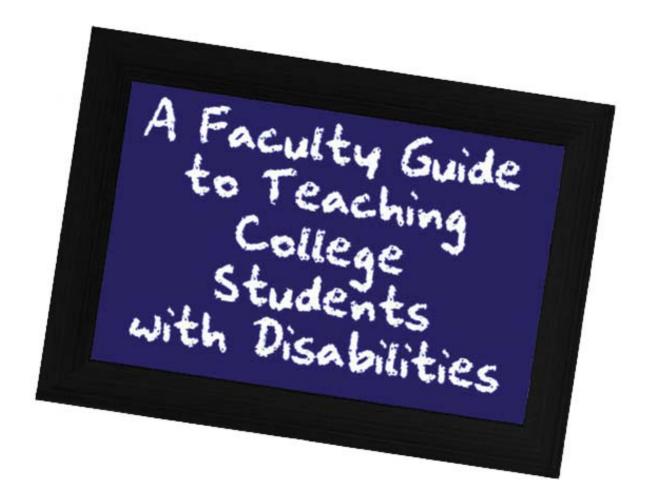
Fourth Edition \$5.00

# REASONABLE ACCOMMODATIONS

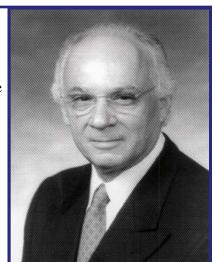


The City University of New York Office of Student Affairs 101 West 31st Street, Suite 1225 New York, New York 10001

# **Dear Colleagues:**

Students with disabilities have turned to CUNY in unprecedented numbers for the promise of a world class education and a better life, encouraged by the guarantees for equal access and opportunity of Section 504 of the National Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Providing access to students with disabilities is one of CUNY's highest priorities. During the past decade, the number of students with disabilities attending The City University of New York has more than tripled.

The City University of New York has been a pioneer in the development of high quality, innovative programs, that provide access and ensure that students with disabilities receive the same opportunities to attend college as do other students. The University recognizes the importance of promoting the full participation of students with disabilities in all aspects of college life and ensuring that its programs, facilities and curricula are fully accessible.



Many of these programs are recognized regionally and nationally as model projects for disability services in higher education. CUNY's Assistive Technology Services Project provides students with disabilities access to cutting-edge technologies. Similarly, CUNY continues to be a national leader in providing services to hearing impaired students. At each CUNY college, highly skilled disability services professionals coordinate the provision of reasonable accommodations and support services to students with disabilities and their faculty.

For students with disabilities, meaningful access must be realized in college classrooms, facilitated by faculty utilizing quality information and resources throughout the university. This type of knowledge enhances accommodations for students with disabilities. CUNY's various campus faculties have made significant strides in helping students with disabilities achieve their educational and career goals. We are confident that these efforts will continue as the University issues this updated guide.

Matthew Goldstein, Chancellor The City University of New York

REASONABLE ACCOMMODATIONS: A FACULTY GUIDE TO TEACHING COLLEGE STUDENTS WITH DISABILITIES is published by The City University of New York. It was originally published by the Professional Staff Congress/CUNY in 1988 under the direction of Aaron Alexander, in consultation with a subcommittee of the CUNY Committee on Student Disability Issues and revised in 1995, 2001, and 2009. Updated design and graphics: CUNY Assistive Technology Services (CATS). Desktop publishing editing: Carolyn Occhino, Scott Underwood and Kieron James. Printing: Asian and Hispanic trading and Consulting. ©2009 CUNY.

SOURCES: The material in this publication is based on articles written and researched by members of the CUNY Committee on Student Disability Issues, and the following references: Jane E. Jarrow, Title by Title: The ADA's Impact on Postsecondary Education (Columbus, Ohio: Association on Higher Education and Disability (AHEAD), 1992); Katherine Garnett and Sandra LaPorta, Dispelling the Myths: College Students and Learning Disabilities (New York: Hunter College/CUNY, 1984); Higher Education and the Handicapped (HEATH) Resource Center, Factsheets (Washington, D.C., The National Clearinghouse Postsecondary Education for the Handicapped, American Council on Education); Phillip S. Jastram and Guy C. McCombs III; Access for Handicapped Students to Higher Education (Washington, D.C.: United States Department of Education, 1985); Office of Civil Rights, USDOE, "Handicapped Persons' Rights under Federal Law" (Washington, D.C.: OCR, USDOE, January 1987); Lynn Smith, The College Student With a Disability: A Faculty Guide (Washington, D.C.: The President's Committee on Employment of the Handicapped, 1980); Tantam, D. (ed. 1998) Clinical Topics in Psychotherapy, Gaskell Press; Tantam, D. (2002) Psychotherapy and Counseling in Practice, Cambridge University Press.

ADDITIONAL COPIES of this publication are available at \$5.00. Make checks payable to CUNY, and mail to CUNY, Office of Student Affairs, 101 West 31 Street, Suite 907, New York, NY 10001.

### **Content**

The purpose of this guide is to assist faculty to successfully carry out their central role in the university's commitment to provide access to students with disabilities. You will find useful information about the needs of students with various types of disabilities and helpful suggestions for how to successfully meet their needs in your classroom and other learning settings.

CUNY prides itself on serving an impressive diverse community of students. When it comes to students with disabilities approximately 10,000 students have been served throughout this institution of higher learning. This does not take into consideration the hundreds, perhaps thousands, who choose not to disclose their disability status or who become disabled throughout their life's journey.

Beyond the university's commitment to fulfill the promise of access is the legal imperative embodied in Section 504 of the Federal Rehabilitation Act of 1973. It states in part (as amended):

"No otherwise qualified person with a disability in the United States... shall, solely on the basis of disability, be denied access to, or the benefits of, or be subjected to discrimination under any program or activity provided by any institution receiving federal financial assistance."

The Americans with Disabilities Act of 1990 (ADA), landmark civil rights legislation for people with disabilities, reaffirms this mandate, which has been clarified and updated by the ADA Amendment Act of 2008.

In order to comply with this legislation, colleges and universities that receive federal assistance must assure that the same educational programs and services offered to other students be made available to students with disabilities. Academic ability must be the sole basis for participation in post-secondary education.

To accomplish this goal, both physical and programmatic access must be provided. Access means more than the removal of architectural barriers and the provision of auxiliary services. It means that reasonable accommodations must be made in the

Where to go for assistance:	Page
The Campus Coordinator/Director of Student Disability Services	3
CUNY-Wide Projects	4
Teaching students with disabilities: an overview	6
Teaching students with learning disabilities	8
Teaching students with visual disabilities	10
Teaching students with mobility and hand-function disabilities	11
Teaching students with hearing disabilities	12
Teaching students with psychological/psychiatric disabilities	13
Teaching students with speech disabilities	14
Teaching students with medical conditions that involve disabilities	2 15
Technology in the Classroom	20

instructional process to ensure full educational opportunity. This principle applies to all teaching strategies and modes, including online and other electronic modes of instruction, as well as to institutional and departmental policies.

The means of achieving this ideal are often not merely matters of judgment. They involve awareness and understanding of disability law and myriad tools and the options for achieving the educational needs of students with disabilities. This guide is designed to help faculty develop their awareness and knowledge in these areas and work in tandem with students and campus disability services coordinators.

