

Implications of Deafness and Cultural Diversity on Communication Instruction: Strategies for Intervention

Linda Palmer, Linda Bement, and Jacquelyn Kelly
*National Technical Institute for the Deaf
Rochester Institute of Technology*

There is a diversity of communication modes and preferences among deaf students. Approximately 30% of deaf students entering the National Technical Institute for the Deaf (NTID) are considered to be "truly bilingual" with ASL as their first language. Speech-language pathologists and audiologists may be less familiar and possibly less sensitive to instruction designed for individuals who have not developed or prefer not to use oral/aural skills. This paper describes how the diversities between deaf and hearing cultures can be used as a basis for instruction in order to develop effective communication skills in interested pupils.

A primary factor leading to educational achievement and ultimately to successful employment of deaf individuals is the ability to communicate effectively with normally hearing people. In an effort to develop and enhance social and vocational communication skills, the post secondary communication programs at the National Technical Institute for the Deaf (NTID) offer instruction in spoken and written English, listening, speechreading, telephone communication and sign language.

The purpose of this paper is to describe the diverse communication characteristics of deaf students at NTID as well as to describe a series of communication courses offered to students interested in improving interactions with persons who are unfamiliar with sign language and deaf culture. Students enroll in this instruction primarily because they perceive a future need for better communication; (a) on a job interview, (b) with hearing supervisors, and (c) co-workers in the work environment. Many students identify this need after returning from cooperative work experiences and request instruction in speechreading and strategy use in order to improve their "functional" communication skills.

DEAFNESS DEFINED

Baker and Cokely (1980) distinguish between a "clinical" or "pathological" view of deafness which accepts "the behaviors and values of the hearing majority

. . . and then focuses on how deaf people deviate" and a "cultural" view which focuses on "the language, experience, and values of a particular group of people who happen to be deaf." The pathological view of deafness has been audiologically defined (Davis & Silverman, 1960; Myklebust, 1965) as severe and profound hearing loss. In spite of an average hearing loss of 94 dB HL (ANSI 53.6-1969) approximately 30% of entering students at NTID are able to understand more than 50% of spoken information presented through hearing alone. For a more complete description of the communication profile test protocol used at NTID, see Johnson (1975). Sixty percent of the students demonstrate intelligible speech to experienced listeners (Samar & Metz, 1988). In addition, on entry 20% have no knowledge of sign language and an additional 10% have only a basic level of competence (Caccamise, Armour, & Burfield, 1985). These data suggest that a large number of students could be described as primarily dependent on oral reception and expression of information, despite audiometric hearing loss averages indicating profound hearing loss.

Woodward and Markowicz (1975) define cultural deafness as a group of persons who share a common culture and a common language, most often American Sign Language or ASL. In addition to proficiency in ASL, having deaf parents or attendance at a residential school which uses ASL are strong factors in considering who is culturally deaf. About five percent of NTID students have deaf parents, and slightly over 30% have attended residential schools for the deaf.

Meadow (1972) defines a deaf community as "a group of persons who share a common means of communication which provides the basis for group cohesion and identity." Describing "a common means of communication" among deaf college age students is an ideal rather than a reality considering the diversity of communication skills and preferences found among this population (Foster, Barefoot, & DeCaro, 1989). Evaluation of students' sign communication skills has indicated a diversity of sign usage. About 40% of entering students can be described as using an English-based sign system commonly referred to as Pidgin Signed English or PSE. These students use mouth movement and often voice along with sign language. This sign system is notably different from ASL, which has been defined as a separate language possessing grammar rules (Stokoe, 1978). In summary, about 30% of this population of deaf students could be considered "truly bilingual" with ASL as their first language. It is this student who could be considered culturally deaf and is the focus of the instruction described in this paper. These students often lack knowledge and experience interacting with members of the hearing culture.

Speech-language pathologists and audiologists have traditionally been less familiar with approaches to intervention for students who have not developed or prefer not to use oral/aural skills in communication with persons unfamiliar with sign language and deaf culture. Culturally deaf students often express a desire to learn to speechread, but do not develop the skill to a level that allows them to rely on it to communicate with hearing people. Instruction initially focuses

on speechreading training and the effective use of alternate strategies to improve overall communication competence. Communication competence has been defined as the demonstrated ability of the deaf individual to receive information through speechreading, and respond in a culturally appropriate way with a non-signing individual in a variety of social and on-the-job situations (Palmer, 1988). Our training and practice in speechreading and expressive and receptive strategies is directed toward this overall communication goal.

