

## *The Spirit of the Law*

Access and Inclusion for students  
with disabilities

Prepared by Kaela Parks, Director of  
DSS at UAA

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## The Letter of the Law

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- Section 504 of the Rehabilitation Act (1973) and the Americans with Disabilities Act (1990) mandate that adjustments be made when a [reasonable request](#) for accommodation is made by an [otherwise qualified](#) individual who experiences a [documented disability](#).

## Legal Definitions

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- [Otherwise Qualified](#)
- [Individual with a Disability](#)
- [Reasonable Accommodation](#)
- [Undue Burden](#)
- [Section 504](#)
- [ADA](#)
- [Board of Regents](#)

## Otherwise Qualified

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- A person who has a disability is **otherwise qualified** if he/she can perform the essential tasks of a program or assignment when appropriate and reasonable adjustments are made.

## Individual with a Disability

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An individual with a disability is any person who:

- has a physical or mental impairment which substantially limits one or more major life activities including walking, seeing, hearing, speaking, breathing, learning, and working;
- has a record of such an impairment; or
- is regarded as having such an impairment.

*(the last two afford protection from discrimination)*

## Reasonable Accommodations

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- Appropriate academic adjustments and programmatic accommodations are defined by individual documented need and directly relate to a student's academic pursuits

but

- do not fundamentally alter a service, program, or activity, lower academic standards, cause undue hardship, or pose a threat to the health or safety of others.

## Undue hardship / Undue burden

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**§ 1194.4 Definitions. ... Undue burden** means significant difficulty or expense. *In determining whether an action would result in an undue burden, an agency shall consider all agency resources available to the program or component.*

## Evolution in Language

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In addition to the definitions themselves, it is also important to be aware of how the language has shifted over time to become more person-centered.

## Section 504 of the Rehabilitation Act

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*“No otherwise qualified handicapped individual in the United States shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program receiving federal financial assistance.”*

## Americans with Disabilities Act

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*“The nation’s proper goals regarding individuals with disabilities are to assure equality of opportunity, full participation, independent living, and economic self-sufficiency for persons with disabilities.”*

## Board of Regents’ Policy PART IX - Chapter VI

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- “No otherwise qualified individual will be denied reasonable access to, participation in, or the benefits of, any program or activity operated by the University of Alaska because of disability.
- Each qualified student with a disability will be eligible to receive appropriate academic adjustments and programmatic accommodations necessary for the student to access educational opportunities, programs, activities, or services in the most integrated setting possible.”

## The Spirit of the Law

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While the letter of the law mandates adjustment when barriers are identified, which is a reactive position, the spirit of the law takes a proactive position. Rather than waiting for a request for accommodation, the need for adjustment is reduced through elimination of barriers at the design stage.

## Quick Comparison

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<b>Letter of the Law</b>	<b>Spirit of the Law</b>
Individuals with disabilities first run into barriers and then use a formal process to request adjustment	Barriers are reduced at design stage so fewer individuals need adjustments
Not all individuals are eligible to make request	Many individuals benefit from accessible design

## The spirit of the Law: Background

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- The Disability Rights Movement is rooted in the broader Civil Rights Movement.
- Just as it is unacceptable to discriminate on the basis of skin color, ethnicity, or gender, so too it is unacceptable to discriminate on the basis of disability.
- Furthermore, creating and maintaining an inclusive and supportive environment is generally more effective than simply saying that discrimination is not tolerated.

## Spirit of the Law: Implementation

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- In order to take a proactive approach and try to remove barriers from the outset, it is important to identify strategies and best practices.
- At many educational institutions today this is done through the adoption of a “Universal Design” approach.

## Universal Design

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- “The design of environments to be usable by all people, to the greatest extent possible, without the need for adaptation or accommodation”
- [Handout](#) with quick tips to increase accessibility through course design

## The need for adjustment

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- Even when a Universal Design approach is employed, there will still be times when further adjustment is needed.
- The accommodation process is a way to ensure that when adjustments are needed, they are put in place in a way that is fair and consistent.

