ABSTRACT

College staff must understand the nature of hearing impairment, its effect on communication, and teaching methods that accommodate functional limitations in order to provide for the special needs of deaf students. Since the extent of a student's ability to communicate is determined by whether the student became deaf before or after he/she established the use of English and by his/her degree of hearing loss, the teacher should determine what the student can hear and when his/her hearing was impaired. As lip-reading, speaking, and the reading of abstract and idiomatic language are often problematic for deaf students, especially for those who became deaf at an early age, communication is best facilitated by the use of sign language and an interpreter. To improve the learning environment and compensate for the difficulties that may be encountered in group discussions and in note-taking, the teacher can, among other things, give a visual signal to the student before speaking, use body language, and have a light on, not behind, his/her face. A student's ability to lip-read never replaces the need for an interpreter. Provisions should be made to assure that the interpreter is clearly visible, that the teacher adjusts his/her pace to the interpreter, and that the interpreter is provided with an outline and new vocabulary before the lecture. (JP)
BREAKING THE SOUND BARRIER

WORKING WITH HEARING-IMPAIRED ADULTS IN AN EDUCATIONAL SETTING

Lois West
Special Services

North Shore Community College
Beverly, Massachusetts
BREAKING THE SOUND BARRIER

Working with Hearing Impaired Adults
in an Educational Setting

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Lois West, Skills Specialist
Special Services
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## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>HEARING IMPAIRMENT AND COMMUNICATION</td>
<td>1</td>
</tr>
<tr>
<td>An Invisible Disability</td>
<td>2</td>
</tr>
<tr>
<td>Lip-Reading</td>
<td>2</td>
</tr>
<tr>
<td>Speech</td>
<td>2</td>
</tr>
<tr>
<td>Reading</td>
<td>2</td>
</tr>
<tr>
<td>Sign Language</td>
<td>2</td>
</tr>
<tr>
<td>Other Educational Issues</td>
<td>2</td>
</tr>
<tr>
<td>SUGGESTIONS FOR WORKING WITH HEARING IMPAIRED PEOPLE</td>
<td>4</td>
</tr>
<tr>
<td>WORKING WITH THE INTERPRETER</td>
<td>7</td>
</tr>
<tr>
<td>SUGGESTIONS FOR WORKING WITH THE INTERPRETER</td>
<td>8</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>9</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>4</td>
</tr>
</tbody>
</table>
INTRODUCTION

The number of students with special needs who are attending college is growing. As a result, the opportunity for college employees to work with these students is increasing. There are individual differences between all students, and students with special needs have another set of individual differences. They offer college employees the opportunity to expand their knowledge about the teaching-learning process and the same rewards of helping people learn.

Hearing impaired students are among those who have special needs in the educational setting, and accommodations for their functional limitations are necessary to provide the best opportunity for them to learn. With communication methods geared to hearing impaired students, these students will be able to take advantage of educational opportunities at the College.

This pamphlet will provide a brief explanation of the nature of hearing impairment, its effect on communication, and teaching methods to accommodate functional limitations. This information will assist college employees in providing an environment more conducive to learning by the hearing impaired student while in a setting primarily designed for hearing people.
HEARING IMPAIRMENT AND COMMUNICATION

It is important to understand that hearing impaired people have the same range of intelligence as hearing people. Their individual ability to learn is primarily limited by their ability to overcome or compensate for the difficulties resulting from hearing loss. The primary impediment in the learning process is the difficulty in communication. The extent of this difficulty depends on not only how much impairment there is but when it occurred. There are degrees of hearing loss. Other things being equal, the more ability to hear the person has, generally the more easily she or he can be taught. Those who are born deaf or become deaf before four years old have not established the use of English at the time when most people acquire their first language. English is not their natural language. The predominance use of written and spoken English in education means that these deaf people primarily have developmental problems. They must develop a way to understand English. Those who become deaf after 16 or 18 years old, when the English language has been generally mastered, primarily have adjustment problems with unbalanced perceptions and a new life role.

There are varying degrees of hearing loss. The ability to hear sound does not necessarily provide the ability to hear speech. Many hearing impaired students may be able to hear sounds and find noise distracting although they may not be able to understand spoken language. While almost any hearing deficiency can be helped by a hearing aid, this will not necessarily help language comprehension. An example of a similar situation for hearing people is turning up the volume of a garbled message. This does not always help the listener to understand the message.

