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INDIVIDUALS WITH HEARING IMPAIRMENT IN POSITIONS OF LEADERSHIP

Josiah L. Osburn

Dr. Brenda Doster and Professor Linda J. Polter, Mentors

ABSTRACT

This investigation examines scholarly literature in the study of the deaf and hard of hearing. The purpose of this examination is to locate the literature that focuses on hearing impairments (HI), and to identify methods or procedures that focus on individuals with hearing impairments in positions of leadership. During this investigation it was found that there is no abundance of literature that specifically focused on the study of individuals with hearing impairments in the positions of leadership. The study then shifted its focus to related studies within the field of hearing impairment that were relevant to understanding the challenges that an individual with a hearing impairment encounter, benefits of new technology, implications of mainstreaming, and the importance of rehabilitative/habilitative intervention teams. When the following research investigation takes place, the hypothesis will be that there are correlations between leadership skills and extracurricular activities in which children with hearing impairments participate.

INTRODUCTION

The initial search to find literature reviews and studies relevant to individuals with hearing impairments and leadership skills concluded that information on this topic is limited. Programs such as Alexander Graham Bell's Leadership Opportunities For Teens (LOFT) and Lions Bear Lake Camp provide leadership training and opportunities for individuals with hearing impairments, but little published information is readily available that details how or why these particular participants were able to attain high achievement levels, while others with similar disabilities struggle to progress through their educational experience. Imagine having a database of research data and articles relevant to the development of leadership skills in the deaf and hard of hearing. This would be an invaluable tool for a student seeking to learn how the hearing impaired process distorted communications they receive, and how to improve this processing skill.

Individuals with hearing impairments collect altered or distorted communication messages, and in return this affects their speech and almost all areas of their lives: pronunciation, vocabulary, background knowledge, processing speed, writing, reading, peer relationships, self-esteem, behavior, performance levels, musical abilities, achievement, psychological development, needs, goals, education, and their environment. These processes determine the quality of life individuals with hearing impairments enjoy. What it takes for a hearing impaired individual to achieve leadership needs to be researched and written about and made easily available. This review seeks to promote the development of scholarly research and publications that professionals can use to help better advocate for children with special needs. The methodology of this review is to correlate past investigations to find trends, connections, and themes helpful in assisting the hearing impaired. These preliminary investigations provide the foundation for the researcher to develop a curriculum unit relevant to teaching leadership skills to children with hearing impairments. Teaching this unit will help the researcher to examine correlations between leadership skills and the carry-over of these skills into other extra-curricular activities in which they participate.

Leadership opportunities for teens (LOFT)

Levinson (2008) articulated the intentions of LOFT in an article titled “AG Bell’s LOFT Program Builds Teens’ Self-Confidence and Leadership Skills”:

LOFT is targeted at high school students, ages 15–18, which are deaf or hard of hearing and use listening and talking as their primary means of communication. The 3-day program, offered just before the AG Bell Convention, includes leadership, advocacy, social, team building, and development exercises that instill confidence and initiative in teens with hearing loss. The 3-day program has a general theme, which includes a goal for each participant to achieve by the end. LOFT is designed to develop important skills in the areas of advocacy, networking, teamwork, leadership, and public speaking, which help young people deal with situations in school, work, or play. Activities include individual public speaking exercises in which teens talk about themselves and their goals, team activities involving a debate, games and outdoor exercises, icebreakers, brainstorming sessions on various issues, and presentations by experts on

leadership and advocacy. The group also prepares a skit that it performs at the general opening session of the AG Bell Convention. Through the program, teens gain a better understanding of themselves and the dynamics of interacting successfully with others. Participants often establish lifetime friendships with others similar to themselves with whom they can communicate and discuss common issues, problems, and solutions. (p. 1)

Lions Bear Lake Camp

Children with hearing impairments can also be found in positions of leadership at Lions Bear Lake Camp in Lapeer, Michigan. The camp, a Lions Clubs of Michigan state project, has been serving children with disabilities for nearly 30 years. Children with hearing impairments between the ages of 6 and 18 attend the camp for one week in July. As the children grow in the program, they have the opportunity to be a part of a Leadership Development Program at ages 16 through 18. The Leadership Development Program has two: Leadership Development One, and secondly Leadership Development Two. The children with hearing impairments ultimately find themselves at an entry-level responsibility role that teaches them about leadership skills. It also allows them to observe camp and cabin counselors in leadership roles and allows them the opportunity to participate in camp activities while helping younger campers. In Leadership Development Two campers take on active roles, practicing leadership skills previously learned, addressing younger camper's needs, and developing a sense of responsibility. The Leadership Development Program provides its campers with the knowledge and skills needed to succeed and progress to higher levels of responsibility as camp employees, junior cabin counselors, and finally cabin counselors.