## The Accommodation Process

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- Student self-identifies to DSS and supplies appropriate documentation
- DSS and the student work together to identify reasonable accommodations
- Faculty and the student work together to implement accommodations
- [Student Accommodation Model Chart](#)

## Self-Identification

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- **Campus Climate is vital – many students fear disclosure and the stigma of disability**
  - The syllabus statement is a vital tool to increase awareness and establish positive campus climate
  - *"If you experience a disability and would like information about support services, contact Disability Support Services, located in \_\_\_\_"*

## Accommodation Determination

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- Accommodations are determined based on a combination of diagnostic/evaluative reports, student experience, and a “best practices” approach but are always supported by documentation
  - Accommodation is based on functional limitations which may vary across diagnoses
  - Accommodations never lower academic standards, only level the playing field

## Faculty Notification letters

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- The student is responsible for notifying faculty
- Requests that are supported by documentation (noted in FN letter) must be implemented even if they come late in the semester
- Accommodations are never applied retroactively

## Accommodation Implementation

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- Contact information for the DSS staff member who determined the accommodations is always included in the letter
- Any questions or concerns on the part of faculty should be raised and resolved as soon as possible to ensure compliance with legal mandates for full access

## Examples of Accommodations

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- Ergonomic Furniture
- Notetaking Assistance
- Testing Accommodations
- Realtime Access (ASL, CART, etc)
- Alternate Format Materials
- Reduced Course Load
- Course Substitutions

## Examples and Case Studies

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- [Handout](#) from “Accommodations: or Just Good Teaching” outlines some of the specific functional limitations experienced by students with different types of disabilities as well as some of the strategies that can be helpful.
- [Case studies from the DO-IT site](#)

## Case Studies from DO-IT Site

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- [Student with learning disability](#)
- [Student with low vision](#)
- [Student who is deaf](#)
- [Student with health impairment](#)
- [Student with psychiatric disability](#)
- [Student with mobility impairment](#)

## Web Resources

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### DO-IT Faculty Room

<http://www.washington.edu/doit/Faculty/>

This web resource features interactive resources for faculty, academic specific and disability specific information, descriptions and examples of universal design in action, video clips of students and faculty working together, case studies, and more.

## Web Resources

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### DSS at UAA Website

<http://www.uaa.alaska.edu/dss>

This web resource is designed to meet the needs of students, staff, faculty, and community members. Information is kept up-to-date and features content related to services and accommodations as well as events and opportunities for resource sharing.

## Web Resources

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### **Supplemental DSS Website**

<http://access.uaa.alaska.edu>

This site features campus maps and highlights accessibility features like automatic door openers, elevators, and restrooms, as well as adaptive computing stations. There are also descriptions of these stations with tutorials as well as a full listing of the DSS Lending Library.

## Web Resources

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### **DSS Training Site**

<http://dss.uaa.alaska.edu>

This website provides access to presentation and training materials that are used by DSS staff. It is updated frequently. Materials can be adapted by other UA DSS professionals for use on campuses and in the community.

## DSS Lending Library

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- The UAA DSS Lending Library features hundreds of books, videos, journals, and more, all on a variety of disability related topics.
- The contents of the library are listed on the access website and are housed in Rasmuson Hall Room 103.
- All items are available through interlibrary loan.

## Adaptive Computing Lab

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- The UAA Adaptive Computing Lab is located in Rasmuson Hall 103 and features computer stations with a wide range of Assistive Technologies and Adaptive computing software applications.
- Training is available and there are scheduled workshops that are open to the community.

## UAA Disability Support Services

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**UAA Disability Support Services**

University of Alaska Anchorage  
Rasmuson Hall 105, 3211 Providence Drive  
Anchorage, Alaska 99508

**Web:** <http://www.uaa.alaska.edu/dss>

**Email:** [aydss@uaa.alaska.edu](mailto:aydss@uaa.alaska.edu)

**Phone:** (907) 786-4530

**TTY:** (907) 786-4536

**Fax:** (907) 786-4531

# Quick Tips to Improve Accessibility

Prepared by DSS at UAA

<b><i>Syllabus Statement</i></b>	The syllabus should contain a statement that makes reference to the appropriate point of contact for students who experience a disability and need to make a request for accommodation.
<b><i>Open and Responsive Approach</i></b>	Students with disabilities often refrain from seeking appropriate accommodations because they are fearful of repercussions/stigma. An open and responsive approach can help tremendously.
<b><i>Supportive Learning Environment</i></b>	All students must always be held to the same standards. Reasonable adjustments are appropriate and legally mandated, but approved academic adjustments are designed to “level the playing field” not “give an edge.”
<b><i>Fair and Clear Expectations/Standards</i></b>	<p>In order to determine if students are otherwise qualified, the expectations and standards used to measure mastery need to be clear.</p> <p>Putting the syllabus online even before a course begins is a great way to facilitate appropriate registration choices.</p>
<b><i>Variety of Instructional Methods/Materials</i></b>	Using online handouts/printouts in addition to hands-on learning and lecture can be helpful for students with different learning styles.
<b><i>Perceptible Learning Tools</i></b>	Information that is conveyed through sound should have captions, and information that is conveyed through graphics should have text.
<b><i>Electronic Format Whenever Possible</i></b>	E-text allows students to access the materials they need in a way that works for them – they can print in large format or listen as text is read out loud and highlighted on screen.



