



## **Instructor Fact Sheet: Teaching Students with Blindness or Visually Impaired**

### **Need for Classroom Accommodations**

A major challenge facing blind students at universities is the overwhelming mass of printed material with which they are confronted - syllabi, coursepacks, books, time schedules, bibliographies, campus newspapers, posters, tests, etc. The increasing use of films, videotapes, overhead projectors, and closed-circuit television adds to the volume of visual material they must access in an alternative way. Therefore, students with visual impairments must plan their schedules well in advance of each semester to assure that support services are in place when classes begin. Such services may include textbooks converted to audiotape or electronic format, special equipment, or readers.

### **Reading Methods**

By the time blind students reach college (unless newly blinded), they have probably developed various methods of managing the volume of visual materials. Most blind students use a combination of methods including readers, books changed to audiotape or electronic format, Braille books, and taped lectures. If the student uses readers, hiring and scheduling arrangements must be made. Many blind and visually impaired students will be registered with the campus Disability Resource Center (DRC). In addition, these students will most likely be registered with the local Division of Blind Services (DBS). DRC and DBS will work together to make the necessary arrangements. Some such students will work independently.

### **Textbooks and Coursepacks**

So that the blind or visually impaired student has time to make the necessary arrangements, please choose books and collate course packs early, and make this information readily available to campus bookstores and copy centers. These items may then need to be ordered by DRC or DBS in electronic format from the publisher, which may take up to four weeks. Sometimes the books are ordered in audio format from a non-profit or government agency catering to the visually impaired. If it is necessary to have a text recorded on cassette/CD or converted to Braille format, it may take two to four months. Items may also be scanned and then read by a text to speech computer program.

### **Syllabi and Handouts**

It is essential to provide syllabi and handouts so that they can be made readable by the time the rest of the class receives them. In many cases this entails creating and supplying these to the student in advance, either in printed copy, on computer disk, or by email. Before the class meeting, the student may then use a computer program to read the material or, if appropriate, arrange for a reader to audio record it.

### **Describing Visual Cues in the Classroom**

When there is a blind student in the classroom, the professor should remember that "this and that" phrases are basically meaningless to the student: for example, "the

sum of this plus that equals this" or "the lungs are located here and the diaphragm here." In the first example, the instructor may be writing on the chalkboard and can just as easily say, "The sum of 4 plus 7 equals 11." The blind student in this case is getting the same information as the sighted student. In the second example, the instructor can "personalize" the locations of the lungs and diaphragm by asking class members to locate them by touch on their own bodies. Examples of this type will not always be possible. However, if the instructor is aware not to use strictly visual examples, the blind student will benefit.

### **Class Notes**

Many visually impaired students will utilize the class notetaker service. These notes can then be converted to large print for reading, or converted to an electronic format by retyping or scanning and then read by a computer program. If the professor's notes are appropriate for student use, these can be photocopied as an alternative. A small number of students may use a laptop to take their own notes during class. Whatever method the student uses for notes, he/she is responsible for the material covered in class.

### **Taping Lectures**

Some faculty members are concerned about having their lectures audio recorded--whether the student is blind or sighted. When an instructor is planning to publish his/her lectures, the fear may be that the tapes will somehow interfere with these plans. If this is the case, the faculty member may ask the student to sign an agreement not to release the recording or otherwise hinder the instructor's ability to obtain a copyright.

### **Testing**

A common area in which blind students need adaptation is testing. As a general rule, it is much better to avoid giving the student "different" tests from the rest of the class because this makes it difficult to compare test results. The fairest option is almost always to administer the same test questions in a non-visual format. This approach is certainly within the prerogative of the instructor.

*Alternative testing methods may include:*

- Some instructors prefer to give oral exams to blind students, or arrange for a teaching assistant to administer the test orally.
- Audio recording the questions for the student, who in turn records his/her answers on another recorder or types the answers.
- Using a reader/scribe.
- Computer based tests with adaptations for visual impairments can be very useful for test taking, and also for writing papers.

### **Illustrations, Models, and Technology**

Students who are blind and visually impaired may use raised line drawings of diagrams, charts, and illustrations; relief maps; and/or three-dimensional models of physical organs, shapes, and microscopic organisms, etc. Modern technology has made available other aids including talking calculators, speech time compressors, and reading machines.

### **Art and Other Visual Subject Matter**

Substitutions may be found for some courses that are "visual" by nature; however, it should not be assumed automatically that a substitution would be necessary. Conversations between the blind student and the professor can lead to new and even exciting instructional techniques that may benefit the entire class.

