READING ME BACK INTO SCHOOL: SUCCESSFUL DEAF AND HARD OF HEARING READERS IN THE MAINSTREAMED SETTING

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Liza Eleonora Offreda
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Abstract

The purpose of this narrative inquiry was to explore the experiences of adult deaf and hard of hearing people as they learned how to successfully read in a mainstreamed setting. The qualitative approach allows for deeper insight into the perspectives of the learner, as these adults reflected on their childhood experiences of literacy development and shared their personal, yet strikingly similar, stories of triumph. Linguistic and cultural narratives are presented, with a focus on the language use of the deaf community versus the hearing community, and on how much support subjects received in terms of access to language, especially in a hearing environment. The theoretical framework is shaped by sociocultural theory and focuses on the importance of social interaction, society’s influence on each individuals’ development, cultural beliefs and attitudes that influence learning, and the environment of the learning process. Unpacking complex issues through narrative inquiry provides a lens into issues that deaf and hard of hearing students face as learners. The investigations in this study tap into those complex issues of history, culture, and language of the deaf community, and may be used as a source of inspiration and guidance for future policy discussions.

Keywords: deaf and hard of hearing students, cultural narratives, deaf community, sociocultural theory, narrative inquiry
Dedication

To my mother,
who made important and difficult life decisions raising a Deaf child.
You are my inspiration.
Acknowledgements

This work ultimately became a story, an important story on my journey called life. I am so thankful to the people who are part of this story, one I will retell for years to come. My participants retold their stories which were the heart of this project. I want to express my sincere gratitude to them for sharing their stories, from which I and my readers were able to learn so much. This is their gift to us.

My journey started with my parents, and my mother’s stories about raising a deaf child inspired this work. Every day before school, my mother would sit with me outside watching the squirrels and engaging in conversations in sign language before putting me on a yellow bus that took me to school. She wrote in my journal to keep me company on those long bus rides. She put “Sign Me a Story” with Linda Bove on TV every time I asked for it, so I could see someone signing on a TV screen. She set up the closed captioning when it was an afterthought for many. I owe it all to you, thank you from the bottom of my heart. Your sacrifice as a mother allowed for me to pursue a doctorate degree and to live my dream, the very same dream you once dreamed of. You are the heart of my stories and my inspiration. My father also never stopped pushing me to strive for greatness. He would drive long distances to take me to soccer practices, games, and tournaments. With those rides came endless conversations and stories that we shared together. It
was from these shared moments that I learned the importance of discipline, determination, passion, family, and love. Thank you for your important words of wisdom about life. Every time I stepped on that field, you were by my side, and every time I sat down to write, you were by my side. Saro' sempre la rosa del tuo cuore.

I have so many stories about my sisters and brothers, but not one story consists of them not believing in me and treating me differently because I was deaf. My reality was quite the opposite. My siblings supported me and loved me. To them, I was more than just a deaf sister, thank you all for that. Now, I get to see your children create stories of their own. I have just one hope for them, to remember to never stop chasing their dreams.

Endless conversations and sharing stories is the heart of relationships with people. I would like to thank Ellen. What would I do without you? Thank you for being my rock throughout this work. You never once doubted me and you never stopped supporting me from day one! Thank you for telling me to keep writing when I didn’t feel like it and thank you for becoming my unofficial second reader. You devoted so much time and energy in ensuring I achieved the goal of becoming the first doctor in my family. I will forever thank you for your role in this story.
This story was made possible with Dr. Lynda Beltz and my dissertation committee. Dr. Beltz, it has been an honor to call you my advisor, one who I counted on for a push to finish my work on a tight schedule. Thank you for your insight and important feedback to make this possible. My dissertation committee, Dr. Kristal Clemons and Dr. Lori Lutz, thank you for taking the time to work with me and help me achieve my dream of obtaining a doctorate degree.

I want to thank all of my family members, friends, colleagues, and interpreters who ultimately cared about this work and supported my stories throughout my dissertation journey, and my journey that is called life.

Lastly, my story is not complete without a mention of my loyal sheltie. Mr. B, you always watched me write and never once left my side. This dissertation is as much yours as it is mine. Thank you for being a patient little boy who knew when it was time to play and when it was time to let me work.

To all my readers, I hope you enjoy this story.

_Here’s to reading me back into school._
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Chapter I: Introduction

We all want children to succeed, even those that aren’t our own. The hallmark of a progressive society is the success of its children. The key to that success is education, and the fundamental determining element of that education is literacy. Literacy, and hence education, empowers people, and enables them to participate in and contribute fully to society. Our aspirations are no different for deaf children, whose brains are intact and who simply learn through a different modality. Yet, the educational system for deaf children has time and again failed to produce fully literate deaf adults. And still, we see a few who have persevered and achieved higher levels. What was the magic ingredient that led to the success of a few? That is what this study seeks to discover.

Statement of the Problem

The focus of this research project is on the deaf and hard of hearing population. In general, the medical establishment are the first to identify a child as deaf or hard of hearing via an audiogram, which determines how much they can and cannot hear. Yet, after diagnosis, the audiogram is irrelevant to the overall need for the input of a visual language. In addition, how one identifies is a matter of personal preference and level of affiliation with the deaf community. Therefore,
this paper does not address the audiogram nor levels of hearing in any way, and instead aims to investigate the educational pedagogy that best facilitates literacy development for all children who are deaf or hard of hearing. Throughout this paper, it is evident that the research suggests that regardless of one’s audiogram, affirming perspectives and actions toward the linguistic and cultural nature of being deaf is a necessary ingredient for the healthy development of a deaf child.

The timing of early exposure to a natural signed language is essential for the academic success of deaf and hard of hearing students (Mayberry, 2007). Deaf and hard of hearing students have a better chance of becoming proficient readers if schools/programs use American Sign Language as the primary language of instruction (Hoffmeister & Caldwell-Harris, 2014). There is a significant risk of language delays when deaf and hard of hearing students are not exposed to an accessible language at a young age (Mayberry, 2007). Current research has shown the negative impacts on literacy development when deaf and hard of hearing students lack sufficient opportunities for language development (Humphries, Kushalnagar, Mathur, Napoli, Padden, Rathmann, et al., 2013). Without access to language, deaf and hard of hearing students become linguistically deprived, which impedes their literacy growth. Research on the brain and the science of language acquisition validated the importance of sign language in language learning (Humphries et al., 2013).
Limited access to English through the auditory mode is assumed as the underlying factor of deaf and hard of hearing readers’ struggle with literacy development, but this is not the case (Kuntze, Golos, & Enns, 2014). Current research does not provide a baseline or a model of how deaf and hard of hearing readers become successful and develop the necessary reading skills without the use of their hearing (Kuntze, Golos, & Enns, 2014).

Many schools for the deaf and hard of hearing across the United States have adopted an American Sign Language/English bilingual education as a response to concerns that first language acquisition delays affect deaf and hard of hearing students’ cognitive development (Baker, 2011). A bilingual framework/approach consists of three focuses within the methodology: oracy (listening, speaking, and speechreading spoken English), signacy (receptive and expressive American Sign Language (ASL), fingerspelling/ finger reading) and literacy (reading/writing written English). With an American Sign Language/English bilingual education, the ultimate goal is to educate deaf and hard of hearing students through access to both languages and cultures (Evans, 2004).

Current research studies indicate the implementation of ASL/English bilingual education typically occurs at residential schools for the deaf and hard of hearing. The current literature implies that implementation of this bilingual methodology within other settings such as public and charter schools is not
emphasized nor dominant. Gallaudet University’s Research Institute provided important demographic information about deaf and hard of hearing students through a survey which sheds light on this issue. In 2008, the Gallaudet Research Institute reported that 85% of deaf and hard of hearing students are served within a setting that is not identified as residential. This resulted in the conclusion that 85% of deaf and hard of hearing students are served in a nonresidential setting, which means they’re being mainstreamed in an environment designed for hearing students. Minimal attention by researchers has been directed towards the needs of deaf and hard of hearing readers in the mainstreamed setting.

**Justification for the Research Problem**

In the field of deaf education, even after 150 years of formal education and practice, the issue of literacy development of deaf and hard of hearing students remains a problem of practice for educators across the nation. In reporting on the Stanford Achievement Test 9th edition for eighteen-year-old students who are deaf or hard of hearing, Traxler (2000) revealed that the average reading comprehension level was just below the 4th grade level.

This study aims to explore an area not yet explored with the aim of mitigating, and one day remedying, the literacy gap currently plaguing the deaf and hard of hearing population. Examining the literacy needs of deaf and hard of hearing children, and their success along with their struggles, allows us to take a
closer look at instructional practices and methodology. A qualitative approach involving the personal stories of successful deaf and hard of hearing adult readers grants us insight into their literacy development, and ignites a shift to explore teaching approaches that focus on the visual medium and skills of deaf and hard of hearing readers, rather than invalid assumptions and traditional practices that incorporate the medical perspective or that are sound-based and do not meet the needs of the deaf and hard of hearing population.

