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## Literacy and the deaf individual : what are we going to do about it?

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NORTHERN ILLINOIS UNIVERSITY

Literacy and the Deaf Individual: What Are We Going to Do about It?

A Thesis Submitted to the

University Honors Program

In Partial Fulfillment of the

Requirements of the Baccalaureate Degree

With University Honors

Department of Literacy, Intercultural and Language Education

By: Tonya Seger

DeKalb, Illinois

May, 2001

University Honors Program

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## Abstract

Do you find it acceptable for students to graduate high school with a third grade literacy level? Of course not! Unfortunately, the average deaf and hard of hearing student graduates with little more than the literacy skills of a nine-year old. Although this fact is well known, not much is happening to change it. This paper covers the following topics: history of deaf education, definition of literacy, why literacy is important, "Deaf Culture", literacy in the workplace, why literacy levels are so low, and what we can do about it?

Research indicates that literacy levels of deaf and hard of hearing students are so low due to a combination of factors. Three areas that this paper focuses on are: cycle of low expectations, poor preparation for teachers, and a lack of complete access to a consistent language base. Some suggestions as to what we can do about poor literacy skills are discussed in direct relation to these problems. First, deaf education has to be held to the same standards as regular education. Secondly, teacher preparation programs require serious revamping. Finally, deaf education has to move from the "deficit model" to the "difference model" approach to teaching.

## Introduction

This paper will discuss, in detail, the history of deaf education, the definition of literacy, why literacy is so important, the place of literacy in Deaf Culture, literacy in the workplace, the main reasons literacy rates are so low, and ultimately, what we can do

- The capital "D" in the term "Deaf Culture" signifies individuals that consider themselves culturally Deaf. In all other references to the word "deaf" the lower case "d" will be used.

about it.

By understanding the history of deaf education, one can see that the turmoil and confusion educators and parents are experiencing today is nothing new. The method of *how* to teach has been argued for the past one hundred years. Now, in the twenty-first century, we must also consider the question of *what* to teach. One constant has been that literacy rates have remained unacceptably low. In order to better answer these questions of *how* and *what* to teach, and to begin to improve literacy skills of deaf individuals, we must first understand what literacy is.

The definition of literacy as formulated by this author is:

*Literacy includes more than the ability to read, write words, understand language, and use many areas of technology. It also incorporates the ability to functionally use those abilities in society. Literacy is an access tool that enables an individual to be an active, functioning, independent, person in mainstreamed society.*

With this common definition to draw from, the reader can much better understand the impact and implications of literacy as the author uses it.

As the above definition is written, one can see that the importance of literacy spans from print being the only true representation of the English language, its purpose as an access tool to independence, its positive cognitive influences, its place in Deaf Culture, to its great importance in the workplace. Low literacy rates mean more than just deaf individuals not being able to read as well as their hearing peers do. Low literacy

rates mean deaf individuals do not have the same access to a quality, fulfilling life in mainstreamed society.

The three main reasons found for such low literacy rates are: a cycle of low expectations, poor preparation for future teachers of the deaf, and a lack of complete access to a consistent language base. For each of these problems there is a proposed solution discussed in detail. Granted, none of the proposed solutions will serve as a quick fix for this problem. There cannot be a "quick fix" for such a staggering problem; we must take it one step at a time. Here is where we must begin.

Deaf education has to be held to the same standards as regular education. A third grade literacy level upon graduation from high school is unacceptable for a regular education student, as it should be for a deaf student. Teacher preparation programs for deaf education need some serious changes. Teachers should be required to take more subject matter related courses, especially in the area of reading. Although these added requirements mean longer programs, they also mean better-educated and prepared teachers. And lastly, deaf education has to move from the "deficit model" to the "difference model" approach to teaching. The deaf child is not broken; the deaf education system is. It is time we own up to these problems and begin to fix them.

### History of Deaf Education

For many years deaf educators have not been able to come to a clear consensus on how deaf students should be taught, and it is not likely they soon will. Such arguments in deaf education mostly concern what method of communication teachers should use to

educate their students: oral only, manual only, or a combination of the two. This paper discusses the history of deaf education with an emphasis on the OralManual debate as it was made popular by Alexander G. Bell and E. M. Gallaudet, and the new implications of the debate in the twenty-first century.

Up until the nineteenth century it was common to send your deaf child to Europe or hire a private tutor. In both instances, these options were reserved for the wealthy. Starting at the turn of the century, education for the deaf became more available to common people. In 1814 an eighteen-year-old Thomas Hopkins Gallaudet became interested in his deaf neighbor Alice Cogswell. The next year Alice's father raised enough money to send Gallaudet to Europe to study different methods of deaf education. Although Gallaudet went to Europe with the intention of learning an array of methods, he spent most of his time learning the French method. Gallaudet studied under Sicard for four months and returned to America with a deaf teacher, Laurent Clerc. Clerc eventually became the first teacher of the deaf (Moore 25).

In 1817, The Connecticut Asylum for the Education and Instruction of Deaf and Dumb Persons (later renamed the American School for the Deaf) opened. Although Gallaudet was in favor of a more combined method of instruction, using both speech and sign together (Moore 64), Clerc's manual-only influence lasted for close to forty years. In those years while Manualism ruled, there was very little instruction or emphasis on speech. Things began to change in 1857 when the American School, despite its resistance to Oralism, was the first to hire a full-time speech therapist. The main purpose of Oralism was to put the deaf child back into society through oral communication and education only.

