WORKING WITH DEAF AND HARD OF HEARING ENGLISH LANGUAGE
LEARNERS

Presented to
The Graduate Program
of
Greensboro College

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in
Teaching English to Speakers of Other Languages

By Noreen Lynn Duffy

December 2019

Advisor: Dr. Michelle Plaisance

Abstract

This paper explores the hypothesis that Deaf and hard of hearing students should not be treated as having a disability, but instead should be counted as a linguistic minority. Therefore, they should be considered emergent learners of English due to the fact that most Deaf and hard of hearing students have not had exposure to spoken language in the same way that their hearing peers have had. After providing a brief history of American Sign Language and Deaf culture in the United States, this paper attempts to lay out the case for a bilingual and bicultural approach to teaching Deaf and hard of hearing students, and the role of TESOL professionals in bringing our training and research to preparing Deaf and hard of hearing students for academic success.

Dedication

To my parents, for believing in me when I couldn't. Without your love and support, I wouldn't have been able to complete this thesis.

Acknowledgements

I would like to express my gratitude to my instructors, especially Dr. Plaisance,

Dr. King, and Dr. Lyday for inspiring me and believing in me. I would also like to

thank Aleksander Moniz Mirov for reading my thesis and offering advice and

encouragement throughout the writing process.

Table of Contents

Chapter One: Introduction

I have always been passionate about language. As a child growing up with Deaf and hard of hearing family members, I was exposed to American Sign Language from an early age. I learned French in elementary school and switched to Spanish in high school, eventually obtaining my undergraduate degree in Latin American Studies. My experiences working at an English school in El Salvador led to my passion for teaching English, but I never forgot my roots.

Upon moving back to my hometown to care for my aging parents, I was privileged to attend a local TESOL conference. To my great surprise, not only were there Deaf teachers in attendance, there were even several workshops about working with Deaf and hard of hearing English language learners. This experience led me to think about how TESOL and Deaf Ed teachers could work together to better serve Deaf and hard of hearing English language learners.

Before I continue, a quick word on semantics. There are important differences between "Deaf," "deaf," and "hard of hearing." My cousin Denise is Deaf, and the capitalization marks an important distinction. "Deaf" individuals are deaf people who communicate using American Sign Language (ASL), or the sign language of their home country. Individuals that are deaf but grew up without using sign language (also known as oral) do not usually consider themselves part of the Deaf community and are referred to simply as "deaf." Hard of hearing (HoH) individuals have some degree of hearing loss, often use hearing aids or

have cochlear implants, and use either sign language or spoken English. Their degree of hearing loss varies, as does their participation in Deaf culture.

Because many people assume that sign language is universal, it is also important to note that there are many different methods of signing in the United States alone. American Sign Language (ASL) is a natural language completely distinct from English, with its own grammar and syntax. ASL is a relatively young language, and fairly unique as far as sign languages go, because unlike their spoken forms, American Sign Language and its British equivalent, British Sign Language (BSL), are mutually unintelligible. ASL's roots instead spring from French Sign Language (LSF) as it was 200 years ago and its manual alphabet (Solomon, 2012). Today ASL is used in the United States, Anglophone Canada, and various other countries around the world. It is also often learned as a secondary language, as it is considered the lingua franca of signed languages.

There are also various versions of Manually Coded English (MCE), which are signed codes for English, modifying the handshapes of ASL to correspond with the first letter of the written word, and which follow spoken English word order and grammar. It was developed in an effort to improve reading comprehension and educational success in Deaf/HoH] students. Until more recently, signed codes were what was exclusively taught in (hearing) schools, which meant that many Deaf students did not learn "proper" ASL until college or beyond. Many Deaf/HoH students who go on to higher education are fluent in both.

2

Pidgin Signed English (PSE) exists as a range of varieties between ASL and the various signed codes for English. It is useful for both Deaf and hearing signers alike, as it can be adapted to meet the linguistic capabilities of all people in the conversation. For example, when I (a hearing person with limited exposure to undiluted ASL) attempt to communicate with my Deaf family members (who are fluent ASL users), it allows me to use the signs I do know in the grammatical order I am more familiar with. (Swisher, 1989)

Then there is the concept of "home signs," which is the technical term for the pidgin developed amongst families with deaf members, or groups of deaf people in the same geographic region. Many immigrant families with deaf children fall into this category of signing, either because of lack of a formalized sign language in their home country, or because the family lacks the resources to send the child to a special school to learn their country's sign language. Without access to a sign language that is intelligible to outsiders, these children are ill-equipped to succeed in American society.

This dilemma brings up the ethical debate around teaching Deaf children in a hearing world. Do we as educators have a duty to prepare our students to function in a hearing society, and in doing so deny their Deaf culture? Or can a balance be struck between honoring the rich history of Deaf communities while also ensuring our students' success? What does a non-ableist definition of success look like? For so long, the idea of "success" has been defined for the Deaf community by hearing individuals in positions of power, and it is important

for us to consider this as we work with historically marginalized groups. This issue is important to all English language learners, but even more important for Deaf/HoH ELLs. In a world where both English and the ability to hear are treated as the status quo, how do we prepare our students to achieve their dreams?

The product of this thesis is a workshop for TESOL teachers, highlighting best practices for both disciplines, leading to the ability to better collaborate for the benefit of their Deaf/HoH ELLs. I have also included information about working with interpreters and other barriers I have uncovered during the research for this project. Building a base of common knowledge and best practices benefits both teachers and their students. While much of the pedagogy for working with Deaf/HoH students is similar to working with hearing ELLs, there are some necessary differences that need exploration and explanation.

Chapter Two: Literature Review

In this chapter, I start with a brief discussion about deafness as disability, and then proceed with an historical overview of Deaf education and community in the United States. I also briefly discuss audism and how it affects deaf education, followed by a look at some issues that may come up in the English classroom. Finally, I discuss bilingual education as the way forward for deaf and hard of hearing students.

Deafness as Disability?

It is important to note that there is quite a lot of debate about whether deafness is a disability. The issue seems clear-cut from the side of hearing individuals; of course, the inability to hear is disabling, and the deaf should receive accommodations making it easier to exist in a hearing world (Nielsen, 2012). Unfortunately, disability is a loaded term in most modern discourse, with disability being equated to dependency, leading to the stigmatization of disabled individuals. The idea of dependency is in direct contrast to the American ideals of independence and autonomy. This leads to ableism: a fear of, an aversion to, or prejudice against people with disabilities (Nielsen, 2012).

Deaf individuals often do not consider themselves disabled. Instead, they consider themselves members of a social and linguistic community identified by its use of American Sign Language (Lane, Pillard, & Hedberg, 2011).This community (or in ASL, Deaf-World) has half a million to a million signers and is

distinct from the larger group of around ten million people who have some degree of hearing loss but communicate primarily via spoken English (Solomon, 2012). Unlike in previous eras, very few individuals today are deafened by disease or trauma; most deaf children are born deaf and are therefore born into the Deaf-World (Lane, Pillard, & Hedberg, 2011). Several prominent Deaf scholars therefore argue that Deafness is an ethnicity, and should be treated as a ethnic and linguistic minority, not as a disability (Lane, Pillard, & Hedberg, 2011).

