This tipsheet offers suggestions for the instructor who has a student with both a vision and a hearing loss, stressing that the first step is to talk with the student to determine what modifications are necessary. Specific recommendations are offered for the following areas: (1) use of student aids/accommodations (such as interpreters, notetakers, readers, and assistive listening devices); (2) physical classroom accommodations (lighting, seating, etc.); (3) use of handouts/ad hoc materials (such as, large print or Braille materials, taped textbooks, reading machines); (4) use of audiovisual materials (the need for modification when using videotapes, an overhead projector, or slides); (5) small group discussions/activities (such as use of clear ground rules, an interpreter, or assistive listening devices); (6) oral presentations; (7) exams (the format may need to be modified, interpreted, or given in a different setting); (8) field visits/labs; (9) teaching style; and (10) contacts for assistance. (DB)
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.

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:

- **Interpreters**—relay information to and from the student and other people in the classroom. Interpreting may be done orally, visually (use of American Sign Language-ASL or some other sign system) or tactually.
- **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.
- **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.

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? 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. 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. Some of the alternate formats may include:

- **Large Print or Braille Materials**—every required reading and handout may need to be converted into large print or Braille. If possible, consider computer conversion. Whether materials are converted by computer or manually, resources may include a volunteer, the Office for Students with Disabilities on campus, or a community service agency.
- **Taped Textbooks**—as with large print and Braille textbooks, first consult the publishing company. They are required by law (the Americans with Disabilities Act—ADA) to have their textbooks available to all readers, which may include audiotape, computer disk, Braille, and large print.
- **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. 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 is important that any information presented visually in class be...
described for the student who has severe vision loss. Examples of this may include graphs/diagrams on the overhead, 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 will likely 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. Ground rules may need to be established and followed to ensure that 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 that a member of the group or a volunteer guide the student to the meeting place.

Oral Presentations
If the course requires student oral presentations, some modifications may include use of an interpreter to voice to the class what a 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 tactual), listening to the test on audiotape, having extended test-taking time, or taking the test in a different location with better lighting or a reading machine. Other modifications may be necessary for the student to record test answers. Some of the ways may include use of a notetaker, computer typed answers, Braille typed answers (later transcribed into print) and use of low vision aids.

Field Visits/Labs
Any activity that occurs outside of the regular classroom will need to be discussed in advance to ensure the student's full participation. If the class occurs off-campus in a different setting, the student may require a guide or assistance from a support service provider (SSP) 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, ensure 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. Class discussion should be heard clearly or interpreted for the student who is deaf-blind. 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.

Who to Contact for Assistance
The instructor and student should access support from staff who coordinate student services. These staff may be available in the various departments, the counseling office, or in the Office for Students with Disabilities. 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. Keeping an open line of communication with the student will ultimately create a positive learning and teaching atmosphere for both you and the student.

For more information, contact:
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National Technical Institute for the Deaf
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