**Deficiencies in the Evidence**

A limited availability of research that focuses on skilled deaf and hard of hearing readers in mainstreamed settings has impacted the pedagogical knowledge necessary to improve classroom literacy instruction. In previous research, a common theme is evident with the focus on the deficits of deaf readers and comparing them with hearing readers who learn literacy in a different manner and form of instruction. Hence, classroom teachers can greatly benefit from literature and data collection based on successful reading strategies or skills used by deaf and hard of hearing students in the mainstreamed setting.

As a researcher, I have decided for this research effort, to use narrative inquiry as my research method. With this approach, narrative inquiry provides a personal analysis of successful deaf and hard of hearing readers and their backgrounds, which includes family members, communication, language
preference, and most importantly, how the language and culture of the deaf and hard of hearing population impacted their growth as readers and their language acquisition in the mainstreamed setting. The heart of my research lies in the interview process of deaf and hard of hearing adults who have earned a graduate degree as a result of at least ten years in a mainstreamed setting in their K-12 education experience. This will foster and urge educators and administrators in the mainstreamed setting to evaluate and implement successful approaches in literacy instruction.

**Theoretical Framework**

The theoretical framework of this study is shaped by sociocultural theory. Sociocultural theory focuses on the importance of social interaction, society’s influence on one’s development, cultural beliefs, and attitudes that influence learning, and the environment of the learning process. The research questions of this study reflect the importance of social interaction between the learner and those in their immediate environment. The theory guides the questions by focusing on literacy development that may be determined by society, social interaction and cultural beliefs. The questions specifically examine the culture surrounding the reading process and how deaf and hard of hearing students develop as readers in the mainstreamed setting.
Developed by Russian psychologist, Lev Vygotsky (1986), sociocultural theory stems from the argument of the importance of social interaction in the cognitive development of a child. With social interaction, Vygotsky (1986) believed in the influence of parents, caregivers, teachers, peers, and the society in which the child lives, on one’s development. With society’s influence, children become immersed in their surrounding culture which impacts their individual development as a whole (Vygotsky, 1986). Cultural beliefs and attitudes of society impact how the child learns and how the child adapts to the environment (Vygotsky, 1986). Vygotsky’s sociocultural theory is pivotal when it comes to a child’s language and literacy development. Ideally, surrounded by people who are more fluent in language and literacy, children receive guidance and tools for learning (Vygotsky, 1986). Vygotsky (1986) believed that we cannot understand a young child’s language development without studying the environment where learning happens and the social interaction of more fluent users of language with the child.

The Zone of Proximal Development is a concept derived from sociocultural theory (Vygotsky, 1986). Vygotsky described this concept as when “a child’s empirically rich but disorganized spontaneous concepts meet the systematicity and logic of adult reasoning” (Vygotsky, 1986, p. xxxv). As children receive language and literacy guidance, their level of development is controlled by the adults or
more capable peers (Vygotsky, 1986). This concept becomes an important part of a deaf and hard of hearing reader’s literacy development as they rely on adults or more capable peers to become a successful reader.

Sociocultural theory has been utilized and reviewed by a variety of research literature on the relationship between language acquisition and cognitive development (Bruner, 1983; Cummins, 2000; Dickinson & Tabors, 2001; Hart & Risley, 1995). These studies explored the relationship between adults and children’s conversations and how it influences literacy development.

Each tenet of sociocultural theory contributed to the development of my study. It provided a frame for my research. With the theory in mind, I reflected upon my problem of practice and how deaf and hard of hearing readers are influenced by the multitude of interactions that happen during the reading process. Interactions are facilitated and made possible through the use of language. Deaf and hard of hearing readers are heavily influenced by the language use within their environment, and the culture of the classroom as they engage in the learning process.

Deaf education is more complex than other fields in education due to the fact that it includes the issues of language and culture, other than the dominant language and culture. In the field of deaf education, we face the question of what language to use, American Sign Language versus Spoken English. Technological
advances within the past thirty years - specifically the cochlear implant, a surgical procedure providing an electronic device aiming to provide hearing to those who cannot hear - has greatly impacted the field of deaf education as educators now incorporate the medical perspective more than ever.

The medical perspective influences the field of deaf education as medical professionals purport to know the fields of linguistics and cognition, in that they dictate what language to use in instruction. Doctors who perform the surgical procedure discourage the use of American Sign Language (ASL), a visual language which is fully accessible to those who are sighted and deaf, as they claim it negatively impacts spoken English language acquisition. The medical perspective influences the stakeholders and their advocacy for language rights and in turn influences how we as educators of the deaf and hard of hearing look at curriculum and how to teach literacy.

Deaf education now is faced with different perspectives/approaches; some educators, schools or programs prohibit the use of American Sign Language (ASL), adhering to the medical perspective (oral education), and some other schools or programs utilize the bilingual approach, the use of both American Sign Language and spoken English.

Deaf and hard of hearing students are often deprived of their natural language and culture, American Sign Language and deaf culture. This in turn
impacts their educational experience in the classroom and their success as readers. With the application of sociocultural theory, light can be shed on the language used during social interaction in the classroom and the significant interaction between a teacher and a student during literacy instruction.

**Research Purpose and Questions**

With the current state of affairs, it’s a wonder any deaf children have become successful readers. Like a dandelion up through the pavement, we persist. The purpose of this research is to collaborate with successful deaf readers, who were educated in the mainstreamed setting, to highlight and analyze their literacy development, and what contributed to their success.

**Central Question:**
What are the main underlying factors that contribute to the development of successful deaf readers in the mainstreamed setting?

**Sub Questions:**
1. What is the role of teachers, staff, and interpreters in the development of the reading process of deaf and hard of hearing readers in the mainstreamed setting?
2. What literacy strategies do staff members utilize to develop deaf and hard of hearing students into successful readers?
3. What are the challenges of developing as a deaf and hard of hearing reader in the mainstreamed setting?

4. What was the instructional/philosophical approach of the program/school the subject attended and how did this impact the deaf and hard of hearing reader?

**Significance of the Research Problem**

Educators of deaf and hard of hearing students, along with their family members, struggle to find significant studies and research-based data that address how deaf and hard of hearing readers become successful readers, on grade level and on par with their hearing peers. A narrative study of the successful literacy development of deaf and hard of hearing readers taught within the mainstreamed setting is important and ultimately significant due to the fact that 85% of deaf and hard of hearing students are receiving their education in public school programs, in mainstreamed settings (U.S. Department of Education, 2004). The most significant contribution of this study, are the firsthand accounts and real experiences of successful deaf and hard of hearing readers, who are currently in the workplace with a graduate degree or studying to earn their doctorate. Educators and families can utilize the research provided through this study to gain a sense of understanding of what it takes to become a successful reader, especially in an environment where hearing children are the majority.
A deeper understanding of the factors that contribute to success for a deaf and hard of hearing reader will allow schools to respond to an increase in deaf and hard of hearing students finding their way into the mainstreamed setting. We are paradoxically seeing a decline in attendance at schools for the deaf which are already utilizing an ASL/English bilingual education, the chosen methodology to addressing the literacy concerns of deaf and hard of hearing students. This study aims to gain insight on what expertise is necessary to address the literacy concerns in the mainstreamed setting, where educators do not yet utilize the ASL/English bilingual education approach. By using narrative inquiry as my research method, I can further explore the issues in mainstreamed programs and the challenges students face.

My research was undertaken with the hope that my findings might influence current leaders in the deaf education field. Instead of scrambling for answers on how to address the unique population within a mainstreamed setting, my research provides a deeper understanding of the needs of deaf and hard of hearing readers. It is my hope that my research will influence educational methodology for the mainstreamed setting and reduce the reliance on the medical perspective that does not take into account the educational needs of deaf and hard of hearing students.
Technological advances such as the cochlear implant have opened doors for the medical perspective to thrive and have biased educational methodology for deaf and hard of hearing students toward the more oral methods. Using data from the Annual Survey of Deaf and Hard of Hearing Children and Youth (1999-2000), the Gallaudet Research Institute’s team of researchers that surveyed the nation made the discovery and confirmed that less than 5% of deaf and hard of hearing children had at least one deaf parent (see also, Mitchell & Karchmer, 2004; Baker, 2011). This strengthens the impact of the medical perspective, as the majority of deaf and hard of hearing students have hearing parents who blindly trust the opinions of their doctors who discourage them from exploring opportunities where their child can receive proper language development and instruction through their natural language, ASL.

How do today’s educators apply research-based instructional methods when there is little to no evidence-based strategies that support literacy development of deaf and hard of hearing readers in the mainstreamed setting? This question leaves me sleepless at night and has greatly informed my research. In large part, my aim was to offer up a different perspective from that which usually results from research on deaf and hard of hearing readers. Teachers, educators, administrators, policymakers, and families will benefit from this study, and hopefully others like it in the future, that clearly display literacy skills that are derived from evidence of
success. This study has the potential to instigate reform and allow policymakers the opportunity to gain a different perspective, a first-person account from deaf and hard of hearing readers regarding their experiences, as opposed to the customarily examined and referenced medical perspective. As a result, together, we can take a step towards positive change.

**Positionality Statement**

My personal experiences as a deaf student and teacher informs my perspective on the issue of literacy for deaf and hard of hearing students. I see myself as a change agent and advocate for the field of deaf education. My research framework incorporates a deeper understanding of my biases, beliefs, and opinions about the issue of literacy. As I present an analysis of my positionality and the influence on my role as a scholar-practitioner, I also explore how my research presents an accurate perspective of the issue of literacy.