The first step as an instructor is to treat students with disabilities as, simply, students. After all, they come to college for the same reasons others do and they bring with them the same range of intelligence and scholastic skills.

In accommodating students who present themselves or learn or perform in ways that are different from others, it is vital to remember that their similarities with others are much more significant.

# Where to go for assistance: The Campus Coordinator/Director of Student Disability Services

Each campus of The City University of New York has designated an office to coordinate services for students with disabilities. The Coordinator/Director of the campus office of Student Disability Services provides students and faculty with assistance in meeting the requirements of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 and the ADA Amendments Act of 2008 as well as other related federal, state and local laws and regulations. The Coordinator/Director may be assisted in these functions by a college-wide committee, or a 504/ADA Committee, made up of faculty, administrators, and students who facilitate compliance with federal regulations to integrate students with disabilities into the college community.

The primary work of the *DS professional staff* is assisting students to successfully transition to college or graduate programs, identify and utilize effective accommodations matched to their needs, and develop personal and academic success skills that help them progress toward their education and career goals. They work with students who identify themselves or are referred by faculty/staff members or outside agencies. Official documentation of disability is required to determine whether and what kind of specialized aids and services or academic accommodations are appropriate.

Among the services provided or arranged for by the Office of Student Disability Services are pre-admission counseling, priority registration, academic advisement, and such accommodations as room changes, readers, interpreters, note-takers, and exam proctors. If routine college tutoring services are not provided in an accessible modality, SDS may arrange for adaptations to meet student needs. More broadly, the Coordinators/Directors serve as advocates for students with disabilities, ensuring that they have physical and programmatic access to all college programs and are effectively mainstreamed into the campus community. Additionally, they collaborate with the Colleges' ADA Compliance Officers. LEADS (Linking Employment, Academics, and Disability Services), a state-agency-funded program that focuses on employment preparation and placement, is an adjunctive service that may be available on your campus

For faculty, the Coordinator/Director of Student Disability Services may render invaluable advisory services. They are the ones to consult for individualized adaptations for students with disabilities as well as to answer questions that may arise in accommodating the needs of students with disabilities in the classroom. One important set of questions about online instruction tools is whether their features present a barrier to students with disabilities. For information about this in relation to your course please refer to "Technology in the Classroom" at the end of this guide.

Students with disabilities represent a cross section of diversified individuals. To facilitate their academic success, please consider alerting your classes to the office for student disability services on campus by including a statement in your syllabus.

### Sample Syllabi Statement:

"Qualified students with disabilities will be provided reasonable academic accommodations if determined eligible by the Office for Students with Disabilities (OSSD). Prior to granting disability accommodations in this course, the instructor must receive written verification of a student's eligibility from the (OSSD), which is located at (your campus information here). It is the student's responsibility to initiate contact with the (OSSD) staff and to follow the established procedures for having the accommodation notice sent to the instructor."

# **CUNY-Wide Projects**

### **CUNY Assistive Technology Services (CATS)**,

based at Queensborough Community College, is a team of assistive technology specialists who provide a wide range of support services and tools to CUNY campuses ensuring consistent assistive technology throughout the university.

CATS stays current with developments in a wide range of assistive technologies in order to provide the necessary support to our campuses. CATS ensures access to all educational material as per the ADA. Some of these include:

- Audio Recording/Playback Devices
- Braille Embossing
- Magnification Devices
- Screen Enlargers
- Screen Readers
- Tactile Image Enhancers/Audio Systems
- Voice Recognition Software

This expertise is shared via training workshops and publications provided to the CUNY college community.

### In addition CATS provides:

- Consultations with colleges in the design and maintenance of adaptive computer and equipment labs
- Hardware and software recommendations
- Installation and maintenance assistance
- Phone and on-site technical support
- Budgeting and purchasing guidance for adaptive equipment and software
- Faculty and staff training and workshops
- Community List Server for help with AT issues.

For more information, please call 718-281-5014

### The CUNY Multi Media Regional Center (MMRC)

at the College of Staten (CSI) Island provides a wideranging combination of facilities, equipment, and support services where CUNY Deaf and Hard of Hearing Students can acquire AT hardware and software and use a media library which houses closed captioned multi-media in myriad formats. The MMRC, located in Building 1 North, Room 115, is our official "Resource Center for the Deaf and Multi Media Regional Center." The MMRC houses four wireless computers with various visual software utilities, among many other technology resources.

The MMRC developed its own version of the assistive technology service known as Communications Access Realtime Translation (CART). Through active research, the staff have cultivated and deployed this service on the CSI campus and developed a method for providing CART services to other CUNY Deaf and Hard of Hearing students via the internet from various remote locations; the result is expanded high-quality services and cost reduction. The MMRC staff teaches, trains and undertakes ongoing assessment of different types of technology offering optimal learning opportunities for CUNY Deaf and Hard of Hearing students.

For more information about CART services, please call 718-982-3341.

# **CUNY-Wide Projects**

### The CUNY Learning Disabilities (LD) Project,

housed at The City College of New York, is a LD Program created to help CUNY staff and faculty address the needs of our students with learning disabilities. The LD Project offers a variety of services, including but not limited to centralized expertise and continued innovation. Some of the services of the LD Project include:

### Staff and faculty training

- Centralized professional development on contemporary LD issues for Student Disability Services staff.
- Faculty workshops via webinar on teaching students with learning disabilities.
- Professionals are also available to do campusbased workshops for tutors.

Maintaining relationships with LD service agencies in the NYC community

- Negotiating special testing rates for CUNY students
- Helping service agencies to understand needs specific to college students with LD
- Providing good referral sources

### Individual case consultation

- Review and explanation of documentation
- Assistance with determining appropriate accommodations and support services
- Assistance with appropriate academic appeal processes

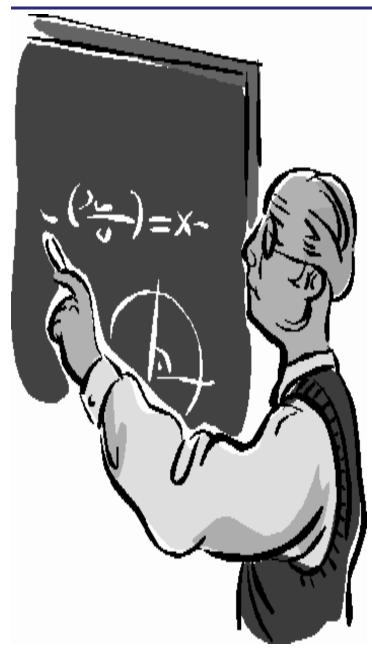
### Print and recorded resource materials

 Multiple books and audio and video recordings are available to assist professionals and students to better understand LD and different strategies that can be helpful in the learning process

Direct all inquiries about the CUNY Learning Disabilities Project to 212-650-5913.



# **Teaching Students with Disabilities: An Overview**



Students bring a unique set of strengths and experiences to college, and students with disabilities are no exception. While many learn in different ways, their differences do not imply inferior capacities. There is no need to dilute curriculum or to reduce course requirements for students with disabilities. What may be needed, however, are what the law calls "accommodations" or "reasonable accommodations," including modifications in the way information is presented (*in hard copy, online and electric formats*) and in methods of testing and evaluation. Faculty will be aided in these efforts by drawing upon the students' own prior learning experiences, using available college and department resources, and collaborating

with the campus Coordinator/ Director of Student Disability Services.