A (Brief) History of Deaf Education and Community in the United States

Unfortunately, little is known about how the native peoples of North America dealt with deafness and other disabilities (Nielsen, 2012). However, contact with the early European explorers often took place in signed gestures, and it can be inferred that signed languages were used between different tribes (Nielsen, 2012) . Spanish explorers were contemporaries of Pedro Ponce de León, a Spanish Benedictine monk who was credited with the invention of the first manual alphabet. It follows then, that North American indigenous sign languages were in existence long before the same could be said about European sign languages (Nielsen, 2012).

Post-colonialization and before the advent of formal schooling for the deaf in the United States, there was no identifiable Deaf community (Nielsen, 2012). Deafness was seen as a disability or an infirmity, and deaf individuals were often the only deaf member of their families. With no standardized language to unite

them, they remained unconnected to other deaf or hard of hearing individuals (Nielsen, 2012). The notable exception to this was a community of signers on Martha's Vineyard, where a significant portion of the population had congenital hearing loss (Lane, Pillard, & Hedberg, 2011).

There were so many Deaf individuals in Martha's Vineyard that in the later nineteenth century, one in every 155 people on the island were deaf (Lane, Pillard, & Hedberg, 2011). This put the Martha's Vineyard deaf population at almost twenty times the national average. So many people in Martha's Vineyard had deaf family members that there was an island-wide sign language used there, and children took that with them to the American School for the Deaf when it was founded (Lane, Pillard, & Hedberg, 2011). Martha's Vineyard Sign Language therefore had a profound effect on the nascent American Sign Language and is today counted as one of the main influences of modern ASL (Lane, Pillard, & Hedberg, 2011).

The American School for the Deaf (ASD) was the first permanent residential school for the deaf, founded by Thomas Hopkins Gallaudet, Dr. Mason Cogswell, and Laurent Clerc in Hartford, Connecticut (History & Cogswell Heritage House, 2019). Cogswell's daughter Alice was deafened by a fever early in life, and her father recruited the young Gallaudet, a divinity student, to help educate her. In 1815, Gallaudet went to Europe to learn more about teaching the deaf, and was turned away by Thomas Braidwood, the founder of the first deaf school in Britain. Gallaudet then went to France, where he met Clerc, a Deaf

teacher who was a product of the French system and convinced him to come to the United States. The school opened in 1817, with seven pupils, including Alice Cogswell (History & Cogswell Heritage House, 2019).

This was not only the beginning of American Sign Language, but also the beginning of residential schools for the deaf in The United States (Luft, 2016). Until the push for mainstreaming deaf and hard of hearing children in the last thirty odd years, one of the only options for educating a deaf child was to send them to a residential school. For many generations of Deaf students, residential schools were places where their Deaf identity was formed, both by their exposure to ASL and their validation as members of the Deaf community, united by their common experiences (Luft, 2016).

Despite claims by Deaf adults that the residential schooling method is an important facet of Deaf culture, residential schools have fallen into disfavor, with increasing numbers of hearing parents opting for mainstreaming or other day school programs for their deaf children (Swisher, 1989). Since an estimated 95% of deaf children are born to hearing parents (Swisher, 1989), this is a significant portion of deaf students.

The methods for teaching deaf and hard of hearing students have gone through several metamorphoses. In the 19th century, the language of instruction was ASL (Barnum, 1984), with large percentages of the teachers at these institutions being Deaf themselves. In 1850, 36.6% of the teachers in deaf

education programs were Deaf themselves; in 1863, 40.8% were Deaf (Barnum, 1984). This changed in 1880 with the International Congress on Deafness in Milan (Barnum, 1984). At this conference, hearing educators of deaf students decided that sign languages of any type would prevent the ability to learn speech and language skills. This decision was unpopular with the Deaf community, who saw a purely oral approach as a hobbling of their ability to communicate. Despite protests from Deaf adults, oralism persisted in the United States until the 1970s (Barnum, 1984; Draper, 2012).

That is not to say that ASL did not flourish in residential schools during that time, merely that it was not the language of instruction, and fluency in ASL was not a targeted outcome for students. While oralism was pushed in schools, adult Deaf continued to push for recognition of ASL as a language, and the Deaf community as a linguistic minority not unlike other ethnic groups (Burch, 2002).

Audism and Anti-ASL Sentiment

It fills me with astonishment to read […] such assertions as these: 'The less the deaf are associated with the deaf the better for them in every way,' and 'It would be better for a deaf child if he didn't know that another deaf child existed in the world!' (Wing, 2001, p. 166)

These words were written in 1886 by deaf educator George Wing, but they are also reminiscent of current attitudes towards deaf education.

9

American Sign Language has not always been accepted by mainstream society. Modern educational policy decisions strongly suggest that anti-ASL sentiment continues today. Looking at the history of deaf education, it suggests that audism (that is, placing a higher value on spoken English and on oral/aural education) is a significant factor that still impacts deaf people today (Simms & Thumann, 2007). Specific to education, Simms and Thumann (2007) stated that audism affects teacher preparation and practices- impeding the achievement of deaf/HoH students through lowered expectations.

Deaf parents of Deaf children are also disturbed by this trend in deaf education. One Deaf parent in a study by Meadow-Orlans, Mertens, and Sass-Lehrer (2003) said

> We have a parent group at [a state residential school] that's […] actively trying to encourage the school to be more on the level of the hearing schools and promoting a curriculum that is the same to teach our deaf children as if they're normal and not 'Oh, they're deaf, they can't do this or we don't expect that.' I mean, their expectations can be too low (p. 87).

Thumann-Prezioso's (2005) research into Deaf parents with Deaf children echoes these fears, along with worries that not being exposed to ASL in an academic context devalues the language in the eyes of the students.

As a deaf child, what is defined by Swisher (1989) as "success" in acquiring spoken English is determined by three main factors: severity of hearing

10

loss, quality of residual hearing, and age at which the loss occurred. The importance of familial involvement is highlighted by the experience of deaf children of Deaf adults (deaf of deaf) who have been exposed to ASL at an early age who outperform their deaf peers in general academic achievement, including English skills (Bockmiller, 1981; Geers & Shick, 1988).

Though various methods have been tried over the years, the end goal has always remained the same: for deaf students to achieve fluency in reading and writing (and often speaking) English (Wilcox, 1984). For the last hundred years or so, formal deaf education was entirely oral and focused on speech reading. ASL was long forbidden in many residential schools for the deaf, because it was viewed as a "contagious menace" by educators, and who decided without research that it would inhibit the acquisition of speech (Swisher, 1989). Similar to how BICS and CALP are transmitted (Cummins, 1979), ASL was historically transmitted child to child (typically between Deaf children with Deaf parents, and deaf children with hearing parents) while their classroom education used not only a different vocabulary, but a different language entirely (Swisher, 1989). Indeed, communities of signers (often groups of students) are constantly evolving the language in the same way that hearing children will introduce and adopt slang (Wilcox, 1984).

