DEAF AND HARD OF HEARING ENGINEERING TECHNOLOGY STUDENTS: A DISTINCT DIVERSITY GROUP

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Abstract – Traditional deaf and hard-of-hearing students are not always considered to be a distinct diversity group. However, these students often self-associate with their deaf and hard-of-hearing peers first and then with their respective hearing ethnic communities. This paper proposes that deaf and hard-of-hearing students always be considered a distinct diversity group and as such be treated equally with their engineering technology classmates.

Many resources are available that suggest beneficial methods to teach deaf and hard-of-hearing students at the college level. It is equally important that instructors be aware of deaf and hard-of-hearing cultural and diversity issues.

Instructors have a tendency to treat deaf and hard-of-hearing students differently from the rest of their class. The proper methods for interacting with deaf and hard-of-hearing students are often unknown by many of their instructors. There are methods that can help instructors level the playing field when it comes to deaf and hard-of-hearing students. The suggestions will be based on the authors’ combined 34 years of classroom experience with deaf and hard-of-hearing students enrolled in Engineering Technology programs at the Rochester Institute of Technology.

Index Terms – deaf, hard of hearing, diversity

INTRODUCTION

Deaf and hard-of-hearing students may be found on many college campuses. They are usually not a majority group unless one looks at the campuses of Gallaudet University or the National Technical Institute of the Deaf (NTID) at the Rochester Institute of Technology (RIT). No other deaf-centered institutes of higher education exist in the United States.

The enrollment of deaf and hard-of-hearing students at non-deaf centered institutes (including RIT outside of NTID) comprises a very small percentage of the overall student population. Therefore, faculty is not often accustomed to having deaf students in their classrooms. Most instructors are not adequately prepared to teach deaf students in an otherwise “hearing” environment due to the communication differences. “Constraints on communication between deaf and hearing persons often result in strained interactions as well as loss of “full” information.” In their paper, DeCaro and Foster use a “meta-ethnographic approach” to describe “the impact of ‘spoiled’ communication on social engagement between deaf and hearing persons.”[1] In order to help educate faculty, NTID prepared a range of training sessions for servicing deaf and hard-of-hearing students though its “Project Access” program which was funded by a National Science Foundation (NSF) grant [2].

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The materials available from Project Access consist of course outlines and instructions for organizing training sessions on a given campus. Sessions include a deaf student panel discussion, working with interpreters in the classroom, and “closed captioning”.

Even at RIT, some faculty have been known to be outwardly critical of deaf students just because they are deaf. Interpreters have been told to “stay out of the way” in some situations. A few unknowing hearing students occasionally use derisive epithets when referring to their deaf peers. There is a general ignorance when it comes to teaching and working with deaf and hard-of-hearing students in a mainstreamed environment. Established diversity groups may, from time to time, experience discrimination but it is relatively rare today to experience an open bias in the classroom or in a campus environment.

In industry, some unknowing companies have been reluctant to hire the deaf and hard-of-hearing because of a lack of understanding of a deaf or hard-of-hearing person’s abilities. For certain industries that frequently have engineers working in very high noise environments such as power plants and printing operations, a deaf engineer may even have an advantage over a hearing engineer. A deaf engineer is often able to communicate in ways other than just verbal speech. There are very few careers that deaf and hard-of-hearing individuals cannot perform.

THE DEAF AND HARD-OF-HEARING DIVERSITY GROUP

Diversity groups are most often thought of as being based on race, ethnic background or national origin. However, in the deaf community many people associate first with their deafness and only secondarily to their more traditional diversity group. The reasons for this vary but may have to do partially with the fact that many deaf people share a common method of communication — sign language. Sign language can take on various forms from simple finger spelling to Signed English to American Sign Language (ASL). Preference is based on the age, upbringing and geographic location of the user.

Other reasons may include the feeling of isolation felt by many deaf people who live in a hearing society. Deaf clubs exist in many cities in the US and tend to further unite the deaf community.