Specific suggestions for teaching students with disabilities will be offered in the sections devoted to each disability, but here are some general considerations:

### 1. Identifying students with disabilities.

Determining that a student has a disability may not always be a simple process. Visible disabilities are noticeable through casual observation unlike an immediately recognizable physical impairment, for example, or the use of a cane, a wheelchair or crutches.

Other students have what is known as hidden disabilities, such as cardiac conditions, learning disabilities, cancer, diabetes, kidney disease, and psychiatric or seizure disorders, all of which are usually not apparent.

Finally, there are students with multiple disabilities.

Some students with disabilities identify themselves as such by contacting the Office of Student Disability Services and/or their instructors before or early in the semester. Others, especially those with "hidden" disabilities, may not. Such students, in the absence of instructional adjustment, may run into trouble in their college work. They may self-identify just before an examination and expect instant attention to their needs.

The faculty member should make an announcement in the syllabus and in class at the beginning of the term inviting students with disabilities to schedule appointments.

The student's own suggestions, based on experience with the disability and with school work, are invaluable in accommodating disabilities in college.

If you suspect that a student has a disability, discuss the issue privately with the student. You may find such an approach awkward, at least initially, but the end result will be extremely beneficial if the student's condition is made known at the very outset.

# **Teaching Students with Disabilities: An Overview**

However a disability is identified, it should be verified manifestations of disability. and discussed with the Coordinator/ Director.

- **2. Dividing the responsibilities.** To the extent manageable, students with disabilities bear the primary responsibility, not only for identifying their disabilities, but for requesting the necessary adjustments to the learning environment for reading and taking notes. For testing arrangements and the use of department resources, the cooperation of the faculty member is vital.
- 3. Faculty-student relationships. Dialogue between the student and instructor is essential early in the term, and follow-up meetings are recommended. Faculty should not feel apprehensive about discussing students' needs as they relate to the course. There is no reason to avoid using terms that refer to the disability, such as "blind," "see," or "walk." Care should be taken, however, to avoid generalizing a particular limitation to other aspects of a student's functioning. Often, for example, people in wheelchairs are spoken to very loudly, as if they were deaf. Students with disabilities may have had some experience with the kind of concerns you bring to the relationship. The students' own suggestions, based on experience with the disability and with school work, are invaluable in accommodating disabilities in college.
- 4. Attendance and promptness. Students using wheelchairs or other assistive devices may encounter obstacles or barriers in getting to class on time. Others may have periodic or irregular curtailments of functioning, either from their disability or from medication. Some flexibility in applying attendance and promptness rules to such students would be helpful.
- **5. Classroom adjustments.** A wide range of students with disabilities may be assisted in the classroom by making book lists available prior to the beginning of the term, by thoughtful seating arrangements, by speaking directly toward the class, and by writing key lecture points and assignments on the chalkboard.
- **6. Functional problems.** In addition to the adjustments that will be discussed in detail for each category of disability, some understanding is required with respect to more subtle and sometimes unexpected

Chronic weakness and fatigue characterize some disabilities and medical conditions. Drowsiness, fatigue, impairments of memory, or slowness may result from prescribed medications. Such curtailments of functioning and interferences with students' ability to perform should be distinguished from the apathetic behavior it may resemble.

- 7. Note-taking. Students who cannot take notes or have difficulty taking notes adequately would be helped by allowing them to tape record lectures, by permitting them to bring a note-taker to class (arranged for by the coordinator/director), by assisting them in borrowing notes from classmates, or by making an outline of lecture materials available to them.
- **8. Testing and evaluation.** Depending on the disability, the student may require the administration of exams orally, the use of computers, readers and/or scribes, extended time for exams, modification of test formats or, in some cases, make-up or take-home exams. For out-of-class assignments, the extension of deadlines may be justified. The objective of such arrangements is always to accommodate the student's learning differences, not to dilute scholastic requirements. The same standards should be applied to students with disabilities as to all other students in evaluation and assigning grades.

# **Teaching Students with Learning Disabilities**

A learning disability (LD) is any of a diverse group of conditions, of presumed neurological origin, that cause significant difficulties in auditory, visual, and/or spatial perception. Included are disorders that impair such functions as reading (dyslexia), writing (dysgraphia), and mathematical calculation (dyscalculia). Each category exhibits a wide variation of behavioral patterns.

A **learning disability** may exist in the presence of average to superior intelligence and adequate sensory and motor systems, as evidenced by the extraordinary achievements of people with LD.

In fact, the marked discrepancy between intellectual capacity and achievement is what characterizes a learning disability. LD is most often diagnosed using a battery of aptitude and academic achievement tests. This documentation is required not only to establish the need for disability services but to determine the kind of services that are required. Students who are believed to have a learning disability and have not been previously or reliably identified should be referred to your campus Coordinator/ Director of Student Disability Services for an appropriate referral.

While a learning disability cannot be "cured," it can be circumvented through instructional intervention and compensatory strategies. In general, a variety of instructional modes enhances learning for LD students by allowing them to master material that may be inaccessible in one particular form. In other words, using multiple instructional

techniques increases the likelihood that students with LD will understand.

Attention Deficit Hyperactivity Disorder (ADHD) is a medical term that is not synonymous with learning disabilities. Students with ADHD may or may not have specific accompanying learning disabilities. The effects of ADHD involve executive functioning



including, but not limited to, trouble with attention, organization, and impulse control. ADHD can impact academic functioning in many ways and with varying severity but it is not considered a learning disability, per se. Many people conflate ADHD with LD because of its impact on the learning process and because it is often (but not always) accompanied by a learning disability.

In teaching students with LD, it is important to identify the nature of the disability in order to determine the kind of strategies that might accommodate a particular student. Drawing upon the student's own experience offers valuable clues to the types of adaptation that work.

Once the nature of the disability is identified for students with LD, these strategies may help:

**Auditory processing**: Some students may experience difficulty integrating information presented orally, hindering their ability to

follow the sequence and organization of a lecture.

- Provide students with a course syllabus at the start of the semester.
- Outline class presentations and write new terms and key points on the chalkboard.
- Repeat and summarize segments of each presentation and review it in its entirety.
- In dealing with abstract concepts, paraphrase them in specific terms, and illustrate them with concrete examples, personal expediencies, hands-on models, and such visual structures as charts and graphs.

**Reading** may be slow and deliberate, making comprehension a difficulty for students with LD, particularly when dealing with large quantities of material. For such students, comprehension and speed are expedited dramatically with the addition of auditory input.

- Make required book lists available prior to the first day of class to allow students to begin their reading early or to obtain text in audio format.
- Provide students with chapter outlines or study guides that cue them to key points in their readings.
- Read aloud material that is written on the chalkboard or that is given in handouts or transparencies.

**Memory** or sequencing difficulties may impede the students' execution of complicated directions.

- Keep oral instructions concise and reinforce them with brief cue words.
- Repeat or re-word complicated directions.