I was born Deaf in 1987, a time when hearing tests were not required by hospitals. I was the 5th child born to an Italian father, who immigrated to the United States when he was 18 years old and a mother, who dedicated her life to doing what was best for her five children.

Guided by an experienced mother’s intuition, my mother knew that something was amiss. After noticing that I did not respond to loud noises, she took it upon herself to test my hearing, banging pots behind me, vacuuming under my
crib when I was asleep, and the like. My mother vividly recalls an incident where a family friend had been using her voice to say hello to me, an infant at the time, but then abruptly came into my visual field right up to my face at which point I screamed and was visibly scared. She later realized, it was because I didn’t hear her coming.

After the hearing tests she conducted at home, my mother took me to see a pediatrician and mentioned that she thought I could not hear. Although that doctor said I was simply preoccupied, and her husband, my father, was in denial, she nevertheless persisted by bringing me to an ENT and finally to an audiologist. The whole process, from that point until diagnosis, took at least 3-4 months, from finally getting the appointment, to doing a regular hearing test, then an auditory brainstem response (ABR) test.

At 10 months old, in August of 1988, my mother finally received confirmation that her baby was deaf. “How is she going to learn how to read?” was the first question she asked, as my mother tried to cope with the news. The first time she ever met a deaf human being, it was her very own baby. Faced with the unknown, still in shock, and going through a grieving process, my mother immersed herself in finding out everything she could about raising a deaf child. In an instant, she was faced with having to make important decisions about what approach she would take to raise me. She read about different approaches in deaf
education. Neither the oral approach, nor the use of cued speech, felt right to this intuitive mother. She then came across the total communication method, which seemed to her to incorporate all the current day approaches. She wanted to give me the best chance to learn, so being in an environment that incorporated every aspect of deaf education, to see what fit best for me, seemed like the best choice.

In September of 1988, my mother enrolled me in an early intervention program for deaf and hard of hearing children, where I was first exposed to sign language. The program had services for deaf and hard of hearing children, and for their families as well. They had parent meetings and classes, and workshops specifically for fathers, and siblings. My parents had the opportunity to talk to other parents of deaf children, to go to sign language classes, and to have access to sign language videos. My mother took me and my older sister, who was 3 years older and not yet enrolled in school, to the program three times a week. They would watch me learn sign language through a glass window. The wonderfully positive experience of this program enabled my parents and siblings to give me the necessary support that I needed. Little did she know at the time, that she was making great decisions, and would go on to watch me thrive in all aspects of life, the underpinnings of which were first and foremost literacy. My mother’s determination and strength propelled her forward in continuing to advocate for me throughout my childhood years.
I then enrolled in a mainstreamed program. From preschool to 1st grade, I was in a self-contained classroom with a teacher of the deaf who used sign language to teach. We also had an aide who was deaf, and who served as a language model. In 2nd grade, I went into a mainstreamed classroom with hearing peers for English only to see if I could succeed in this environment. In 3rd grade, I was placed in the mainstreamed classroom all day with an interpreter. Because of a change in the schedule, I had a different recess/lunch time as my deaf friends. I missed my deaf friends and it was very scary being in a classroom with all hearing children. For four years, I sat alone in the cafeteria every day, where the only people who talked to me were the lunch ladies and my interpreter who stopped by every now and then to check on me. At recess I was never picked to play sports with the hearing kids, to the point where I would just spend recess hiding in the bathroom to avoid the embarrassment.

In 7th grade, I started junior high school, in the same building as the high school. There were more deaf peers which made for a better environment. I finally had deaf peers in elective classes like art and physical education. I also saw them during lunch time. By then, I was used to being alone in the classroom with an interpreter.

The change in educational settings (from a self-contained class to a regular class with an interpreter) was a result of being on-par with my hearing peers. The
self-contained classroom was a disservice for deaf students who read on or above grade level. So, I was placed in a regular classroom. However, I did not have the same connection that my hearing peers had with our teachers. Instead, I bonded with my interpreters and sat in front of the classroom on the side of the room to avoid any distractions or interference for the teacher and other students. I received a great education but my experience participating in class and socializing with my hearing peers was minimal. In the self-contained classroom setting, there was direct communication with the teachers and students, yet the teachers were unqualified in both their content area and in their use of American Sign Language (ASL). This disparity in the quality of education, with each setting missing a critical component for any child’s development, is the reason I decided to become a teacher.

After graduate school, majoring in deaf education, I started working at a school for the deaf, teaching English. For the very first time, I experienced a setting where deaf students were the majority and were provided with a positive environment. As a teacher, I saw the valuable impact of the Bilingual/Bicultural approach on the literacy and language development of deaf and hard of hearing students. I taught my students through their first language, ASL, and they received direct instruction, something that I never experienced in middle school or high school. I saw my students have access to role models and language models
through their deaf and hard of hearing teachers, which had become the norm. This positively influenced their educational experience, something that was rewarding to see as a teacher.

My K-12 educational experience was in a mainstreamed setting, a deaf and hard of hearing program at a hearing school, the opposite of my teaching experience. Not every deaf or hard of hearing child has access to a school for the deaf, and not every deaf or hard of hearing child’s best educational environment is at a school for the deaf. In my situation, the school for the deaf was 2 hours away, not ideal nor even an option for my family. However, my family wanted a program where I could receive services, which unfortunately, was not at my hometown school. An hour from home, my mainstreamed program, had two separate tracks within the deaf and hard of hearing program. The two tracks consisted of two different educational philosophies, the oral education method and the total communication method. The oral education method consisted of instruction through spoken English only, prohibiting the use of ASL. The total communication method was a mix of signed exact english (sign language in English order), spoken English, contact sign language (style of language that combines spoken English and sign language) and ASL. Students in the two programs were not allowed to take classes together nor to interact in the hallways, at recess or in the lunchroom. This separation of deaf children created an
oppressive hostile environment where denial of deaf identity and language rejection prevailed. It was here that I experienced firsthand the issues that plague deaf education; the war between two very different educational philosophies having a devastating polarizing effect on the children it was raising. As a young child, I became fluent in sign language (a mixture of ASL and SEE), through my family members, my teachers/staff, and my peers. The mainstreamed program supervisor and the majority of the educators felt as if sign language would impede literacy development. They made it clear that they firmly believed sign language was inferior to speech, which created an oppressive educational environment where deaf culture and ASL were constantly seen in a negative light. Defying all odds and perspectives of my educators, I continued to read above grade level throughout my time as a K-12 student, fluent in both languages, ASL and English.

The oppressive educational environment as a deaf student in the mainstreamed setting fueled my passion for the deaf education field and my desire to make a difference for our future generations of deaf and hard of hearing students in the mainstreamed setting. This experience led me to my dream of becoming an English teacher and striving to provide a classroom filled with both languages and both cultures. My experiences truly shaped and defined the person and the educator I am today.
My determination and push for a bilingual/bicultural education stems from my experiences and my cultural beliefs as a deaf person who communicates primarily in ASL. In regard to the issue of literacy, I have a predisposition toward advocating for language access for deaf and hard of hearing students. When educators deny ASL as a language right for deaf and hard of hearing students, it becomes a personal and cultural rejection. I feel as if I owe my literacy success primarily to my exposure to both ASL and English, regardless of all the other negative experiences.

Carlton Parsons (2008), discusses the influence of language and cultural oppression on African Americans. I contend, this applies to the deaf community as well. The deaf community thrives on positive cultural-historical experiences. Parsons points out that to “strip a people of their culture….is to destroy the community and disconnect its members from history, traditions, beliefs…..” (Carlton Parsons, 2008, p. 1138). This articulates and underscores what my work is about as a scholar-practitioner, literacy development is influenced by language and cultural oppression.

**My Role as a Researcher**

As indicated above in my explanation of my personal experiences along with my beliefs and biases, I am passionate about my research and my inquiry into what makes deaf and hard of hearing readers successful. By partaking in the interview
process to gather data, I was afforded the opportunity to reflect on my role as a researcher, and how I may contribute to the analysis. My status within the deaf community influenced my research. “It is important is to understand how you are influencing what the informant says, and how this affects the validity of the inferences you can draw from the interview” (Maxwell, 2005, p. 109). Each interview concluded with a discussion of our shared or differing experiences, a way to connect with one another through reflection of our stories. “The goal in a qualitative study is not to eliminate this influence, but to understand it and to use it productively” (Maxwell, 2005, p.108-109).

**My Role as a Scholar-Practitioner**

My research aims to improve the literacy development of deaf and hard of hearing students by providing an analysis of the experiences of successful readers within the deaf community. When I examined and acknowledged my biases and perspectives based on my experiences growing up in the mainstreamed setting, I determined that they would not hinder my ability to conduct research that will be beneficial to the deaf education field. Teachers, students, families, policy makers, and administrators can trust the review from a researcher that is from within the community. My role as a scholar-practitioner incorporates my role within the deaf community. As Briscoe noted, “a researcher who is a member of the group is
likely to perceive and represent the group in a way that constructs a social identity that protects and serves the interest of the group.” (Briscoe, 2005, p.28).