SPEECHREADING AND STRATEGY INSTRUCTION

Speechreading instruction for students with little or no speechreading ability begins with an analytic focus by developing the visual perception of place of articulation in consonant and vowel viseme groups. Appendices A and B show the consonant and vowel lip shape "groupings" for visemes presented in this instruction. Differentiation between these consonant and vowel viseme groups is taught under optimal conditions. Discrimination between these groups during normal conversation is not always possible. We have found these categories to be the most functional for speechreading training because they are easily understood (Jacobs, 1981). Practice begins with isolated words associated with a particular topic such as food, days or dates. Quick recognition and identification exercises improve visual perception, speed and flexibility in recognizing the visual image. These exercises also teach discrimination of homophonous words through contrast (Jacobs, 1981; Jeffers & Barley, 1971). Analytic training has been found to be helpful in that it provides students with a strategy to break down a speechread word into possible component parts. This serves as one of the most functional skills students can employ when confronted with a difficult technical word commonly used in their profession. Knowledge of overall lip shape and practice with contextual cues helps recognition of individual words.

In addition to analytical strategies, instruction focuses on incorporating the use of topic cues to assist in word and sentence perception. We have found the ability to use topic and associational cues to be one of the single most important determinants in speechreading success. Students practice speechreading comprehension questions associated with a topic or situation such as a fast food restaurant. In this instance, the clinician asks the question, "Is that for here or to go?" and the student is required to (a) speechread the statement, and (b) respond appropriately. In the event that speechreading is unsuccessful, the use of an alternative communication strategy is encouraged.

Alternative communication strategies or repair strategies include writing, oral, palm or air spelling, requests for repetition, revision, confirmation, and gestures. Individuals are introduced to and practice a variety of strategies, but typically use only those that feel most comfortable.

Profoundly deaf individuals with limited English language ability will often know what they would like a non-signing person to do to facilitate communication, but will not have the English to request it effectively. For example, the talker may be asked to "use slow lips" to request a talker to slow down. Students are

provided instead with an appropriate English sentence, such as, "Please talk more slowly." Appendix C contains some examples of typical speechreading problems and the English sentences that are taught to help solve the problem.

In alternative communication strategy development, the individual is encouraged to build a personal hierarchy. An example of a strategy hierarchy would be one request for a repetition, and when that does not help understanding it is followed by an attempt to confirm what information was understood, ending with a request for the talker to please write. The goal of this hierarchy training is to allow the students to practice and be comfortable with a variety of strategies. In addition, students practice flexibility in strategy use so that they can quickly recognize when the strategy they have chosen is not working. When writing for communication is chosen as the preferred mode of communication, difficulties may arise because writing is not a natural mode of communication for many hearing persons and can be perceived as "impersonal." A great deal of attention is paid to writing strategies in order to make paper and pen communication a more efficient means of communication. Writing strategies include writing quickly, referring back to something that has already been written, writing only keywords – telegraph style and using abbreviations. Students often forget to use eye contact, facial expressions and gestures during written conversations and must practice "inserting" these important non-verbal cues at appropriate moments. This speechreading and strategy training occurs over a period of ten weeks.

Strengthening Communication Skills Through Roleplay

The second course in the three-part series requires that students use their newly learned skills when communicating in a variety of roleplayed situations. Hearing roleplayers who are unfamiliar with deafness, sign language or deaf culture are used to simulate real-life interactions for the deaf students. Cultural diversities between deaf and hearing people and the language required to communicate effectively serve as the basis for this instruction. The first roleplay experience is meeting a stranger in the lunchroom at work. The task is to introduce oneself and have a short conversation. The differences between deaf and hearing introductions is modeled and discussed and the art of conversation in the hearing culture is practiced prior to the roleplay. Roleplays are videotaped with an interpreter included in the picture so that students can review and evaluate the on-camera roleplay. The challenge to the deaf student is to be able to successfully convey and understand information in a language and culture that is not their own or their preferred choice.

The field of psychology offers guidance to speech-language pathologists and audiologists when addressing communication problems in adolescents. We have found many published materials and programs useful for deaf students: Galvin and Book (1984); Goldstein, Sprafkin, Gershaw, and Klein (1980); Kelly and Subtelny (1984); Mayo and Waldo (1986); and Schwarzrock (1973).