**S.A.M. (Student Accommodation Model)**

**Is there a disability?**

*Based on definition of disability within ADA/504*

**NO**  ADA, 504 not applicable.

YES 

**Is the student otherwise qualified?**

*Based on criterion for admission/enrollment*

**NO**  Review qualification criteria.  
 No accommodation required.

YES 

**Is there adequate, appropriate documentation?**

*Based on guidelines/policies*

\*Current                      \*Thorough  
\*Comprehensive      \*Appropriate Evaluator

**NO**  Need to provide documentation.  
Need additional documentation.  
Documentation shows no diagnosis.  
Definition of disability unmet.  
 No accommodations necessary.

YES 

**What is the difficulty/impact?**

↓  
**Is it disability related?**

↓  
**Does it substantially limit him/her?**

**NO**  Further exploration re: area identified.  
Other non-disability resources, e.g. Writing Ctr.  
Definition of disability unmet.  
 No accommodation necessary.

YES 

**What are the appropriate accommodations?**

*What is the purpose/goal/outcome? -or- What is the obstacle/inaccessible feature?*



**PROVIDE APPROPRIATE ACCOMMODATIONS**



**Considerations:**

- \*Program as a whole 'to be accessible'
- \*'Fundamentally alter' program/requirements not required
- \*Give individual 'primary consideration'
- \*'Undue administrative or financial burden' not required
- \*Provide 'equal opportunity'
- \*'Accommodation/aid of personal nature' not required
- \*Accommodation chosen needs to be 'equally effective'

Excerpted from the reference manual: **Accommodations – Or Just Good Teaching: Strategies for Teaching College Students with Disabilities** (1997). Edited by Bonnie M. Hodge and Jennie Preston-Sabin.

*Please note that this is not an exhaustive list of accommodations, nor are all suggestions appropriate in all classroom-type situations. Rather, the following is offered as an educational starting point. Each DSS student is provided reasonable accommodations on a case-by-case basis.*

## Teaching Students with Attention, Concentration, or Memory Difficulties (Ch. 4)

### Commonly Associated Disabilities:

- Attention Deficit Disorder
- Psychological Disorders
- Learning Disabilities
- Clinical Depression
- Seizure Disorders
- Head Trauma
- Narcolepsy
- Tinnitus
- Agnosia
- Aphasia

### Instructional Accommodations for Students Impacted by Attention, Concentration, or Memory Difficulties:

- Outlines provided for lectures
- Alternate location for testing
- Use of a scribe or notetaker
- Extended time for tests
- Series of short tests
- Tape record lectures
- Seating location
- Calculators

## Teaching Students with Chronic Health Problems (Ch. 5)

### Commonly Associated Disabilities:

- Cardiovascular Disorders
- Muscular Dystrophy
- Clinical Depression
- Cystic Fibrosis
- Cerebral Palsy
- Head Trauma
- Diabetes
- AIDS

### Instructional Accommodations for Students Impacted by Chronic Health Problems:

- Adaptive physical education courses
- Outlines provided for lectures
- Alternate location for testing
- Use of a scribe or notetaker
- Extended time for tests
- Tape record lectures
- Series of short tests
- Seating location

Excerpted from the reference manual: **Accommodations – Or Just Good Teaching: Strategies for Teaching College Students with Disabilities** (1997). Edited by Bonnie M. Hodge and Jennie Preston-Sabin.