As a deaf person, I have experienced the same difficulties and oppression when it comes to our status in the hearing community. My personal experiences attest to my commitment toward considering the best interests of the research, and adds depth on the topic of literacy development of deaf and hard of hearing students. As Briscoe validates, “those who live in conditions of oppression develop a multiple consciousness and are better able to perceive incidents from multiple perspectives” (Briscoe, 2005, p.25).
Chapter II: Literature Review

So, what does the research say about all of this? A myriad of research has been done which points toward a Bilingual/Bicultural education (American Sign Language and English instruction) as the key to English literacy. Yet, as schools of the deaf have modified their educational methods, the significant problem remains: deaf and hard of hearing students are still reading below the 4th grade level, even after the development of a Bilingual/Bicultural education method from Kindergarten to 8th grade. We are failing our deaf and hard of hearing students, as they are graduating without being fully literate and without being fully prepared for the real world. With 85% of deaf and hard of hearing students in the mainstreamed setting, there is a need for more research on this educational environment and approach.

Significance Statement

Educators of deaf and hard of hearing students, along with their family members, currently struggle to find significant studies and research-based data that address concerns of their students/children’s reading levels and how deaf and hard of hearing readers become successful. Research of the literacy development success of deaf and hard of hearing readers taught within the mainstreamed setting is important and ultimately significant. However, there is a dearth of research on deaf and hard of hearing readers in the mainstreamed setting. Educators and
families can benefit from research provided through qualitative study to gain a sense of understanding of what it takes to become successful, especially in an environment where hearing children are the majority.

With the discovery of pertinent pedagogical information from the experiences of deaf and hard of hearing people learning to read and write in the mainstreamed setting, this research can contribute to current practices in mainstreamed programs so they are better able to serve their deaf and hard of hearing students.

**Problem Statement**

The majority of deaf and hard of hearing students from both schools for the deaf and the mainstreamed setting graduate from high school with reading comprehension just below the fourth-grade reading level (Traxler, 2000). This is a result of several factors that is discussed in recent research.

Many studies attribute this result to the fact that children with hearing loss struggle to achieve success in reading and academics (e.g., Wilbur, 2000; Anita, Jones, Reed, & Kreimeyer, 2009; Easterbrooks & Beal-Alvarez, 2012). Another factor that contributes to the result is that the percentage of deaf and hard of hearing children born to hearing parents is incredibly high, over 90%, and only less than 5% of those children have at least one deaf or hard of hearing parent (Mitchell & Karchmer, 2004). This results in the majority of deaf and hard of hearing
students receiving spoken English exposure as their first language, even though with technology (hearing devices), early intervention, and family support, those students struggle to achieve age-appropriate English skills (Blamey, Sarant, Paatsch, Barry, Bow, Wales, Wright, Psarros, Rattigan, & Tooher, 2001; Geers, Moog, Biedenstein, Brenner, & Hayes, 2009; Morere, 2011). Another contributing factor is the issue of language access. Deaf and hard of hearing students do not receive necessary early access to a visual language, sign language (Easterbrooks & Baker, 2002; Andrews, Leigh, & Weiner, 2004; Chamberlain & Mayberry, 2000; Goldin-Meadow & Mayberry, 2001; Hoffmeister, 2000; Erting, Prezioso, O’Grady-Hynes, 1990; Anderson, 2006). Regardless of research that validates the needs of deaf and hard of hearing students, current schools and programs that serve deaf and hard of hearing students within a hearing continuum struggle to provide the necessary support for those students to transition to later-literacy success (Mayer, 2007; Kyle & Harris, 2011). There is a complete lack of research on successful deaf readers, specifically on those who were taught in the mainstreamed environment.

**Organization of the Literature Review**

The purpose of this literature review is to establish a foundation of the factors that influence and affect the success of deaf and hard of hearing readers. Because of the complex nature of deaf education and existing perspectives, and the
shortage of research on deaf and hard of hearing readers in the mainstreamed setting, the literature review is organized around four main factors: American Sign Language/English bilingual education, language development, literacy strategies for deaf and hard of hearing students within the K-12 educational setting, and teacher involvement. In order to understand the context of this literature review, I will begin with a brief of history of deaf education.

**Deaf and Hard of Hearing Readers: A Review of the Literature**

History books document deaf education in America dating back to the 1800s. The lovely and inspiring story of Thomas H. Gallaudet meeting a young girl, Alice Cogswell, who was deaf, is a topic introduced and discussed in schools for the deaf across the nation. Alice Cogswell’s love for learning influenced Thomas H. Gallaudet’s 1815 trip to Europe to seek methods on how to teach deaf students (Gannon, 1981). In 1816, Gallaudet returned to America with Laurent Clerc, a deaf teacher who modeled how to teach deaf and hard of hearing students from Paris, France, who brought the idea of establishing the Connecticut Asylum for the Education and Instruction of Deaf and Dumb Persons in Hartford (Gannon, 1981). In 1817, the Connecticut Asylum, now known as the American School for the Deaf, became the very first school with the purpose of teaching young deaf and hard of hearing students using what was known as the language of signs (Gannon, 1981). After the American School for the Deaf in Hartford was founded, New
York City followed suit and established a school of its own. The New York Institution for the Instruction of the Deaf and Dumb instructed their students using the language of signs as their mode of communication. This sent a message to the nation and other states established schools of the deaf, all using the language of signs as their mode of communication (Gannon, 1981).

Deaf education in America changed dramatically after the historical convention where the International Congress on Education of the Deaf met in Milan, Italy in 1880 (Gannon, 1981). At the convention, a resolution was passed to prohibit the use of sign language as a communication method to instruct deaf and hard of hearing students, emphasizing the importance of speech, the oral method. The Americans in attendance opposed the decision and urged looking at the needs of the child who may benefit from both sign language and speech (Gannon, 1981). Their concerns were disregarded, and the resolution passed, which had a profound and lasting effect on the lives of deaf and hard of hearing readers for generations to come.

Current educators of the deaf and hard of hearing engage in ongoing conversations about the use of the oral method versus the use of sign language, now known as American Sign Language, with the bilingual approach. At schools of the deaf across the nation, educators usually employ the bilingual approach in instruction, utilizing both languages, American Sign Language, and English. In
public schools, in order to adapt to the inclusion concept, the majority of deaf and hard of hearing students are limited to the oral method or the use of sign language interpreters in the general education classroom. Public schools also typically offer an option of a self-contained classroom with a teacher of the deaf, if there is a significant number of deaf and hard of hearing students.

In the mainstreamed setting, the communication method may vary from program to program depending on the program’s philosophy decided by the administrators. The educational approach and goal of mainstreaming our deaf and hard of hearing students was to allow them the opportunity to function in the hearing world with support from the district and the school. However, many students do not receive appropriate accommodations or the necessary support to excel in the mainstreamed setting.

**American Sign Language/English bilingual education**

Many schools for the deaf and hard of hearing across the United States have adopted an American Sign Language/English bilingual education (Allen & Anderson, 2010). The ASL/English bilingual methodology consists of three components: signacy (receptive and expressive ASL, fingerspelling/ finger reading), literacy (reading/writing), and oracy (listening, speaking, and speechreading). The foundation of the ASL/English bilingual education model is
linguistic, cultural, and educational to address the literacy needs of deaf and hard of hearing children.

As previously mentioned, the ultimate goal of an American Sign Language/English bilingual-bicultural education is to educate deaf and hard of hearing students by means of access to both languages and cultures (Evans, 2004). The need to develop American Sign Language skills is as equally important as the need to develop skills in reading and writing English (Evans, 2004). Early exposure to a visual sign language enables the deaf and hard of hearing child to develop a first language, the most crucial component for developing literacy skills (Cummins, 2000). With a bilingual-bicultural education at schools for the deaf, deaf and hard of hearing students are exposed to not only ASL but Deaf culture and the Deaf community, and essential factor in their social-emotional development. To date, there have not been any empirical studies to validate this factor (Marschark & Knoors, 2012).

Current studies have found ASL/English bilingual education typically take place at residential schools for the deaf and hard of hearing. There are limited studies within other settings such as public and charter schools that utilize the ASL/English bilingual education approach. The field of deaf education refers to the demographic data provided by the Gallaudet Research Institute in regards to current information about the population of our deaf and hard of hearing students
(DeLana et al, 2007). In 2005, the Gallaudet Research Institute reported that 70% of the deaf and hard of hearing students are served within a setting that is not identified as residential (DeLana et al, 2007). By 2008, only three years later, the number increased to 85%. Deaf and hard of hearing students are now more likely to be educated in regular school classrooms. (Data Accountability Center, 2008).

There is a profound limitation regarding studies focused on ASL/English bilingual education as the appropriate instructional methodology to enhance deaf and hard of hearing students’ literacy development in the public-school setting. As a result of deficits in current research and studies, it is increasingly difficult for administrators of programs in the public-school setting that serve the deaf and hard of hearing population to choose the appropriate instructional methodology. Inappropriate educational practices contribute to students failing to become successful readers (Power & Leigh, 2000).