# **Teaching Students with Learning Disabilities**

**Note-taking**: Some students with LD need alternative ways to take notes because they have difficulty writing and assimilating, remembering, and organizing the material while listening to lectures.

- Allow note-takers to accompany the student to class.
- Permit audio recording and/or make your notes available for material not found in texts or other accessible sources.
- Assist students, if necessary, in arranging to borrow classmates' notes.

**Participation**: It is helpful to determine the students' abilities to participate in classroom activities. While many students with LD are highly articulate, some have severe difficulty in talking, responding, or reading in front of groups.

Specialized limitations: Some students with LD may have poor coordination or trouble judging distance or differentiating between left and right. Devices such as demonstrations from students' right left frame of reference and the use of color codes or supplementary symbols may overcome the perceptual problem.

The science laboratory can be especially overwhelming for students with LD. New equipment, exact measurement, and multi-step procedures may demand precisely those skills that are hardest for them to acquire.

- An individual orientation to the laboratory and equipment can minimize students' anxiety.
- The labeling of equipment, tools, and materials is helpful.
- The students' use of cue cards or labels designating the steps of a procedure may expedite the

- mastering of a sequence.
- Specialized adaptive equipment may help with exact measurements.

Behavior: Because of perceptual deficiencies, some students with LD are slow to grasp social cues and respond appropriately. They may lack social skills, or they may have difficulty sustaining focused attention. If such a problem results in classroom interruptions or other disruptions, it is advisable to discuss the matter privately with the student or with the Coordinator/ Director.

**Evaluation**: A learning disability may affect the method by which students should be evaluated. If so, some of the following arrangements may be necessary:

- Allow students to take examinations in a separate, quiet room with a proctor. Students with LD are especially sensitive to distractions.
- Grant time extensions on exams and written assignments when there are significant demands on reading and writing skills.
- Avoid needlessly complicated language in exam questions, and clearly separate them in their spacing on the exam sheet. For students with LD perceptual deficits who have difficulty in transferring answers, avoid using answer sheets, especially computer forms.
- Try not to test on material just presented, since more time is generally required to assimilate new knowledge.
- Permit the use of a dictionary, computer spell checker, and proofreader, and, in mathematics and science, a

- calculator. In mathematics, students may understand the concept, but may make errors by misaligning numbers or confusing arithmetical facts.
- When necessary, allow students to use a reader, scribe, audio recorder or computer.
- Consider alternative test designs. Some students with LD may find essay formats difficult, and may have trouble with matching tests.
- Consider alternative or supplementary assignments that may serve evaluation purposes, like recorded interviews, slide presentations, photographic essays, or hand-made models.
- Professors who are aware of learning differences in their students can help these students utilize their hidden talents in the following areas:
- \* By understanding that learning styles differ for every student.
- \* By create a learning environment that supports and emphasizes different learning styles.
- By employing teaching methods and supporting varying learning styles.
- Knowing the correct time to intervene when learning becomes difficult.

In general, effective study groups, both inside and outside the classroom, help students with LD communicate with others. It allows them to share notes, build social support, and get organized.

For additional guidance or detailed faculty training on LD issues, please contact the CUNY LD Project at The City College of New York (212-650-5913).

# **Teaching Students with Visual Disabilities**

Visual disabilities vary greatly. Persons are considered legally blind when visual acuity is 20/200 or less in the better eye with the use of corrective lenses or when they have a field of vision no greater than 20 degrees. Most people who are legally blind may have some vision. Others who are partially sighted may rely on residual vision with the use of adaptive equipment. People who are totally blind may have visual memory, depending on the age when vision was lost.

Whatever their degree of visual disability, students should be expected to participate fully in classroom activities, including discussions and group work. To record notes, some use such devices as portable or computerized Braillers, others may use notetakers. They may encounter limitations in laboratory classes and field trips, and internships, but with planning and adaptive equipment the barriers can be overcome or minimized.

### Before or early in the semester:

- Provide reading lists or syllabi in advance to allow time for such arrangements to be made as ordering electronic versions of textbooks and other reading materials or for scanning or Brailling of texts.
- If videos will be used in class or needed. assigned, provide a list in advance to enable private viewing with a video describer.
  If a second or reduced.
  If a second or reduced.
- Web-based or web-enhanced courses pose challenges for students with vision disabilities.
   Screen enlargement and screen reader software may address many access issues.
   Consultation with the student

and the Disability Services staff will assist in identifying effective adjustments.

- In cooperation with the Disability Services staff, assist the student in finding readers, note-takers, or tutors, as necessary, or team the student with a sighted classmate or laboratory assistant.
- Reserve front seats for lowvision students. If a guide dog is used, it will be highly disciplined and require little space.

### **During the semester:**

- Face the class when speaking.
- Convey in spoken words
   whatever you put on the board
   and any other visual cues or
   graphic materials you may use.
- Permit lectures to be taped and/ or provide copies of lecture notes, where appropriate.
- Duplicate materials distributed to the class on a large-print copier, or print documents in large fonts and/or provide electronic copies on disk, flash drive or by e-mail.
- Be flexible with assignment deadlines.

Plan field trips and such special projects as internships well in advance and alert field supervisors to whatever adaptations may be needed.

 If a specific task is impossible for the student to carry out, consider an alternative assignment.

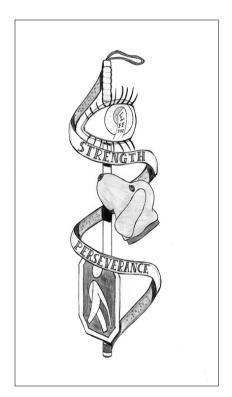
### **Examinations and evaluations:**

Students should not be exempt from examinations or be expected to master less content or lower levels

of scholastic skills because of visual disabilities. But alternative means of assessing their course achievements may be necessary. The students themselves, because of their experience in previous learning situations, and the college Disability Services staff may offer suggestions on testing and evaluation strategies. Among alternatives are oral, large print, Braille, or audio taped exams.

Screen reader and print enlargement software can be used with electronically formatted examinations, which may be sent to the Disability Services office via email. Each of these alternatives, with additional time to complete the exam, may be warranted.

Other adaptations suited to specific instructional situations— like tactile materials in presenting diagrams or illustrations in certain subjects—may be helpful.



# **Teaching Students with Mobility and Hand-Function Disabilities**

A wide range of conditions may limit mobility and/or hand function. Among the most common permanent disorders are such musculoskeletal disabilities as partial or total paralysis, amputation • or severe injury, arthritis, active sickle cell disease, muscular dystrophy, multiple sclerosis, and cerebral palsy. Additionally, respiratory and cardiac diseases can be debilitating and may consequently affect mobility. Any of these conditions may also impair the strength, speed, endurance, coordination, and dexterity that are necessary for fluid mobility. While the degree of disability varies, students may have difficulty getting to or from class, performing in class, and managing out-of-class assignments and tests.

The following information provides guidance for faculty and staff, as well as short lists of best practices for working with students with mobility and hand-function disabilities.

Getting to and from class: Physical access to classrooms is a major concern of students with mobility disabilities. Those who use wheelchairs, braces, crutches, canes, or prostheses, or who fatigue easily, find it difficult moving about, especially within the time constraints imposed by class schedules.