*Please note that this is not an exhaustive list of accommodations, nor are all suggestions appropriate in all classroom-type situations. Rather, the following is offered as an educational starting point. Each DSS student is provided reasonable accommodations on a case-by-case basis.*

## Teaching Students with Hearing Impairments or Deafness (Ch. 6)

### Commonly Associated Disabilities:

- Learning Disabilities
- Auditory Agnosia
- Head Trauma
- Deafness
- Tinnitus

### Instructional Accommodations for Students Impacted by Hearing Impairments or Deafness:

- Assistive learning device
- Speak facing student
- Seating location
- Sign Interpreter
- Tape recorder
- Notetaker

## Teaching Students with Integrative Processing Difficulties (Ch. 7)

### Commonly Associated Disabilities:

- Attention Deficit Disorder
- Dysgraphia and Dyslexia
- Psychological Disorder
- Agnosia and Aphasia
- Learning Disabilities
- Seizure Disorders
- Head Trauma
- Narcolepsy

### Instructional Accommodations for Students Impacted by Integrative Processing Difficulties:

- Reasonable tardiness/absence
- More frequent deadlines
- Develop study schedule
- Extend test time
- Supplement text
- Tape recorder
- Relocate test
- Meet weekly
- Notetaker

Excerpted from the reference manual: **Accommodations – Or Just Good Teaching: Strategies for Teaching College Students with Disabilities** (1997). Edited by Bonnie M. Hodge and Jennie Preston-Sabin.

*Please note that this is not an exhaustive list of accommodations, nor are all suggestions appropriate in all classroom-type situations. Rather, the following is offered as an educational starting point. Each DSS student is provided reasonable accommodations on a case-by-case basis.*

## Teaching Students with Mobility Impairments or Motor Control Difficulties (Ch. 8)

### Commonly Associated Disabilities:

- Cardiovascular Disorders
- Muscular Dystrophy
- Traumatic Injury
- Cerebral Palsy
- Head Ttrauma
- Paraplegia
- Arthritis

### Instructional Accommodations for Students Impacted by Integrative Processing Difficulties:

- Change class – advance notice
- Adaptive physical education
- Sufficient space for seating
- Testing alternatives
- Laptop computer
- Notetaker

## Teaching Students with Social Behavior Disorders or Difficulties with Consistent Performance (Ch. 9)

### Commonly Associated Disabilities:

- Arrested Substance Abuse
- Psychological Disorders
- Tourette’s Syndrome
- Learning Disabilities
- Seizure Disorders
- Head Trauma
- Lupus

### Instructional Accommodations for Students Impacted by Social Behavior Disorders or Difficulties with Consistent Performance:

- Supplementary text materials
- Signal-inappropriate behavior
- Notetaker or tape recorder
- Alternate testing location
- Discuss class behavior
- Frequent deadlines
- Weekly meetings
- Study schedule

Excerpted from the reference manual: **Accommodations – Or Just Good Teaching: Strategies for Teaching College Students with Disabilities** (1997). Edited by Bonnie M. Hodge and Jennie Preston-Sabin.

*Please note that this is not an exhaustive list of accommodations, nor are all suggestions appropriate in all classroom-type situations. Rather, the following is offered as an educational starting point. Each DSS student is provided reasonable accommodations on a case-by-case basis.*

## Teaching Students with Speech and Language Difficulties (Ch. 10)

### Commonly Associated Disabilities:

- Developmental Language Disorder
- Learning Disability – Semantics
  - Deafness and Aphasia
  - Respiratory Disorder
  - Speech Impairment
  - Head Trauma
  - Stuttering

### Instructional Accommodations for Students Impacted by Speech and Language Difficulties:

- Individual sessions by appointment
- More writing, less talking
- Assistive technology
- Sign Interpreter

## Teaching Students with Visual Impairments or Blindness (Ch. 11)

### Commonly Associated Disabilities:

- Learning disabilities – vision
  - Head Trauma
  - Low Vision
  - Blindness

### Instructional Accommodations for Students Impacted by Visual Impairments or Blindness:

- More speaking and listening
- Notetaker or tape recorder
- Alternate testing location
- Less reading and writing
- Alternate testing format
- Learning facilitator
- Seating location
- Extended time
- Taped texts
  - Reader
  - Scribe