It was long suspected that knowledge of ASL was a barrier to learning spoken English (Swisher, 1989). Around 1960, when ASL was finally considered a "real" language, manually coded English (i.e. signed English with the addition

of signs to include spoken English syntax and morphology) became the norm in deaf education classrooms (Drasgow, 1993). Manually coded English's supporters were disappointed in its success compared to ASL (Drasgow, 1993). This is likely due to several reasons. First and foremost, ASL is a natural sign language. Unlike signed codes, a natural sign language is "an entity unto itself, with its own grammatical rules […] which are in some cases quite different from those of a spoken language." (Swisher, 1989 p. 247). Conversely, signed codes are "by definition parasitic on spoken language to a greater or lesser extent." (Swisher, 1989 p. 247). Signed codes are also ineffective at transmitting the rhythm of the English language because while in spoken English there is more time allocated to content words than to function words, whereas in signed codes, the content signs and the auxiliary signs (such as inflectional morphemes) are equally stressed (Swisher, 1989).

Despite the widespread use of signed code, the scholastic achievement of deaf and hard of hearing students remains low. Even though manually coded English (MCE) was supposed to help deaf students achieve fluency in English, the average reading achievement of deaf high school graduates in 1983 was at a third or fourth grade level, and math scores were below a seventh-grade level (Allen, 1986). This fact points towards significant problems with expecting deaf students to pick up English through written input alone (Swisher, 1989).

Additionally, as has been shown with other minority groups, low expectations of deaf and hard of hearing students lead to lower academic

12

performance and low self-esteem (Simms & Thumann, 2007). Teachers who have been trained to believe that deaf students are mentally deficient often unknowingly pass this belief on to their students (Simms & Thumann, 2007). Woodward's (1982) research indicated that teachers of deaf and hard of hearing students have "low expectations of deaf students and view them as unable or slow to learn." An additional point of friction in the education of deaf children is that hearing people have historically been in control, and therefore have emphasized the importance of spoken English in the "successful" integration of deaf children into the hearing world (Swisher, 1989).

Another factor complicating English language learning in Deaf students is the lack of knowledge among hearing teachers as to the complexities of ASL: that it is a language in and of itself, not just a "crude approximation of English, or broken English, suited only for the rudiments of communication." (Drasgow, 1993 p. 257). And since language and culture in the world our students live in are inseparable, attempting to teach ASL must include a cultural component (Drasgow, 1993).

A Deaf parent commenting on audism and lack of understanding of ASL as evidenced by his Deaf children's experiences in school, Mowl (1996) stated "These special educators, with no experience of growing up Deaf, think they understand the education of deaf children and are able to assess our children to figure out what the future holds for them in this world" (p. 235). This assertion speaks to the danger of trying to educate students from minority communities

13

without understanding their communities, languages, and desired educational outcomes.

Deaf Students in the English Classroom

> The failure of deaf children to acquire fluency in English is not, as was maintained as lately as a generation ago, deficient or disturbed linguistic or cognitive processes. It occurs because of imperfect methods used for teaching English (Wilbur, 1987 p. 42).

A deaf education classroom usually employs one of two methods: the oral approach, where sign language is not used in any form; and the signed approach, which uses either manually coded English or ASL (Humphries & Allen, 2008). Despite their differences, both types assume unusual cognitive development patterns and emphasize English speech and language skills. While learning to read and write English is an important part of a deaf child's education, ASL is an important part of their linguistic, cognitive, and cultural development (Humphries & Allen, 2008).

The Deaf community in the United States is defined by its use of ASL, a factor which unites people of diverse backgrounds in a much different way than a spoken language (Drasgow, 1993). While the same could be said about most languages, ASL is different in that a deaf child of hearing parents could experience cultural conflict within their family, up to the point that the family might not even have a language in common without the teaching of ASL to the parents

14

and English to the child (Drasgow, 1993). What ties the Deaf community together, besides their common language, are the near-universal negative experiences associated with existing in a hearing world, but also the positive aspects of Deaf culture, such as Deaf solidarity and the beauty and expressiveness of their language (Swisher, 1989).

However, Deaf and hard of hearing children are not homogenous; they come from a variety of linguistic backgrounds and levels of familiarity with spoken English. They may also come into the classroom with knowledge of different sign languages(Humphries & Allen, 2008). Most deaf education pedagogy does not consider variation in the language and culture of the child and their family. According to Humphries and Allen (2008), teachers must be able to "critically analyze, select, adapt, or redesign curriculum practices that will help children make connections between the varieties of language used at home, in the community, and at school" (p. 166).

While the language learning histories of Deaf students are very different than those of a hearing English language learner, they nevertheless make similar errors and can therefore benefit from many of the same techniques used with hearing ELLs (Langston & Maxwell, 1988). While it is a common belief that deaf students' difficulties in acquiring English stem from interference from ASL, this is not held up by research (Swisher, 1989). A study investigating similarities and differences in written errors of deaf and ESL students found only three language errors that could possibly be contributed to ASL (Swisher, 1989). Relatedly,

15

Langston & Maxwell (1988) described a panel of experts who were asked to distinguish between the compositions of Deaf signers, deaf non-signers, and ELLs were unable to correctly judge which population made which errors.

A deaf student's attitude towards learning English is often complicated by several factors: their difficulty with acquiring the language combined with the prestige of English in greater society can lead to internal conflict (Swisher, 1989). The fact that the language they are most likely to have fluency in (ASL) is a minority language and is less valued in educational contexts is also difficult (Swisher, 1989). Since ASL was once so devalued by mainstream academia, it has affected the way that deaf students perceive themselves as learners. Bicultural elements must be incorporated into their curriculum for deaf students to perceive themselves as fully competent learners(Drasgow, 1993).

Since students are coming into an English classroom with a variety of views about ASL and English, teachers should be prepared for a mix of opinions among their deaf students, and even conflicting opinions within an individual. As Swisher (1989) argued,

> One cannot assume that deaf students have been exposed to ASL or predict with any certainty what their language attitudes will be. One can predict, however, that English is likely to have been an issue for them for most of their lives (p. 251).

Because of this, teachers must also be aware of their own biases, and how they present the learning of English to their students.

Language acquisition in children with severe hearing loss is complicated because in most cases, they simply cannot perceive the majority of spoken linguistic data, and therefore cannot apply that input into their concept of grammar and convert it into comprehensible output (Swisher, 1989). Unlike students who have fluency in another spoken language before attempting to learn English, Deaf ASL users cannot initially be taught the grammar of English, because they do not have the vocabulary to talk about its use (Drasgow, 1993). Metalinguistic skills must first be developed in ASL, then similarities and differences noted in the second language (English) (Drasgow, 1993).

The Way Forward

Drasgow (1993) asserted that "exposure to an artificial language […] results in an impoverished, idiosyncratic, or incomplete language system" (p. 247). Many deaf educators feel similarly and have begun to advocate for a bilingual/bicultural approach to teaching- where ASL is taught as the first or native language, and English as a second language (Drasgow, 1993). This stance is strengthened by the fact that studies show deaf children who are exposed to ASL at an early age acquire it in the same way that hearing children acquire spoken language (Wilbur, 1987).

