilities. ulty communication and better implement appropriate and legally mandated accom-

Faculty Mentor



It has been my good fortune and honor to work for nearly two years with Gregoria Barazandeh. Her research on the attitudes toward disabilities at the university is timely and policy relevant. Gregoria is one of the most impassioned and focused students that I have mentored in the past ten years. The most appropriate words that describe her personal virtues are patience, persistence and passion. Gregoria's passion for the subject of this UROP-sponsored

research derives from her own observations and experiences. Her research is an excellent example of a solid scholarly research endeavor that may lead to consequential policy reforms in disability accommodations on the campuses of the University of California.

Caesar D. Sereseres School of Social Sciences "A good education is a ticket to success in our society; it is a predictor of success in later life in terms of employment, income, and independence." (National Council on Disability)

Introduction

More students with disabilities are enrolling in postsecondary educational settings than ever before. The number of students with "hidden" learning and medical disabilities increased fourfold between 1978 and 1994 (Brinckerhoff, et al., 1993; Vogel and Adelman, 1992). In 1988, 15.3% of the first-time, full-time college freshmen with disabilities indicated they had a learning disability. According to the National Joint Committee for Learning Disabilities, learning disabilities comprise a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, writing, reasoning, or mathematical capabilities (University of Washington, 2001). By 1994, that statistic had more than doubled to 32.2% (HEATH Resource Center, 2001).

The Office of the Dean of Students' publication, A UCI Guide for Students with Disabilities, states that federal regulations implementing Section 504 of the 1973 Rehabilitation Act and the Americans with Disabilities Act of 1990 require providing reasonable and appropriate academic accommodations for students with disabilities to allow them equal access to educational opportunities (University of California, Irvine, Office of the Dean of Students 2). However, in following those guidelines, institutions of higher education are not required to lower academic standards or compromise the academic integrity of their school, department or program.

Despite current enforcement of disability regulations and laws, several persistent barriers remain in the academic environment. These barriers include misconceptions and a lack of knowledge among both students and faculty regarding disabilities and accommodations, negative attitudes by some faculty toward students with disabilities, and a lack of effective academic tools that address disabilities from the students' point of view (Burgstahler, 2003; Burgstahler, Duclos and Turcotte, 1999; Dona and Edmister, 2001). The better informed both students and faculty are about student disabilities and the success of appropriate accommodations, the more likely it will be for students with disabilities to achieve their full educational potential (Leyser, Vogel and Wyland, 1998). Greater communication between students and faculty enhances this goal (Graham and English, 2001; Leyser, et al., 1998).

Thus, the question becomes: Do schools and faculty need assistance to implement appropriate accommodations? Specifically, is an additional mode of support needed to help students with disabilities work successfully with the federally mandated policy of providing suitable accommodations? This paper identifies and examines the variety of barriers present today, and describes a workable communication solution that will address the needs and goals of students, faculty, and the administration.

Disability Law at Federal and State Levels, and Implementation at UCI

Laws, regulations and rules that affect UCI students with disabilities exist at all levels of the government. At the federal level, Section 504 of the 1973 Rehabilitation Act (Public Law 93-12) "is acknowledged as the first national civil rights law to view the exclusion and segregation of people with disabilities as discrimination and to declare that the Federal Government would take a central role in reversing and eliminating this discrimination" (National Council on Disability, 1997). The Act states that "no qualified individual with a disability in the United States shall be excluded from, denied the benefits of, or be subjected to discrimination under any program or activity that receives federal financial service."

The Americans with Disabilities Act of 1990 (ADA) (Public Law 101-336) joined the Rehabilitation Act as the most comprehensive federal civil rights law used to protect the rights of people with disabilities. It prohibits discrimination against them in employment, state and local government organizations, public accommodations, commercial facilities, transportation, and telecommunications. To be protected by the ADA, one must either have a disability or have a relationship or association with an individual with a disability. The ADA defines an individual with a disability as a person with a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such impairment, or a person perceived by others as having such impairment (U. S. DOJ/ADA, 1990).