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A group of students listen to a teacher's presentation	<h2>Learning Disabilities Case Study 3</h2> <p><a href="#">Case Study 1</a>   <a href="#">Case Study 2</a>   <b>Case Study 3</b>   <a href="#">FAQ</a>   <a href="#">Resources</a></p> <h3>John and College Studies: A Case Study in Accommodating Learning Disabilities</h3> <p><b>Background</b> John has a learning disability which affects auditory processing. Like many students with invisible disabilities, such as learning and psychological impairments, he is sensitive to the attitudes and perceptions of fellow classmates and instructors regarding his need for a notetaker in class. He is reluctant to announce this need among his classmates, fearing perceptions of preferential treatment, invalid reasons, and negative stereotyping (e.g., that he is lazy or stupid).</p> <p><b>Access Issue</b> John needed to obtain lecture notes as an accommodation. He was too embarrassed to make such a request of his classmates. Although the student disability resource center had provided paperwork and approval for monetary compensation for a notetaker, nearly two weeks had passed and still no classroom volunteers were identified.</p> <p><b>Solution</b> Intervention from the student disability resources office included contact with the instructor who then made a general announcement in class about the need for a notetaker, noting that monetary compensation would be provided; if there were no volunteers, the disability resources office staff would recruit on campus for a paid notetaker enrolled in the class. It was also recommended that the instructor provide lecture outlines and the option for the student to tape record the lectures. Additional support was provided to the student through disability management counseling, which reinforced self-advocacy and learning skills.</p> <p><b>Conclusion</b> This case shows how:</p> <ol style="list-style-type: none"> <li>1. The three-way coordination of the student, faculty, and office of disability services can effectively support the student who has concerns about what others might think and help him attain needed academic accommodations.</li> <li>2. The disability resources office may help a student develop self-advocacy and learning skills.</li> </ol>			
<b><u>DID YOU KNOW?</u></b> The rights of voters with disabilities are often challenged by inaccessible polling places and ballots.				
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Two students gathered closely around a computer monitor	<h2>Low Vision Case Study</h2> <p><a href="#">Case Study</a>   <a href="#">FAQ</a>   <a href="#">Resources</a></p> <h3>Derek and Access to Information: A Case Study on Accommodations for Low Vision</h3> <p><b>Background</b> I'm Derek, a freshman studying Japanese and political science. I'm visually impaired. I can read large print but have trouble with the computer screen, especially when the lighting is poor. For the most part I am able to read large print text without any problems.</p> <p><b>Access Issues</b> I need large-print materials for all of my courses. I also need access to a computer with enlarged images, a large screen, and reduced glare.</p> <p><b>Solution</b> The disabled student services advisor helped me contact my professors two months prior to the upcoming semester. I was able to get reading lists for three out of four classes and producing materials in large print was arranged. I was also accommodated with a large monitor, screen magnification software, glare guard and talking grammar/spelling software for the computer in my dormitory. Each of the instructors also received guidelines from the student services center to provide any handouts in large-print format. In addition, for each of my classes I was given preferential seating in the front row. Lectures were recorded on tape.</p> <p><b>Conclusion</b> This case study illustrates the use of high and low technology solutions to support a student with visual impairments. In Derek's case, simple accommodations made by the instructors (preferential seating, enlarged handouts, taped lectures) were adequate to allow full participation in the courses.</p>			
<b><u>DID YOU KNOW?</u></b>  Some students with disabilities are clients of the federal/state vocational rehabilitation system.				
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A meeting conducted in sign language	<h2>Hearing Impairments Case Study</h2>			
<b><u>DID YOU KNOW?</u></b> Less than 30% of English speech is visible on the mouth	<b>Case Study</b>   <a href="#">FAQ</a>   <a href="#">Resources</a>			
<a href="#">Search Knowledge Base</a>	<h2>Michael and Graduate School: A Case Study on Accommodations for Deafness</h2>			
<a href="#">Knowledge Base Articles by Topic</a>	<b>Background</b> My name is Michael and I am a graduate student in Rehabilitation Counseling at San Diego State University. I have a severe-profound, bilateral hearing loss and use hearing aids and speech reading (watching the movement of a person's lips) to maximize my communication abilities. I have some knowledge of American Sign Language but not enough to effectively use a sign language interpreter as an accommodation.			
<a href="#">About The Faculty Room project</a>	<b>Access Issues</b> Graduate level courses emphasize student participation and the development of critical thinking skills. In addition to using a notetaker and real-time captioning, in what ways can instructors create a fully inclusive classroom environment that meets and maximizes my communication needs.			
<a href="#">Enter Board Room, Conference Room, or Student Lounge</a>	<b>Solutions</b> I contacted the Office of Disability Services and coordinated the provision of real-time captioning and notetaking for use in large classrooms. However, instructors have the ability to further enhance communication accessibility by following some simple communication tips. By educating my instructors regarding my communication needs, I was able to enlist them in using the following communication strategies in their classrooms whenever they have a deaf student who prefers oral communication. <i>(For the purpose of this case study, the term "deaf" will refer to a person with a severe/profound hearing loss who prefers oral communication. These communication tips are also helpful for many deaf students who use sign language interpreters, as well as others with varying degrees of hearing loss).</i>			
<a href="#">Evaluate this site.</a>	<ul style="list-style-type: none"> <li>• <b>Ask the deaf student to choose the best seating for communication.</b> Typically, this means a seat near the instructor so that the student can see the instructor's lips. Whenever possible, especially in small groups, use a round table or semicircular seating arrangement which enables the student to see everyone's face. Usually, the person with a hearing loss will know best where to sit. It is helpful to take into consideration the area's lighting, so the instructor is illuminated clearly.</li> <li>• <b>Avoid unnecessary pacing and speaking when writing on a chalkboard/dry-erase board.</b> It is difficult to speech read a person in motion and impossible to speech read one whose back is turned. Write or draw on the board, then face the group and explain the work. If using an overhead projector, do not look down at it while speaking.</li> <li>• <b>Use visual aids.</b> For a person with a significant hearing loss, or who is deaf, vision is a primary channel for receiving communication. Make full use of available aids, including films, videotapes, overhead projectors, Power Point, diagrams, and chalkboards/dry-erase boards. Give the student time to read/analyze before speaking.</li> <li>• <b>Make sure the student doesn't miss vital information.</b> Write out any changes in meeting</li> </ul>			