Ties between Lions Bear Lake Camp and Eastern Michigan University were established with the help of Eastern Michigan University student Alana Townsend, and her senior honors thesis. Townsend created a speech practicum, and an alternate path for students to earn credit toward the requirements of the Eastern Michigan University Hearing Impaired major. Each summer students seeking a degree in Special Education with a Hearing Impaired Endorsement have the option of going to Lions Bear Lake Camp for an intensive one-week pre-student teaching opportunity. Currently, each summer Professor Linda J. Polter accompanies the students from EMU's Hearing Impaired program to the camp. Students prepare an adapted curriculum unit, and teach activities to campers with varying degrees of hearing impairments.

The Anatomy and Process of Hearing

This literature review was written to address the needs of professionals that work directly with individuals with hearing impairments. It is designed to assist them in making accurate diagnosis of the impairment. Understanding the anatomy of the ear and the process of hearing allows professionals in the field to improve the communication skills of the hearing impaired. There are 3 main parts to the ear (Med-El Corporation, 2009):

Outer ear:

- *Pinna* (auricle)—collects and funnels sound into the ear canal
- *Ear canal* (external auditory meatus)—directs sound into the ear

Middle ear:

- *Eardrum* (tympanic membrane)—changes sound into vibrations
- *Malleus, incus, and stapes* (hammer, anvil, and stirrup)—this chain of three small bones (or ossicles) transfers vibrations to the inner ear

Inner ear:

- *Cochlea* (inner ear)—contains fluid and highly sensitive cells (“hair cells”), with tiny hair like structures that move with sound vibrations
- *Vestibular system*—contains cells that control balance
- *Auditory nerve*—leads from the cochlea to the brain

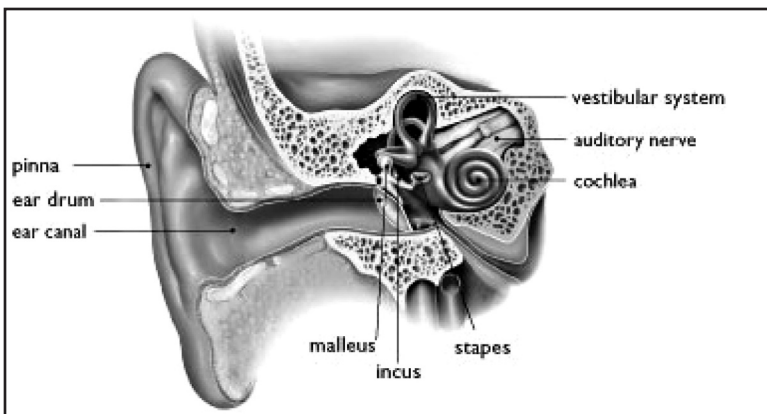


Figure 1. The Human Ear (Med-El Corporation, 2009)

The hearing process:

- 1) Sound funnels into the ear canal and causes the eardrum to move.
- 2) The eardrum vibrates with sound.
- 3) Sound vibrations move through the ossicles to the cochlea.
- 4) Sound vibrations cause the fluid in the cochlea to move.
- 5) Fluid movement causes the hair cells to bend. Hair cells create neural signals, which are picked up by the auditory nerve. Hair cells at one end of the cochlea send low pitch sound information, and hair cells at the other end send high pitch sound information.
- 6) The auditory nerve sends signals to the brain, where they are interpreted as sounds. (Med-El Corporation, 2009)

Considerations of impairment.