According to the ADA, a "physical" disability is any physiological disorder or condition, cosmetic disfigurement, or anatomical loss that affects one or more body systems—neurological, immunological, musculoskeletal, special sense organs, respiratory (including speech organs), cardiovascular, reproductive, digestive, genitor-urinary, lymphatic, skin, or endocrine—that limits a major life activity. Similarly, a "mental" disability is any mental or psychological disorder or condition (including mental retardation, organic brain

syndrome, emotional or mental illness, or specific learning disability) that limits a major life activity (U. S. DOJ/ADA, 1990). Conditions that may meet these criteria include allergies, arthritis, asthma, cancer, diabetes, heart disease, chronic illnesses, eating disorders, emotional or psychiatric illnesses, visual, hearing, mobility and learning disabilities, and attention-deficit/hyperactivity disorder. A major life activity can include such functions as caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working (U. S. DOJ/ADA, 1990).

In addition to these federal regulations, some states have passed amendments to the ADA that are then enforced by designated agencies within those states. On September 30, 2000, Governor Gray Davis of California signed into law AB 2222 under the California Government Code Section 12926, which significantly changed California disability discrimination law by extending its protection to a greater number of Californians, including students. Beginning on January 1, 2001, under AB 2222, a covered disability is defined as any physical or mental condition or disorder that "limits" a major life activity (or makes achievement of that major life activity "difficult"), unlike the ADA definition, which requires that the physical or mental impairment "substantially limit" one or major life activities (Meyers, 2003).

As the above-cited federal and state laws have been passed regarding individuals with disabilities, a system has also been created at UCI to deal with issues pertaining to disabilities (University of California Policies Applying to Campus Activities, Organizations, and Students, 2005). However, administering appropriate accommodations is not always simple, due to a lack of resources, a lack of understanding of the need for reasonable accommodations, or a lack of sensitivity (Myers, 2003). To create a better understanding of these problem areas, the remaining sections discuss the extent of the problem, then address the specific areas and focus on attitudes toward disabilities and reasonable accommodations at the university. Finally, it presents a new communication tool for the university—the *Disability Fact Sheet Handbook*.

Disability Statistics in Colleges and Universities: Disability Population at UCI Undergraduate/Graduate Statistics for Fall 2004

As shown in Table 1, 17.81% of all UCI undergraduates and graduates registered with the Disability Services Center (DSC) have learning disabilities. According to the HEATH Resource Center's report, *College Freshmen*

with Disabilities: A Biennial Statistical Profile, 6% (66,197 out of 1.1 million) of all first-time, full-time freshmen enrolled in American four-year institutions in 2000 selfreported having at least one type of disability. Of that student group, 26,745 (40.4%) self-reported having a learning disability. The breakdown also indicated that among these freshmen, 2.9% reported having speech disabilities; 16.9% reported "other" disabilities; and 1.54% reported health-related disabilities. Health-related disabilities included those resulting from cystic fibrosis, cancer, multiple sclerosis, diabetes, and other medical conditions. The study does not distinguish what constitutes a "learning" disability as it does "health-related" disabilities, and results are based on self-reporting rather than on professional evaluations leading to reporting. Figure 1 illustrates the complete percentage breakdown of the 2000 Biennial Statistical Profile.

Table 1
The 2004 breakdown of types of disabilities for all undergraduate and graduate students at UCI who are registered with the Disability Services Center

Disability Type	New	Continuing	Total #	Total %
Vision	5	14	19	5.94
Mobility/Functional Impairments	36	71	107	33.44
Acquired Brain Injury	8	5	13	4.06
Deaf/Hearing Impaired	0	14	14	4.38
Learning Disability	14	43	57	17.81
ADHD	21	28	49	15.31
Psychological	19	42	61	19.06
TOTALS	103	217	320	100.00

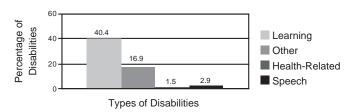


Figure 1 College Freshmen with Disabilities: A 2000 Biennial Statistical Profile

The Problem

A basic diagnosis of a disability does not qualify an individual for accommodations, because the individual must also have a substantial limitation in at least one major life activity, such as caring for oneself, performing manual tasks, seeing, or learning (U. S. DOJ/ADA, 1990). Such a limitation, in turn, would result in functional limitations that make it difficult for the individual to participate effectively in the

daily tasks involved in academic pursuits. Students who experience these limitations may require physical or academic accommodations to remove barriers to the equal educational access they are guaranteed by law. Academic accommodations are not linked to the diagnosis, but instead are assigned to compensate for functional restrictions. Table 2 lists some of the most common academic accommodations provided at colleges and universities for students with disabilities.