For example, it is often thought that a blind student cannot take a course in art appreciation and that, if this class is a requirement for graduation, it should be waived. However, the blind student should have the opportunity to become familiar with the world's great art. The instructor, a classmate or educational assistant who is particularly talented at verbally describing visual images can assist the blind student as a visual "interpreter" or "translator." The "Mona Lisa" (or other great work of art) can be described, and there are poems written about the "Mona Lisa" that may be used as teaching aids to give more insight and understanding to the work. Miniature models of great works of sculpture can also be made available for display and touching in the classroom.

One student was able to learn the proper technique in an archery class when a rope was stretched perpendicular to the target. A "beeper" that was added to the target assisted with positioning. The point is that disabilities (in this case, blindness) do not automatically preclude participation in certain activities or classes. Students, professors, and advisors must be careful not to lower expectations solely on the basis of disability.

### **Guide Dogs**

Some blind students use guide dogs. A guide dog will not disturb the class. They are very highly trained and disciplined. Most of the time the dog will lie quietly under or beside the table or desk. The greatest disruption a professor can expect may be an occasional yawn or stretch. It is good to remember that as tempting as it may be to pet or speak to a guide dog, the dog while in harness is responsible for guiding its owner, and should not be distracted from that duty.

### **Field Trips**

If classes involve field trips to out-of-class locations, discuss traveling needs with the blind student. In most instances, all that will be required is for a member of the class to act as a sighted guide. In locations where public transportation is adequate, many blind persons travel quite independently.

### **Partial Sight and Accommodations**

Between 70 and 80 percent of all legally blind persons in the United States have some measurable vision. Partially sighted students often require many of the same accommodations as totally blind students. This includes readers, alternative texts, raised line drawings, describing visual cues in class, etc. In addition, depending on their level and type of vision, partially sighted students may use large print textbooks, handouts, or tests; a closed-circuit TV magnifier or other magnifying device; or a larger font on word processing. Large print is usually 18 to 24 pt., but varies from student to student. In class some partially sighted students are able to take notes with a bold felt tip pen or marker.

### **When a Student Doesn't Appear "Blind"**

The partially sighted student is confronted with two basic difficulties that the blind student is not. First, the partially sighted student is sometimes viewed by instructors and classmates as "faking it" because most partially sighted students do not use white canes for travel and because most are able to get around much like everyone else. People have difficulty believing that the student needs to use adaptive methods when utilizing printed materials.

One partially sighted student commented that having been observed playing Frisbee by one of her instructors, she was sure that the instructor would no longer believe that she

was partially sighted. As she explained, she had more peripheral than central vision and was able to see a red Frisbee. If any other color Frisbee was used, she could not see well enough to play. Playing Frisbee and reading text present quite different visual requirements. This is often difficult for the fully sighted person to understand.

### **Large Size Handwriting and Large Print**

The partially sighted student may experience bias when using larger print. The sighted reader's psychological response to large handwriting may be that "a child has written this." Unfortunately this may unconsciously lead to the conclusion that the written communication, e.g. a student's essay on an exam, is less sophisticated than that of other students. When the student uses a large print word processor, this can still be a problem. It is very important to read for content and try not to be distracted by large size writing.

Note: it is sometimes assumed that a student using large print is trying to make an assignment appear longer as in the case of a term paper of a required length. When the number of words instead of pages required is stated, the assignment length is clearer for everyone.

### **Meeting With the Partially Sighted Student**

Potential difficulties can be alleviated if the student and professor discuss the student's needs early in the term. Depending on the level of vision, a partially sighted student may be assisted by such classroom accommodations as sitting in the front of the room and having large print used on the chalkboard and on an overhead projector.

The capacity to read printed materials, however, also depends greatly on conditions such as degree of contrast between print and background and the brightness and color of

text. Therefore, it is essential for the student and instructor to clarify what methods, techniques, or devices will work to maximum advantage in the setting being used.

### **In Conclusion**

It is important to understand that the student with vision loss has a responsibility to his/her own academic success. He/she must employ all the necessary skills and strategies of a good student in order to be successful. He/she should have good attendance, be punctual, complete assignments, participate in class activities, utilize instructor's office hours and be active in the learning process.

*Thank you,*

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[www.dso.ufl.edu/drc](http://www.dso.ufl.edu/drc)

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