Most public schools do not have the level of expertise necessary to implement methodology designed for the deaf and hard of hearing population. Public schools have limited resources, with only a small number of teachers and staff who work with deaf and hard of hearing students, which presents a challenge given the increasing number of deaf students in this setting (DeLana, Gentry & Andrews, 2007). These public school programs also lack strategic language planning, a critical component of the ASL/English bilingual education approach.
currently utilized in schools for the deaf. Because 95% of deaf and hard of hearing children are born into hearing families, they often come into the school environment with language delays. Language planning is designed to create a support system in order to develop a child’s language skills. One of the key concepts regarding language acquisition planning is the emphasis placed on language, not speech development (Enns, 2006). Instructional methods and approaches are put into place to ensure there are a multitude of language acquisition opportunities for deaf and hard of hearing students (Enns, 2006).

Many districts are plagued by the harsh reality of budget cuts and face challenges as they only employ a small number of teachers/staff to work with deaf and hard of hearing students (DeLana et al, 2007). Economic pressures such as budget cuts, the preferences of parents, and a lack of research-based decisions have impacted the increase of deaf children in regular classrooms without the necessary support (Marschark & Knoors, 2012). Spoken English has become the norm in public school settings for deaf and hard of hearing students (Allen & Anderson, 2010). It was reported that 94.5% of high school deaf and hard of hearing students use oral speech in regular schools versus the 51.6% of students who use sign language in public schools (Shaver et al, 2014).

Deaf and hard of hearing programs in public schools often lack the appropriate curriculum, assessment tools, professional development, and qualified
staff (DeLana et al, 2007). Programs also may fail to understand the importance of hiring teachers who are fluent in American Sign Language and hiring certified sign language interpreters (DeLana et al, 2007). The access required for students become minimized, as administrators without the appropriate training do not have the resources to coordinate an effort to enhance the program’s learning environment through collaboration with the local Deaf community if this is an option (DeLana, et al, 2007). Any of those vital components could negatively impact implementation of appropriate instructional methodology for deaf and hard of hearing readers in the mainstreamed setting. This became a pedagogy concern that was made clearer in the study and what deaf and hard of hearing students benefit from in terms of literacy instruction.

In a bilingual environment, exposure to ASL at an early age is a critical component of a deaf and hard of hearing reader’s ability to develop reading skills (Chamberlain and Mayberry 2000; Hoffmeister 2000; Kuntze, Golos, & Enns, 2014; Padden and Ramsey 1998; Prinz and Strong 1998). One pedagogical element of the bilingual approach is to consciously teach students translation skills between English and ASL to support their success as deaf and hard of hearing readers. With enhancing students’ translation skills, teachers are also encouraged to teach students how to mediate between the two languages during literacy time.
Translation skills are essential for bilingual learners in order to shift between both languages (Evans, 2004).

**Bilingual Brain**

Dr. Laura-Ann Petitto is a leading cognitive neuroscientist, one of the first in the discipline of Educational Neuroscience, a discipline that she helped create. Her studies focus on early language acquisition, a topic she has covered for the past thirty years. As a researcher in the field of educational neuroscience, Petitto has presented findings and discoveries on how a bilingual brain of a deaf and hard of hearing child works in parallel to that of the bilingual hearing brain. Her groundbreaking research aims to advance educational policy and practice in the field of deaf education. Dr. Petitto’s research (2009) challenged the notion of how bilingualism in young children puts them at a disadvantage and proved that instead they are at an advantage linguistically, cognitively, and academically. A factor in the success of bilingual programs is where both languages are equally used emphasizing that each child receives early exposure to both languages (Berens, M. S., Kovelman, I., & Petitto, L., 2013).

Bilingual education, which offers students the opportunity to acquire both sign and spoken language, does not harm the developmental process in either language (Kovelman, Baker, & Petitto, 2008; Yoshinaga-Itano, 2006). Research validates how children from monolingual home environments placed in bilingual
programs performed better in reading tasks than children in monolingual programs (Berens et al., 2013). Dating back to early research with the bilingual education methodology, it was discovered that there are cognitive benefits from learning two different languages (Cummins, 2001; Hakuta, 1986; Hakuta & Diaz, 1986; Baker, 2011). With a deeper understanding to linguistic meaning and cognitive flexibility through bilingualism, deaf and hard of hearing children benefit from learning both American Sign Language and a language that can be spoken or shared through print or listening/speaking (Easterbrooks & Baker, 2002; Baker, 2011). Providing a rich language experience contributes to establishing reading proficiency in deaf students (Harris & Beech, 1998; Marschark & Knoors, 2012).

The decision to outlaw sign language at the Milan Convention in 1880 was made with the belief that sign language would prevent speech acquisition. This deeply rooted erroneous belief that had a profound influence on deaf education in America has now recently been challenged by research on bilingualism. Petitto’s research has found unequivocally that young bilinguals, regardless of modality (a signed language or spoken language), are able to differentiate between both languages during the process of language acquisition (Petitto, L.A., & Holowka, S., 2002).
Language Development

Language development has been an ongoing debate in the deaf education field as technology advances have opened doors to the medical perspective influencing educational methodology for deaf and hard of hearing students. With the introduction of the cochlear implant in 1984, there was a shift in the Deaf education field, as doctors actively promote spoken English development. Administrators and teachers that work in the deaf education field, more specifically in the hearing environment, are more likely to support the doctors’ recommendation to focus on spoken language development rather than incorporating ASL, as it is seen to hinder language development for cochlear implant users. There are no publications that confirm that sign language interferes with spoken language development (Spencer & Marschark, 2010; Marschark & Knoors, 2012). However, it is argued that if hearing parents support their children’s language development using ASL, there will be linguistic, social, and academic advantages (Calderon & Greenberg, 1997; Marschark & Knoors, 2012).

With the influence of the medical perspective on educators, many deaf and hard of hearing students have been denied the opportunity to receive proper language development instruction. Students with cochlear implants are encouraged to be taught in the regular school classroom through spoken English rather than schools for the deaf (Shaver et al, 2014). Deaf educators who follow
the medical perspective teach primarily through spoken English, which in turn does not provide access to language. In response to the medical perspective and the resistance to sign language, research on brain plasticity justifies the need for language development in the child’s natural language, American Sign Language (Humphries et al., 2012). Emphasizing the importance of American Sign Language, “for proper language development, children must be exposed regularly and frequently to accessible language before the age of five years old -- that is, while brain plasticity still allows for the development of fluent language” (Humphries et al., 2012, p. 873).

Without an opportunity to develop language through American Sign Language, deaf and hard of hearing students struggle in regard to their literacy development (Humphries et al., 2013). Without access to language, deaf and hard of hearing students become linguistically deprived, which impedes their literacy growth. Research on the brain and the science of language acquisition “strongly supports sign languages as the only truly viable and reliable access to language for deaf children” (Humphries et al., 2012). Deaf and hard of hearing students have a better chance of becoming proficient readers if schools/programs used American Sign Language as the primary language of instruction (Hoffmeister & Caldwell-Harris, 2014).
Researcher Carol Padden (1993) confirmed the importance of American Sign Language as the medical perspective started to gain popularity. Padden mentioned how American Sign Language “makes the world intelligible to Deaf people, makes it possible for them to have a group life that includes a rich variety of expressive resources, including English in print” (Padden, 1993, p.98). There is no sufficient evidence that justifies the medical perspective that learning American Sign Language will impede spoken English development. In response to educators that claim otherwise, using, a visual language or teaching language through several modalities does not hinder their reading development (Lederberg, Schick, & Spencer, 2013).

Language acquisition plays an important role in the lives of deaf and hard of hearing readers. The quality of language instruction is based on the number of opportunities students receive--and how accessible the language becomes (Kuntze, Golos, & Enns, 2014). Deaf and hard of hearing children who are denied the opportunity to interact with adults or peers in an accessible language, without hesitation, suffer in terms of literacy development (Kuntze et al., 2014). There is a significant risk of language delays when deaf and hard of hearing students are not exposed to an accessible language at a young age (Mayberry, 2007).

The developmentally appropriate and natural approach of using American Sign Language in the early years enhances the level of communication needed to
achieve the level of comprehension to become a successful reader. Lastly, American Sign Language is positively used as a form of social mediation between the teachers and students as it promotes language and literacy development (Kuntze et al., 2014). Deaf and hard of hearing readers who consider their literacy development as essential in their growth feel as if their ability in utilizing both languages were a positive factor (Kelstone, 2013). With social mediation and access to language development in American Sign Language, teachers can guide students in terms of developing cognitive strategies and introducing students to different ways of thinking and processing information (Kuntze et al., 2014).