Many assumed The American School did this in order to avoid the "establishment of a competitive school" (Moore 68). Their efforts worked for a while, but in 1864 the first oral school was established in New York. From that point Oralism only grew stronger. During the Milan Conference, in 1880, the majority decided that speech was superior to signs in the mission of "normalizing" the deaf child. Those that resisted Oralism used a combined method that is referred to as simultaneous communication today. It was during the 1880s that the Oral/Manual debate began.

Alexander Graham Bell was born in 1847 and had a deaf mother. Bell's mother lost her hearing at age four due to scarlet fever. Bell's relatives were very strong supporters of Oralism, with two generations before him dedicated to teaching speech. Ironically, Bell used the manual alphabet to communicate with his mother and even addressed a graduating class of Gallaudet College (now Gallaudet University) in sign language. Despite Bell's many accomplishments and dedication to Oralism, he is most famous for his patent of the telephone in 1876.

After Bell's invention, he was not able to spend as much time working towards the advancement of Oralism, as he would have liked, but he still stayed active. Bell opposed Manualism because he thought it slowed the learning of English as a language and isolated the deaf from society, increased intermarriages between the deaf, and eventually would cause a "defective race" (Moore 77). Bell surprisingly appreciated American Sign Language (ASL) and realized it as a true language, but did not see its place in the educational setting (Arnold 72). Bell opposed ASL used in institutions for the deaf because he feared that it would separate deaf students from society, as well as from their families.

Edward Miner Gallaudet was born in 1837, the youngest of twelve. Edward was the son of the very famous Thomas Hopkins Gallaudet and, like Bell, had a deaf mother. E. M. Gallaudet was very open to his father's original ideas of a combined method of education and in 1868 advocated its use. In 1871, E. M. Gallaudet declared that sign was used too much and that speech should be used in conjunction. It is a common misconception that E. M. Gallaudet was at one end of the deaf education spectrum while Bell was on the other. E. M. Gallaudet actually "steered a middle course between Bell's Oralism and the entrenched manualists" (Arnold 33). E. M. Gallaudet and Bell were much closer in educational philosophies than many are commonly led to believe. Both wished for deafpeople to 'mingle readily and freely in the society of hearing people' (Gallaudet 58). Both agreed that the use of spoken English was the only way this "mingling" was possible. Where the two differed was in their opinion concerning intermarriages and to what extent oral means should be used in the education of deaf students.

E. M. Gallaudet thought that in the case "with whom success in articulation is impossible . . . give them education through the use of signs, the manual alphabet, and writing" (Gallaudet 58). The important thing to keep in mind is that E. M. Gallaudet believed in a combined method, he did not advocate the use of one method or the other exclusively. This is where he and Bell differed. Another area in which they differed was concerning intermarriages. When E. M. Gallaudet responded with anger to Bell's call for the banning of intermarriages, the tension between the two previous friends began to mount.

In 1880, E. M. Gallaudet tried to set up a teacher-training program, which incorporated combined methods and he asked Bell to lecture. Bell agreed, but proceeded to go to the Senate Appropriations Committee to oppose the program. Despite Bell's efforts, and much to his chagrin, E. M. Gallaudet followed through with his teacher-training program without the help of Bell. In one last-ditch effort to join forces with Bell, E. M. Gallaudet proposed that the two merge camps in 1893 (Moore's 80). Bell again responded positively, but later changed his mind. It was at this point that the two philosophies, though not that different, split for good. What does all of this mean for us today? First, let us take a look at how these philosophies are used now, as well as their effects.

In the 1996-97 Annual Survey of Hearing-Impaired Children and Youth conducted at Gallaudet University, 44% of schools use oral methods as the primary teaching mode, 51% of schools use sign and speech together, and 4% of schools use sign only as the primary teaching method (Holden-Pitt & Diaz 76). These results indicate that oral methods are still widely used, but simultaneous communication is used the most commonly as a communication method when teaching deaf and hard of hearing students. Since the survey is voluntary, these numbers can be skewed. In addition to the survey being voluntary, the increased amount of hard of hearing students in inclusion settings greatly increased the percentage of oral only teaching methods (76). Also, the results of the survey tend to fluctuate a bit between states. With all of that taken into consideration, it is probable that simultaneous communication is used as the primary teaching method more than the survey reflects.

Simultaneous communication, as E. M. Gallaudet made it famous, can actually be considered an oral method (Johnson et al 13). The purpose of this method is to show English language through both visual and auditory means in order to better facilitate the students' understanding and acquisition of the English language. By definition, the signing used during simultaneous communication is not an actual language, it is merely sign-supported speech (Johnson et al 4-5). With these points in mind, it is not difficult to see that simultaneous communication is closer to an oral method than manual. Therefore, the Oral/Manual debate of yesterday can actually be considered the Oral/Oral debate by today's standards.

The following are studies conducted in order to measure the amount of information deaf students comprehend when it is provided through various means of communication. All of the studies came to similar conclusions: deaf students can identify more when information is presented through manual means rather than oral alone (Crittenden, Ritterman, & Wilcox 360; Hyde & Power 398; White & Stevenson 57). These studies also mentioned that while simultaneous communication is more successful than Oralism alone (because of the presence of signing) it could also hinder the education process. In many cases the combination of two forms of communication at once is too overwhelming for both the teacher to provide and the student to understand (Crittenden, Ritterman, & Wilcox 360; Hyde & Power 398; Johnson et al 19-20; White & Stevenson 57).

When the teacher needs to make deletions in his or her communication, in order to facilitate a more comfortable rate of speech/sign, the deletion is usually made in his or her signing. It is only natural that one would make deletions in the least familiar means

of communication. Because two forms of communication at once is equally overwhelming for the student, they too will sacrifice one for the other. In the majority of cases, deaf students feel more comfortable concentrating on the manual communication of the teacher, the very weakest form the teacher provides (Hyde & Power 392). Crittenden et. al., (357) also state that combined audio-visual does not improve performance of deaf students over one modality presentations. In other words, the addition of speech to signing does not increase identification of test items by deaf subjects.