17

Roughly 95% of deaf children are born to hearing parents (Swisher, 1989).

Thus, many children are theoretically exposed to English, but because so much

of spoken English is inaccessible to a deaf/HoH child, it does not actually

function as a mother tongue (Andrews & Rusher, 2010). This means that hearing

parents are often scared about what impact being deaf will have on their child's

future. It is important that these parents are exposed to successful adult Deaf

role models to allay their fears (Moog & Rudge, 2019). Additionally, there must

be parental buy-in for a bilingual/bicultural approach to work (Wilbur, 1987).

Ideally, with exposure to the Deaf community, parents will understand that ASL

does not interfere with English acquisition, and that ASL provides another

avenue of communication between them and their children (Wilbur, 1987). While

experts remain unconvinced about the effectiveness of bilingual/bicultural

models, they generally agree that there must be parental acceptance and

involvement, administrative support, and more Deaf adults involved in every

level; from role models in the classroom to being part of administrative and

educational policy decisions (Drasgow, 1993). Deaf adults are the product of the

deaf education system, and as such, their input is incredibly valuable in

determining the success of future generations of deaf students (Drasgow, 1993;

Solomon, 2012)

Part of the work that needs to be done is at a cultural level, with the Deaf

community being recognized not as "a loosely knit group of audiologically

impaired individuals" but as "a linguistic and cultural minority whose complex

history, language, and literature warrant sustained recognition." (Dirksen, Bauman, & Drake, 1995, p. 307)

Deaf education professionals and parents of deaf and hard of hearing students are often frustrated, believing that their students are under-prepared and undereducated compared to their hearing peers. Humphries and Allen (2008) proposed a new approach: moving away from the "special education" school of thought that assumes deaf and hard of hearing children are deficient or developmentally delayed. Instead, understanding that deaf/HoH children are emergent language learners that require environments similar to other ELLs (Andrews J. F., 2012). TESOL teachers working with deaf and hard of hearing students must recognize and utilize the rich linguistic and cultural resources they already have, using them as building blocks for English language literacy (Humphries & Allen, 2008).

One example of English being aided by ASL is the use of fingerspelling, which is an important component in literacy development for deaf and hard of hearing children. Like a hearing child sounding out the words, it serves as a tool to decode English words, and can also be used as a placeholder until more context was given to identify the word (Humphries & Allen, 2008).

Success for English language learners, Deaf or not, also involves seeking more diversity in the classroom, so that children of various backgrounds (cultural, linguistic, or other) have role models for their academic success (Andrews &

Martin, 1998). Echoing the current trend in general education, and despite

teaching a population that is increasingly more diverse, the rate of minority

teachers in deaf education is still quite low (Andrews & Martin, 1998).

There is already a roadmap for success: Deaf children of Deaf families,

and hearing children of Deaf adults (referred to as "Child of Deaf Adult" or

CODA) that use ASL in the home tend to be more successful at reading and

writing (Humphries & Allen, 2008). These families produce functionally bilingual

children in ASL and English (Humphries & Allen, 2008). We are now identifying

hearing loss at an earlier age than ever before. Prior to the 21st century, children

were often not discovered to be deaf or hard of hearing until parents realized

their child was not learning to talk, around age two or three (Moog & Rudge,

2019). Advances in technology and Early Detection and Hearing Intervention

(EHDI) programs mean that deaf children are being diagnosed younger than

ever. This is good news for their linguistic development- the sooner they are

given linguistic input that they can process (e.g. ASL) the higher their chance of

academic success (Moog & Rudge, 2019).

Chapter Three: Project Design

In this chapter, I discuss the workshop I created for TESOL teachers on the history of the Deaf community and the linguistic properties of American Sign Language, as well as discuss various methods for working with this unique group of English language learners.

Originally, I envisioned this project as a resource for both Deaf Ed and TESOL teachers, but through the course of my research, I began to refine my focus to working specifically with TESOL teachers who may be called upon to teach deaf and hard of hearing individuals. It is important as a teacher to know something about the communities you serve, especially in this case, where so much of the commonly held beliefs about the Deaf community do not reflect the way the Deaf community views itself. The fact that we consider deafness a disability, and therefore the purview of special education does a disservice to deaf and hard of hearing students. Believing that these students are emergent language learners, not developmentally delayed or intellectually inferior is crucially important to their success with the English language.

To better serve this population, it is important to first understand what exactly it is that makes the Deaf community unique. I believe the best way to do this is to provide a brief history of the Deaf community in the United States. This will hopefully allow TESOL teachers to see the Deaf community as a linguistic minority, and feel more comfortable providing services to students within that community.

As there are many misconceptions about American Sign Language, including arguments about whether it should even be considered a language, as well as fears that ASL proficiency will deter English learning, it is important to discuss these topics so that TESOL teachers can be as informed as possible.

It would also be prudent to present some of the current thinking on language acquisition in deaf and hard of hearing individuals to show where that work aligns with the work we do as TESOL teachers. Deaf and hard of hearing individuals make up a small percentage of United States students, but their needs closely resemble that of traditional English language learners. In the case of deaf and hard of hearing students receiving TESOL services, the question should not be if English is spoken in the home but instead how much of their home language deaf and hard of hearing students have been exposed to prior to entering school. This will vary based on several factors, including the severity of hearing loss, age of diagnosis, and parental involvement. With that base of knowledge, we can then move into a discussion of how to work with deaf and hard of hearing students, and ways the practices we already use in everyday teaching can be adapted to working with these students. Obviously, our practice with a class of deaf and hard of hearing students would not be the same as with a class of hearing ELLs, but there are still many techniques that are applicable.

I chose a workshop as my delivery vehicle for this information partially because my initial inspiration for this thesis topic came from a workshop at an ESL conference about deaf and hard of hearing English language learners. I

learned a lot in that workshop, but as it was more informational rather than practical, I found myself thinking about ways that the topic could be handled that would leave TESOL teachers with both a greater knowledge of the Deaf community and ideas that could be brought back to their schools in support of deaf and hard of hearing students.

The workshop consists of several activities. The opening activity polls workshop participants on what they know about the Deaf community. Based on those answers, we can challenge preconceptions and dismantle harmful stereotypes before building background knowledge by moving into the history of the Deaf community in the United States.

Armed with that context, teachers then learn about the evolution and linguistic properties of American Sign Language which prepares them to begin thinking about similarities between traditional English language learners and deaf and hard of hearing students and how their training in TESOL can be applied to the specific needs of this community.

As we move into a discussion about language learning in deaf and hard of hearing individuals, participants are asked to work in groups to adapt a mainstream classroom lesson plan for use with deaf and hard of hearing students. This activity helps prepare TESOL teachers to work with classroom teachers and deaf education teachers.

As we finish the workshop, it is my intent to have a question and answer session with deaf educators (including interpreters) and Deaf students and

23

parents. The rallying cry of disability advocacy has always been "Nothing about us without us," and I feel that it is vital to give Deaf voices an opportunity to speak on issues that concern them, especially regarding education. This will also give us an opportunity to connect our learning in the workshop with actual students and their lived experiences, further enabling us to take our work from the theoretical to the practical.