Occasional lateness may be unavoidable. Tardiness or absence may be caused by transportation problems, inclement weather, or elevator or wheelchair breakdown. Getting from class may pose similar problems, especially in cases of emergency.

- before or early in the semester and discuss it with students and, if necessary, with the Coordinator/Director.
- Be prepared to arrange for a change of classroom or building if no other solution is possible.
- Familiarize yourself with the college's emergency evacuation plan and assure that it is manageable for students with disabilities.



In class: Some courses and classrooms present obstacles to the full participation of students with mobility disabilities. In considering seating and classroom arrangement, integrating students into the class may require planning. Relegating these students to a doorway, a side aisle or the back of the room should be avoided. Even such apparently insurmountable barriers as fixed seating may be overcome by arranging for a chair to be unbolted and removed to make room for a wheelchair. Laboratory stations too high for wheelchair users to reach or transfer to, or with insufficient under-counter knee clearance, may be modified or they may be replaced by portable stations.

Consider the accessibility factor Otherwise, the assistance of an aide to follow the student's lab instructions may be necessary. Students with hand-function disabilities may have similar difficulties in the laboratory and in the classroom doing in-class writing assignments and taking written tests. For such students:

- Permit the use of a note-taker and/or tape recorder.
- Team the student with a laboratory partner or assistant.
- Allow in-class written assignments to be completed out of class with the use of a scribe, if necessary.
- Conduct oral or taped tests, or allow extended time.

Out-of-class assignments: For students with mobility and/or hand function disabilities, the use of the library for research assignments may present obstacles.

Arrangements for assistance with library personnel may have to be made for access to resources and equipment, or for manipulating the pages of publications. Because the completion of required work may thus be delayed, the extension of deadlines and the employment of "Incomplete" grades may be appropriate on occasion, but not a rule of thumb.

Off-campus assignments and field work may pose similar problems of access to resources. Instructors should consider such expedients as advance notice to students who rely on accessible transportation services, the extension of dead-lines and alternative assignments.

# **Teaching Deaf and Hard-of-Hearing Students**

### **Demographics**

Approximately 28 million
Americans have some degree of
hearing loss. Approximately 2
million are profoundly deaf. Those
with a severe or profound hearing
loss that has existed since before
they learned language will
obviously have the most trouble
with spoken language – as they
have never heard it before. More
than 20,000 students who selfidentified as hard of hearing or deaf
enrolled in academic year 19921993 in postsecondary education.

The first language of profoundly deaf persons and many other Americans may be American Sign Language (ASL). They must learn English as a second language or even a third language.

### **Strategies for Success**

Deaf and hard-of-hearing people use a variety of devices and techniques to augment their aural capacity, such as hearing aids, cochlear implants, listening devices such as infrared, FM or audio loops, or computer-assisted real-time transcription (CART) and lipreading. However, depending on the nature of the impairment, hearing aids and cochlear implants may not help. And no matter the skill with which it is done, lipreading only aids in understanding 30 to 40 percent of spoken English.

To maximize their college experience, deaf and hard of hearing students often utilize interpreting, captioning and/or note -taking services for their classes, and extended time on exams. These services, mandated by the Americans with Disabilities Act (ADA) of 1990 and Section 504 of

the Rehabilitation Act of 1973, are usually coordinated through the office of disability services on campus. In order for these services to be truly effective, However they require some cooperation from professors. In general, students and professors work out their own arrangements for things like testtaking, and the office of disability services only gets involved when an agreement cannot be reached. Equally vital for the success of students with a hearing loss are professors who are sensitive and responsive to their needs so that they can fully participate in the educational experience.

### **Best Practices for Deaf Students:**

The interpreter sits or stands near you so that you and the interpreter are within the deaf student's range of vision.

Allow the student to sit where s/he can most easily see you, the interpreter and the board or screen. Provide copies of the syllabus, power point presentations, or other hand outs for the interpreter, note-taker or captionist as far in advance as possible. This will insure that your interpreter has time to prepare so that they can provide the best services for you and your students with the least inconvenience.

Make sure any films you show are

Make sure any films you show are captioned or subtitled.

Don't speak and demonstrate at the same time. Just as you cannot hold a conversation and memorize a piece of music at the same time, a person using a visual language like ASL cannot take in verbal instructions and watch a demonstration at the same time.

It is certainly an odd phenomenon to talk to someone through

someone else, but if you follow some simple guidelines, your interactions with your deaf students can go quite smoothly. Talk directly to the student. Yes, it is the interpreter who is hearing what you are saying and it is the interpreter the student will most often look at, but it is the student you are communicating with and if you direct your words to the student, and listen to what they're saying as if it were coming from their own mouth, you'll find that you and the student -- as well as the interpreter -- will have much more fruitful interactions

### For Hard of Hearing Students:

Lecture from the front of the room – not pacing around.

Do not speak while writing on the blackboard.

Point out who is speaking in group discussions.

Repeat or rephrase questions/ comments from the class before responding

Students with hearing loss may be hesitant to self-identify and faculty members may be instrumental in picking up the signs and following up with the students to get the appropriate assistance they need in order to guarantee success.

### Warning Signs of Hearing Loss

- Giving inappropriate responses
- Speaking in an unusually loud/ soft voice
- Not hearing when someone speaks from behind
- Appearing to pay attention but not actively participating in class discussions
- Asking for repeats often
- Responding with smiles and nods but no further comments

# Teaching Students with Psychological/Psychiatric Disabilities

Students with psychiatric disabilities present some of the most difficult challenges to the college professor. As is the case for students with other disabilities, this disability may be hidden and, in fact, latent, with little or no effect on learning. Unlike other disabilities, however, psychiatric disabilities may manifest themselves in negative behavior ranging from indifference and recalcitrance to disruptiveness. Such conduct makes it hard to remember that those students have as little control over their disabilities as do students with physical disabilities.



The most common psychological disability among students is depression. The condition may be temporary, in response to inordinate pressures at school, on the job, at home, or in one's social life; or it may be a pathological sense of hopelessness or helplessness that may provoke, in its extreme, threats or attempts at suicide. It may appear as apathy, disinterest, inattention, impaired concentration, irritability, or as fatigue or other physical symptoms resulting from changes in eating, sleeping, or other living patterns.

Anxiety is also prevalent among students and may be the transient reaction to stress. Mild anxiety, in fact, may promote learning and improve the student's functioning. Severe anxiety, however, may reduce concentration, distort perception and weaken the learning process. Anxiety may manifest itself as withdrawal, constant talking, complaining, joking or crying, fantasizing, or extreme fear, sometimes to the point of panic. Bodily symptoms might include episodes of lightheadedness or hyperventilation. Students are susceptible to a myriad of other psychiatric disorders, some of which express themselves in inappropriate classroom behavior or inadequate performance of assignments. Some troubled students who are undergoing treatment take prescription medication to help control disturbing feelings, ideas, and behavior. The prescribed medication(s) might cause undesirable side effects such as drowsiness and disorientation.