Point of lesion. The *point of lesion* is where the hearing is affected. Which part is malfunctioning? Is the pinna or ear present, and is there an opening at the auditory canal? Is the tympanic membrane optimally functioning? Is there fluid inhibiting full range of motion or is there a perforation or whole disrupting proper movement? Is the ossicular chain of bones (malleus, incus, and stapes) transferring sound wave vibrations to the cochlea? Are the bones fused together or is one of them missing? Does the cochlea, a snail like organ, have the normal two and three quarters turns or is it shorter than normal? Are the tiny hair cells in the cochlea being chemically stimulated correctly, and are the messages being transferred into nerve signals traveling to the brain?

Degree of loss. The *degree of loss* indicates to professionals the range of hearing the student is capable of achieving. The loss is measured in multiple ways through results of various test, most importantly the audiogram (see Figure 2), which measures intensity and frequency at which the individual is hearing. Understanding these two key characteristics allows professionals to better pinpoint the type or method of intervention the individual requires, from technology to adaptive curriculum.

The time of onset. The *time of onset* indicates when the loss happened. What age was the person when the impairment affected his or her hearing? Most importantly, what is the hearing age, when did he or she begin to hear? What does this mean for the individual with the impairment?

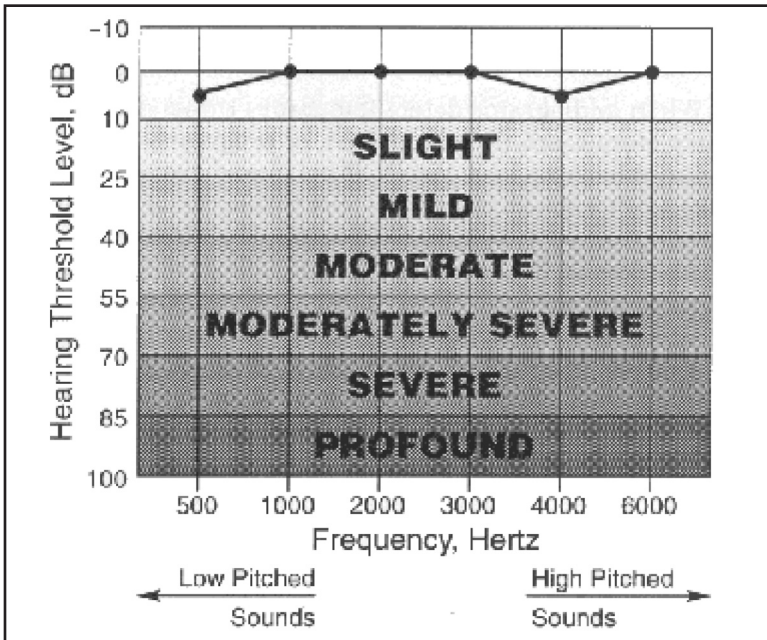


Figure 2: An audiogram (Miller, 1987)

1. Ability to receive a message to the brain is altered.
2. Decoding the message in the brain is distorted.
3. They are challenged to deal with altered reception and distorted messages in brain processes.
4. Unfortunately, all of these contribute to the development of language.

Impact of the Impairment

Easterbrooks and Estes (2007) indicated the importance of the foundations of our language that are learned by the time we enter pre-school, and the most critical age of hearing is the first year of life. Children with hearing impairments, who do not hear at birth, suffer ill-developed language skills, including but not limited to listening, speaking, and spoken language skills. The child is challenged to deal with altered communication in brain processes. Unfortunately, all these important processes of hearing and communication that are altered contribute to the child's inability to pick up on grammar, and sounds such as vowels and consonants. These characteristics tend to alter the speech and spo-

ken language that individuals with a hearing impairment produce. Their voices are different than an individual with hearing, because not only do they have problems receiving and decoding information, they have never heard sounds like that of a person with hearing.

Seifert, Oswald, Bruns, Vischer, Kompf, and Haeusler (2002) found that key characteristics of speech production to understand are “attaining acoustic control over speech, normalizing perceived fundamental frequencies and improving articulatory skills” (p. 122). Easterbrooks and Estes (2007), and Seifert et al. (2002) agree that it is important to understand that the impact of delayed language abilities impacts all areas of a child’s life, such as vocabulary, background knowledge, processing speed, written language, reading, math, science, social studies, peer relationships, self esteem, behavior, performance levels, achievement, psychological development, needs, goals, education, and the academic environment.