Marschark, Sapere, Convertino, and Pelz (2008) conducted an experiment with deaf and hearing teachers with experience in working with the deaf and hard of hearing population. The results show how the relationship between teachers and students promote language and literacy development (Marschark et al., 2008). The teachers in the experiment were able to motivate their students more than mainstream teachers and were able to meet the needs of the deaf and hard of hearing students through barrier-less communication (Marschark et al., 2008). Deaf and hard of hearing students progress in learning at the same rate as their hearing peers when teachers are aware of how deaf and hard of hearing students learn (Marschark et al., 2008).
Literacy Strategies

To gather a deeper understanding of the reading processes of deaf and hard of hearing readers, multiple researchers have examined and analyzed how deaf and hard of hearing students learn how to read. Reading comprehension teaching strategies include a focus on activating background knowledge. Teaching reading comprehension with the foundation of background knowledge positively enhances students’ reading process (Luckner, 2008). Many deaf and hard of hearing students have been identified as performing subpar to hearing peers when their background knowledge about topics has been measured (Luckner, 2008). As a result, teachers spend more time preparing students before their reading process using strategies such as in-class experience, visual aids, mental imagery, conceptually related books, simulation, webbing, free recall, and anticipation guides (Luckner, 2008). With a focus on background knowledge, teachers can shift to interactive reading.

When it comes to emergent reading, Williams (2004) presented findings that support interactive storybook readings as a method of understanding literacy. Reading aloud to deaf and hard of hearing students through an accessible form of language allows parents or teachers to engage with the child through valuable interactions (Williams, 2004). Through evaluation of the benefits of storybook reading sessions, it was evident that it is a successful method of literacy
development as it allows the child to develop a sense of independence as a reader (Williams, 2004). Active learning and interactive opportunities allow the deaf and hard of hearing reader to enhance their language comprehension, problem-solving and necessary academic skills (Marschark, 2003). Social mediation through interaction also promotes the reading development of deaf and hard of hearing students (Golos & Moses, 2013).

Interactive storybook readings, when the child participates in the reading activity, may be an effective tool to enhance deaf and hard of hearing students’ reading development (Williams, 2004). The skills as a reader through repetition and interactive storybook reading opportunities show improvement as their comprehension, interest, and ability to engage along with the story supports literacy development (Williams, 2004). Improving the ability to interact with the story through storytelling and recognizing familiar words lead to the building of confident readers (Williams, 2004).

Williams’s (2004) study, results presented the effects and benefits of interactive storybook readings, as deaf and hard of hearing readers learn elements of a story such as the author, title, and important literary terms (Williams, 2004). With storybook reading, adults are able to model literary behaviors and encourage dialogue for deaf and hard of hearing readers (Easterbrooks, Lederberg, & Connor, 2010). The approach and literacy strategy may be recognized and
implemented by schools and programs as a language intervention model as it provides deaf and hard of hearing readers the opportunity to receive access in their first language and exposure to new vocabulary (Williams, 2004).

A general belief in the field of deaf education, which has influenced literacy instruction, is the fact that deaf and hard of hearing students do not have access to the phonological system of English (Luckner, 2008). This has led teachers to believe phonology instruction is not a part of reading instruction. However, skilled readers who are deaf and hard of hearing have noted that they utilize phonological awareness in their reading process (Luckner, 2008). In addition, limited access to English through the auditory mode is assumed as the underlying factor of deaf and hard of hearing readers struggle with literacy development, but this is not the case (Kuntze et al., 2014). As mentioned earlier, current research does not provide a baseline or a model of actually how deaf and hard of hearing readers develop the necessary reading skills without the use of their hearing (Kuntze et al., 2014).

R.R. Kelly et al’s research (2001) on the use of reading strategies by deaf college students found that deaf and hard of hearing readers of higher ability benefit more from different reading strategies than readers of lower ability. Teachers are responsible for planning differentiated instruction based on reading ability (Kelly et al., 2001). The study also indicated that teachers should focus on the following strategies: determining the meaning of text rather than
vocabulary (word by word), synthesizing the main idea, promoting background knowledge references and relating to new knowledge, using authentic text, and developing an idea of coherence (Kelly et al., 2001).

With the recommended strategies, it is essential for teachers to incorporate experience with “critiquing the meaning of text” (Kelly et al., 2001, p. 396). For example, a strategy could include inserting random sentences in text passages in order for students to practice finding sentences that do not make sense or belong in the text (Kelly et al., 2001). This is an important strategy to enhance the learning experience of deaf and hard of hearing readers.

In Banner and Wang’s (2011) study, the researcher interviewed successful deaf and hard of hearing readers and concluded that skilled deaf readers are able to apply several reading strategies during their reading process. Through the interview process, Banner and Wang (2011) discovered that reading strategies have to be explicitly taught during reading instruction in order for students to become familiar with the reading process. Skilled deaf and hard of hearing readers have experienced early exposure to reading and accessible communication at an early age (Banner & Wang, 2011). When students are evaluated in sign language rather than English, deaf and hard of hearing readers were able to show language flexibility and creativity surpassing their hearing peers (Marschark, 2003).
The skilled readers are able to use the following strategies: mental imagery, visualizing, summarizing or rephrasing the text, and establishing meaning (Banner & Wang, 2011). In Banner and Wang’s (2011) study, utilizing background knowledge as part of the reading process was an essential factor of success. With that said, classroom teachers are encouraged to utilize reading strategies through direct instruction and provide opportunities for their students to practice them. Without teachers becoming responsible for learning time, students will struggle to acquire necessary reading skills (Donne & Zigmond, 2008).

In Cannon and Guardino’s (2012) study of reading strategies of deaf and hard of hearing students, they examined the importance of metacognitive strategies. With a literature review, the researchers reviewed a variety of strategies that are the foundation of an effective reading program and presented reading strategies that specifically address the population of deaf and hard of hearing students. In their summary of recommendations to practitioners, they presented four components: conversation/fluency, alphabetic principle, vocabulary, and comprehension (Cannon & Guardino, 2012).

The first component, conversation and fluency, are an important aspect of the reading process as it aims to increase teacher-student interaction (Cannon & Guardino, 2012). Repeated reading has been noted as a strategy to enhance conversation and fluency (Cannon & Guardino, 2012). Regardless of method of
instruction (oral/signed), when students reread passages on their reading level, they continuously improve (Cannon & Guardino, 2012). In addition, guided, repeated reading also improves conversation skills through strategies such as comprehension questions, pre-teaching, and post-reading questions (Cannon & Guardino, 2012). Fluency as a skill allows deaf and hard of hearing students to read text without difficulty (Luckner & Urbach, 2012). Fluent readers will then be able to focus on other reading skills such as background knowledge, vocabulary, and comprehension (Luckner & Urbach, 2012).

The second and third components, alphabetic principle and vocabulary, focus on word-identification, decoding skills, vocabulary, and word development (Cannon & Guardino, 2012). It has been recommended by the researchers that through vocabulary instruction, teachers use the ‘chaining’ strategy, where vocabulary is taught through print, sign, spoken, and/or fingerspelling (Cannon & Guardino, 2012).

In the last component, the research focused on metacognitive strategies, which maximized comprehension, an essential aspect of the reading process (Cannon & Guardino, 2012). Aligning with Banner and Wang’s (2011) research, there is a need for research regarding reading, more specifically metacognitive strategies for deaf and hard of hearing readers. An increase in comprehension leads to an increase in reading skills, as students enhance their vocabulary and
word level skills (Cannon & Guardino, 2012). The importance of metacognitive strategies and the effect on the deaf and hard of hearing reader requires a deeper understanding of the environment that leads to success.

Results of the study produced by Easterbrooks (2010) that explored literacy environments that support emergent literacy clearly validate the importance of classroom environments, a source of influence on the literacy development of deaf and hard of hearing children. Marschark & Knoors (2012) also encouraged teachers to review the visual needs in the classroom environment and the visual strengths of students. Additionally, five factors were identified as essential in literacy development: “parent involvement, a language-rich environment, storybook reading, a supportive classroom environment, and explicit instruction” (Easterbrooks, 2010). With the five factors, researchers can further examine the development of deaf and hard of hearing readers with the necessary support.

Kuntze et al. (2014) challenged the claim of phonological development that supports the reading process by refuting with the strategies that include a focus on language skill, which contributes to literacy development. As the introduction of reading programs and methodologies, there has been a shift to encourage teachers to emphasize the development of sound-symbol approaches and stressing the importance of pre reading skills (Kuntze et al., 2014). There is an evident relationship between phonological ability and the reading process of deaf and hard
of hearing students, and this may differ from the experience of hearing readers (Kyle & Harris, 2010). With a suggestion to future researchers from Kuntze et al. (2014), there is a need to explore alternative routes to literacy development through the usage of visual methods.

**Teacher Involvement**

Visual methods have appeared in research as a source of literacy development support, with the visual influence on literacy. Kuntze et al. (2014) included the following five components: emergent literacy, social mediation/English print, American Sign Language acquisition/visual engagement, media, and lastly, literacy and deaf culture. With the introduced framework, it is justified through findings in the literature that deaf and hard of hearing students benefit from visually based learning (Kuntze et al., 2014). Marschark & Knoors (2012) pointed out how deaf children’s brains are developed in a way where they have more attention directed to the visual environment to be able to process what is happening.

Reed (2003) discussed the importance of combining pull-out instruction and in-class instruction to optimize the literacy development of deaf and hard of hearing students. The teachers’ knowledge about literacy development and practice contributed to their success, but to remain effective, teachers must continue their professional development to meet the needs of deaf and hard of
hearing readers but this is seldom offered in the mainstreamed setting. Reed (2003) acknowledged how most classroom teachers and administrators have very little experience working with deaf and hard of hearing students. As a result, within the public-school setting, Reed (2003) noted that teachers of the deaf became responsible for advocating for their students, along with educating classroom teachers. Teachers of the deaf communicate with the classroom teacher regarding the needs of the deaf and hard of hearing students. This became an important part in students’ literacy development.