Students are fascinated when introductions and conversations are compared and contrasted within the deaf and hearing cultures. Differences, such as the

way that hearing conversations begin formally with names exchanged and small talk versus the “to the point” nature of a typical signed conversation, are highlighted. The students are provided with communication skill building steps for successful introductions and conversations within the hearing culture. These are:

1. Exchange greetings – shake hands
2. State your name
3. Ask for the other person’s name
4. Tell that you are deaf and how you prefer to communicate
5. Engage in some small talk
6. Start the conversation
7. End the conversation

The videotaped roleplay situation is viewed and then critiqued in class by both students and instructor and they are rated on whether (a) the communication skill building steps had been followed, (b) speechreading or alternate strategies were appropriately used, (c) the conversation remained on topic, and (d) the overall communication was effective. Students are given a rating from one (poor) to five (excellent) for each of the criteria used in this evaluation.

As the students become comfortable with this procedure, more challenging situations are introduced. These include making a complaint in a retail business, asking for a raise, and firing someone. Special attention is paid to the concepts of assertiveness, negotiation, consideration and empathy. The concept of empathy is a good vehicle for discussing the role of touch as it differs in hearing and deaf cultures.

One of the most difficult tasks for deaf students who are not familiar with the conventions of a hearing culture involves knowing how the other person may feel in a situation. The reasons for this perceived lack of skill, however, may be due to cultural and linguistic differences as well as to the pervasive effects that hearing loss may have on overall personal adjustment (Schloss, Selinger, Goldstein, & Morrow, 1983). This is often interpreted as a lack of empathy on the part of the deaf person but may in fact be a lack of experience with the social conventions of a hearing culture. A suggested strategy is to ask hearing students to participate in this discussion. This technique often helps to surface numerous misunderstandings based on assumptions that are culturally reasonable but may initially appear as insulting or demeaning to a person not familiar with the differences between deaf and hearing cultures.

Job Interviewing

The last course of instruction in job interviewing ideally happens after a student has completed the previously described courses. The skills that are developed in this three-part series all build upon one another and we have found that students completing all three in order benefit the most from the instruction. Support for students in the job search process is offered through the National Center on Employment of the Deaf (NCED). A textbook has been developed to help job

search instructors reach their goals (Veatch, 1988). Students have an opportunity to practice simulated interviews which are videotaped and interpreted as previously described. Students who experience difficulty during this simulated interview or on an actual interview may be referred for this instruction. An outline of topics covered can be found in Appendix D.

After an initial practice job interview, students and instructor identify violations of accepted social conventions and communication breakdowns. Strategies for intervention are discussed. Students who have completed functional communication instruction are better aware of the effective social strategies that can be applied as well as the appropriate strategies necessary to ensure a successful interview.

Job interview questions are somewhat predictable, but applicants, whether hearing or deaf, often are not aware of the structure of most interview situations, the kinds of questions asked or the purpose for them. For example, when asked about their technical skills, deaf students often have difficulty supplying enough information about their technical training to give the interviewer a true picture of what they can do. Additional interferences include poor speech intelligibility and/or English writing skills. Included in this instruction is an outline of a typical job interview along with questions frequently asked. Students are encouraged to prepare answers as well as bring literature related to telecommunication devices, telephone relay services and tips for communication with deaf individuals to share with the interviewer. Students are given the opportunity to answer job interview questions informally in class as well as to interview each other. Taking on the role of the interviewer gives students another perspective on job interviewing. Students are able to get additional feedback from a computerized mock interview which provides a printout of the interview, allowing them to research questions that they were unable to answer. Speechreading practice for job interview questions is provided by NTID's Dynamic Audio Visual Interactive Device (DAVID) computer system (Sims, VonFeldt, Dowaliby, Hutchinson, & Meyers, 1979).

Instruction regarding the use of an interpreter during an interview is another option. A sign language specialist provides the job interview students with information about how to find a certified interpreter, financial considerations and how to use an interpreter effectively on a job interview. A successful interpreted interview is possible when the candidate is (a) a skilled signer, (b) knowledgeable about his/her technical field, (c) has taken the responsibility to inform the interpreter beforehand about his/her technical skills and the signs that are most likely to be used, and (d) has instructed the interviewer beforehand on how the interpreted interview works.