Easterbrooks and Estes (2007) emphasized essential questions when considering language development for individuals with hearing impairments: “what malfunctioning auditory processes, delayed speech and language skills; brain tasks such as detection, discrimination, identification & comprehension are modified?” (p. 8–10). These language skills are altered, and affect the individual’s ability to listen, to perceive vowels and consonants, to connect speech, to develop linguistic complexity, and to recognize contextual cues that come naturally to an individual who can hear. In the process of communication, individuals with hearing impairments are continuously lagging behind. They are constantly struggling to learn material they should have already learned, while tackling materials for their current academic level (Easterbrooks & Estes, 2007)

LITERATURE REVIEW

Current literature on the deaf and the hard of hearing usually focuses on the importance of early identification and intervention, speech and spoken language, techniques from new technology, benefits of mainstreaming, development of a well functioning habilitative intervention team, and social challenges.

New Technology

New technologies, such as *auditory brain stem response (ABR)*, *otoacoustic emissions (OAE)*, digital hearing aids, and cochlear implants are all impacting the way we assist children with hearing impairment (Ozcebe, Sevinc, & Belgin, 2005). These technologies are reducing the

number of unidentified infants, allowing children access to new sound frequencies, and progressively contributing to better intelligibility of speech and spoken language. Taking into consideration these technological advancements, Flipsen (2008) wrote about

progress in speech intelligibility that appears to continue for at least ten years past intervention. English, French, and Persian children receiving early intervention are reaching levels of complete intelligibility, fully intelligible, and the relatively high likelihood of them achieving fully intelligible conversational speech. (p. 109)

The benefits of new technology are changing life outcomes for children with hearing impairments. According to Easterbrooks and Estes (2007), “Early newborn screening utilizing ABR and OAE are identifying 3 out of 1,000 newborns as having a hearing loss within the first weeks of life” (p. 30). Retrospectively advocating, Ozcebe et al. (2005), stated “that ages of suspicion, identification, amplification and intervention of hearing loss are still far beyond the suggested ages by the Joint Committee on Infant Hearing” (p. 1081). Ozcebe et al. (2005) also asserted, “Children who were early-identified and had early initiation of intervention services (within the first year of life) had significantly better general language skills, vocabulary, speech intelligibility, phoneme repertoires, syntax and as a natural result of these linguistic skills they had better social-emotional development and parental relations” (p. 1083). Detecting hearing loss through early newborn screening is becoming universal.

Ozcebe et al. (2005) reviewed that:

In 1993, 11 hospitals in the United States were known to screen more than 90% of newborns for hearing loss, and by 2000, the number of these hospitals increased to approximately 1000. Today, almost all hospitals are participating in early screening. It has been reported that ages of identification of hearing loss and enrollment intervention has been lowered by using universal hearing screening programs. (p. 1084)

Nonetheless, average determined intervals are still being collected that indicate slow transition to intervention after being amplified. Ozcebe et al. (2005) found that “between suspicion and identification,

identification and amplification and intervention of hearing loss ranged 6.9, 7.1, and 6.5 months” (p. 1084). Improvements are happening around the world for individuals with hearing impairments, but Ozcebe et al. (2005) also emphasized that, “delay between first suspicion and diagnosis is one year or more in 36% of the children with permanent hearing loss” (p. 1084). Even after the child has been identified, Ozcebe et al. (2005) cited Harrison and Roush (1996), having found “that the time intervals between suspicion and diagnosis, diagnosis and hearing aid fitting, and diagnosis and early intervention were approximately 5, 3, and 3 months” (p. 1084).