times, special assignments, and additional instructions. Allow extra time when referring to manuals and texts since the deaf student must look at what has been written and then return his attention to the instructor. Following up with e-mail is an excellent way to communicate vital information.

- **Slow down the pace of communication slightly to facilitate understanding.** Do not talk too fast. Allow extra time for the deaf student to ask or answer questions.
- **Repeat questions or statements made by other students and point to the person speaking.** Remember that many deaf students are cut off from whatever happens outside their visual area.
- **Allow full participation of the deaf student in the discussion.** It is difficult for deaf students to participate in group discussions because many are not sure when speakers have finished. Recognize the deaf student from time to time to allow full participation by that person. Be aware of turn taking and give the deaf student a chance to look at the various students before each speaks.
- **Use hands-on experience whenever possible in training situations.** Like other people, deaf people learn quickly by "doing." What may be difficult to communicate verbally may be explained easily by hands-on demonstration.

### Conclusion

This case demonstrates that:

1. Using simple communication strategies can enhance communication access for a deaf student and, ultimately, result in a positive learning experience.
2. Most instructors are more than willing to follow communication tips. Students with effective self-advocacy skills can help provide the necessary education and awareness for faculty.
3. Communication strategies that enhance the learning experience for deaf students benefit other students as well.

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Girl working at a computer	<h2>Health Impairments Case Study 2</h2> <p><a href="#">Case Study 1</a>   <a href="#">Case Study 2</a>   <a href="#">FAQ</a>   <a href="#">Resources</a></p> <h3>Karen and College Work: A Case Study in Accommodations for Health Impairments</h3> <p><b>Background</b> My name is Karen. I'm a third-year math education student with Rheumatoid Arthritis. On a good day I can attend my classes, take notes, and participate without difficulty. When my arthritis is problematic, I have a hard time gripping a pencil to write. I also fatigue very quickly and cannot work on homework for prolonged periods of time.</p> <p><b>Access Issues</b> My arthritis interferes with my ability to type quickly and efficiently as well as take handwritten class notes. My doctor has recently restricted me from typing and writing for extended periods of time. I also have difficulty carrying out extended math notations and writing my lesson plans for my education class.</p> <p><b>Solutions</b> The disability student services center helped me access computer technology in a computer lab on campus. I was accommodated with speech recognition software, an alternative keyboard, and a trackball. I was also provided access to math software that allowed me to complete math notations without writing. With this computer configuration, I was no longer dependent upon writing or typing with a standard keyboard to complete class assignments. I also requested permission from my professors to tape their lectures and all were supportive of this accommodation, which minimizes my need to write.</p> <p><b>Conclusion</b> This example illustrates:</p> <ol style="list-style-type: none"> <li>1. How adaptive technology can accommodate a student who has difficulty writing and typing.</li> <li>2. How campus computer lab staff can support disabled students.</li> <li>3. How tape recorders can provide an effective accommodation, but their use should be discussed with the instructor prior to implementation.</li> </ol>			
<b><u>DID YOU KNOW?</u></b> Students with health impairments often require flexible attendance requirements.				
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A group of students listen to a teacher's presentation	<h2>Psychiatric Impairments Case Study</h2> <p><b>Case Study</b>   <a href="#">FAQ</a>   <a href="#">Resources</a></p>			
<b><u>DID YOU KNOW?</u></b> Functional limitations due to mental illness can impact academic performance.	<h2>Sally and College Studies: A Case Study in Accommodating Psychiatric Impairments</h2>			
<a href="#">Search Knowledge Base</a>	<b>Background</b> My name is Sally and I'm a 22-year-old student with Major Depression and Anorexia Nervosa. I attend college full-time and need disability accommodations to help compensate for low mood, fatigue, bouts of anxiety ranging from mild to severe, and very low energy and motivation. I want to excel in my classes but my illnesses interfere.			