Outside of the deaf community most people are not aware of “deaf pride” and the strong deaf community ties that exist. Deaf people expect to be called deaf — the ASL sign for deaf is a gesture that points first to the mouth and then to the ear — signifying the deaf person’s common traits of “hearing loss” and “muteness”. To call a deaf person “deaf” and a hard-of-hearing person “hard-of-hearing” is not only natural but expected and much more acceptable than the term “hearing impaired”.

Most diversity groups are guaranteed fair and equal treatment under U.S. law. Deaf and hard-of-hearing rights are protected by the Americans with Disabilities Act (ADA), but this act is very much based on the premise of “you must ask for your protection”. It is also counter to the belief of many deaf and hard-of-hearing that they do not have a “disability”. On campus the reliance the ADA shows itself when interpreters are not provided for a deaf student because a “request was not made” by the deaf student.

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The fact that no other diversity group must ask for fair treatment tends to create a negative pallor towards the deaf and hard-of-hearing. Having to ask for something puts a person in a compromising situation. Being viewed negatively might partially lie in the fact that diversity groups typically don’t need “special accommodations”. Also, most prejudice against known diversity groups is usually not tolerated by faculty or students. Faculty, students and prospective employers need to learn that by complaining in any way about the additional resources a deaf or hard-of-hearing person might need constitutes improper behavior. Complaining may not be technically against the law but it is malevolent and should not be tolerated on campus or in the professional workplace.

Our government leaders may not consider the deaf and hard-of-hearing to be a distinct diversity group but, society should at least treat the deaf and hard-of-hearing with the same fair and equal treatment legislated for “legally recognized” diversity groups. Educators need to be especially careful in how they interact with the deaf and hard-of-hearing so as to set a good example for their students and potential employers. Employers should be careful not to underestimate the abilities of the deaf
and hard-of-hearing. As with all diversity groups the deaf and hard-of-hearing bring a unique perspective to the workplace and serve to strengthen the organization.

**EXPERIENCES FROM THE CLASSROOM**

**Teaching Deaf and Hard-of-Hearing Students**

Like most universities the colleges within RIT, except for NTID, have a small percentage of deaf and hard-of-hearing students compared to their hearing peers. When a deaf or hard-of-hearing student decides to take a class they must specifically request interpreting and note taking services. Surprisingly, some instructors have been observed to have negative attitudes towards note takers and especially interpreters.

Interpreters are provided as a service to the deaf or hard-of-hearing and should be viewed as a transparent medium to the deaf or hard-of-hearing student. It is important to continue to communicate directly to the deaf or hard-of-hearing student. Interpreters are meant to serve as a conduit for the student and will automatically translate what an instructor says to the student and conversely will “voice” what the student signs to an instructor.

For proper communication to occur when addressing a deaf or hard-of-hearing person through an interpreter, one should face the deaf or hard-of-hearing person and speak directly to them. A person should avoid obscuring their mouth when they are talking so that the deaf or hard-of-hearing person has the opportunity to lip read. If the student has a question for the instructor, they will often use sign language to communicate to the interpreter. The interpreter will then “voice” the question for the student. When answering the question remember that this is a question from the student not the interpreter. Give your answer to the student – again, the interpreter will automatically translate what you say for the student.

Sign language is a very logical three-dimensional language. Grammar is often inserted through the use of facial expressions. When watching a deaf or hard-of-hearing person communicate, it may appear as though the person is very emotionally involved in what they are taking about. This may or may not be the case. Since grammar is often inserted through facial expressions deaf students are often falsely assumed to be agitated or just plain “weird”.

Educators set an example for their class and should treat all diversity groups, including deaf and hard-of-hearing students, with respect. If hearing students see instructors openly annoyed because they have a deaf or hard-of-hearing student in the class the hearing students may assume that it is acceptable to treat the deaf and hard-of-hearing diversity group with a lack of respect. This lack of respect may carry itself over into the workplace and may possibly end up carrying over to other diversity groups as well.