According to Ozcebe et al. (2005), the key to appropriate intervention is “timely initiation of intervention after identification” (p.1084). For this process to happen reasonably, Ozcebe et al. (2005) stated, “the child needs to be aided one month within identification” (p. 1084). If the child is a candidate for a cochlear implant (awaiting age restrictions of implantation, about the age of one) the hearing aids provide some access to sound. The auditory nerve sends these sounds to the brain so sound pathways can develop. Ertmer (2002) cites Kirk (2000), “that there is considerable variability in oral communication outcomes among children who have been implanted, and improvements in communications skills typically result from a combination of cochlear implant use and clinical intervention. Thus, the extent to which children make progress in speech perception, speech production, and oral language is strongly influenced by the intervention efforts of parents, teachers, speech-language pathologist, and audiologists” (p. 149). As the child grows, intervention specialists, such as a speech and language pathologist, can give intensive age-appropriate speech and language lessons. The intervention specialist shares this information with parents. Then the child can receive a range of language practice in all his or her activities, including normal living at home. When the child is old enough for implantation, the aids are removed and replaced by a cochlear implant, which gives the child even better access to sound. Some children even wear both a cochlear implant and a hearing aid for bilateral hearing. Teachers of the deaf and hard of hearing, and speech and language pathologists, train the child to listen, develop language, and even to speak. By the time the child enters kindergarten, he or she will have a good idea of how to communicate. Teachers of the deaf and hard of hearing are trained to adapt any subject to include the extra language practice that the child needs. The child also continues with the speech and language pathologists. These children are surrounded with professionals that contribute to their access to sound,

and their abilities to communicate with a hearing and speaking world.

Implications of Mainstreaming

Digital hearing aids, cochlear implants, newborn screening, and a well-functioning habilitative intervention team are all responsible for making it possible for a person who is hard of hearing to be mainstreamed into general education classroom. Ertmer (2002) stated, “When properly implemented nearly 75% of cochlear implant recipients have been successfully placed in mainstream schooling 4 years after implantation” (p. 149). The mainstreamed child is able to be among age-appropriate peers and experiences in a general education classroom setting, while intervention specialists accommodate the individual with the hearing impairment. Children with hearing impairments acquire listening and language skills in a coordinated sequence. A teacher of the deaf or hard of hearing must start at the beginning, no matter the child’s age. Easterbrooks and Estes (2007) illustrated the point that educating a “four year old with two year old skills,” (p.31) is to adapt current or grade level content to an appropriate comprehension level. Easterbrooks and Estes (2007), expressing the essentials, said “the key to the development of literacy in a child who has a hearing loss is to consider the process a team effort and a multiyear effort” (p. 128). If the child with a hearing impairment is met with proper identification, technologies, and intervention, the possibilities for this child are determined by the individual with the hearing impairment and not limits imposed by society.

Speech and Spoken Language

Seifert et al. (2002) stressed that “the most effective strategy for normal language acquisition in hearing disabled children has been proven to be identification and therapy by six months of age” (p. 122). This research continues investigating the field of hearing impairment, and identifies improved speech and language skills due to early intervention strategies, new technologies, advanced habilitation team organization, and the need for long-term studies. The new hearing screens performed within the first few days of birth are identifying children with the disability, and allowing “specialist to intervene at critical time periods of language development” (p. 115). Flipsen (2008), in another study reconfirms Seifert, showing children immersed in “English, French, and Persian that were receiving early intervention, after the age of five were reaching levels of complete intelligibility, and fully intelligible, and the relatively high likelihood of them achieving fully intelligible conversa-

tional speech”(p. 562). Flipsen (2008) also noted that for

children implanted at slightly older ages, progress toward fully intelligible speech appears to continue even as long as ten years after implantation. Being able to identify hearing issues during these time periods, with this early intervention from specialists is crucial to the future functionality of the children with hearing impairments speech perception, speech production, language, reading levels, and his or her ability to communicate in a hearing society through their life span. (p. 559)

Blood and Blood (1999), confirmed these statements, “perceptions of personality, future employability, intelligence, relationships with peers, and non-disabled adults are important social skills that children with hearing impairments need extra help in developing due to their learning disabilities, which simultaneously grow with their language delay”(p. 109).