Another paper that questions that effectiveness of simultaneous communication is Unlocking the Curriculum by Johnson, Liddel, & Erting. This article states that simultaneous communication is "only partially comprehensible" and "largely unintelligible" (5). There is no question as to how these authors feel about speaking and signing at the same time. It is true that these studies show simultaneous communication produces better results than Oralism alone. But they also show that simultaneous communication does not seem to supplement Manualism, and even in some cases hinders it. With such weak teaching methods, it is no wonder the literacy rates of the average deaf students linger around the third grade level. These facts give rise to the more contemporary and properly named OrallManual debate.

As is stated earlier, simultaneous communication can actually be considered a form of Oralism for a few reasons: it employs English as its main form of instruction and, by definition, it is not a true sign language. Both Oralism and simultaneous communication wish to restore the deaf person in society through means of speech. Nowadays simultaneous communication is considered closer to the oral side of the deaf

education spectrum than it was considered during the time of Bell and E. M. Gallaudet. In its place is ASLIESL (English as a Second Language), Bilingual-Bicultural, or ASL Immersion, whichever you would like to call it. All three are different names for virtually the same idea.

Supporters of this approach, usually those involved in the Deaf Community, conclude that deaf students should have access to a natural sign language early in their education and then later learn English as a second language (Johnson et al 18-20 & Johnson 12). English is taught as a second language solely through means of reading and writing. Speech is never demanded, or even encouraged of the students. However, in most programs a speech therapist is available for the students if they wish to learn to speak. The main point is that the therapist is there for the students if they wish to take advantage of him or her, they are never forced to learn to speak.

Although this approach may seem a little new, it has actually been around since the dawn of deaf education. It is only because of the constant demands of the Deaf Community and its supporters to be taken seriously, that this approach has been attempted. Because the concept has been virtually ignored until recently, it is difficult to find studies that prove its effectiveness and superiority in the field of deaf education. Right now, all we have to go on is the fact that deaf students of deaf parents tend to perform closer to their hearing peers in tasks such as reading and writing. The idea is that most deaf children of deaf adults are immersed in a natural sign language from birth and have a strong language base when they enter school. It is easy to make the connection that it is this strong language base that allows the deaf students of deaf parents to be closer to their hearing peers in standardized test scores.

Although deaf educators have still not been able to come to some sort of a consensus about the best method of educating the deaf, deaf education has come a long way since the turn of the nineteenth century. In that time, many schools and programs had been established for both the public and private education of the deaf, philosophies had been studied, and methods have changed. In two hundred years, the preferred method of instruction has gone from Manualism to Oralism to simultaneous communication and now, possibly back to Manualism again. This paper discusses a history of deaf education focusing on the OralManual debate of yesterday and today. Now that we have entered the twenty-first century, deaf educators must come to some kind of conclusion as to what works the best, we have argued long enough.

### What is literacy?

Although the word "literacy" is a very commonly used term, not many people can give a thorough explanation of what it actually means. While researching this topic there were many references to the word "literacy" but very few definitions. Usually, when a word is used so freely it means there is a commonly known and accepted definition of that word. Unfortunately, the most common interpretation of literacy is simply "reading and writing"; but, it is much more than that. Fifty years ago that interpretation may have been sufficient, but it is sufficient no more. The twenty-first century brings advancements in technology and the understanding of how the human mind works.

In order to properly approach the subject of low literacy levels in the deaf and hard of hearing population, we must first clearly define what the word "literacy" means.

Unfortunately, many authors of articles *try* to make headway in the work of improving literacy levels do not supply a thorough definition of the word "literacy." As a result many of these authors have done a lot of work in vain. If the reader approaches his or her work with an insufficient understanding of the terms used, the information given will not have as much of an impact. This section will discuss commonly used definitions of the word "literacy," more specific types of literacy, and finally, develop a comprehensive and modern definition of the term.

As defined in the American Heritage College Dictionary, literacy is described as "The condition or quality of being literate, esp, the ability to read and write" (792). The word literate is defined as "Able to read and write. Knowledgeable or educated in several fields or a particular field. Familiar with literature ... Well-written; polished ... One who can read and write. A well-informed educated person." (792). These definitions are a bit ambiguous and general. As stated earlier, the definitions, overall, describe literacy as merely the ability to read and write. There is one phrase that is used here that will be helpful to us later when trying to come up with a more modern and comprehensive definition. This phrase is "Knowledgeable or educated in several fields or a particular field" (792). With this phrase in mind, let us look at some more attempts to define the term "literacy."

As stated in the article "Framework for Literacy: 1993 and Beyond" the definition of literacy that became the federal standard for literacy assessment in 1988 is "Using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential" (68). Although this definition seems very similar to the one above, it differs in two important ways. First, this second definition

includes the word "using." The definition from the dictionary merely stated that the person could read and write if they were literate; this definition says the person must *use* their ability to read and write in order to be literate. Their literacy skills must be functional.

The other subtle, but important difference is the mention of society. For the definition of literacy to meet the ever-growing demands of the twenty-first century, it is not enough just to say literacy is having and using the ability to read and write. While reading and writing "focus on processes occurring inside the individual," the more developed idea of literacy "focuses on practices outside the individual" (Padden & Ramsey 96). Instead of looking at literacy as basic skills that one possesses individually, try to consider it as a skill that "groups of people who interact using print; who accomplish career, social, and personal ends with print; and who hold sets of values and attitudes about print" possess (96). With this more evolved definition in mind, we must consider literacy as not only reading and writing, but also its functionality; using that ability as well as applying it in social contexts in order to achieve goals.