A common difficulty which occurs during an interpreted interview is that the deaf applicant loses control of the communication. Misunderstandings can occur because the interpreter is not knowledgeable about a particular technical field and conveys information inaccurately. Our experience has been that even students without any speaking skills often prefer to use writing rather than an interpreter during a job interview.

Results of Instruction

Results of this instruction are made apparent to the students and instructors who review videotapes prior to and at the conclusion of instruction. An adequate measure to quantify the improvements seen on our videotapes has not yet been developed; however, our observations indicate that students consistently reduce the number of inappropriate behaviors and subjectively report more confidence and ease when communicating with hearing individuals as a result of this instruction. An appropriate self-perception inventory which adequately suits the needs of this special population is currently being developed.

SUMMARY

The ultimate goal of our communication training is to improve the individual's overall ability to communicate within the hearing culture in a variety of real-life situations. This paper has outlined how cultural considerations have influenced our communication skill instruction. Addressing the communication needs of deaf individuals is a complex task which requires recognition of the great diversity of attitudes and performances of this unique group of people.

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APPENDIX A

LIPREADING CLUES FOR VOWELS

VOWEL SYMBOLS FROM WEBSTER'S DICTIONARY

Speechreading clue	Vowel symbol	Key word
Lips puckered	ü	boot
	ù	push
	õ	toe
	ər	worm
Lips relaxed	ɪ	pin
	ə	up
	ä	lock
	e	bed
Lips back	ē	leaf
	ā	cake
	ī	tie
	a	cat
Lips rounded	ó	ball
* Vowels with movement	aù	cow
	ói	boy
	yü	menu
	ā, ī, õ	

* All the vowels with movement are really *two* sounds. The vowels ói, ā and ī all end with the sound ē. It's easy to confuse ā (aē) and ī (iē) in speech and speechreading.

APPENDIX B

LIPREADING CLUES FOR CONSONANTS

CONSONANT PRONUNCIATION FROM WEBSTER'S DICTIONARY

Stop Sounds		Speechreading Clue	Continuing Sounds	
Air	Voice		Air	Voice
p pick	b boy	Lips together		m may
		Tongue between teeth	th bath	th bathe
		Upper teeth to lower lip	f fight	v vase
		Lips rounded		w wh r ** won why red
		Teeth together, lips spread	s say	z zoo
ch * chair	j * jump	Teeth together, lips forward	sh shoe	zh * measure
t top	d dog	Tongue behind teeth Front sounds		n l nice like
k kite	g girl	Back sounds		y ŋ yellow ring

* These sounds are very difficult to make correctly. The best sound to use for them is /sh/.

** Some speakers round their lips for the /r/ sound but the sound is made with your tongue not your lips.

APPENDIX C

**ENGLISH SENTENCES TAUGHT TO ADDRESS
SPEECHREADING PROBLEMS**

Speechreading Problem	You can write . . .
• When a person has no facial expression when speaking.	• Talk more naturally.
• When a person is talking too fast.	• Please talk slower. or Please slow down.
• When a person keeps turning their head while they are talking.	• Please look at me when you talk.
• When a person has a beard or a moustache.	• Please talk slowly.

Speechreading Problem

- When a person keeps putting an object (pen, cigarette, hands) in or near their mouth while talking.
- When the person uses a word that you do not know the meaning of.
- When you are confused and do not understand what the person is trying to say.
- When you want to try to speechread the information one more time.

You can write . . .

- Please put down (remove) the _____ .
I need to see your face to speechread.
- Please explain.
- I don't understand.
- Please repeat.
Say it again.

APPENDIX D**COMMUNICATION FOR THE JOB INTERVIEW COURSE CONTENT**

- I. Introduction and Course Requirements / Ice Breaker
- II. Self Evaluation
 - A. What Happens to Your Body When You Get Nervous
 - B. Know Your Communication Strengths and Weaknesses
 - C. Establishing Personal Goals to Improve Job Interviewing
- III. The Parts of an Interview
 - A. Introduction and Small Talk
 - B. Setting Up the Purpose of the Interview
 - C. Questions Asked to Gather Information About You
 1. Education
 2. Work Experience
 3. Career Goals
 4. Personal Strengths and Weaknesses
 - D. Your Opportunity to Ask Questions
 - E. Closing
- IV. Evaluation of Performance / Identifying Improvements
 - A. Rating Sheets
 - B. Class Discussions of Practice Interviews
 - C. Final Exam and Final Interview