Social Interactions

Blood and Blood’s (1999) study found, “important parts of the counseling process need to guide people with hearing impairments to accept their disability and adjust to negative attitudes held by some communication partners”(p. 109). There is much more to an individual than his or her ability to communicate, although spoken language is accepted as a sign of intelligence by society. Wilkens and Hehir (2008), wrote that

real-world outcomes attained by children that are hard of hearing should be keeping friends, getting a job, connecting with community resources, going to college, and having a rich and rewarding recreational or family life. Bridging these aspects of life facilitates the promotion of positive school and life outcomes; lower teen pregnancy and dropout rates, fewer behavioral and emotional problems, fewer teenagers involved in violent crime, homicide, or suicide, greater school attainment and achievement levels, and increased parental engagement in schools. (p. 4)

Language is the tool that the child with impairments must use to achieve in a hearing world. Due to language barriers and slower development

of language skills, children with a hearing impairment need to be encouraged to get involved with extracurricular activities in which they have opportunities to participate. Wilkens and Hehir (2008), also indicated that “language development takes place across a wide variety of settings—from informal, relatively simple family and friendship settings to the more formal and complex settings in academic pursuits or professional life. This allows the child access to the vocabulary and norms of the widest possible variety of linguistic domains” (p. 4). Children that are hard of hearing develop language skills differently than their hearing peers; this doesn’t mean that they should be isolated from the social activities of their hearing counterparts. They should try to live a life that they choose, and possibly use their “social capital” to advance and overcome consternation at the label “hard-of-hearing” (Wilkens & Hehir, 2008). Hard-of-hearing children need guidance from adults to ensure they understand the importance of life beyond the comfort fruits of life, and urge them to venture in unfamiliar waters and ensure they are getting all they possibly can out of life. Wilkens and Hehir (2008) also stated:

There is little cause for complacency at any program, level, or school for deaf children, regardless of structure of student composition. But since bridging social capital is particularly vital for students making the transition out of secondary school and into the new (and often quite unfamiliar) worlds of college, work, or other independent living situations, we think it most appropriate to begin at that level. (p. 5)

Blood and Blood (1999) tied current scholarly data by emphasizing the impacts of the speech and spoken language, and how these developments impact the individual with a hearing impairment in later years of life. This study reflects the importance of early identification and intervention, and provides a perspective of an individual with a hearing impairment who was fortunate to receive early identification and intervention compared to an individual who did not. The purpose of their study was to, “determine subjects’ preferences for interacting with individuals with a hearing impairment who acknowledge their hearing loss and perceptions of personality, employability, intelligence, and adjustment related to acknowledgement of hearing loss” (p. 109). Blood and Blood (1999) concluded “the more spoken communication experience a child with a hearing impairment has, the better they will be able to adjust conversation and the acceptance of their disability to negative attitudes

held by some receivers of their spoken language”(p. 110).

In academics, counselors, speech and language pathologists, and teachers of the deaf all help children with hearing impairments better communicate with a hearing world. Blood and Blood (1999) stressed strategies to “assist them in improving speech skills, making changes in the environment, and developing tactics for dealing with communication break downs” (p. 109). The conclusion of this research identified the “acknowledgment tactic” (Blood & Blood, p. 110). “This strategy empowers the persons with the disabilities by encouraging them to disclose acknowledge of a disability during the initial social interaction, and allows them more control over the topic of the discussion and less time on the disability” (p. 110). Speakers who use acknowledgment tactic find their hearing loss also receives more favorable ratings on personality, employability, and better ability to adjust to negative attitudes held by communication partners (p. 109). It will also help address situations where the “nondisabled may view the disabled as incompetent, inferior, and harbor feelings of uncertainty and uncomfortableness around individuals with disabilities in social situations” (p. 110). Individuals with a hearing impairment might consider concentrating efforts on being “speakers who acknowledged their disability in an open and non-threatening manner, while encouraging communication partners to ask questions about the disability” (p. 110).

Data collected through Blood and Blood (1999) generated information from graduate students who looked at a video of an interview of two students with hearing impairments. The graduate students were given a survey that included looking at relationships such as: sincere, insincere; likable, not likeable; trustworthy, untrustworthy; decisive, indecisive; physical normal, physically abnormal; reliable, unreliable; poor sense of humor, good sense of humor; mentally stable, mentally unstable; unsociable, sociable; hostile, friendly; weak character, strong character; unintelligent, intelligent; unemployable, employable; emotionally adjusted, emotionally un-adjusted. Findings concluded that the examiners favored the individual who acknowledged his loss, “feeling that he had positive perception, and thought he was more open and honest, which contributed to his ability to deal with his problem and/or his disability” (p. 114).