Another way to look at this social aspect of the definition of literacy is to consider literacy an access tool. Aside from the skills one must have and use in order to be considered literate, we must also consider what literacy enables us to do. In his Plenary Address at the 12th Biennial Convention of American Society of Deaf Children in 1990, Roger J. Carver, M.S.Ed. explained that "Literacy is an access tool that enables him to participate and function [in society] as an accepted and fulfilled human being" (Carver 1). Carver stressed the importance of the social aspect of literacy. He correlated literacy to a

key that opens many doors for people. For too long those doors have been locked to the deaf population.

Now that we have looked at some definitions of literacy, we will look at some specific types of literacy. If the reader remembers back to the phrase "Knowledgeable or educated in several fields or a particular field" (792) you will understand that literacy can be used in many different contexts, which further complicates the Purpose of this paper. For example, if someone is greatly knowledgeable in the field of computers, he or she is considered computer literate. Such examples are numerous and the list could endlessly go on. For the purposes of this paper, we will discuss the types of literacy in respect to the education of deaf students. Although many types of literacy tend to focus on reading and writing skills, please keep in mind what we have learned so far.

The first type of literacy pertinent to this paper is emergent literacy. Emergent literacy is literacy development that occurs during the preschool years or years prior to formal reading instruction. It is characterized as, "Toddlers and preschoolers who, in their homes and day care environments, engage in everyday activities such as storybook reading, drawing and scribbling, as well as independently looking through books, naturally develop-without direct instruction, but through social interaction-an understanding of the language of books and the functions of print" (Gillespie & Twardosz 320). Children learn very early the practices of reading. For example, they learn which way books open, that we read from left to right, and from top to bottom. This type of literacy is a building block for text-based literacy.

English text-based literacy "refers to the use of print and written information from a variety of genres, for example, newspapers, journals, literary works, and textbooks" (paul

72). As stated earlier, there are numerous types of literacy and no one is expected or needed to be proficient in all of them. But, there is a need to "develop *general* text-based literacy skills which, along with some instructional assistance, permit access to subject-specific information" (73). Why is this type of literacy so important for deaf students? Studies indicate that text-based reading skills influence how words are organized in a person's mind, as well as help develop an understanding of phonological and morphological aspects of spoken language. This understanding helps lead to eventual advanced reading skills (Paul, 73). One would assume that these skills would have a positive impact on the overall education of deaf and hard of hearing students.

Another type of literacy that is very important in the education of the deaf and hard of hearing population is quantitative (or mathematical) literacy. Quantitative literacy skills include "working with percentages, understanding statistics, apprehending geometric vocabulary and spatial concepts, grasping the relative magnitude of large numbers, understanding basic notions of chance and the ... metric system" (Daniele, 77). Why is quantitative literacy important? The connection quantitative literacy has with the increasing levels of technology makes it vital. As Daniele states in his article "Qualitative Literacy," "One might argue that the impact of changing technology on quantitative literacy and the impact of quantitative literacy on the ability to use technology ... will be far more pronounced than the impacts within other literacy components" (77). Literacy does not only mean being able to understand and use text-based materials, but also being able to use technology.

Now that we have explored some commonly used definitions of literacy, as well as different types of literacy, it is time to develop a modern and comprehensive

definition. This definition should serve as a starting point in the journey of increasing the literacy skills of deaf and hard of hearing students. Hopefully the reader understands that a common theme in this section of the paper is that literacy is not just reading and writing. But, while trying to prove that point, it has become evident that reading and writing are the main components in the definition of literacy. The additional aspects discussed in this section all eventually come back to those two ingredients.

With all of that in mind, here is the definition that evolved as the topic was being researched. The definition that best describes the word "literacy" in relation to the twenty-first century, as well as the field of deaf education, as formulated by this author is the following:

*Literacy includes more than the ability to read, write words, understand language, and use many areas of technology. It also incorporates the ability to functionally use those abilities in society. Literacy is an access tool that enables an individual to be an active, functioning, independent, person in mainstreamed society.*

### Why is Literacy Important?

Now that we have clearly defined what literacy is, we will discuss why it is so important. As stated earlier in the definition, *literacy is an access tool that enables an individual to be an active, functioning, independent, person in mainstreamed society.* Although it is clear that literacy is important for everyone to function in society, why is it

especially important for deaf and hard of hearing students? Not only is this particular question answered in this section of the paper, but more specific questions concerning the importance of literacy are also raised here and addressed in detail in the following sections of this paper.

Since "much of the information associated with learned institutions such as courts, businesses, governments, and schools in the United States has been preserved or recorded in printed or written texts in standard English" (paul 72), it is very important that a person wanting to be involved in today's society be able to understand and use the English language. For most deaf and hard of hearing students, due to their hearing losses, the English language is only completely available to them through print (paul 73). Some may argue that the use of strict simultaneous communication gives the deaf and hard of hearing student sufficient access to the English language. But, as it is cited in the History section of this paper, most studies state that this argument is just not true. With that reality in mind, the value of literacy for the deaf and hard of hearing student just increased.

Also mentioned in the History section of this paper, for a long time speech was considered *the* access tool for deaf and hard of hearing students. Times have changed and as of recently, interpreters have been considered the new access tool for the deaf. But can one truly be considered independent if they have to rely on another person's interpretation of what one says/signs? Roger 1. Carver does not seem to think so and he proposes that literacy should be the access tool for deaf and hard of hearing students in the twenty-first century (Carver 1). Carver stated that with strong literacy skills one has the ability to "drift down the Mississippi River on a raft with Huckleberry Finn and Tom

Sawyer ... , create a succulent devil's food cake from scratch ... , retreat from Moscow across the frozen Russian steppes with Napoleon's exhausted troops ... , [and to] rejoice in Christ's marvelous victory over Death" (Carver 1). Being able to do all of these things using only one's literacy skills is what it means to be truly independent.