<a href="#">Knowledge Base Articles by Topic</a>	<b>Access Issues</b> I am stabilized on my psychiatric medications, which help my mood and eliminate thoughts of self-harm, but I experience morning fatigue as a side effect so early morning classes are difficult for me. Depression and eating disorders also affect my cognition by decreasing concentration, short-term memory, and problem-solving skills. I am very critical of myself and often don't have enough confidence to talk in class. If I do speak in class, I always feel I'm being judged so I withdraw.			
<a href="#">About The Faculty Room project</a>	I don't have an obvious disability like some people, and maybe it would be easier to see I need help if I did. Teachers don't usually know how to help people with mental illnesses because they don't understand them. Sometimes I even feel that getting special accommodations is cheating in some way. I get frustrated because I really want to succeed in college and I know I'm not stupid.			
<a href="#">Enter Board Room, Conference Room, or Student Lounge</a>	<b>Solution</b> The office of disabled student services helped me to see that getting accommodations is not cheating-that I need them to compensate for my mental illness disability. I usually do as well as other students when I am in a positive, encouraging environment and receive the accommodations of extended time on tests, and notetaking assistance (to make sure I don't space out and miss anything), as well as Support Services such as communication opportunities via e-mail and class electronic discussion lists, and tutoring-especially for math and science work.			
<a href="#">Evaluate this site.</a>	<b>Conclusion</b> This case study illustrates that:			
	<ol style="list-style-type: none"> <li>1. Mental illness is a disability and students with mental illness can benefit from a range of accommodations.</li> <li>2. The disabled student services office can help students with mental illness determine specific accommodations that are appropriate for them.</li> <li>3. It is sometimes important that the student effectively communicate the functional limitations of a psychological disorder in order for the instructor to understand access issues.</li> </ol>			
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Examining the hydrodynamics of a kayak hull

**DID YOU KNOW?**  
Some individuals with disabilities can control their environment with the 'flip of a switch.'

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## Mobility Impairments Case Study

**Case Study 1** | [Case Study 2](#) | [FAQ](#) | [Resources](#)

### Scott and Engineering: A Case Study in Accommodations for Mobility Impairments

**Background**

My name is Scott. I am a 19-year-old engineering student with muscular dystrophy. I use a powered wheelchair for mobility. An important part of the first year of my engineering program involves work on computer-aided design programs in the engineering computer lab.

**Access Issues**

Although I can use one hand to control my wheelchair, I have limited strength and movement in my hands and fingers. I cannot use a standard mouse or keyboard due to limited strength and movement. I also cannot physically access some lab computers due to the height of the table and the position of the computer equipment.

**Solution**

I met with my course instructor and toured the computer lab prior to the first class. I could not physically access the lab computers. An adaptive technology specialist within the university helped the lab acquire an adjustable computer table and set up the workspace at an appropriate height and location for me. I also got a trackball which eliminated the need to use a mouse. With the trackball, I can perform mouse functions and use a virtual, on-screen keyboard. These computer accommodations were in place by the first day of class. They provided me with the full access I need to complete required laboratory coursework as part of the engineering program.

**Conclusion**

This case study illustrates:

1. A variety of assistive devices can be purchased to replace a standard keyboard and mouse.
2. Some technology access problems can be solved through the purchase and deployment of assistive technology.
3. Preplanning, site visits, and cooperation with computer lab staff as adaptive computer equipment and furniture take time to order and set up.
4. The availability of an adaptive technology specialist as a resource within the university setting.
5. It is important to consider potential accessibility issues whenever electronic and information technology is purchased.
6. Students should plan ahead in order to arrange for critical access options.