Table 2
Examples of Academic Accommodations

Type of Disability	Types of Accommodations
Visual	Seating near front of class; large print handouts and equipment tables; TV monitor connected to microscope to enlarge images; computer equipment to enlarge screen characters and images; audio-taped, Brailled, or electronic-formatted lecture notes; computer with optical character reader and voice output; reader for tests and assignments; note taker
Hearing	Interpreter or real-time captioning; note taker; open or closed- captioned films; use of visual aids; written assignments; FM system; reduced course load
Learning	Note taker or audio-taped class sessions; extended exam time; alternative testing arrangements; computer with voice output; spell checker and grammar checker
Mobility	Note taker; classroom, labs, and field trips in accessible locations; adjustable tables; computer equipped with special input device; extended exam time
Medical	Note taker; extended exam time; assignments made available in electronic format; reduced course load
Psychiatric	Note taker; reduced course load
Other	Note taker; access to class notes; extended exam time; distraction- reduced test space; reduced course load

When a student's disability is hidden, it may not be obvious to others that an accommodation is needed. This is particularly true regarding learning disabilities (LD). Students with LD often encounter people who are skeptical about their disability and their need for accommodations. As one student said about disclosing their LD to a professor, "If I tell you that I have this problem, I don't want to have to convince you." Another student in the same focus group described an incident with a faculty member who told her that learning disabilities were "psychosomatic." Other students spoke of how such incidents led to the decision not to disclose the existence of their learning disability, even though it meant they did not receive the accommodations they needed, and ultimately received lower grades (Madaus, Scott & McGuire, 2003). Yet, in other focus group studies conducted at postsecondary institutions in the northeast, faculty members stated that they often are not aware that their students have disabilities. Other faculty members reported that they do not understand how the need for accommodations should be disclosed or administered, as indicated by this statement, "[t]his topic of disability has never been discussed...I feel as faculty we are left in the dark" (Faculty member, personal communication, 2/29/2000) (Izzo, Hertzfeld, Simmons-Reed and Aaron, 2001).

This input from both sides of the fence points to a need for better dissemination of information about disabilities and greater interaction between students with disabilities and faculty. One possible solution would be to provide a disability fact sheet handbook with information, standards of requests and accommodations, and suggestions for appropriate interactions.

In addition to the problems caused by hidden disabilities, students do not often discuss their disabilities with faculty, and faculty, by law, are not allowed to broach the subject with the student. Many students have limited knowledge of their own disabilities and may be timid, embarrassed or uninformed about the accommodations available to them from the school (Myers, 2003). One contributing factor may be a lack of self-advocacy and communication skills, such as the ability to express thoughts and feelings honestly and directly. Such skills are vital to requesting accommodations at the college level, because, unlike the practice in middle and high schools, it is the responsibility of the university student—not the counselors—to disclose the disability and arrange for accommodations (Graham and English, 2001).

At the same time, faculty members often have limited knowledge of disabilities or appropriate accommodations, especially for those students with "hidden" disabilities (Leyser, Vogel and Wyland, 1998). This lack of knowledge can have negative impact on student performance. "Failure of students with disabilities to obtain appropriate academic services supports and programs may cause them to achieve grade-point averages well below those of their non-disabled peers" (Izzo, et al., 2001).

Faculty Attitudes and Practices Regarding Students with Disabilities

Knowledge About and Attitudes Toward Disabilities Leyser, Vogel and Wyland (1998) examined a large Midwestern research university to study its knowledge, attitudes and practices regarding students with disabilities. The university had an enrollment in 1996 of approximately 23,000 undergraduate and graduate students. Of the 420 faculty who responded to the survey, 66.7% indicated they had no familiarity with Section 504 of the Rehabilitation Act, while 14% indicated they had only very limited familiarity with it. In addition, 40% reported only limited personal communication with students with disabilities, 82% had

no or very limited training in the area of disabilities, and more than 40% indicated they had only limited knowledge and skills for administering requested accommodations for students with disabilities.