Aside from the positive influence literacy skills have on independence, they also greatly influence cognitive development in children. For example, "children's early experiences with reading increase linguistic abilities, vocabulary, and knowledge about themselves and their environment (Stewart et al). Although this is also true for hearing children, its implications for deaf and hard of hearing students, due to their language needs, are even more pronounced. For example, "reading to deaf children creates a context for dialogue, which provides opportunities for deaf children to gain information about themselves, their families, and their environment" (2). The incidental learning that can occur while reading is usually accessed by hearing children through everyday spoken interactions with their family and peers. Since most deaf and hard of hearing children lack this natural interaction (unless their parents are fluent in sign), reading takes on an added importance.

Why is literacy especially important for deaf and hard of hearing students? As discussed in this section, literacy is especially important because it fosters independent living in today's society, as well as certain cognitive abilities in children. Other areas that will be covered in this paper are related to the importance of literacy in Deaf Culture, as well as literacy in the workplace. These topics will be discussed in the following sections of the paper.

## Literacy in Deaf Culture

Now that we have a clear definition of literacy and know why it is so important for deaf students, we will discuss the significance of literacy specifically in Deaf Culture. But, before we can do that, we must keep in the nature of this paper and give a clear definition of Deaf Culture.

Deaf culture is defined as "a set of beliefs and practices shared by a group of Deaf people who also share a common signed language [American Sign Language]" (Padden & Ramsey 97). Some characteristics that are often associated with Deaf Culture are "a general disassociation from speech" (Padden 16), "strong emphasis on social and family ties when family members are of the same culture or community", independence in hearing society, and the sharing of "success stories and literature of the culture" (17). Please notice that literature, a large part of literacy, is mentioned as a defining component of Deaf Culture.

An obvious characteristic of Deaf Culture that has not yet been mentioned is hearing loss. Being culturally Deaf "usually means the person has some degree of hearing loss. However, the type or degree of hearing loss is not a criterion for being Deaf. Rather, the criterion is whether a person identifies with other Deaf people, and behaves as a Deaf person" (16). Although Deaf Culture is complex and interesting enough to warrant its own research, for the purposes of this paper, it has been sufficiently addressed.

Now that we know what Deaf culture is, we will explore how literacy, as it has been previously defined, fits in. David S. Martin answers this question by stating "The

rationale for promoting literacy ... is usually culture-specific" (82). In other words, the reason(s) literacy is important to an individual weighs specifically on what culture they belong to. The beliefs and values one holds directly influences the importance of literacy.

This reasoning may sound a bit contradictory at first since the language used by the Deaf, which is American Sign Language, does not as yet have an established and universally recognized written form. But, if one continues to think about the subject at hand, he or she will remember that all Deaf people must also belong to/interact with the hearing culture in order to function in mainstreamed society. Everyday tasks such as going to work, grocery shopping, and interacting with the general public requires a knowledge of hearing culture.

One major belief members of Deaf Culture share is that they do not have a disability. Throughout history deaf people have been considered handicapped. Their hearing loss is considered only a medical condition, not a cultural characteristic. In the book, How You Gonna Get to Heaven if You Can't Talk With Jesus: On Depathologizing Deafness there are several articles that specifically deal with that issue. Instead of being considered disabled, members of the Deafcommunity consider themselves a minority. Equal in every way to their hearing counterparts, just different in that they use their eyes instead of ears to communicate (Woodward).

Since members of the Deaf community do not consider themselves as having a disability, it is only obvious that their independence is greatly valued. Remember part of our definition of literacy: *Literacy is an access tool that enables an individual to be an active, functioning, independent, person in mainstreamed society.* With independence

being a top priority for members of the Deaf community, and literacy being a major access tool to that independence, one can now understand the great importance literacy has in Deaf Culture.

To better understand the influence literacy has on the Deaf community, consider a few of the access tools Deaf individuals use to function in hearing society. Instead of using a telephone, Deaf individuals use a Telecommunication Type System (TTY), which requires them to type and read their conversations. Whereas hearing individuals listen to the sounds coming from the television, Deaf individuals use closed captioning to read the dialogue on television. These tools utilize reading and writing skills to help Deaf individuals become more independent.

The bottom line is that although literacy is especially important for deaf individuals, it is even more so for the Deaf community. Literacy is an access tool that allows Deaf individuals to function independently in the hearing society that surrounds them.

### Literacy in the Workplace

If the reader finds the third grade reading average of deaf and hard of hearing high school graduates to be disappointing, here is another sad statistic. Findings from a survey conducted by MacLeod-Gallinger showed that "10 years after graduation 49% of deaf respondents were employed as blue collar workers as compared with approximately 38% of hearing students" (Loera & Meichenbaum 88). The number one reason attributed to this difference is "the poor academic preparation of deaf high school graduates,

particularly in the area of literacy" (88). This section of the paper will explore the pertinent connection between literacy and the workplace.

According to the above study, nearly half of deaf and hard of hearing high school graduates are blue-collar workers. When considering these numbers please keep in mind that 30% of deaf and hard of hearing students "exit school without a diploma or certificate" (Loera & Meichenbaum 87). So, while half does not seem like such a bad statistic, remember that number is not even taking into account the employment status of the 30% of students who did not graduate from high school. The purpose of this section is not to look down upon blue-collar work. It is, rather, to understand what type of skills are needed in order to be successful in this, as well as other, types of work today.