Benefits of the mainstreamed setting placement for deaf and hard of hearing students rely heavily on the informed decisions of teachers and staff in terms of students’ strengths and needs (Marschark & Knoors, 2012). An understanding of deaf and hard of hearing students’ underachievement issues and communication barriers will assist the transition to achieving appropriate modifications in the mainstreamed classroom (Marschark & Knoors, 2012). Teacher involvement in the reading process along with the assessment process—will positively influence education (Easterbrooks & Baker, 2002).

Summation

The results of the research have the ability to affect the lives of deaf readers through changes in educational policy and curriculum planning. Educators can provide more appropriate educational methods with an understanding of the
experiences of deaf readers. Current research is only the beginning of validating deaf readers’ experiences. Ideas for research include looking at the IEP process to determine if it is appropriate for the growth of deaf readers, resources and training for families, training for teachers of the deaf, and studies that look at the shift between monolingualism to bilingualism. Lastly, another recommendation proposed the idea of continued qualitative studies on the experiences of successful deaf readers to provide a wider range and to evaluate several research ideas to validate the experiences of deaf readers.

Researchers often focus on the deficits of deaf readers and compare them with hearing readers who learn literacy in a different manner and form of instruction. Classroom teachers will benefit from literature and data collection based on successful reading strategies or skills used by deaf and hard of hearing students. The process and knowledge of teachers are essential to literacy development, along with their beliefs and practices. Teachers will benefit from studies that clearly display literacy skills that are derived from evidence of success.

In review of a variety of literature, each study has identified different factors, which allows an analysis of the unique population of deaf and hard of hearing students. With review of the current literature, it is clear that there is not enough evidence-based research to impact policy change and to support teachers in public schools and programs for the deaf and hard of hearing to serve their
students. This is a result of limited understanding in how American Sign Language supports literacy development and how it provides access to English print (Mayer, 2007).

There is a need for more narrative inquiries and personal interviews that not only explore the realms of reading strategies and literacy interventions but allow for a description of the experience of deaf and hard of hearing readers in the mainstreamed setting.

Cannon and Guardino (2012) made an important recommendation for future researchers, encouraging them to not only look at their reading skills but also their backgrounds, which includes family members, communication, language preference, and most importantly, how the language and culture of the deaf and hard of hearing population impacted their growth as readers and their language acquisition. It is also essential for researchers to explore the teaching approaches that focus on the visual medium and skills of deaf and hard of hearing readers with the shift to ignore invalid assumptions and traditional practices that are sound-based or do not meet the needs of students.

With the combined literature found on deaf and hard of hearing readers, future research should provide a sense of investigation into the readers’ preferences and chosen strategies that enhance their reading process. A qualitative approach in research will allow for an exploration of how deaf and hard of hearing readers are
taught in regards to reading skills and how they continue to independently use those learned strategies. In considering deaf and hard of hearing students who struggle with literacy development, it is critical to examine the instructional practices and methodologies used in the classroom. Also, an exploration is needed of differing practices of literacy development, especially in the early stages, and an awareness of how it impacts students’ reading levels along with bilingual/bicultural strategies. This will allow researchers to promote change, and advocate, and lobby for literacy intervention and language oppression for deaf and hard of hearing students in the mainstreamed setting.
Chapter III: Methodology

Research Purpose

Literacy development, learning how to read and write, is considered the foundation of success in academic careers. The ultimate goal of this study is to glean pertinent information from the detailed experiences of deaf and hard of hearing adults who have achieved graduate degrees or terminal degrees as a result of their successful literacy development in the mainstreamed setting, so as to provide struggling mainstreamed programs with an understanding of the tools necessary to prepare their students for future academic success.

In deaf education, the mainstreamed setting is described as the practice of placing deaf and hard of hearing students in regular education classes with hearing students rather than schools for the deaf. Some mainstreamed settings provide deaf and hard of hearing programs where deaf and hard of hearing students are taught with the self-contained classroom approach. The self-contained classroom is within a school for hearing students but deaf and hard of hearing students have the opportunity to be taught with their deaf and hard of hearing peers.

Information derived from an analysis of the influence of an American Sign Language/English bilingual education, language development, effective literacy strategies, and teacher involvement along with personal experiences of successful deaf and hard of hearing readers, mainstreamed programs can benefit from
resources and support as a result of the research. With an understanding of the tools necessary to improve the literacy development of deaf and hard of hearing students, mainstreamed programs/settings will be better prepared to instruct their students.

**Research Questions**

The goal of this research was to understand how deaf readers could best succeed in a mainstreamed setting, and to do so by focusing on their understanding of their experiences and success. The primary question of this study is: What are the underlying factors that contribute to the development of successful deaf readers in the mainstreamed setting? To further explore this question, I have asked four supporting questions: (a) What is the role of teachers, staff, and interpreters in the development of the reading process of deaf and hard of hearing readers in the mainstreamed setting? (b) What literacy strategies do staff members utilize to develop deaf and hard of hearing students into successful readers? (c) What are the challenges of developing as a deaf and hard of hearing reader in the mainstreamed setting? (d) What was the instructional/philosophical approach of the program/school the subject attended and how did this impact the deaf and hard of hearing reader? The questions focus on personal experiences of deaf and hard of hearing readers who successfully obtained a graduate degree and/or a terminal
degree after at least ten years in the mainstreamed setting during their K-12 educational experience.

**Methodology**

The chosen methodology, narrative inquiry, is intended to elicit a detailed understanding of the lived literacy experiences of deaf and hard of hearing students who received their education in the mainstreamed setting. With the narrative inquiry approach, I interviewed each participant asking questions specifically about their literacy experience in the mainstreamed setting, engaging in discussions of how social and cultural beliefs of the deaf community played a role in the classroom, and how all of those experiences may have influenced his/her success. I transcribed each interview and looked for common themes amongst them all. Amongst these common themes, regarding these adults prior educational K-12 experiences, I hoped to uncover a deeper understanding of what current deaf and hard of hearing children need in the current classroom.

Narrative inquiry/research can be designed to meet the goals of a researcher’s questions. My goal is to gather stories of deaf and hard of hearing people’s experiences in learning how to read and their reading/writing classes in the mainstreamed setting. Those stories may provide resources to current mainstreamed programs that struggle to meet the needs of deaf and hard of hearing children in the mainstreamed setting. There was a focus on the language use
(American Sign Language vs. spoken English) of the deaf community versus the hearing community and how much support they received in terms of access to language, especially in a hearing environment. Doing so, I believed, would bring us to linguistic and cultural narratives.

Through narratives, participants shared their personal experiences as they reflected on their K-12 education. The heart of narrative inquiry is “not only on individuals’ experiences but also on the social, cultural, and institutional narratives within which individuals’ experiences are constituted, shaped, expressed, and enacted,” according to (Clandinin, 2007, 42-43). Unpacking complex issues through narrative research provides a lens into issues that deaf and hard of hearing students face as learners such as language use, teachers and staff support, and linguistic and culture understandings. Investigations and their results touching into those complex issues in regard to the history, culture, and language of the deaf community may influence mainstreamed programs in order to improve and modify their educational approach.

Paradigm

The Constructivism-interpretivism paradigm emphasizes the “lived experiences” that are captured through individual interviews (Ponterotto, p.129). With a paradigm, it serves as a model of how the research is formed and organized. The interaction between myself and the participants enabled
collaboration through an organized collection of empirical data (Ponterotto, p.129). Ponterotto (2005) described the constructivist position as one that “espouses a hermeneutical approach, which maintains that meaning is hidden and must be brought to the surface through deep reflection” and this reflection stems from the interactive link between the researcher and participant (Ponterotto, p. 129). Through interactive dialogue between myself and the participants, we worked together to co-create themes and discover findings.

Capitalizing on my connection to the community and my role as a scholar-practitioner, I aimed to explore how literacy development is influenced by language and cultural oppression in the deaf community. I collaborated with the participant as a member of the deaf community, because “a researcher who is a member of the group is likely to perceive and represent the group in a way that constructs a social identity that protects and serves the interest of the group” (Briscoe, 2005, p.28). With shared experiences and reflection, there was an interactive link as data was collected.

**Research Design**

A qualitative study was completed to provide a personal analysis of successful deaf and hard of hearing readers and their backgrounds, which includes family members, communication, language preference, and most importantly, how the language and culture of the deaf and hard of hearing population impacted their
growth as readers and their language acquisition in the mainstreamed setting. The heart of the research lies in the interview process in which successful deaf and hard of hearing students with a graduate degree as a result of at least ten years in a mainstreamed setting in their K-12 education experience shared their experiences. With the information obtained from such research, I concluded, would allow mainstream educators and administrators to evaluate strategies from a unique perspective, and perhaps encourage them to implement additional approaches in their literacy instruction.