In conducting their study, Leyser, Vogel and Wyland found that, while one study five years earlier reported that some faculty members projected negative attitudes toward students with disabilities, most studies reported that faculty expressed positive attitudes toward students with disabilities (Aksamit, Morris and Leuenberger, 1987; Fonosh and Schwab, 1981). Other findings showed faculty members were reluctant to provide certain accommodations, such as copies of lecture notes and alternative assignments or oral rather than written assignments, for fear of lowering the general academic standards (Nelson, Dodd and Smith, 1990).

The specific type of disability a student has can lead to additional problems through inaccurate perceptions that discount the person as an individual (Yuker, 1994). This issue is particularly true for students with psychiatric disabilities, because such disorders are non-visible and tend to be stigmatized by our society. Many faculty members in the Leyser, et al. study reported having only limited knowledge about the rights and needs of students with non-visible disabilities, including those with psychiatric disabilities (Burgstahler, 2003; Cafferalla and Zinn, 1999; Vogel and Adelman, 1993). The combination of misinformation and societal stigma regarding symptoms and behaviors in students with psychiatric disabilities can contribute to fear and misunderstanding, and may result in a student's being labeled as lazy or uncooperative (Dona & Edmister, 2001; Leyser, Vogel, Wyland and Brulle, 1998). Consequently, a student may be criticized for not having a "legitimate" disability, and be wrongfully told by faculty that they are not in need of an accommodation (Burgstahler, 2003; Burgstahler, Duclos and Turcotte, 1999; Dona and Edmister, 2001).

Additional findings revealed that most people, including faculty, without disabilities—or even some with disabilities—judge the severity of a disability by the individual's functional limitations or the adaptive equipment the individual must use (Smart, 1980). Therefore, a person without a disability may wrongly perceive an individual with a less-visible disability as not needing accommodation. If an individual with a disability detects another person's prejudice, that individual could internalize those feelings into his or her own self-identify (Smart, 1980). These feelings are problematic because they can diminish the student's self-confidence, self-esteem, and self-worth (Smart, 1980), and negatively

affect self-advocacy and communication skills, making it even harder for the student to discuss the nature of the disability and accommodation needs with faculty (Myers, 2003). When a student is affected deeply enough to hinder their bringing up such a subject, it is possible that their academic success will suffer. With this in mind, it is not surprising that other experts claim the academic success of a student with disabilities is influenced by faculty member attitudes and faculty willingness to provide accommodations (Baggett, 1994; Fonosch and Schwab, 1981; Moore, Newton and Ney, 1986).

Viewing Student Accommodations

Prior research findings demonstrate the levels at which faculty view a request for accommodation of a disability. Table 3 shows typical scenarios that might arise if a student requests accommodations from a faculty member (Graham and English, 2001).

Table 3
Sample responses to a student's request for accommodations (specifically, "I would like to talk to you about my attention-deficit/hyperactivity disorder (ADHD) and the accommodations I need in your class.")

Negative Response	Indifferent Response	Positive Response
Faculty: ADHD is just an excuse for poor time management and lack of prioritizing.	Faculty: I don't need a letter of accommodations from you. Do whatever is necessary.	Faculty: Let me know what I can do to help. Come by my office during my office hours, and we will talk.
Student: I hear that a lot and I know it is a common perception However, my purpose is to inform you of my need for an accommodation.	Student: May I leave this letter of accommodations with you for your records?	Student: Thank you. I will call and make an appointment to speak with you about my accommodations.
Faculty: I do not want to use accommodations to give you an unfair advantage over your peers.	Faculty: Certainly, I will file this in my office.	
Student: I will work to complete all course requirements as you have outlined them. These accommodations actually create more work for me. If you have any questions, you can contact the disability support office.	Student: Thank you. I will make arrangements with you or the support office when I need accommodations.	

These exchanges demonstrate various feelings students and faculty may have about accommodations and indicate the attitudes that can underlie the problems, particularly if faculty members feel giving accommodations will lower academic standards of their class and the school. Unfortunately, this conversational format also demonstrates many faculty members may still not know the clear requirements of the

law that schools recognize disabilities and offer accommodations, so they may attempt either to deny requests for accommodations or be less than supportive in acknowledging them. However, these interactions provide self-advocacy suggestions to students who receive negative or indifferent responses to their requests for accommodations. Such suggestions act to ensure that students actually receive the accommodations, by reminding the faculty member that the disability support office may become involved if a request is dismissed out of hand or otherwise ignored.