It is common knowledge that the workplace of today is much more demanding than it was just a couple of decades ago. The workplace of the twenty-first century demands "decision-making, information processing, organizing, data manipulation, and problem solving by almost all employees" (Craig & Craig 70). None of these skills can be mastered without a strong foundation in literacy. These skills and success in the workplace cannot be separated (Daniel 81). Let us take a look at common reasons why some employers may not want to hire individuals (both hearing and deaf alike) who lack literacy skills.

First, it is dangerous for the worker who is illiterate, as well as for his or her coworkers, if he or she cannot "read, comprehend, and follow warning signs and written directions for safety" (Loera & Meichenbaum 88). Secondly, "an employee's inability to perform a task because of skill deficiency, such as an inability to follow written instruction, can result in resentment among coworkers who are given the additional

uncompleted work (88). Another cause of such resentment among coworkers is a result of the worker that is illiterate being "secretive, evasive, and unsociable" (88) for fear of others finding out that they are illiterate and ultimate termination.

Up until now, this section has concentrated on the relationship of literacy and the workplace in respect to both hearing and deaf individuals. How is literacy specifically related to deaf and hard of hearing individuals in the workplace? First, consider the most common problem that deaf and hard of hearing individuals face in the workplace: lack of communication. Such communications problems include "ineffective communication strategies, dependency, communication misunderstandings, and the impact of communication barriers on career advancement" (Loera & Meichenbaum 89).

Now consider the most common remedies to these communication problems. These remedies include "TDDs [Telecommunication Device for the Deaf] or relay services- [both of which provide] accommodations which require reading and interpersonal problem-solving skills" (Loera & Meichenbaum 89). So, not only does a deaf individual who is illiterate have to face the same difficulties as hearing, illiterate, individuals, but also the added burden of insufficient communication skills with mainstreamed society.

While the relationship between literacy skills and the workplace is greatly important for both hearing and deaf individuals, it is easy to see that the deaf, illiterate individual is at an even greater disadvantage. In the following sections, the reasons for low literacy rates, as well as possible solutions will be explored.

### Why is Literacy so Low?

Although there are numerous assumptions as to why literacy rates among deaf and hard of hearing students are so low, this section of the paper concentrates on three major reasons. These reasons include a cycle of low expectations from parents and professionals, poor preparation for teachers of the deaf, and a lack of complete access to a consistent language base. These three topics of focus may seem a bit superficial for such an elaborate problem, but each topic is rich with complexity.

The cycle of low expectations from parents and professionals may seem to be a straightforward problem, but it is twofold. First, the most obvious conclusion of this cycle is that people tend to only live up to what is expected of them. Therefore, when it is drilled into the head of a first grade, deaf or hard of hearing student that although it is not their fault, they will never read like a "normal hearing child," they may tend not to try to ever reach the "normal" reading level. Why would anyone try harder when a trusted adult/teacher tells him or her that it does not matter how hard he or she tries, they just cannot do it?

Secondly, when teachers are repeatedly told that their students will always have problems with reading skills and will probably never read at grade level, they too fall into the rut of not really trying to change it. Unfortunately, "poor literacy performances seem to be accepted by many educators and professionals as the norm" (Carver 2). It appears that deaf educators view these poor literacy skills as a sad reality they must accept. It

also appears that with this attitude "deaf education in the United States has come to expect, as well as accept, that deaf children cannot perform as well as hearing children and [that deaf education] has structured itself in ways that guarantee that result" (Johnson et al12).

What is it about this structure that guarantees failure? Let us begin with inappropriate materials. As David Doleman states in his article "Some Concerns About Using Whole Language Approaches With Deaf Children," "special" instructional materials are criticized for three main reasons:

*"(1) syntactic and vocabulary controls may be unnecessary because a reader does not read every word in a story and can rely on text redundancies and knowledge of the world as aids to comprehension; (2) reading materials with controlled vocabulary and syntax offer limited contextual information and may be fragmented ... ; and (3) controlled syntax at the sentence level may not be necessary for understanding whole passages" (279-280).*

Because teachers of the deaf have mostly been taught that their students are lacking in literacy skills and not how they can help develop these literacy skills, the use of these "special" materials is widespread. These "special" materials are used as an alternate to regular education reading materials, such as basal readers, in order to accommodate the lower level of literacy skills and background knowledge of deaf and hard of hearing students.

While it is true that changes need to be made in the teaching of reading to deaf and hard of hearing students from that of hearing students, it is not true that these changes need to include the simplifying of vocabulary and syntax. Research has proven that "deaf children's patterns of emergent literacy development can parallel those of hearing children" (Gillespie & Twardosz 321). If this is true, maybe the changes need to be made within the method of instruction, as well as the content being taught, and not with the materials used for instruction.

Another part of the structure of deaf education that guarantees failure is the "lack of standards and accountability in the field" (Johnson et al 12). Reasons for these lack of standards and accountability primarily fall not with the teachers themselves, but with the poor training programs. Nationwide, deaf education programs fail to give future educators of the deaf the proper skills and knowledge needed for successful teaching (Johnson et al 12, Lytle & Rovins 9, Missouri Commission for the Deaf 4, and Rittenhouse & Kenyon-Rittenhouse 63).

In Lytle and Rovins' article "Reforming Deaf Education: A Paradigm Shift from How to Teach to What to Teach," the authors propose that teachers of the deaf do not have enough subject matter knowledge to sufficiently teach deaf or hearing students. Studies show that in deaf education there is a "large gap between what [teachers] need to know to be able to teach [certain] subjects and what they learned in their teacher education programs" (9). How do we expect deaf students to perform at, or even near, the same level as their hearing peers when the deaf education teachers are not trained as well their regular education counterparts?