Chapter Four: Product

What follows are the slides from a workshop aimed at TESOL teachers who may have the opportunity to work with Deaf and hard of hearing students. The slides are meant to be used after a discussion about what the assembled teachers in the workshop know about deafness, Deaf culture, and working with deaf students.

After the presentation of the slides, teachers will have to opportunity to work in groups to modify the existing lesson plan (provided below) for use with deaf and hard of hearing students. Finally, the workshop will end with a question and answer session with both Deaf students and Deaf education professionals.
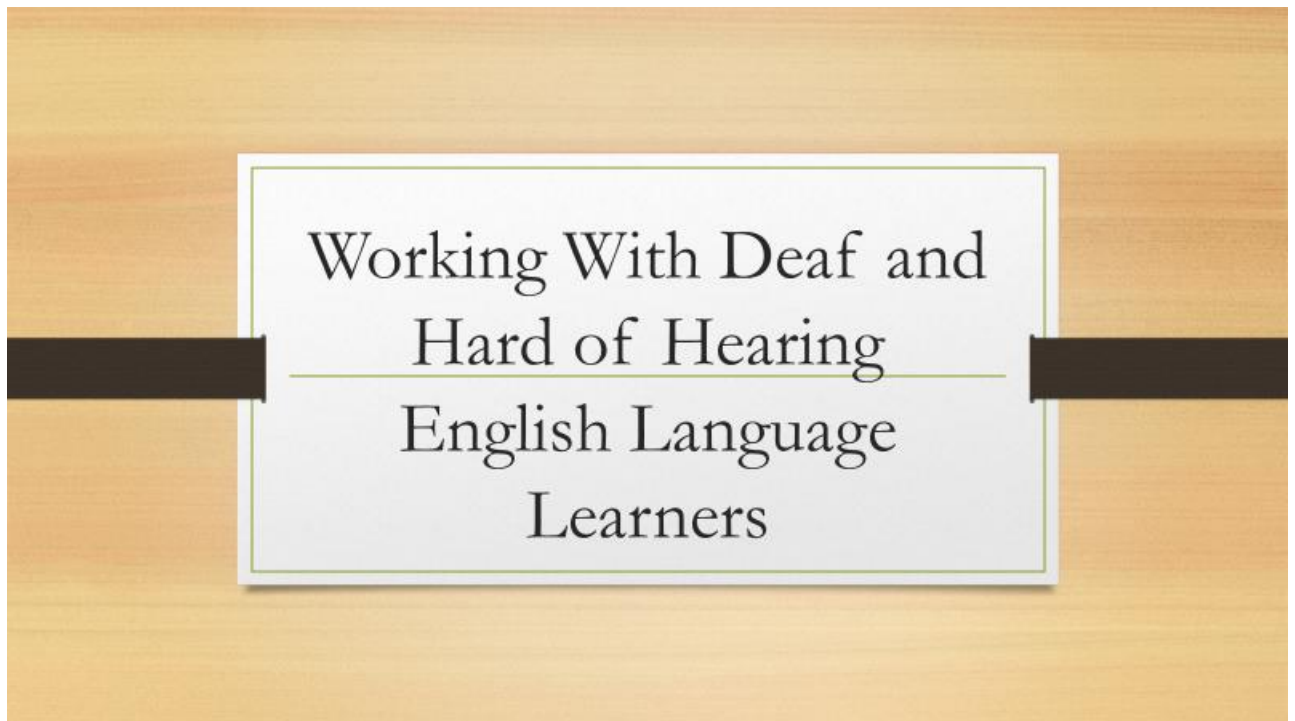
Deaf or deaf?

deaf: "lacking the power of hearing or having impaired hearing."

Deaf: a deaf individual who belongs to and participates in the Deaf Community, and primarily uses sign to communicate.

Is Deafness a Disability?

- As of 2013 hearing loss affects about 1.1 billion people to some degree.
- Traditionally, deafness has been treated as an impairment or disability.
- However, those belonging to the Deaf community often do not consider themselves disabled.
- They instead consider themselves as part of a social and linguistic community.
- This community is known in ASL as "Deaf-World."

Deaf-World

- There are 500,000 to 1,000,000 American Sign Language users in the United States alone.

- They are distinct from the 10,000,000 people nationwide with hearing loss who communicate primarily through speech.

American Sign Language: History

- Historically, the deaf were isolated from one another and very few learned to communicate with others.

- There was a notable exception in the case of Martha's Vineyard, where the occurrence of deafness was twenty times the national average. An island-wide sign language was adopted to accommodate the large Deaf population.

- Martha's Vineyard sign language was an early contributor to what would become American Sign Language.

27

Gallaudet and Clerc: Fathers of ASL

- Thomas Hopkins Gallaudet was a hearing divinity student hired by the family of Alice Cogswell, a young girl who lost her hearing.
- Gallaudet traveled to Europe to learn how other countries educated their deaf.
- In France he met Laurent Clerc, a Deaf teacher, who agreed to come to the United States to found a school for the Deaf.
- The American School for the Deaf was founded in 1817 and was the first permanent school for the deaf on the continent. It is still in service today.

American Sign-Language: Roots

- American Sign Language is based on the 19th century French manual alphabet, and signs from both Martha's Vineyard and French.
- Gallaudet's son went on to found Gallaudet University in 1864, the first higher-learning institution for the Deaf in the United States.
- American Sign Language is a natural language, with its own grammar and syntax that exists independently from English.
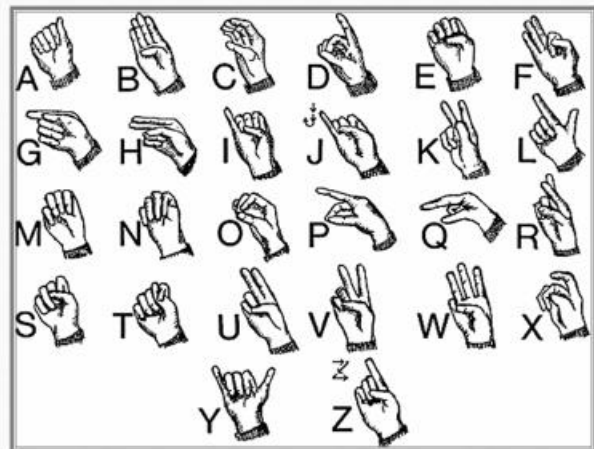
Residential Schools

- This was not only the beginning of American Sign Language, but also the beginning of residential schools for the deaf in The United States.

- Until the push for mainstreaming deaf and hard of hearing children in the last thirty odd years, one of the only options for educating a deaf child was to send them to a residential school.

- For many generations of Deaf students, residential schools were places where their Deaf identity was formed, both by their exposure to ASL and their validation as members of the Deaf community, united by their common experiences.

Evolution of Deaf Education

- In the 19th century, the language of instruction was ASL, with large percentages of the teachers at residential institutions being Deaf themselves. In 1850, 36.6% of the teachers in deaf education programs were Deaf themselves; in 1863, 40.8% were Deaf.