It is beneficial for hearing students to see how instructors adapt their teaching methods to deaf and hard-of-hearing students. Hearing students will be much more willing to work with their deaf and hard-of-hearing peers if the instructor sets a good example by following proper communication protocol. To show even more respect to deaf and hard-of-hearing students some instructors take it upon themselves to get trained in sign language. Since sign language is a logical three-dimensional language many engineers find it a very easy language to learn. At a minimum, it is recommended that all instructors learn some simple signs such as “thank you”, “good” and “good morning”.

Interaction between hearing and deaf students should be encouraged and facilitated by the instructor. When forming student teams for classroom projects it is usually a good idea to mix the hearing and deaf students. By mixing the students a more realistic experience is created for both sets of students. Instructors that have some knowledge about working with deaf or hard-of-hearing students should share that knowledge with mixed groups. If an instructor judges that they do not have adequate knowledge it is acceptable to ask the interpreter for suggestions for the mixed groups. Interpreters are professionally trained to facilitate communication between the hearing and deaf or hard-of-hearing population and can be called on for guidance when needed.
A Deaf or Hard-of-Hearing Students Perspective in a Hearing Classroom

Long, et. al. [10] summarizes the issues that a deaf or hard-of-hearing student might encounter in a traditional classroom:

“…students are faced with the challenge of peer and teacher interactions being filtered through a third party, the interpreter. Students with a hearing loss are sometimes concerned that the intervention of the third party in the communication process may in some way distort the message. At times they feel that what they are signing is not being accurately represented to their instructors and peers. At other times, they feel that the interpreter may not have the content knowledge or sign skills needed to convey the lecture accurately. To the deaf and hard-of-hearing student in the classroom, there is always the concern that part of the message is being lost. When the message is interpreted, there is always the added challenge of the lag that occurs. When this lag occurs in the classroom, the deaf and hard-of-hearing students are always behind their hearing peers in reception of the message. This lag often leads to difficulty responding to the instructor’s questions or reluctance to stop the class to ask a clarification question. Thus deaf and hard-of-hearing students are at times not actively engaged in communication in mainstream classes.”

Deaf and hard-of-hearing students may not be in tune with their classmates because the deaf and hard-of-hearing student may be getting a slightly different “filtered” version of what is going on in the classroom. If other deaf and hard-of-hearing students are in the classroom these students may self-congregate because the information they are getting from the class is consistent within their self-imposed group. In addition, these students often share a common first language, American Sign Language (ASL). Stinson et. Al [11] found.. “Both quantitative and qualitative results indicated that students varied considerably in their communication with hearing peers and professors, in their relations with deaf peers, and in their concerns about access. It is a challenge for interpreting and other support services to serve these various needs, especially when it is not unusual for these variations to occur in the same classroom.”

Project Access [2] helps because it offers sessions for better understanding the needs of deaf and hard-of-hearing students in the classroom. A pre-recorded video of a deaf student panel is available for locations that cannot create their own deaf student panel. A panel is an excellent method for informing instructors what the needs and desires of deaf and hard-of-hearing students are.

SUMMARY

Deaf and hard-of-hearing students comprise a unique diversity group. The diversity group is one that does not have official recognition and is often misunderstood by a campus community. Complaining about the additional resources that a deaf or hard-of-hearing person might request is considered improper, discriminatory behavior. There are resources, such as Project Access, that provided a framework for training instructors that need to teach deaf or hard-of-hearing students. Employers should hesitate to hire deaf or hard-of-hearing candidates. Educators and employers should take some time to learn about the deaf and hard-of-hearing and their culture. Traditional deaf and hard-of-hearing individuals bring a different perspective to both the campus and the workplace. Like all diversity groups, these differences often add strength to an organization.
REFERENCES