It is easier for programs to tell teachers in training that deaf and hard of hearing students will probably never read at grade level than it is to show them actual methods of teaching reading. Although deaf education teacher training is terribly lacking in this area, the deficit is placed on the student, not on the professionals. This practice of wrongfully placing the blame on the student is called the deficit model. "The deficit model would have us believe that the problem lies within the deaf individual [instead of] ... the environment [and] its failure to provide readily accessible communication and linguistic tools that can be quickly and easily be used by the deaf individual" (Carver 2). This brings us to the third, and last, topic of discussion, lack of complete access to any language.

Since most deaf children are born into completely hearing families (Moore 132), and not many hearing families are fluent in ASL, it is easy to see that deaf children do not have access to a natural language in the same way hearing children do. Unfortunately, once these children go to school, the lack of language is still an issue. Even in the twenty-first century, only a small fraction of deaf education programs exclusively use ASL as the means of communication and English taught as a second language.

As was stated in the history section of this paper, simultaneous communication still prevails despite the fact that it is naturally flawed. Simultaneous communication is not natural nor is it easy to understand, it is only "partially comprehensible" at best. "The task for a hearing person attempting to speak and sign simultaneously appears to be psychologically and physically overwhelming" (Johnson et al 5).

So, now we have a student who does not understand the language used at home and receives only partial and jumbled messages from his or her teacher who is trying to

visually represent English. It is common knowledge in the field of language acquisition that in order to learn a new language one must first have a strong language base in one language (Johnson et al16). The natural language of deaf people is ASL, not English. With that information in mind, let us consider the scenario again. If a deaf child does not understand the language being used at home nor in the classroom, will this child be literate in this language? With third grade literacy levels upon graduation in mind, the answer is no.

With the lack of access to a natural language comes the catastrophic lack of incidental learning and background knowledge. The simple things hearing people learn through everyday interaction with their family, peers, and media are simply nonexistent to a child without access to a language. "Deaf students often have far less or at least far different incidental learning than hearing children" (Daniele 79). Without this incidental learning it is difficult to build up a strong inventory of background knowledge. "Deaf students' lack of background knowledge often prevents them from making proper inferences when reading" (LaSasso 436).

Another problem that results because of this lack of language and subsequent lack of background knowledge, is that the deaf reader tends to have "too few or too many questions while reading" (LaSasso 435, Gillespie & Twardosz 321). Since the deaf students lack the language that the text is written in, as well as the context with which it is written in (due to the weak background knowledge), the deaf student would tend to have too many questions while reading and easily become discouraged and overwhelmed. Conversely, because of this discouragement and a possible lack of motivation, some readers may have too few questions. "Accepting the notion that comprehension occurs

when one gets answers to his questions, it follows that the deaf student who has no questions simply has no basis for comprehension or learning" (LaSasso 437).

It is easy to see how the combination of low expectations, poor teacher training, and lack of access to language can terribly devastate any attempt to teach literacy skills to a deaf student. In the following section many suggestions are offered as how to help diminish this catastrophic combination.

### What Can We Do?

Now that we know why literacy is so low among the deaf and hard of hearing population, what are we going to do about it? Admitting the problem is only half the battle. Since we have taken responsibility for the failure of deaf education in the previous section, it is now time to discuss how we will change it. While there is no "quick fix" for this enormous problem, we must begin somewhere.

First, if the cycle of low expectations is to end, deaf education must be held to the same standards as general education. No longer should it be acceptable for a deaf student to graduate high school with third grade literacy skills; we would not accept the same from a hearing student. Secondly, teacher preparation programs in the field of deaf education need serious revamping. Not only should deaf education teachers have the same subject specific education as general education teachers, but even more concentrated training in the subject of reading is greatly needed. Lastly, deaf education has to move from the "deficit model" to the "difference model" approach to teaching. Instead of thinking of the deaf child as having a deficit they must overcome in order to

learn English, it is our job, as parents and educators, to "go ... meet deaf children where they are and where they will always be-in a visual world-and to bring to them ways of understanding our world" (Erting 102). The only way we can meet deaf children in their visual world is to give them access to a natural language, ASL.

Since the beginning of deaf education, there has been the question of *how* to teach deaf students. Whether it is oral, cued speech, simultaneous communication, total communication, etc ... , none of these methods appear to be successful when considering the consistently low literacy skills of deaf students. While the question *how* to teach is of substantial significance, so much so that it is an area that will be focused on later in this section, it is not the only question to consider when evaluating deaf education today. It has recently become more apparent that the question of *what* to teach is just as, if not more, important as *how*.

While future teachers of the deaf are being educated to recognize the best methods of communication to use in their classrooms, their general education counterparts are learning about subject matter. Despite the fact that it makes perfect sense that "teachers' knowledge of subject matter may be the best predictor of student achievement" (Lytle & Rovins 10), future teachers of the deaf still do not receive any specialized training in the subject of reading. In fact, in some cases future deaf educators are required to take less reading classes than their future general education counterparts. This just emphasizes the low expectations held for our deaf students. Why bother learning how to teach reading when deaf students will never learn how to read?

If we are to view deaf students/children equal to their hearing peers, we must raise our expectations and begin to treat them as equals. That means holding the same

educational standards for deaf students as hearing. As early as the mid 1960s, it has been "suggested that 'educational programs for deaf children should have essentially the same educational standards as do programs for hearing children'" (Lytle & Rovins 10).

Despite early suggestions for equal standards, deaf students still graduate high school with little or no literacy skills. That is a pure lack of standards that would not be accepted in general education.