- This changed in 1880 with the International Congress on Deafness in Milan. At this conference, hearing educators of deaf students decided that sign languages of any type would prevent the ability to learn speech and language skills.

- Despite protests from Deaf adults, oralism persisted in the United States until the 1970s.

"It fills me with astonishment to read […] such assertions as these: 'The less the deaf are associated with the deaf the better for them in every way,' and 'It would be better for a deaf child if he didn't know that another deaf child existed in the world!'"

These words were written in 1886 by deaf educator George Wing, but they are also reminiscent of current attitudes towards deaf education.

Audism

- Audism: placing a higher value on spoken English and on oral/aural education.
- Audism affects teacher preparation and practices- impeding the achievement of deaf/HoH students through lowered expectations.

> " We have a parent group at [a state residential school] that's […] actively trying to encourage the school to be more on the level of the hearing schools and promoting a curriculum that is the same to teach our deaf children as if they're normal and not 'Oh, they're deaf, they can't do this or we don't expect that.' I " mean, their expectations can be too low.

Research into Deaf parents with Deaf children echoes these fears, along with worries that not being exposed to ASL in an academic context devalues the language in the eyes of the students.

Deaf Education and Audism

- Though various methods have been tried over the years, the end goal has always remained the same: for deaf students to achieve fluency in reading and writing (and often speaking) English. For the last hundred years or so, formal deaf education was entirely oral and focused on speech reading.

- ASL was long forbidden in many residential schools for the deaf, because it was viewed as a "contagious menace" by educators, and who decided without research that it would inhibit the acquisition of speech.

31

Manually Coded English

- It was long suspected that knowledge of ASL was a barrier to learning spoken English. Around 1960, when ASL was finally considered a "real" language, manually coded English (i.e. signed English with the addition of signs to include spoken English syntax and morphology) became the norm in deaf education classrooms.

- Manually coded English follows English word order and requires signing each individual word, including word endings, articles, and conjunctions.

Manually Coded English: Failure

- Manually coded English's supporters were disappointed in its success compared to ASL. This is likely due to several reasons:

1. . First and foremost, ASL is a natural sign language. Unlike signed codes, a natural sign language is "an entity unto itself, with its own grammatical rules […] which are in some cases quite different from those of a spoken language." Conversely, signed codes are "by definition parasitic on spoken language to a greater or lesser extent

2. Signed codes are also ineffective at transmitting the rhythm of the English language. In spoken English there is more time allocated to content words than to function words, whereas in signed codes, the content signs and the auxiliary signs (such as inflectional morphemes) are equally stressed.

Academic Achievement

- Despite the widespread use of signed code, the scholastic achievement of deaf and hard of hearing students remains low. Even though manually coded English (MCE) was supposed to help deaf students achieve fluency in English, the average reading achievement of deaf high school graduates in 1983 was at a third or fourth grade level, and math scores were below a seventh grade level.

- Low expectations of deaf and hard of hearing students lead to lower academic performance and low self-esteem. Teachers who have been trained to believe that deaf students are mentally deficient often unknowingly pass this belief on to their students.

Deaf Education Teachers

- Teachers of deaf and hard of hearing students have "low expectations of deaf students and view them as unable or slow to learn."

- An additional point of friction in the education of deaf children is that hearing people have historically been in control, and therefore have emphasized the importance of spoken English in the "successful" integration of deaf children into the hearing world.

- Another factor complicating English language learning in Deaf students is the lack of knowledge among hearing teachers as to the complexities of ASL.

> "These special educators, with no experience of growing up Deaf, think they understand the education of deaf children and are able to assess our children to figure out what the future holds for them in this world."

- G.E. Mowl, author and Deaf parent of a Deaf child.

Deaf Students in the English Classroom

Deaf Education Today

- A deaf education classroom usually employs one of two methods: the oral approach, where sign language is not used in any form; and the signed approach, which uses either manually coded English or ASL.

- Both types assume unusual cognitive development patterns and emphasize English speech and language skills.

- While learning to read and write English is an important part of a deaf child's education, ASL is an important part of their linguistic, cognitive, and cultural development.

Deaf Culture and ASL

- The Deaf community in the United States is defined by its use of ASL, a factor which unites people of diverse backgrounds in a much different way than a spoken language.

- While the same could be said about most languages, ASL is different in that a deaf child of hearing parents could experience cultural conflict within their family, up to the point that the family might not even have a language in common without the teaching of ASL to the parents and English to the child.

Multi-cultural Deaf Students

- Deaf and hard of hearing children are not homogenous; they come from a variety of linguistic backgrounds and levels of familiarity with spoken English. They may also come into the classroom with knowledge of different sign languages.

- Most deaf education pedagogy does not consider variation in the language and culture of the child and their family.

- Teachers must be able to "critically analyze, select, adapt, or redesign curriculum practices that will help children make connections between the varieties of language used at home, in the community, and at school."

ASL and Learning English

- While the language learning histories of Deaf students are very different than those of a hearing English language learner, they nevertheless make similar errors and can therefore benefit from many of the same techniques used with hearing ELLs.

- While it is a common belief that deaf students' difficulties in acquiring English stem from interference from ASL, this is not held up by research. A study investigating similarities and differences in written errors of deaf and ESL students found only three language errors that could possibly be contributed to ASL.

Students' Attitudes Towards English

- A deaf student's attitude towards learning English is often complicated by several factors: their difficulty with acquiring the language combined with the prestige of English in greater society can lead to internal conflict.

- The fact that the language they are most likely to have fluency in (ASL) is a minority language and is less valued in educational contexts is also difficult.

- Since ASL was once so devalued by mainstream academia, it has affected the way that deaf students perceive themselves as learners. Bicultural elements must be incorporated into their curriculum for deaf students to perceive themselves as fully competent learners.

Differing Attitudes

- Since students are coming into an English classroom with a variety of views about ASL and English, teachers should be prepared for a mix of opinions among their deaf students, and even conflicting opinions within an individual.

- "One cannot assume that deaf students have been exposed to ASL or predict with any certainty what their language attitudes will be. One can predict, however, that English is likely to have been an issue for them for most of their lives."

- Because of this, teachers must also be aware of their own biases, and how they present the learning of English to their students.

Complications

- Language acquisition in children with severe hearing loss is complicated because in most cases, they simply cannot perceive the majority of spoken linguistic data, and it therefore cannot apply that input into their concept of grammar and convert it into comprehensible output.
- Unlike students who have fluency in another spoken language before attempting to learn English, Deaf ASL users cannot initially be taught the grammar of English, because they do not have the vocabulary to talk about its use.
- Metalinguistic skills must first be developed in ASL, then similarities and differences noted in the second language (English).

Bilingual-Bicultural

- E. Drasgow asserts that "exposure to an artificial language […] results in an impoverished, idiosyncratic, or incomplete language system."
- Many deaf educators feel similarly and have begun to advocate for a bilingual/bicultural approach to teaching- where ASL is taught as the first or native language, and English as a second language.
- This stance is strengthened by the fact that studies show deaf children who are exposed to ASL at an early age acquire it in the same way that hearing children acquire spoken language.

