

# Teaching Students Who are Deaf-Blind

When a student who has both a vision and a hearing loss registers to take a course, each component of the course will need to be reviewed to determine if the student requires accommodations, e.g. syllabus, handouts, overheads or other AV materials, exams, and paper assignments. There is not a formula for addressing these needs because students who are deaf-blind have differing levels of hearing and vision loss. The first step is to talk with the student about the course to determine what modifications are necessary.

## Who to Contact for Assistance

Help is available! The instructor and student should access support from staff who coordinate services for students with disabilities. These staff may be located within the various departments, within the counseling office or with the Disability Support Service (DSS). These staff have the knowledge and experience in providing the necessary accommodations and access to resources in order to provide support services. With permission from the student, talking to previous instructors may also be helpful.

## Use of Student Aids/ Accommodations

There are several types of support

services available to students. Access to these services will help increase the student's understanding in class and maintain the general pace of the course. These may include:

**Assistive Listening Devices (ALDs)**—a small microphone device worn by the instructor that increases the volume and clarity of the class lecture for the student who wears the device. An auxiliary device may also be used in a small group situation, in order to enhance the understanding of several voices.

**Interpreters**—relay information to and from the student and other people in the classroom. The type of interpreting needed will depend upon the student's residual hearing and vision. Interpreting may be done orally, visually (use of American Sign Language or other sign system, with modifications including restricted use of signing space or increased/decreased distance between student and interpreter) or tactually (hand over hand).

**Notetakers**—provide a written, Brailled, or taped secondary source of information during a class lecture.

**Tutors**—may also require an interpreter when accessing tutorial services.

**Readers**—for students who have usable hearing and limited vision, this support service provider reads textbooks and other course materials.

## **Physical Classroom Accommodations**

There are several possible accommodations that may need to be addressed based upon the location and setting of the course. Does the classroom have adequate lighting? Are there sources of glare such as fluorescent lighting or exposed windows along one wall? Do white walls or white table tops create glare? Is there enough space in the classroom to allow for a guide dog and/or interpreter? Are night classes accessible to students who use public transportation or have night blindness? The student and instructor will need to evaluate seating with regard to classroom participation and at times it may be beneficial/necessary to look at alternate settings if the physical classroom cannot accommodate a student's needs. This can be done in conjunction with the Office for Students with Disabilities on campus.

## **Use of Handouts/Ad Hoc Materials**

For students in your class who will need alternate media, it is critical to meet with the student early to allow time to convert materials into the student's preferred mode. Ensuring a student receives course materials in a timely manner, defined as the same time other students receive the information, is essential to the student's success (Senge & Dote-Kwan, 1998). At times, some materials should be made available early, e.g. if the student is expected to read material distributed in class and respond either through discussion or written report. This is needed because students who use an interpreter cannot read a document

and participate in class discussion at the same time. Visual impairments can also slow reading comprehension. Some of the alternate formats may include:

**Large Print/Braille Materials or Taped Textbooks**—every required reading and handout may need to be converted into large print, Braille or audiotape. First consult the publishing company. They are required by law (the Americans with Disabilities Act-ADA) to have their textbooks available in alternate format to all readers. If possible, consider computer conversion. Whether materials are converted by computer or manually, resources may include a volunteer, the DSS on campus, or a community service agency that serves blind individuals.

**Reading Machines**—will enlarge the print size and change the polarity to decrease vision strain and problems with glare by displaying white text on a dark screen. Reading machines also known as closed circuit televisions (CCTV) may be available on campus, in community libraries, or owned by the student.