In dealing with psychological conditions that impair the functioning of the affected student alone, the principles outlined for students with disabilities in the Overview section generally apply. If the behavior begins to affect others or your course of instruction, other measures may be necessary:

- Discuss inappropriate classroom behavior with the student privately, directly, and forthrightly, delineating the limits of acceptable conduct.
- In your discussions with the student, do not attempt to diagnose or treat the psychological disorder, but only the student's behavior in the course.
- If you sense that discussion would not be effective, or if the student approaches you for therapeutic help, refer the student to the Coordinator/Director if the student acknowledges a disability or to the campus psychological center or to counseling services, whichever is most appropriate at your college.
- Promptly refer any behavior by the student that may be abusive or threatening to the college's proper disciplinary or security channels.

# **Teaching Students with Speech Disabilities**

Speech communication disabilities range from problems with articulation or voice strength to complete voicelessness. Students with a speech communication based disability could include a person with Asperger's Syndrome, a person with a learning disability, or a person with numerous other possible primary disability classifications. A range of observable difficulties may include projection difficulties, as in chronic hoarseness and esophageal speech; fluency problems, as in stuttering and stammering; and the nominal aphasia that alters the articulation of particular words or terms.

Some of these difficulties can be managed by such mechanical devices as electronic "speaking" machines or computerized voice synthesizers. Others may be treated through speech therapy or other compensatory strategies. All of the difficulties can be aggravated by the anxiety inherent in oral communication in a group. Patience is therefore an effective strategy for students with speech disabilities. Other strategies are listed below and some may require collaboration among the faculty member, the student, and the disability service provider at a particular college.

- Give students the opportunity —but do not compel them—to speak in class.
- Permit students the time they require to express themselves, without unsolicited aid in filling in gaps in their speech. Don't be reluctant to ask the student to repeat a statement.
- Address students naturally. Don't assume the "spread phenomenon"—that they cannot hear or comprehend.
- Consider course modifications, such as one-to-one presentations and the use of a computer with a voice synthesizer.



# **Teaching Students with Medical Conditions that Involve Disabilities**

There are many other medical conditions that may interfere with students' academic functioning. Some of their symptoms, like limited mobility or vision, and the types of intervention required may resemble those covered elsewhere in this manual. The general principles set forth in the Overview apply, particularly the need to identify the disability and to discuss with the student both its manifestations and the required considerations.

Below are brief descriptions of some of the more common conditions, along with recommended accommodations.



### **Acquired Immune Deficiency Syndrome (AIDS)**

Acquired Immune Deficiency Syndrome (AIDS) is caused by a virus that destroys the body's immune system. This condition leaves the person vulnerable to infections and cancers that can be avoided when the immune system is working normally. The virus is transmitted primarily through sexual contact or needle sharing with intravenous drug users. It is not transmitted through casual contact.

Manifestations of AIDS are varied, depending on the particular infections or diseases the individual develops. Extreme fatigue is a common symptom. Classroom adaptations will likewise vary. Students with AIDS may be afraid to reveal their

condition because of the social stigma, fear, and/or misunderstanding surrounding this illness. It is therefore exceptionally important that the strictest confidentiality be observed.

For general classroom considerations, please refer to the Overview section.

### Cancer

Because cancer can occur in almost any organ system of the body, the symptoms and particular disabling effects will vary greatly from one person to another. Some people experience visual problems, lack of balance and coordination, joint pains, backaches, headaches, abdominal pains, drowsiness, lethargy, difficulty in breathing and swallowing, weakness, bleeding or anemia.

The primary treatments for cancer are radiation therapy, chemotherapy, and surgery, which may engender additional effects. Treatment can cause violent nausea, drowsiness and/or fatigue, affecting academic functioning.

For general instructional accommodations, please refer to the Overview.

### **Multiple Sclerosis**

Multiple sclerosis is a progressive disease of the central nervous system, characterized by a decline of muscle control. Symptoms may be mild to severe in degree: blurred vision, legal blindness, tremors, weakness or numbness in limbs, unsteady gait, paralysis, slurred speech, and difficulty with concentration. Because the onset of the disease usually occurs between the ages of 20 and 40, students are likely to be having difficulty adjusting to their condition.

The course of multiple sclerosis is highly unpredictable. Periodic remissions are common and may last from a few days to several months, as the disease continues to progress. It is not unusual to have striking inconsistencies in performance.

For appropriate classroom accommodations, refer to section(s) on speech, visual and/or mobility, disabilities, and hand-function disabilities.

# **Teaching Students with Medical Conditions that Involve Disabilities**

### **Muscular Dystrophy**

Muscular dystrophy refers to a group of hereditary, progressive disorders that most often strike the young, producing degeneration of voluntary muscles of the trunk and lower extremities. The atrophy of the muscles results in chronic weakness and fatigue and may cause respiratory or cardiac problems. Walking, if possible, is slow and appears uncoordinated. Manipulation of materials in class may be difficult. For appropriate accommodations refer to the overview and the section on mobility disabilities and handfunction disabilities.

### COPD/Asthma

Many students suffer from chronic breathing problems, the most common of which is bronchial asthma. Asthma is characterized by attacks of shortness of breath and difficulty in breathing, sometimes triggered by stress, either physical or mental. Fatigue and difficulty climbing stairs may also be major problems, depending on the severity of the attacks. Frequent absence from class may occur and hospitalization may be required when prescribed medications fail to relieve the symptoms. For appropriate classroom accommodations, refer to section on mobility impairments and Overview.



### **Seizure Disorders**

Students with epilepsy and other seizure disorders are extremely reluctant to divulge their condition because they fear being misunderstood or stigmatized. Misconceptions about these disorders-that they are forms of mental illness, contagious and untreatable, for example-have arisen because their ultimate causes remain uncertain. There is evidence that hereditary factors may be involved and that brain injuries and tumors, occurring at any age, may give rise to seizures. What is known is that seizures result from imbalances in the electrical activity of the brain. There are three distinct types of seizures:

Petit mal means "little" seizure and is characterized by eye blinking or staring. It begins abruptly with a sudden dimming of consciousness and may last only a few seconds. Whatever the person is doing is suspended for a moment but resumed again as soon as the seizure is over. Often because of its briefness, the seizure may go unnoticed by the individual as well as by others.

Psychomotor seizures range from mild to severe and may include staring, mental confusion, uncoordinated and random movement, incoherent speech, and behavior outbursts, followed by immediate recovery. They may last from two minutes to a half hour. The person may have no recollection of what happened, but may experience fatigue.

Grand mal seizures may be moderate to severe and may be characterized by generalized contractions of muscles, twitching and limb jerking. A few minutes of such movements may be followed by unconsciousness, sleep, or extreme fatigue.

Students with seizure disorders are often under preventive medication, which may cause drowsiness and temporary memory problems. Such medication makes it unlikely that a seizure will occur in class. In the event of a grand mal seizure, follow this procedure:

- Keep calm. Although its manifestations may be intense they are generally not painful to the individual.
- Remove nearby objects that may injure the student during the seizure.

# **Teaching Students with Medical Conditions that Involve Disabilities**

- Help lower the person to the floor and place cushioning under his/her head.
- Turn the head to the side, so that breathing is not obstructed.
- Loosen tight clothing.
- Do not force anything between the teeth.
- Do not try to restrain bodily movement.
- Call the medical office or other appropriate authority or ask someone else to do so.