An Invisible Disability

Loss of hearing is not a visible disability. You generally cannot tell just by looking at someone if they have a hearing impairment. People with partial hearing may try to appear to have normal hearing, and people with little or no hearing may not want to appear verbal. It is important to speak with the student individually to find out as much as possible about what she or he can hear, when hearing was impaired, and what works well in a learning situation.

Lip-Reading

Hearing impaired people have many options for communication with each other and hearing people. Many hard-of-hearing people and people who lost their hearing after they learned English can lip-read and speak English. This is more difficult or impossible for people born deaf. However, even those people who have well-developed lip-reading abilities can only understand
26% to 36% of what is said because all English sounds cannot be identified visually and words must be identified immediately when spoken. To lip-read well a person must have good intelligence, exceptional language ability and visual acuity, and considerable motivation. A lot of what seems to be good lip-reading can be uncomprehending smiling and agreement.

Speech

Speech for deaf people is difficult. If English was never learned before deafness, it is very difficult to learn oral language. Even those who lose their hearing at later ages have speech problems because they cannot hear themselves speak to control volume and tone. In addition, it is important to understand that the speech of deaf people does not correlate with their intelligence.

Reading

While hearing impaired people can communicate with pen and paper, more advanced levels of reading depends on acquired language. The average reading level of adults who were born deaf or lost their hearing at an early age is at the third grade level. While it is simpler to understand written language that is concrete and literal, it is even more difficult to understand language that is abstract and idiomatic. Language that remains constant, such as the language of mathematics, is understood; but idioms which change and are highly connotative are not easily understood. Therefore, even though the hearing impaired student may have no visual problems, she or he may not be able to read more difficult materials with good comprehension.

Sign Language

The most effective way to communicate with deaf students is with lip-reading and sign language, which is a language of its own. Two sign languages are used by deaf people in America, Siglish and Ameslan. Siglish follows English grammar in its sentence-structure. It is also called Signed Exact English. Ameslan is a highly condensed language with a structure more similar to Chinese than English and incorporates much non-verbal communication. It has no tenses or fine time distinctions. In an educational setting where the college employees do not know sign language, an interpreter acts as a bridge to communicate between the teacher and staff and the deaf student. In both lip-reading and sign language, facial expression and body language are important to communication.

Other Educational Issues

Hearing impaired students have particular difficulty understanding and participating in group discussions because it is difficult to follow changes in speakers and lip-read other people they can't see well or are not used to lip-reading. They also have difficulty reading and writing, particularly when it requires abstract words. Taking class notes is especially a problem because they cannot watch the teacher and interpreter and write at the same time.
Communication difficulties the hearing impaired student faces are numerous but not necessarily impossible to overcome. The following pages provide a number of suggestions to improve the learning environment for hearing impaired students.
SUGGESTIONS FOR WORKING WITH HEARING IMPAIRED PEOPLE

1. Have the student's attention before speaking. You can tap your foot, tap on their desk, wave or give some visual signal, or tap them on the shoulder while standing in front of them.

2. Students should sit close to you or near the front of the room unless they prefer sitting in the middle of the room to monitor the environment.

3. Watch for fatigue. Hearing impaired people tire more quickly because they must constantly be looking and listening.

4. In a one-to-one or small group situation, sit at eye level facing each other with the light from the windows on your face, not at your back.

5. Avoid standing in front of a light source because it is difficult for the student to see you. Have light on your face, not behind you.

6. Avoid unnecessary pacing because it is difficult to lip-read a moving person and impossible to lip-read them from the side or back.

7. Speak slowly and clearly in a moderate tone. Don't exaggerate and over-emphasize because distorted lip movements and rhythm are difficult to read.

8. Look directly at the person and make eye contact when speaking to them.

9. Speak at a moderate speed or slower if necessary. Allow time for the student to assimilate the information and respond if appropriate.

10. Distracting factors such as moustaches, smoking, pencil chewing, and hands in front of the lips reduce communication.

11. Try to rephrase a thought or question instead of repeating the same words. What you are saying may not be easy to lip read or understand.

12. Pantomime, body language, and facial expression aid communication.

13. Use paper and pencil to communicate when necessary.

14. Ask the student to repeat what she or he has said if you don't understand. Ask him or her to speak louder or softer if necessary.
15. Encourage the student to participate in class. Develop a supportive class atmosphere.