At the same time Colelella and Varma (2001) indicated “nondisabled persons have ambivalent feelings toward persons with disabilities (or other stigma)” (p. 305). Feelings of aversion and hostility clash with those of sympathy and compassion. For instance, a nondisabled

person encountering a disabled person may see himself or herself as feeling friendly toward an unworthy person or hostile toward a less fortunate person. “This ambivalence creates a conflict that leads to argument about threatening self-esteem because people wish to perceive themselves as both judicious and human” (p. 305).

This literature review is an effort to appraise where we are in understanding the problems of the hearing impaired, and to hopefully contribute in insight as to how the problems of the hearing impaired can be addressed by the addition of a curriculum for providing hearing impaired individuals with the perspective they can gain from a leadership position. It is time to reinvest in children with hearing impairments so they can be better prepared to face the difficult word that lies beyond their comfort zones. It is time for advocates of the hearing impaired to concentrate their energies beyond proven work, such as early intervention, to real-world issues such as: life beyond school, recreation, education, and careers. Blood and Blood (1999), Colella and Varma (2001), and Wilkens and Hehir (2008) all agreed that new research needs to direct resources to the study of secondary transitions including, but not limited to:

- 1) Addressing social implications of children with a hearing impairment
- 2) Challenging children with hearing impairments in roles of leadership, and showing them that they can do it
- 3) Encouraging children with hearing impairments to build upon social relationships they possess, moving beyond their comfort zones, and provoking their curiosity to understand themselves and their environment

Our abilities to help individuals with hearing impairments have improved with the understanding of early identification, intervention of speech and spoken language, new technology, mainstreaming, and social challenges. It is hoped that this investigation will contribute to that knowledge.

The purpose of this examination was to locate publications that focus on the realm of hearing impairments (HI), and to identify methods or procedures that focus on moving individuals with hearing impairments into positions of leadership. During this investigation it became apparent that there was a paucity of information on how participating in leadership actually made a difference in the benefits and lifestyle of

hearing impaired children, and could be accelerated by such activity. There have been great advances in recognizing and teaching the hearing impaired about how to better cope with their impairment. The benefit of participating in leadership experiences has a much more ambitious goal: not just coping and fitting in, but becoming full contributors.

Teaching Leadership Skills to the HI

It has often been said that “a mind is a terrible thing to waste” (Young, 1971). It is time to teach the hearing impaired that their disability in communications does not disqualify them from being real contributors. It also deprives society the benefit of recognizing their innate abilities. This literature review did find topics such as, new born screening, early intervention, new technologies, adaptive speech and spoken language we hope to have compiled the overall knowledge of the field. The majority of results indicate the importance of identifying information about how an individual with a hearing impairment develops language and how language skills contribute to their understanding of leadership. This may lead to the conclusion that children with hearing impairments will better understand leadership skills if taught in an adaptive manner.

Projects like LOFT and Lions Bear Lake camp offer many possibilities to the hearing impaired. Part of this investigation was to locate readily available information about individuals with hearing impairments in the position of leadership. These programs offer individuals with hearing impairments leadership opportunities. Hopefully this research will encourage more information readily available to the public. Investigating, and organizing a methodology to collect data about how these individuals find themselves in leadership roles has shown that more importantly these individuals with hearing impairments should be taught leadership skills. If a curriculum unit about leadership skills was taught to individuals with hearing impairments it would contribute to an understanding of how being put in leadership roles benefits the hearing impaired, and expands their horizons. It will motivate the hearing impaired to overcome their disability. Teaching the hearing impaired leadership skills offers the potential of contributing greatly to improving the way hearing impaired view themselves and their communications.

This information can be the foundation to develop a new curriculum unit relevant to teaching leadership skills to children with hearing impairments. The intention is to teach this curriculum unit while using a mixed methodology to observe correlations between leadership skills, and the carrying-over of these skills into other extra-curricular activities

that motivate the student to improve their communication skills, including speech.

A curriculum unit will be adapted by the researcher to teach the following leadership skills to children with hearing impairments. Leadership development goals defined by the Lions Bear Lake Camp are as follows:

Mentoring leadership development goals and leadership development goals:

1st year participant goals:

- To learn the qualities of a leader, such as teamwork, responsibility, respect, motivation, listening, planning, initiative, creativity, persistence, presenting, problem solving, and observation.
- To develop these qualities in themselves by actively participating in daily camp activities and becoming reflective practitioners.