In an attempt to standardize deaf education teacher preparation programs, "the National Council on Education of the Deaf (CED) and the Council for Exceptional Children (CEC) began a collaborative process in which new standards were jointly developed and approved" (Joint Standards Committee 220). As one may expect, the majority of the standards listed concerned *how* the students would be taught and not *what*.

Only one of eight sections is concerned with "Instructional Content and Practice" (222). Within this section only one standard, #32, specifically focuses on subject matter. The standard states programs need to implement "subject matter and practices used in general education across content areas" (222). Although the core of these standards deal with methods of teaching, there is at least mention of subject matter equal to that taught in general education classrooms. It is time we make more than mere mention, it is time we make it a priority.

How can we make equal standards in deaf education a priority? It must begin in the teacher preparation programs. Most importantly, it is blatantly obvious that future deaf educators "need more than the one or two reading methods courses taken in teacher preparation programs" (Cerra, Watts-Taffe, & Rose 379). Not only are more reading

courses desperately needed, but more courses that are geared specifically for teachers of the deaf are vital. One may wonder how these programs will work more subject-related courses into already jam-packed course loads? There are a couple suggestions for this question.

One suggestion offered by Lytle and Rovins was that deaf teacher preparation programs should require "prospective teachers to get a bachelors degree in an appropriate subject matter area" (9). This paper takes their suggestion one step further and proposes that, the one subject matter area be reading. Lytle and Rovins also suggested "the number of professional education courses be reduced and that classroom practicum experiences be increased" (9). Another recommendation was that future deaf educators should be educated and certified in both deaf and general education. What do these added requirements mean for the traditional four-year education program? These extra requirements mean that the traditional program will have to change to a required five-six year schedule. But more importantly, these added requirements mean much better educated teachers of the deaf

Although these suggestions for revamping deaf education teacher preparation programs may seem a bit drastic, but keep them in perspective. For example, consider an extra year or two of college training in exchange for better-educated teachers and possible higher literacy rates among deaf students. For those who truly care about the education of deaf students, that extra year or two of school no longer sounds so drastic, does it?

The last area that parents and professionals should consider when thinking about how to increase the literacy rates of deaf students is the difference model of teaching.

Previously in this section, the greatly disputed question of *how* to teach was mentioned. This question of *how* is usually restricted to what method of communication is used in the classroom and/or home. The most popular method of communication today is simultaneous communication. As is stated in various previous sections of this paper, it simply does not work.

Although the difference model, in essence, encompasses the area of method of communication, its idea of *how* to teach is much more detailed. The difference model is based on the idea that "the key to successful educational development and literary functioning is through the child's strengths by using all his/her functional, physical, and sensory abilities ... The bottom line is to remove as many obstacles from the path of the deaf child's course of development rather than creating or adding them" (Carver 2). Currently, by not providing deaf children with a natural sign language from which they can build experiences and knowledge, additional obstacles are incorporated into the student's course of development.

In order to break down those obstacles, we must stop viewing English as "the primary language or the only language being acquired [by deaf students], with the use of signing seen ... as supportive of English acquisition" (Johnson 9). Although this may seem to be an easy proposal, it is very difficult in light of traditional views. Traditionally, parents and professionals view deaf children as having a deficit they must overcome in order to function normally in mainstream society. A major part of the "normal" functioning is learning through the language used by society, English. Instead, we need to be sure that our student's "intact faculties and strengths are fully utilized

rather than his/her defective or inadequate faculties" (Carver 3), which are stressed in simultaneous communication.

How can we best utilize our student's "intact faculties and strengths" in order to give them the skills they need to be well educated, literate persons in society? It seems natural that "exposure to a language that utilizes the children's vision rather than their limited hearing provides them with the opportunity to participate in the dialogue of the home from which first language acquisition usually occurs" (Erting & Pfau 1). This visual language is assumed to be ASL since simultaneous communication, or any other mode of communication created to visually represent English, is not considered a language.

By having a natural language, and the subsequent background knowledge that would develop along with it, deaf students would be much better prepared to learn than they are presently. "Children's arrival at school with a natural sign language in place would probably enhance the development of English literacy" (Johnson 9). Once the child has a strong language base in ASL, whether originally learned at home or at school, English is taught as a second language. While trying to understand this concept it is important to keep these three things in mind:

*H(J) acquisition of written language is not dependent on oral language; (2) written language teaching can be initiated at about one year of age [emergent literacy]; and (3) written language is easier to learn than oral language "*  
*(Johnson et al J7).*

This above model is called the "bilingual-bicultural [bi-bi] or ASLIESL approach and appears to have in common the goals of producing deaf children who are bilingually competent in ASL and (at least) written forms of English" (Johnson 9). The reason the phrase "at least" is used is for a simple reason. The bi-bi or ASLIESL approach strives for competence in written forms of English only. The learning of spoken English is an option left up to the student and his or her family; it is neither encouraged nor discouraged.

### Conclusion

Numerous studies show that the average deaf and hard of hearing student graduates with little more than the literacy skills of a nine-year old. Although this fact is well known, not much is happening to change it. This paper discussed the history of deaf education, the meaning of literacy, the importance of literacy, literacy and Deaf Culture, literacy in the workplace, why literacy levels are so low, and lastly, what we can do about it.

Research indicates that literacy levels of deaf and hard of hearing students are so low due to a combination of factors. Three areas that this paper focused on are: cycle of low expectations, poor preparation for teachers, and a lack of complete access to a consistent language base. Some suggestions as to what we can do about poor literacy skills were discussed in direct relation to these problems. First, deaf education has to be held to the same standards as general education. Secondly, teacher preparation programs

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