What Students and Faculty Want

Many faculty members want to know more about the various types of classroom accommodations for students with disabilities. In Leyser, Vogel and Wyland's study of 420 faculty members, 42% of faculty participants wanted more training on classroom accommodations, 34.3% wanted training on test accommodations, and 31.7% wanted more written information, such as a handbook or one-page handouts about disabilities and accommodations. The authors said they believe the survey had nationwide significance because, although the school studied was only one source, "the [one] university is representative of many other comprehensive large public universities across the nation…and that…findings reported here corroborated data collected on faculty attitudes and practices in many other universities" (Leyser, et al. 21).

Most recent studies show that students and faculty agree on the importance of faculty development regarding students with disabilities. This information is particularly important when accommodating students with hidden disabilities (Henderson, 2001). One student with LD stated, "I do not look disabled. Teachers think there is nothing wrong with me. They think that I'm getting an unfair advantage" (Student, personal communication, 2/28/2000). In the same study, faculty reported their own experiences in dealing with communications about accommodations: 1) "People respond to disability in different ways. That is why some students try to get through classes without saying anything to you. All they need is one bad experience and they are going to try to avoid saying anything to you" (Faculty member, personal communication, 2/29/2000); 2) "I do not want to give accommodations without the proper identification because it is not fair to the other students...How do I get the information to make an informed decision?" (Faculty member, personal communication, 5/24/2000). Conversely, students also expressed appreciation of instructors who were amenable to disclosure of LD. One student shared the story of a positive interaction with a professor related to a test accommodation disclosure: "I was really nervous about bringing the accommodation letter...but he sat down and talked about...what I would do, the entire process, like I guess he knew and understood it."

These statements show the complicated nature of understanding disabilities and accommodations. The confusion and differences of opinion can impact the accommodations themselves, including their success in practice. Thus, there is a need for better education about disabilities and the reasons for accommodations, so that students will know what and how to ask for them, and faculty members can support accommodations and know that they will not necessarily lead to the dilution of the academic quality of courses.

Specific Background Information

The DSC is the designated campus office at UCI for determining appropriate accommodations and auxiliary aids for students with disabilities. Such a determination is based on disability documentation from a qualified professional, provided by the student, and a collaborative assessment of the student's needs (University of California, Office of the Dean of Students 2). Academic accommodations and support services are determined on an individual basis. All disability documentation is the responsibility of the student. The DSC encourages students to provide faculty with a verification letter that explains their accommodation. Although a student is not required to discuss their "disability" with faculty, doing so opens the doors for better communication in specific ways: 1) students give the faculty permission to confidentially discuss their disabilities on an ongoing basis so that faculty may initiate communication about any new or ongoing concerns; 2) students can encourage faculty to become more knowledgeable about disabilities; 3) students let the faculty know they want to work with them on the best instructional strategies for themselves; and 4) students let the faculty know they expect him or her to adopt the suggestions approved by DSC or to explore the feasibility of alternate forms of accommodation. Once a student with a disability discloses their concerns and needs to a faculty member, an interactive process begins with feedback between the faculty and the student.

The "UC Irvine Students with Disabilities Survey"

A survey was conducted at UCI to explore the need to increase communication and understanding about disabilities between students and faculty (Figure 2). I based the survey questions on my experience as a peer educator and peer

mentor to students with disabilities, and on the shared experiences of DSC office staff at the various UC campuses. The survey consisted of 11 questions to solicit information such as: 1) knowledge of disabilities; 2) personal experience or contact with faculty; 3) faculty willingness to make accommodations; 4) student and faculty needs for additional information and better communication. Two open-ended questions asking for additional comments and student suggestions were also included. Prior to its use, DSC staff members and people with disabilities reviewed the survey to give suggestions and recommendations regarding the effectiveness and clarity of the questionnaire before its final printing. The survey was approved by the Institutional Review Board (IRB) of UCI under protocol #2005-4683.

Students registered with the DSC were surveyed. These students provided insights into the barriers they faced in obtaining equal educational access and, in particular, appropriate academic accommodations (Figure 2).