2nd year participant goals:

- While specifically working with children and a mentor, they will apply the qualities of a leader (teamwork, responsibility, respect, motivation, listening, planning, initiative, creativity, persistence, presenting, problem solving, and observation) to successfully demonstrate competency of leading a group of children.

Expectations from 1st year participants:

- To observe different leaders at camp
- To start to develop and reflect some characteristics of being a leader
- To follow directions of a cabin leader, assist with rest period, and get ready for bed as necessary

Expectations from 2nd year participants:

- To assist campers with daily activities in activity groups and in cabins
- To lead one planned members or rest period activity
- To observe different leaders at camp

METHODOLOGY AND RESEARCH

To investigate correlations between leadership skills and extra-curricular activities in which children with hearing impairments partici-

pate, a study will take place with the help of Lions Bear Lake Camp. With the help and permission of Lions Bear Lake Camp council and administrators (specifically Dennis Tomkins, Julie Steele), Leadership Development campers and their parents will be contacted to participate in the study. Campers, parents, and counselors who work with individuals that are hard-of-hearing in roles of leadership will be surveyed. An explanatory mixed methods design will be used to collect and analyze data. The design of these surveys will focus on collecting quantitative data about individuals with hearing impairments in the positions of leadership, and to see if leadership skills carry-over to extracurricular activities in which these individuals participate. Quantitatively, descriptive statistics through observations and surveys will be compared with the above literature review to see if there are any correlations. Qualitatively, this investigation will combine journal responses, interviews, and observations collected from camp. Finally, the researcher will be able to conclude if there are correlations between leadership skills, and the carrying-over of these skills into other extra-curricular activities in which the campers participate.

Since there is not currently a great deal of information about individuals with hearing impairments in positions of leadership, this investigation seeks to provide such data to the field. When this information is analyzed, the data will offer criteria about individuals with hearing impairments in positions of leadership, and will help other individuals with the same impairment understand how people like them can make it to such a position.

DISCUSSION

The deaf and hard of hearing need strong people to teach and guide them. More importantly, they need to be taught that they need to advocate not only for themselves, but for others like them. How do we, as educators best combine technology, age of intervention, the skills of pathologists and audiologists, with the strengths and weaknesses of each recipient, to maximize oral communication with the general parameters needed to be mindful of flexible and differing environments or individuals? It is imperative that this study and others develop the data that will give us the source of worthy citation. Future research needs to correlate past investigations to find trends, connections, and themes needed to assist individuals with hearing impairments, while providing an understanding of what a leader is. We, as educators, must combine

the disciplines that have been developed, such as new technology, early intervention, and mainstreaming. We need to be mindful that the teaching environment can affect and contribute to the current protocols for dealing with the problems of the hearing impaired. Goals should include breaking barriers to proffer a level playing field for the development of speech proficiency (Blood & Blood, 1999; Colella & Varma, 2001; Wilkens & Hehir, 2008).

The research examining leadership skills and individuals with hearing impairments is scarce. This examination of literature revealed that it is difficult for an individual with a hearing impairment to understand the concept of leadership. This is most likely because children with hearing impairments—who do not hear at birth—suffer in the development of their language skills, which contributes to their difficulty in understanding of what a leader is. New technologies are changing the way children are diagnosed, aided, and assisted to emerge as individuals with a hearing impairment living in a hearing world. With the help of intervention specialist, these children are able to exist in this hearing world, age appropriately, as peers with hearing individuals.

This literature review provides some insights in identifying supporting information to how an individual with a hearing impairment develops language, and how language skills contribute to the individual's understanding of leadership. One of the most important features of a leader is his or her ability to reciprocally communicate with others. If communication strategies, such as “social bridging” and “acknowledgement tactics” are aligned with other areas of life, such as critical thinking, individuals with hearing impairments should be capable of grasping the importance of their disability being represented by strong leaders (Blood & Blood, 1999; Wilkens & Hehir, 2008). It is the goal of this research, and future educators, to provide teaching, guiding, and mentoring to young people with hearing impairment, and to witness generations of strong, confident leaders in the future.

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