After a seizure, faculty should deal forthrightly with the concerns of the class in an effort to forestall whatever negative attitudes may develop toward the disabled student.

### Sickle Cell Anemia

Sickle cell anemia is a hereditary disease primarily affecting blacks. It reduces the blood supply to vital organs and the oxygen supply to the blood cells, making adequate classroom ventilation an important concern.

Because many vital organs are affected, the student may also suffer from eye disease, heart condition, lung problems and acute abdominal pain. At times limbs or joints may be affected. The disease is characterized by severe crisis periods, with extreme pain, which may necessitate hospitalization and/or absence from class. Completing academic assignments during these periods may not be possible.

For appropriate classroom accommodations, refer to section(s) on visual and hand-function impairments, as well as the Overview.

### **Substance Abuse Recovery**

Substance abuse is a condition of physiological and/or psychological dependence on any of a variety of chemicals, such as illegal drugs, some prescription drugs and alcohol. Individuals who are recovering from drug or alcohol abuse or who are in treatment programs to assist their recovery are covered by federal antidiscrimination legislation and are eligible for college services for students with disabilities. These students may experience such psychological problems as depression, anxiety or very low self esteem. They may exhibit poor behavioral control and, if they are using medication as part of their treatment, they may experience undesirable side effects. The

needs of students with substance abuse issues varies. Refer students showing symptoms of substance abuse to the appropriate college facility: counseling services, the psychological center, or Disabled Student Services.

In cases of inappropriate classroom behavior, discuss it with the student in a private setting.

Use appropriate campus disciplinary channels when necessary.

Refer to the Overview and the section on psychological impairments for additional classroom considerations.



# **Teaching Students with Neurological Conditions that Involve Disabilities**



Asperger's Syndrome/Autism Spectrum Disorders Autism Spectrum Disorders include High Functioning Autism and Asperger's Syndrome. These conditions are thought to be neuro-biological and developmental disabilities affecting many aspects of functionality. Specific functional limitations are unique in nature and vary from person to person.

Individuals with Asperger's syndrome (AS) are characterized by average to superior intelligence while at the same time experiencing severe and pervasive deficits in social interaction. Some common limitations are difficulties with social reciprocity and friendships; social awkwardness; imaginative impairments and repetitive adherence, including concrete and literal uses of language, and a preference for routines; language impairments, including pronoun reversal, Echolalia, and late or no development of language; physical impairments, including fine or gross motor difficulties, and hyper- or hyposensitivity of the various senses; and learning impairments, including difficulty with organization, sequencing, distractibility, and slow processing.

While many individuals with AS report that they keenly desire social relationships, the combination of

repeated social failures and intelligence sufficient to appreciate these difficulties increases the risk for developing depression, anxiety, and other mental health concerns (Tantam, 1998; 2000). Academically some of the key issues that students have in a learning environment are as follows:

**Motivation** - competitive motives are absent in the student with AS. He lacks both pride and shame and has no desire to 'stand out'.

**Imitation** - although he may be able to copy what others do, he finds it hard to adjust these copied movements to his own frame of reference.

**Perception** - there is a possibility of inconsistent or unexpected response to sensory input.

**Attention** - the student's focus of attention is often narrow and/or obsessive. Stimulus characteristics may be combined with idiosyncrasies.

**Memory** - the student's memory is likely to be episodic, i.e., events are not stored in the context in which they occurred. Lists of facts may be stored in this way without a meaningful framework to link them

**Problem Solving** - the student tries to learn set responses for set situations. He may learn a set of strategies, but not be aware that he possesses them, and therefore would have difficulty to select an appropriate strategy for a new situation. Some of the accommodations for students with Asperger's would include the following:

- Academic visual supports
- Computer use for in-class assignments and inclass tests
- Extended time on tests
- Reduced distraction testing room
- Note Taker
- Priority Seating
- Audio Recorder

### ADD/ADHD

Consequences of ADD/ADHD at the college level include procrastination, poor organization and time management resulting in academic underachievement, poor self–esteem, and difficulty keeping current with assignments and reading. Problems also arise in personal relationships and mood stability. Distractibility and difficulty focusing can lead to problems with reading comprehension, note–taking, and completing assignments and tests in a timely

## **Teaching Students with Neurological Conditions that Involve Disabilities**

fashion. Impediments to success at the college level include issues that are both academic and/or personal. *Academic issues may include:* 

- Poor organization and time management skills
- Reading problems resulting from difficulty concentrating and focusing
- Poor note-taking or writing skills

### Personal issues may include:

- High frustration levels or poor self–esteem
- Inappropriate social skills or too much time socializing
- Confusion about goals and the future
- Lack of perseverance or procrastination
- Lack of sleep and difficulty getting up in the morning

A common pitfall for students with ADHD is the feeling that they are instantly cured upon graduating from high school and no longer require supports and/ or treatment at the college level. Unrealistic expectations may also lead a student with ADHD who has been successful in high school to take on too heavy a load at college, failing to take into consideration the multiple demands upon his or her time. Poor time management may lead to a "crash and burn syndrome," with the student staying up all night and sleeping all day after studying or partying or both.

# Sample ADD/ADHD Accommodations for the Classroom

### For lecture setting:

- Tape recorders or micro tape players
- Note takers
- Hard copies of notes provided by the instructor or other student
- Laptop computer for note taking
- Calculators (some have voice synthesizers)
- Classroom without a lot of distractions (such as noise, decorations, interruptions, etc.)
- Request that the directions be clear and concise (possibly in written form, on the
- Blackboard or on paper)
- Detailed syllabus to give ample time to complete reading and writing assignments

- Extended time
- Administer test on the computer
- Use a tape recorder to record the answers
- Oral examinations
- Index cards, blank paper, and/or ruler (help keep place on line)

### Organizational Skills:

- Break projects into weekly and then daily goals
- Use daily checklist of what needs to be done that day (might help if you prepare it the
- Night before)
- Use alarm watch or timer as a reminder for meetings and classes
- Electronic organizers or daily planners
- Mini talking memo
- Color coding for reading/scanning (highlighters and colored mylar templates)
- Premack Principle perform the task that is unpleasant first, followed by the one that is liked or by a reward.

### Concentration:

- Use white noise machine or environmental soothers to cover noise
- Study in an environment that doesn't have a lot of visual or auditory distractions
- Use a watch alarm or timer set for 10 minute intervals to be reminded to get back on task
- Find outlets for restlessness like exercise and/ or sports.

### **Cerebral Palsy**

Cerebral palsy is caused by an injury to the motor center of the brain that may have occurred before or shortly after birth. Manifestations may include involuntary muscle contractions, rigidity, spasms, poor coordination, poor balance, or poor spatial relations. Visual, auditory, speech, hand-function, and mobility difficulties might occur.

For appropriate classroom accommodations, refer to section(s) on speech, visual, and/or mobility disabilities and hand-function disabilities.

### For test-taking:

Quiet environment

# **Technology in The Classroom**

The use of technology in the classroom is playing an increasingly vital role in higher education today. Applications used by faculty across CUNY include electronic presentations, courses taught synchronously or asynchronously by using learning management systems (LMS) like *Blackboard*, the use of multimedia like audio and video podcasts to deliver lectures and other resources, reliance upon electronic reserve and other databases to provide research material, and the use of external web sites to serve as course content.