1.	How knowledgeable are you about your disability?
2.	Does the UC Irvine faculty need to learn more about disabilities?
3.	How often do you discuss the nature of your disability (i.e., characteristics, symptoms) with faculty?
4.	From your personal experience, how understanding are faculty about administering the accommodations you receive related to your disability?
5.	If faculty could have a fact sheet regarding your disability (to discuss symptoms and offer tips so faculty could better accommodate you), would you be willing to give faculty a fact sheet that would be available at DSC?
6.	From your experience, how approachable are your faculty regarding your disability?
7.	Do you believe there is a need for better communication between students with disabilities and faculty?
8.	Would better communication between students with disabilities and faculty help you maximize your educational potential?
9.	How willing do you believe faculty are to adapt their instructional strategies and course materials to meet the accommodation needs of students with disabilities?
10.	What should faculty do to better support students with disabilities?
11.	How did you feel about revealing your disability to the university and/or faculty for accommodation purposes?

Figure 2 UC Irvine Students with Disabilities Survey

Participants & Procedure

Each undergraduate and graduate student registered with the DSC (320 students) was sent, via e-mail from the Director of DSC, a survey questionnaire, a cover letter, and instructions on where to return the completed survey. The letter explained the purpose of the survey and the importance of the student's input. The purpose of the survey was to explore whether the use of a handbook containing information about particular disabilities would improve student/faculty communication and understanding about disabilities and result in greater use of appropriate accommodations for students with disabilities. Anonymity was assured and the letter also indicated that participation was

voluntary. Respondents had one week to complete and return the survey. To encourage more participation, invitations to participate were posted in the DSC. A total of 40 students replied to the questionnaire. Student responses are summarized in Table 4.

Table 4
Results of the UC Irvine Students with Disabilities Survey

Question	Responses (N=40)
How knowledgeable are you about your disability?	Wanted to learn more: 67% Very knowledgeable: 10% Somewhat knowledgeable: 13%
Does the UC Irvine faculty need to learn more about disabilities?	Strongly agree: 55% Agree: 27.5% Neutral: 17.5%
How often do you discuss the nature of your disability (i.e., characteristics, symptoms) with faculty?	Often: 17.5% Rarely, only when I must: 12.5% Never: 70%
From your personal experience, how understanding are faculty about administering the accommodations you receive related to your disability?	Very: 50% Somewhat: 25% Not at all: 12.5% Indifferent: 12.5%
If faculty could have a fact sheet regarding your disability (to discuss symptoms and offer tips so faculty could better accommodate you), would you be willing to give faculty a fact sheet that would be available at DSC?	Yes: 62.5% Perhaps: 17.5% Not sure of faculty reaction: 20%
From your experience, how approachable are your faculty regarding your disability?	Very: 50% Somewhat: 25% Indifferent: 25%
Do you believe there is a need for better communication between students with disabilities and faculty?	Strongly agree: 67.5% Strongly disagree: 17.5% Neutral: 15%
Would better communication between students with disabilities and faculty help you maximize your educational potential?	Agree: 80% Hesitant: 20%
How willing do you believe faculty are to adapt their instructional strategies and course materials to meet the accommodation needs of students with disabilities?	Very: 25% Indifferent: 50% Somewhat: 20% Not at all: 5%
What should faculty do to better support students with disabilities?	The comments made most frequently included the need for faculty to be more trusting, sensitive, and just to ask the students what they need.
How did you feel about revealing your disability to the university and/or faculty for accommodation purposes?	No problem doing so: 67.5% Do not like to do so: 17.5% No response to question: 15%

Discussion

The primary goals of this survey were to examine knowledge and practices of students with disabilities, as well as students' perceptions of faculty attitudes and practices regarding students with disabilities. Findings showed that 77.5% of the students "strongly" reported the need for better communication between students and faculty, and that this increased communication would help them maximize their educational potential. Fifty percent of the students stated that faculty members were "very understanding" about administering accommodations and that 25% of the faculty were, "very willing" to adapt their course materials to meet the needs of students. These statistics are similar to the findings of other studies (Bagget, 1994; Fonosch & Schwab, 1981; Moore, Newton & Ney, 1986), in showing

that bridging the communication and information gap between students with disabilities and faculty members could benefit both parties.