Deaf Child, Hearing Parent

- Roughly 95% of deaf children are born to hearing parents. This means that many children are theoretically exposed to English, but because so much of spoken English is inaccessible to a deaf/HoH child, it does not actually function as a mother tongue.

- This means that hearing parents are often scared about what impact being deaf will have on their child's future. It is important that these parents are exposed to successful adult Deaf role models to allay their fears.

- Ideally, with exposure to the Deaf community, parents will understand that ASL does not interfere with English acquisition, and that ASL provides another avenue of communication between them and their children.

The Way Forward

- While experts remain unconvinced about the effectiveness of bilingual/bicultural models, they generally agree that there must be parental acceptance and involvement, administrative support, and more Deaf adults involved in every level; from role models in the classroom to being part of administrative and educational policy decisions.

- Deaf adults are the product of the deaf education system, and as such their input is incredibly valuable in determining the success of future generations of deaf students.

Accepting Deaf Culture

- Part of the work that needs to be done is at a cultural level, with the Deaf community being recognized not as "a loosely knit group of audiologically impaired individuals" but as "a linguistic and cultural minority whose complex history, language, and literature warrant sustained recognition."

- As teachers, we can do this by including Deaf culture in our multicultural classrooms, and changing our language surrounding deaf students from the pathological to the practical.

Redefining Deaf Education

- Deaf education professionals and parents of deaf and hard of hearing students are often frustrated, believing that their students are under-prepared and undereducated compared to their hearing peers.

- Humphries and Allen propose a new approach: moving away from the "special education" school of thought that assumes deaf and hard of hearing children are deficient or developmentally delayed. Instead, understand that deaf/HoH children are emergent language learners that require environments similar to other ELLs.

Integrating TESOL and ASL

- As TESOL teachers who might work with deaf and hard of hearing students, we must recognize and utilize the rich linguistic and cultural resources they already have, using them as building blocks for English language literacy.

- An example of English being aided by ASL: Fingerspelling, an important component in literacy development for deaf and hard of hearing children. Like a hearing child sounding out the words, it serves as a tool to decode English words, and can also be used as a placeholder until more context is given to identify the word.

Successfully Bilingual: CODA

- Deaf children of Deaf families, and hearing children of Deaf adults (referred to as "Child of Deaf Adult" or CODA) that use ASL in the home tend to be more successful at reading and writing. These families produce functionally bilingual children in ASL and English.

41

Scientific Advances

- We are now identifying hearing loss at an earlier age than ever before. Prior to the 21st century, children were often not discovered to be deaf or hard of hearing until parents realized their child wasn't learning to talk, around age two or three.

- Advances in technology and Early Detection and Hearing Intervention (EHDI) programs mean that deaf children are being diagnosed younger than ever. This is good news for their linguistic development- the sooner they are given linguistic input that they can process (e.g. ASL) the higher their chance of academic success.

Our Goal

- As TESOL teachers, we can aid deaf educators in creating bilingual classrooms, drawing on our experiences and research-based practices.

- Working with deaf educators, we can modify successful practices used with hearing ELLs to better serve all deaf and hard of hearing students, allowing them to gain fluency in written English.

42

GUIDELINES FOR WORKING WITH INTERPRETERS

Before the meeting

- Meet the interpreter beforehand to introduce yourself and explain your role in the classroom.

- Give a copy of the lesson plan (with any modifications) to the interpreter. This is especially necessary with vocab they may be unfamiliar with,

- Plan enough time – You may not be able to cover as much material as you would sans interpreter.

During the meeting

- Orient yourself facing the deaf student (many deaf students have some residual hearing, and rely on you and your voice/facial expressions as well as the interpreter's).

- Try not to move around too much- and don't block to view of the student to the interpreter.

- Face the student and speak to them directly, as if you both spoke the same language.

- Don't speak too fast. Pause after each complete thought and/or when the interpreter signals to you to allow for the interpretation.

- Leave time for questions, and be willing to repeat and/or reword your speech.

- Confirm understanding by asking the student to repeat key information back to you.

- Be aware of the education level of your student in order to phrase your message at an appropriate level. Avoid using acronyms and idioms and take time to define new vocabulary.

- You are communicating THROUGH the interpreter but TO the student. Dealing with cultural differences and the personality of the student is primarily your job, not the interpreter's. Some examples of things to keep in mind regarding cultural and linguistic differences

- There may be less eye contact with the client than you customarily expect.

- A smile or nod on the part of the patient may not indicate total agreement.

(modified from: https://umtia.org/resources/how-to-work-with-an-interpreter/)

LESSON PLAN TEMPLATE

Subject / Course:	SCIENCE	
Topic:	ASTRONOMY	
Lesson Title:	The Solar System	
Level:	Lesson Duration:	45 min

Lesson Objectives:

The students will know the 8 planets- their order, different sizes and their names. They will be familiar with new words, such as solar system, orbit, asteroid.

Summary of Tasks / Actions:

Opening to Lesson

Begin by drawing a big sun on the board and "Solar System". Ask the students if they know what this is, and ask for volunteers to come up to the board and draw anything they can think of that is related to the solar system. Discuss what makes up the solar system- stars, planets, asteroids: find out their background knowledge. If they are any words they don't know, explain using diagrams.

Students will watch a video (song)about the Solar System and the different planets.

https://www.youtube.com/watch?v=uVVfALI4MxU   (play it a few times)

Ask students: What are the 8 planets? Can they remember them all, and in the right order.

How long is a year? (time it takes for the Earth to go around the sun).

Talk about what the word "orbit" means. Pause the video to explain what orbit means— the lines going around the sun is the "path" that the planets take. Does anyone know what an asteroid is?

Body of Lesson

First the students will write in their notebooks their own definitions of:

Solar system,   Orbit,   Planet,   Asteroid

Next, divide the class into 2 groups.

Group 1

Using different balls to represent the planets, students will arrange them in order. For example, basketball- Jupiter, soccer ball- Saturn, 2 softballs- Uranus and Neptune, 2 ping pong balls- Earth and Venus, 1 jacks ball- Mars, 1 marble- Mercury.

They will record in their NB, by drawing pictures of the planets (they should show that they understand that different planets have different sizes), their names and arrangement.

Group 2

Choose 9 students to "be a planet". One student is the sun. Give each of the 8 other students of piece of cardboard with the name of a planet on it. The students need to arrange themselves in a line in the right order. Then they physically (move) orbit around the sun.

They will record in their NB, by drawing pictures of the planets, their names and arrangement.

After 12 minutes, groups swap.

If students don't finish drawing when time's up, they can continue in the second activity: both group activities have the same aim.

Closing

Students will watch another video (song) which gives more information about the sun, and the 8 planets: https://www.youtube.com/watch?v=BZ-qLUIj_A0

Materials / Equipment:

student notebooks

projector

computer with internet

basketball, soccer ball, softball x2, ping pong ball x2, rubber ball, marble

References:

https://www.youtube.com/watch?v=uVVfALI4MxU

https://www.youtube.com/watch?v=BZ-qLUIj_A0

Take Home Tasks:

For homework students can research information about their favorite planet.