## **Use of Audiovisual Materials**

The use of videotapes in the class, class lecture using an overhead projector, and slides will all require some type of modification for students who have vision and hearing loss. Some adaptations may include use of an interpreter to be sure a student receives the information being presented. Also large print or Braille copies of overhead materials or a transcript of videotapes/slides may be needed for the student. The use of color overlays might improve contrast for students with low vision (Enos & Jordan, 1996). Lighting

is often critical for students with low vision. Dimming the lights may impair the student's ability to see the material or the interpreter. It will be important that any visual information presented in class be described for the student who has severe vision loss. Examples of this may include graphs/diagrams on the over-head, the use of objects, e.g. scale model of chromosomes, and demonstrations, e.g. role play of counseling situation.

### **Small Group Discussions/Activities**

Accommodations used in the classroom at large may also be needed when students have small group discussions or complete group projects. Some of these support services may include use of an interpreter or ALD. Communication rules may need to be established and followed to insure only one student speaks at a time and that students identify themselves before speaking so the student who is deaf-blind can follow and participate in the discussion. Materials produced by the group may need to be converted into alternate format and special meeting times outside of the classroom may require a volunteer or member of the group to guide or transport the student to the meeting place.

### **Oral Presentations**

If the course requires oral presentations by students, some accommodations may be added to insure clear communication by all. If the student uses an interpreter in class, the interpreter may need to voice to the class what the student signs. Even if the student does not use sign language, an oral interpreter may be needed if a

student's voice is not clearly understood or loud enough. If the student also has limited use of vision, an interpreter will relay feedback and comments from classmates to the student.

### **Exams**

Some examples of alternate test giving methods include taking the test orally, having the material interpreted into ASL (either visually or tactually), listening to the test on audiotape, having extended test-taking time, or taking the test in a different location with better lighting and/or with a reading machine. Other modifications may be necessary for the student to record test answers. Options include use of a notetaker, proctor, computer-typed answers, Braille-typed answers (later transcribed into print) and use of low vision aids such as writing guides and templates (American Council on Education, 2000).

### **Field Visits/Labs**

Any activity that occurs outside of the regular classroom will need to be discussed in advance to insure the student's full participation. If the class occurs off-campus in a different setting, the student may require a guide or assistance from someone to arrive at the new location. If the student typically walks to class, alternate transportation may be needed. If the student uses a guide dog, insure that the lab does not interfere with the support animal, e.g. use of chemicals/strong fumes.

### **Teaching Style**

Having a student who is deaf-blind in the classroom may require some adaptations in an instructor's teaching style. If the

instructor typically paces or walks around the classroom during a lecture, the student may not be able to follow the voice clearly. If the instructor speaks while writing on the blackboard, the student may not be able to hear or speechread the person clearly. If the instructor uses overheads and slides on a regular basis, they may need to be copied or transcribed into Braille for the student who cannot see them. The instructor's lecture speed should permit an interpreter to keep pace. Use of the communication rules noted earlier help insure full participation. The use of role-play and class participation should include the student with vision and hearing loss. Instructors who produce last-minute handouts will need to have them available in the alternate format choice of the student. Given the student's preferred learning style, the instructor can make the necessary accommodations with as little change to teaching style as possible.

## Conclusion

Because of the degree of vision and hearing loss varies from person to person, the possible accommodations needed for students who are deaf-blind are diverse,

distinct and yet often easy to accomplish. Accessing the services through the Disability Support Service will help. Keeping an open line of communication with the student will ultimately create a positive learning and teaching atmosphere for both you and the student.

## References

- American Council on Education (2000). *Students who are deaf or hard of hearing in postsecondary education* (revised). (HEATH Resource Center publication). Washington, DC.
- Enos, J. & Jordan, B. (1996). *A guide for students who are deaf-blind considering college*. Sands Point, NY: Helen Keller National Center-Technical Assistance Center.
- Senge, J.C. & Dote-Kwan, J. (1998). Responsibilities of colleges and universities to provide print access for students with visual impairments. *Journal of Visual Impairment and Blindness*, 92(5), 269-275.

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*For more information on how to contact professionals in the tutoring field, as well as other topics covered by the PEPNet Teacher Tipsheet series, visit PEPNet's Web site at <http://www.pepnet.org>.*

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