Finally, the findings of 82.5% of the student respondents showed that they felt faculty need to learn more about disabilities. Additionally, 62.5% of the students who responded were willing to give faculty members a fact sheet about their disability. Both of these points are in concert with the Leyser, Vogel and Wyland study of 420 faculty members, which revealed that more than 30% of them wanted more written information about disabilities and accommodations.

This study pointed to the need for broader avenues of communication between students with disabilities and faculty. It also confirms my hypothesis by strongly indicating the need for an additional mode of support—such as a disability fact sheet handbook—to increase this communication. A handbook would meet several of the needs expressed by students in the survey, as evidenced by the fact that at least 50% of the students described the faculty as being approachable regarding their disabilities, but only 25% believed the faculty were very willing to adapt their instructional strategies to accommodate the students' needs, with 50% believing the faculty to be indifferent. The results of this survey show that many students believe that faculty are supportive of the integration of students with disabilities and are willing to help them maximize their educational potential, but may need better and/or more assistance in doing so.

Limitations

Several shortcomings of this survey need to be noted. First, the responses were only from students with disabilities. Therefore, another survey should be conducted for faculty regarding student and faculty behavior to verify the data based on student self reports. Second, the sample size in this study was small (40 respondents), as a large majority of the students contacted did not respond. In future studies, a larger sampling of the student with disabilities' population should be acquired. Possible methods of reaching this goal include posting flyers in the DSC or throughout campus a few weeks prior to the study and sending out follow-up reminders. Additionally, acquiring certain demographic data, such as year, school, and major, may be desirable to research more closely the reason for the communication gap.

Although this survey was small and involved only students with disabilities, the responses validated that more cooperation and communication is needed between students with disabilities and faculty. While the respondents differed in some of their perceptions, 77.5% clearly indicated their willingness to disclose their disability to their institution and to communicate with faculty, including providing an information sheet regarding their specific disability. In addition, the results suggest both faculty and students would benefit if a handbook were available to provide information regarding disabilities and available accommodations.

Development of the Disability Fact Sheet Handbook

The DSC Director identified the most common disabilities appearing in the campus student population (see Table 1). Information was gathered and extrapolated from published medical literature and various data related to disabilities and academic accommodations on those disabilities identified by the DSC. In addition to these primary sources, direct contact with various disability-related organizations and agencies—such as the American Bar Association Commission on Mental and Physical Disability Law and the National Council on Disability—and individuals provided further insight into the need and the development of a handbook. Previous research studies and the results from the UC Irvine Students with Disabilities Survey were also used.

Based on this data, I wrote a handbook using medical/disability literature and available research studies, and my experience as a DSC Peer Educator and Peer Mentor for students with disabilities. The fact sheets in the handbook include information on many of the physical, learning, and psychological disabilities of current UCI students. Each two-page fact sheet covers the definition, incidence, and characteristics of a particular disability, appropriate accommodations for that disability, and helpful resources and tips for both students and instructors. A sample of a handbook fact sheet for Attention Deficit Hyperactivity Disorder (ADHD) is at the end of this paper. The complete *Disability Fact Sheet Handbook* is available online at this address: www.disability.uci.edu/disability_handbook/index.html.

Once the *Handbook* was complete, a training workshop was developed and presented to the DSC staff and peer educators. The workshop communicated ways to provide disability fact sheets to each student, to encourage students to be self-advocates by giving the fact sheet(s) to their faculty members along with their verification letters, and to promote discussion between students and the faculty. The *Handbook* was well-received, so the project was expanded to other UC campuses, and subsequent workshops were also conducted for their respective DSC staff. The positive feedback on the *Handbook* expansion has been overwhelming

from the various UC campuses and members of the community. Additional research will be needed after the *Handbook* has been used more extensively, at which point it will be possible to more accurately measure its effectiveness.

Conclusion

Under the law, postsecondary institutions cannot discriminate on the basis of a student's disability. When qualified students with disabilities enroll in postsecondary education, institutions are required by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 to provide appropriate academic accommodations. Yet, university students have the responsibility to register themselves with the DSC at their school to request academic accommodations and to fulfill the academic requirements of each of their courses. The best accommodations result when the faculty, student, and DSC staff members meet and work together. Faculty, administration and staff must also increase their awareness of the rights and needs of qualified students and take action for these students to maximize their educational potential. However, faculty members may be hampered by a lack of knowledge or misconceptions about students with disabilities; in particular, they may believe that they give an unfair academic advantage to students with disabilities through their accommodations. Findings in the literature indicate that the more students and faculty know about disabilities, the more likely students will be able to receive necessary accommodations and maximize their educational potential. The Handbook, then, can be a successful tool in advocating for a useful and positive change within a campus community.