Create a small poster with some pictures and some interesting facts.

Questions for Consideration:

1. How can we make this lesson accessible to deaf students?

2. What are some potential issues?

3. How would you use an interpreter in this setting?

4. Are there additional activities you would suggest for a class with a deaf student?

Chapter Five: Conclusion

Starting this project, I never would have believed that my lifelong interest in American Sign Language and Deaf culture would dovetail so nicely with my TESOL studies. I likewise could not have foretold that my stance on ESL services for deaf and hard of hearing students would expand from my original position. Initially, I believed that TESOL services should be provided to deaf and hard of hearing students whose families did not speak English. But, as I learned more about the realities deaf students face, especially in regards to their exposure to English prior to entering school, I became convinced that most deaf children fit the criteria of emergent language learners and should be treated as such, receiving ESL services as well as other language intervention services.

In too many cases, deaf and hard of hearing students are at best lumped in with special education because of their need for accommodation or at worst considered mentally deficient, when their "delays" are in fact the result of being unable to access spoken language at an early age. That we should be talking about early childhood language acquisition as a new idea in this millennia when it was first proposed in deaf contexts in the 1880s (Neese Bailes, 2001) is further proof that the advances in mainstream education have passed by deaf education, leaving deaf students underserved.

I propose that as TESOL teachers, we can use our expertise to aid deaf educators in creating bilingual and bicultural classrooms, drawing on our

experiences and research-based practices. Working with deaf educators, we can modify successful practices used with hearing English language learners to better serve all deaf and hard of hearing students, allowing them to gain proficiency in written English.

There remains much work to be done in this field, and I am especially eager to see what might come of a partnership between deaf educators and TESOL teachers. If these ideas are implemented, will we finally start to see a positive change in the educational outcomes of deaf and hard of hearing students? I am particularly interested to see what would happen if Deaf culture were honored the way we celebrate the cultures of other linguistic minorities. Would the "Deaf World" become more accessible to deaf and hard of hearing students and their hearing families?

I also hope to see greater opportunities for Deaf adults to influence deaf education as role models, teachers, administrators and researchers. Their lived experience as products of the deaf education system and members of Deaf culture is an invaluable resource for future generations of deaf and hard of hearing children. Additionally, any future research on this topic, by myself or by other researchers should include Deaf voices. I acknowledge that my perspective on this issue is one-sided and would be greatly enriched by working with Deaf scholars and educators on any future research.

Additionally, as readers may have noticed, I did not bring up the debate around cochlear implants in this paper. The reasons I chose not to do so were twofold. First, I did not feel confident in my ability as a hearing person to accurately represent the arguments for and against cochlear implants in children. Second, children that are implanted at a young age do have greater success in acquiring English, but they still need specialized instruction in English to make up for the loss of input prior to implantation.

References

Allen, T. (1986). Patterns of academic achievement among hearing impaired students: 1974-1983. In Shildroth (Ed.), *Deaf Children in America* (pp. 161-206). San Diego: College-Hill Press.

Andrews, J. F. (2012). Reading to Deaf Children Who Sign: A Response to Williams (2012) and Suggestions for Future Research. *American Annals of the Deaf, 157*(3), 307-319. Retrieved from https://www.jstor.org/stable/26234844

Andrews, J. F., & Martin, G. (1998). Hopwood, Affirmative Action, and Deaf Education. *American Annals of the Deaf, 143*(4).

Andrews, J., & Rusher, M. (2010). Codeswitching Techniques: Evidence-Based Instructional Practices for the ASL/English Bilingual Classroom. *American Annals of the Deaf, 155*(4), 407-424.

Burch, S. (2002). *Signs of Resistance: American deaf cultural history, 1900 to World War II.* New York: New York University Press.

Cummins, J. (1979). Cognitive/academic language proficiency, linguistic interdependence, the optimum age question and some other matters. *Working Papers on Bilingualism, 19*, 121-129.

Drasgow, E. (1993). Bilingual/Bicultural Deaf Education: An Overview. *Sign Language Studies, 80*, 243-266. Retrieved September 19, 2019

History & Cogswell Heritage House. (2019, September 29). Retrieved September 2019, 2019, from The American School For the Deaf: https://www.asd-1817.org/about/history--cogswell-heritage-house

Humphries, T., & Allen, B. M. (2008). Reorganizing Teacher Preparation in Deaf Education. *SIgn Language Studies, 8*(2), 160-180.

Lane, H., Pillard, R., & Hedberg, U. (2011). *The people of the eye: deaf ethnicity and ancestry.* New York, New York, USA: Oxford University Press.

Langston, C., & Maxwell, M. (1988). Holistic judgement of texts by deaf and ESL students. *Sign Language Studies, 60*, 295-312.

Luft, P. (2016). What is Different About Deaf Education? The Effects of Child and Family Factors on Educational Services. *The Journal of Special Education, 51*(1), 27-37. doi:https://doi.org/10.1177/0022466916660546

Meadow-Orlans, K., Mertens, D., & Sass-Lehrer, M. (2003). *Parents and Their Deaf Children: The Early Years.* Washington: Gallaudet University Press. Retrieved from https://www.muse.jhu.edu/book/4276

Moog, J., & Rudge, A. (2019). 21st Century Teenagers and Young Adults who are Deaf or Hard of Hearing: Outcomes and Possibilities. *Journal of Early Hearing Detection and Intervention, 4*(1), 1-14. doi:10.26077/jzyj-kz24

Mowl, G. (1996). Raising Deaf Children in a Hearing Society: Struggles and Challenges

  for Deaf Native ASL Signers. In I. Parasnis (Ed.), *Cultural and Language*

  Diversity and the Deaf Experience (pp. 232-245). New York: Cambridge

  University Press.

Nielsen, K. (2012). *A Disability History of the United States.* Boston: Beacon Press.

Simms, L., & Thumann, H. (2007). In search of a new, linguistically and culturally

  sensitive paradigm in deaf education. *American Annals of the Deaf, 152*(3), 302-

  311. doi:http://dx.doi.org/10.1353/aad.2007.0031

Solomon, A. (2012). *Far From the Tree.* New York, New York, USA: Scribner.

Swisher, M. V. (1989, June). The Language-Learning Situation of Deaf Students.

  TESOL Quarterly, 23(2), 239-257.

Thumann-Prezioso, C. (2005). Deaf Parents' Perspectives on Deaf Education. *Sign*

  Language Studies, 5, 415-440. doi:10.1353/sls.2005.0020

Wilbur, R. (1987). *American Sign Language: Linguistic and applied dimensions* (2nd

  ed.). Boston, MA, USA: Little Brown & Company.

Wilcox, S. (1984). "Stuck" in school: a study of semantics and culture in a Deaf

  education class. *Sign Language Studies, 43*, 141-164. Retrieved from

  www.jstor.org/stable/26203604

Wing, G. (2001). The Associative Feature in the Education of the Deaf. In L. Bragg

  (Ed.), *Deaf World: a historical reader and primary sourcebook* (pp. 165-174).

  New York, New York, US: New York University Press.