In many ways, technologies have the power to revolutionize the way in which students with disabilities can access course content; these students, however, may face some significant accessibility barriers unless the course content is carefully chosen and delivered. For instance, an online video on YouTube can serve to make an important point about a particular topic in the classroom; that same video, however, without ready access to captions or a transcript, is likely to be difficult to access for a deaf or a hard of hearing student. In addition, that same video may have some vital visual component that is entirely missed by a student with a visual disability. Challenges such as this can often be overcome by careful planning, taking into account basic guidelines for accessible content, and considering your audience when suggesting and creating material. As with non-technological accommodations, solutions needed to resolve accommodation concerns may vary. But keeping in mind these basic guidelines when suggesting, developing, and delivering course content

Pictures – Descriptions. Recognize that some students cannot see pictures in textbooks, on web sites, or on presentation slides. Include a brief description of a picture that you believe serves a vital role for the course curriculum. This description should be included along with the picture on a presentation slide and delivered orally if showing the slide to the class. The description should be included as an alternative text for a web page. If you choose to point students to web sites with illustrations or pictures, be sure to check that the web site provides adequate descriptions for important elements.

will allow you to resolve any significant difficulties

before they arise:



### **Video – Captions, Transcripts, & Descriptions.**

Like pictures and illustrations, the use of video can present particular challenges to students with visual disabilities. Use of videos in a curricular context should be accompanied by at least a brief description that conveys the significant meaning of the visual action. This description with pertinent dialogue can give the student sufficient context to derive a meaningful experience. In addition, videos that you use (or link to) should either be captioned or be accompanied by full transcripts that can enable students with hearing disabilities to access the content. This, combined with the visual action, can enable students to have a full experience of videos.

**Audio – Captions & Transcripts.** Similar to video captions and transcripts, audio material like podcasts, lecture recordings, and other material should be accompanied by synchronized captions or have transcripts available for students with hearing disabilities.

Blackboard – Features & Access. As a LMS used by CUNY, Blackboard can present its own set of accessibility challenges for students with disabilities. Aside from making certain that you keep in mind the guidelines outlined above, be sure to look at <a href="http://www.blackboard.com">http://www.blackboard.com</a> for the latest documentation to see which features are not accessible to students with disabilities. Keywords such as "accessibility" and "disabilities" will bring up results that will give you the latest information on how to create accessible

# **Technology in The Classroom**

course content by using Blackboard as well as provide information on features that do not work for users with certain disabilities.

**Other tips.** Use the following general tips for your classroom and electronic access.

When creating PDF files, be sure not to lock them with security features so as to prevent access.

Whenever possible, convert your material into formatted text rather than relying on a picture of a printed page. When creating presentations and posting them for students, convert your presentation to a common format like RTF to allow for better access. Ask if software is available to make accessibility and conversion easier. Ultimately, students themselves can serve as a guide to what they need. Discuss the curriculum as well as the material you plan to use during the course of the semester so as to ensure that the student has an opportunity to work with you to make changes if needed. If you feel it will help you with course design, including presentation of on-line material, among the useful websites available is the following:

http://trace.wise.edu/world/web/ and http://www.w3.org/TR/2008/REC-WCAG20-20081211/





Public Law 93-112 93rd Congress, H. R. 8070 September 26, 1973

# An Act

# Section 504 The Rehabilitation Act of 1973

No otherwise qualified handicapped individual shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

# ... as could be seen by a dyslexic

No oderwiz kalifid handicop individul... shl soly by risan of his handicop be eklud from the paticipash in, be denid binitif of, of be sujeted two dikrem-nashon ender an procrim or aktviti recevng binanshal esistens.

# THE CITY UNIVERSITY OF NEW YORK

### Baruch College Disability Services

55 Lexington Avenue New York, NY 10010

http://www.baruch.cuny.edu/studentaffairs/disabilityServices.htm

### Borough of Manhattan Community College Office of Services for Students with Disabilities

199 Chambers Street New York, NY 10007

http://www.bmcc.cuny.edu/disabled/

### Bronx Community College Services for Students with Disabilities

West 181st Street and University Avenue Bronx, NY 10453

http://www.bcc.cuny.edu/disabilityServices/

### Brooklyn College Center for Student Disability Services

2900 Bedford Avenue Brooklyn, NY 11210

http://www.brooklyn.cuny.edu/bc/text/info/disab.htm

### The City College of New York/ Sophie Davis Student Disability Services

160 Convent Avenue New York, NY 10031

http://www.ccny.cuny.edu/student\_affairs/Disabilities/default.html

### College of Staten Island Services for Students with Disabilities

2800 Victory Boulevard Staten Island, NY 10314

http://www.csi.cuny.edu/disabilityservices/index2.html

# The CUNY School of Law Student Affairs

65-21 Main Street Flushing, NY 11367

http://www.law.cuny.edu/student/StudentServices/ StudentswithDisabilities.html

### The Graduate School and University Center Office of Student Affairs

365 Fifth Avenue New York, NY 10016

http://www.gc.cuny.edu/current\_students/handbook/studentservices.htm#12

### Hostos Community College Services for Students with Disabilities

500 Grand Concourse Bronx, NY 10451 http://www.hostos.cuny.edu/sswd/

> York College Student Services

94-20 Guy R. Brewer Boulevard Jamaica, NY 11451 Hunter College Office of AccessABILITY

695 Park Avenue New York, NY 10021

http://www.hunter.cuny.edu/studentservices/access/disabilities

### John Jay College of Criminal Justice Accessibility Services

445 West 59<sup>th</sup> Street New York, NY 10019

http://www.jjay.cuny.edu/johnJay/johnJayDisability.asp

### Kingsborough Community College Access-Ability Center

2001 Oriental Boulevard Brooklyn, NY 11235

http://www.kbcc.cuny.edu/sub-other/sub-student\_current/special services.html

### LaGuardia Community College Office for Student Services and Disabled Students Programs

31-10 Thomson Avenue Long Island City, NY 11101

http://www.lagcc.cuny.edu/osd/

**Program for Deaf Adults** 

http://ace.laguardia.edu/pda/

### Lehman College Student Disability Services

250 Bedford Park Boulevard West West Bronx, NY 10468

http://www.lehman.edu/vpstud/splstudentserv/aboutsss.html

### Medgar Evers College Services for the Differently-Abled

1650 Bedford Avenue Brooklyn, NY 11225

 $\frac{\underline{http://www.mec.cuny.edu/academic\ affairs/student\ affairs/}}{\underline{services\ diff\ abled.asp}}$ 

### New York City College of Technology Student Support Services Program for Students with Disabilities

300 Jay Street Brooklyn, NY 11201

http://www.citytech.cuny.edu/students/supportservices/disability.shtml

### Queens College Services for Students with Disabilities

65-30 Kissena Boulevard Flushing, NY 11367 http://qcpages.qc.edu/spsv/

### **Queensborough Community College Services for Students with Disabilities**

222-05 56th Avenue Bayside, NY 11364

http://www.qcc.cuny.edu/SSD/default.asp

http://york.cuny.edu/student-development/ossd