Sample Disability Fact Sheet

DISABILITY FACT SHEET
ATTENTION-DEFICIT/HYPERACTIVITY DISORDER
(ADHD)

Definition:

ADHD is a condition that can make it hard for a person to sit still, control behavior, and pay attention. These difficulties usually begin before the person is 7 years old. However, these behaviors may not be noticed until the person is older. Doctors do not know just what causes ADHD. They believe that some people with ADHD do not have enough of certain chemicals (called *neurotransmitters*) in their brain. These chemicals help the brain control behavior.¹

Incidence:

According to the National Institutes of Health, today, ADHD affects approximately 3 to 5 percent of the school-age population—approximately one million children in the U. S. have ADHD—with males diagnosed three to four times more often than females. While males are more likely to show signs of hyperactivity, females with ADHD typically exhibit symptoms of inattention.²

Characteristics of ADHD:

There are three main signs, or symptoms, of ADHD.

- A. Problems with paying attention (called an inattentive type)
- B. Being very active (called hyperactivity)
- C. Combined subtype

A. An Inattentive type, with signs including:

- Failing to pay attention to details and making careless mistakes
- Rarely following instructions carefully and completely losing or forgetting things like pencils, books, and tools needed for a task
- Skipping from one uncompleted activity to another
- Daydreaming, "spacey," easily confused, slow moving, and lethargic
- Difficulty processing information as quickly and accurately as other students

B. A hyperactive-impulsive type, with signs including:

- Fidgeting or squirming; Difficulty remaining seated
- Always seeming to be "on the go"
- Blurting out answers before hearing the full question
- Difficulty waiting for a turn or while in line
- Problems with interrupting or intruding

C. Combined type

Students with the combined type of ADHD have symptoms of both types described above. They have problems with paying attention, hyperactivity, and controlling their impulses.³

Tips for Students:

- Learn about ADHD. The more you know, the more you can help yourself.
- Learn about strategies for managing your behavior. These include techniques such as: charting, ignoring behaviors, and experiencing both natural and logical consequences.
- Teach others around you about what ADHD is and what they can do to help.
- Talk with your doctor about whether medication will help you.

Tips for Faculty:

• Figure out what specific things are hard for the student. One student may have trouble starting a task, while another may have trouble ending one task and starting the next.

^{1.} The Nemours Foundation (dedicated to providing treatment and curative services to acutely and chronically ill children). Retrieved from http://kidshealth.org/parent/positive/learning/adhd.html

^{2. &}quot;Facts About Children and Adolescents with ADHD", cited on About Our Kids.Org. Retrieved from http://www.aboutourkids.org/articles/adhd_facts.html
3. National Institute of Mental Health:

http://www.nimh.nih.gov/publicat/adhd.cfm

- Post rules, schedules, and assignments. Call attention to changes in the schedule.
- Keep the classroom door closed as much as possible.
- Make sure directions are given step by step. Give directions both verbally and in writing.
- Work together with the student to create and implement an educational plan tailored to meet the student's needs.
- Have high expectations for the student, but be willing to try new ways of doing things.⁴

Possible Accommodations:

- Extended exam time (generally time and a half; possibly double-time)
- Note taker, access to class notes
- Distraction reduced test space
- Reduced course load⁵

Resources/Organizations:

Barkley, R. (1995). <u>Taking charge of ADHD</u>. New York: Guilford Press. Tele: 1-800-365-7006

Hallowell, Edward M. & John J. Ratey. (1994). <u>Driven To Distraction</u>. New York: Touchstone.

CH.A.D.D. (Children and Adults with Attention-Deficit/Hyperactivity Disorder): 8181 Professional Place, Suite 201; Landover, MD 20785; (301) 306-7070; Web http://www.chadd.org/

National Attention-deficit Disorder Association: 1788 Second Street, Suite 200; Highland Park, IL 60035; (847) 432-2332; Web: http://www.add.org/

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^{4.} Id.

^{5.} A UCI Guide to TEACHING STUDENTS with DISABILITIES

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