16. Communicate in one modality at a time. For example, don't write on the blackboard while speaking.

17. Write assignments on the blackboard, use handouts, or post them on a bulletin board.

18. Select key words and/or ideas and write them on the board or a handout. If possible, provide new words in advance.

19. When dictating single words, use them in a sentence to give a clue to the word, which may be hard to lip-read.

20. Provide opportunities for the student to learn the names of the other students.

21. Overhead projectors are excellent. You are in one place with the light on your face and facing the class.

22. When using filmstrips, have someone else operate the projector so you can face the class. If possible, give the student the printed script. Maintain some light in the room.

23. Other visual aids such as charts and diagrams are helpful.

24. Make sure the student has a good notetaker. Copies can be made with carbon paper, special pressure sensitive paper, or copy machine. The student can also take her or his own notes as much as possible in addition to those by the notetaker.

25. In group discussions have someone jot down the topic every time it changes.

26. Questions or statements from the back of the room should be repeated.

27. Allow plenty of time when referring to materials because the student must look, then find the information, and look back for further instruction if necessary.

28. Hearing aids amplify sound. A noisy environment can be annoying and make understanding more difficult.

29. If the hearing aid squeaks, tell the student.
30. Be in a position in which the student can clearly see both you and the interpreter.

31. Be accessible for one-to-one conversations with the student in order to communicate what is working well and clear up any questions you or the student may have.

32. Be open to experimenting with techniques to facilitate the learning process. Each hearing impaired student has her or his own unique learning needs.

33. Don't restrict conversation to business matters. Humor and small talk help everyone relax.

34. Help the student find a tutor or professional for extra help when needed.

35. See the student as a person with the same social needs as any other student. Don't make the hearing impairment the focus of your perception of that person.
WORKING WITH THE INTERPRETER

Information about working with the interpreter is helpful to understand his or her role in the educational setting. The interpreter is a valuable and essential part in the communication between college employees and the deaf student. He or she will translate spoken English into manual communication. The best teacher/interpreter relationship is based on trust and mutual respect for the importance of each job. It is very helpful to meet with the interpreter, preferably in the presence of the deaf student, in the beginning of the course to begin establishing this relationship. Reliance on a deaf student's ability to lip-read should never replace the need for an interpreter, assuming that the deaf person knows sign. Even excellent lip-readers read only 35% of what is said and try to fill in the rest through context.

The role of an interpreter for a deaf student is similar to that of an interpreter for people who don't speak foreign languages. The interpreter translates the teacher's instruction and other English communications from students or audio visual materials into sign language for the deaf student. He or she can also speak for the deaf student when necessary. The interpreter will usually stand to the teacher's left or right in order to maintain eye contact with both the teacher and interpreter. He or she must be in good light. Initially, the interpreter may distract some of the hearing students, but their interest will quickly return to the central focus of the class. The professional interpreter will not provide direct instruction or substitute her or his personality for that of the teacher. The interpreter is not the teacher. He or she is only a means of communication. She or he should not answer the student's questions about instruction. The student should ask the teacher directly or through the use of the interpreter.

If the interpreter is not present when the class is scheduled to begin, there are a number of options in the situation. You can do more of the work on the blackboard and make sure the deaf students get good notes from the notetaker. Slow down the pace of the class to allow more time for the deaf students to follow the class. It may be possible to tape the class and have it interpreted for the deaf students at a later time.
SUGGESTIONS FOR WORKING WITH THE INTERPRETER

1. The interpreter will usually stand to your left or right and must be in good light.

2. The interpreter will generally adjust to the pace of the teacher, but occasionally the teacher will need to adjust her or his pace to the interpreter. To ensure that hearing impaired students receive the full message of the instructor, the interpreter may ask the teacher to slow down or repeat.

3. There is a time lag between the teacher's instruction, the interpretation, and the student's reception of the instruction. Slowing the pace of instruction often facilitates communication.

4. A brief outline can help the interpreter and student follow the lecture. It is especially helpful to have the outline in advance to provide the opportunity to study the vocabulary and read ahead.

5. Try to present new vocabulary in advance because it is difficult to lip-read or spell unfamiliar words. If this is not possible, write new vocabulary on the board or use an overhead projector.

6. When using audio visual materials that require special lighting, the interpreter must be in good light. A small lamp or second projector may be needed to provide light for the interpreter.
CONCLUSION

While it may take time to learn techniques for working with deaf students, the modifications in the educational environment will also work to the advantage of the other students in the class. Techniques such as maintaining a moderate pace; using visual materials including the blackboard, audio visual equipment, and handouts; and communicating in one modality at a time will benefit all the students in the class. It also provides the teacher, college employees, and students with the opportunity to continue developing ways of communicating and learning about people who are both similar and different from themselves.
REFERENCES