Examining the literacy needs of deaf and hard of hearing children and their success along with their struggles allows us to take a closer look in regards to instructional practices and methodology. Traditional educational approaches have historically used invalid assumptions and the medical perspective to inform their pedagogy. These approaches are most often solely sound based and often have not met the needs of the deaf and hard of hearing population. A qualitative approach opened the door for exploration of teaching approaches that may have included the visual medium and skill development appropriate for deaf and hard of hearing readers.

It is my hope that the impact of the study provides a personalized portrayal into the lives of deaf and hard of hearing people who received their education in the mainstreamed setting. With narratives, leaders directly involved with the deaf
education field can become inspired and positively address the unique population within a mainstreamed setting. The research findings will, I hope, provide a deeper understanding of the needs of deaf and hard of hearing readers and will provide a source of inspiration for a successful model of implementation. Teachers, educators, administrators, policymakers, and families will benefit from this and other studies that clearly display literacy skills that are derived from evidence of success. Subsequently, all those involved in educating our future deaf students will be empowered to transform the current status quo.

The theoretical framework is shaped by sociocultural theory. Sociocultural theory focuses on the importance of social interaction, society’s influence on one’s development, cultural beliefs and attitudes that influence learning, and the environment of the learning process. The research questions reflect the importance of social interaction between the learner and the parents, caregivers, teachers, peers, and the society. The theory guides the questions by focusing on literacy development that may be controlled by society, social interaction and cultural beliefs. The questions also allowed for the examination of the culture of the reading process and how deaf and hard of hearing students develop as readers in the mainstreamed setting.
Research Tradition

Jerome Bruner (1986), a psychologist who developed the constructivist theory, described narrative research as a “primary way of knowing and that we construct worlds from our own perspectives, living by story.” Narrative research also captures the participant’s lived experiences through a specific research process, which differs from a more interpretative methodology in narrative inquiry.

Narrative inquiry is described as “an investigation into some puzzle or problem” (Clandinin, 2007, p. 627). Clandinin continued to describe narrative inquiry research as “a way of knowing, a method of investigation involving an intentional, reflective process” (Clandinin, 2007, p. 627). Under the umbrella of qualitative research methodology, narrative inquiry “embraces narrative as both the method and phenomena of study” (Clandinin, 2007, p. 5).

Narrative Inquiry as described by Huber et al. (2013) incorporates stories and experiences as data while understanding the formation of the relationship between the researcher and the participant. Studying people’s experiences allows for a way for the researcher to pay attention to detailed stories and allow for it to thrive. Narrative inquiry also provides the possibility of becoming co-researchers in a sense where the participant has a voice in the development of the research.

D. Jean Clandinin (2007) described the emergence of narrative inquiry in literature through an incorporation of the method and the development of four
themes within human sciences. Clandinin (2007) described several historic occasions (Polkinghorne, 1988; Bruner, 1986; Geertz, 1983; Sarbin, 1986; Martin, 1986) where the narrative inquiry movement contributed to the field of social sciences. Clandinin (2007) determined through a collection of literature and research accounts, four themes emerged through narrative inquiry. The four themes cover different ways of ‘thinking and action’ taken by the researchers in various disciplines (Clandinin, 2007, p. 7). The four are as followed, “(1) a change in the relationship between the person conducting the research and the person participating as the subject, (2) a move from the use of number toward the use of words as data, (3) a change from a focus on the general and universal toward the local, and specific, and (4) a widening in acceptance of alternative epistemologies or ways of knowing (Clandinin, 2007, p.7).” With an understanding of the four themes, and the depth of the narrative inquiry approach, it brings us to the importance of growth and learning in the research process. Through a relationship with the participants, through interaction and building a relationship, both researcher and the participant will learn from the process (Clandinin, 2007). Participants are a crucial part of the research study.

**Participants**

The following criteria was used to recruit participants: deaf or hard of hearing status, must possess a graduate degree or is in process of obtaining a
terminal degree, and must have ten plus years in the mainstreamed setting in their K-12 education experience. Their hearing status is critical in this research as their experience as readers differs from those who are hearing. As we take a close look at how deaf and hard of hearing readers become successful in the mainstreamed setting, it was deemed crucial that the participants possess a graduate degree, because this would serve as proof of their academic success. Ten plus years allows for a marker that focuses on the full scope of the mainstreamed setting and how it influenced the experience of deaf and hard of hearing readers.

The population that was studied is specific as described in the criteria established. Participants are successful deaf and hard of hearing students with a graduate degree obtained after spending at least ten years in a mainstreamed setting in their K-12 education experience. In qualitative research, purposeful sampling is used, which means the researcher must determine who the participants will be (Creswell, 2014). For quality purposes, the criterion sampling strategy was utilized to ensure each participant meet the criteria that will reflect upon the research purpose (Creswell, 2014).

The participants’ hearing status varied, from those who present as deaf to those who present as hard of hearing. Participants were sought whether they had the experience of being the only deaf or hard of hearing student in a mainstream setting or having deaf and hard of hearing peers within a mainstream setting. Their
primary language also varied, with some communicating via American Sign Language and some via spoken English. The reason and purpose of this criterion—that their primary language vary—is that this allowed for a variety of themes and differences to emerge.

Maximum variation, another sampling strategy that was used for variations of deaf and hard of hearing students (Creswell, 2013). Maximum variation is a popular approach, because the findings will allow for “reflect differences or different perspectives-an ideal in qualitative research” (Creswell, 2013, p. 157). Participants were also from different geographic locations. They also varied in race and gender to provide diverse perspectives of their experiences.

The sample size, eight participants, provided an opportunity for me to collect detailed stories and experiences (Creswell, 2013). Narrative research is often used with one or two participants, however to collect a detailed story, a larger pool is recommended (Creswell, 2013). A larger pool of eight participants is more equitable, diverse, and inclusive, eliciting multidimensional stories stemming from varied language and pedagogical experiences.

**Recruitment and Access**

My recruiting process for adult deaf interview subjects focused on personal networking efforts at various Deaf community functions and events held in the summer of 2017. Through networking with deaf and hard of hearing individuals, I
determined who met the criteria. Upon identification of potential participants that meet the criteria, I emailed them from my husky.neu.edu email address providing information about the study and inviting them to participate (see Appendix A). There were no incentives to recruit participants.

The deaf community can be considered as the researcher’s own “backyard.” The convenience of studying in the researcher’s “backyard” may become risky (Creswell, 2013). As a deaf researcher from the deaf community, I have access to deaf and hard of hearing individuals. Through networking efforts, I can identify those who meet the criteria. My research criteria established for participants stated that they must be deaf or hard of hearing. With this criterion, it does not allow for me to find participants from outside my “backyard.”

The names of participants were never recorded in any form, so as to ensure complete confidentiality. In addition, when it came time to transcribe the interviews and put their comments into writing, pseudonyms were created for each participant. Upon agreeing to the study, participants received a consent form. Approval to proceed with the study was obtained from the Institutional Review Board (IRB) at Northeastern University. As Creswell (2013) recommended, I employed several strategies to ensure validation and accuracy in data collection.
Data Collection

Participants that responded to the email inviting them to participate in the research by expressing interest in scheduling an interview was sent a follow-up email with an unsigned consent form (see Appendix B). Participants were told that they can opt out of committing to an interview at any time, and to discontinue an interview once it is underway. Upon meeting for the interview, the unsigned consent form was reviewed and the participant was asked to verbally consent to the interview. Even after the interview has taken place, they were told, they can decide to withdraw from participation. The participants were all fluent in American Sign Language (ASL), the language of the deaf community. I am fluent in ASL and conducted all the interviews in this language.

Participants were invited to participate in person (at a mutually agreeable place), in one interview that may take between 60-90 minutes. Participants were interviewed once. The interview took between 60-90 minutes. If participants requested to extend the interview at a later date, they were allowed to do so. After each interview, I followed up with each participant through email to double check and verify any information that was gathered during the interview that may be vague/unclear. Member checking was utilized to ensure the validity of the data.

Each interview was recorded and then transcribed. Interviews were conducted in American Sign Language and was transcribed into written
English. Recordings captured the whole interview and gave participants confidence in the accuracy of the dialogue (Seidman, 2006). With the recording, the researcher was able to focus on connecting with the participant rather than writing everything down. Recording presents the benefit of preserving original data; researchers can refer to the video to provide accuracy as they develop transcripts (Seidman, 2006). “A detailed and careful transcript that re-creates the verbal and non-verbal material of the interview can be of great benefit to a researcher who may be studying the transcript months after the interview occurred” (Seidman, 2006, p. 119).

The purpose of conducting qualitative interviews is to provide a detailed analysis of the participants’ stories and experiences. In-depth interviewing allows the researcher to seek for detailed information through examples of specific experiences and narratives of the participant (Rubin & Rubin, 2005). With in-depth interviewing, data can be collected in a number of ways. For this research, data was collected through the semi-structured interview format. With the semi-structured interview format, the researcher has a set of questions prepared in advance along with the flexibility of probing through follow-up questions (Rubin & Rubin, 2005). This flexibility enables a deeper analysis and a focus on the overall research question. In order to focus on the research questions, there is an
established understanding of how I want to guide the participant in order to benefit the research.

Careful preparation of questions, and ensuring efficiency, is essential in order to develop a relationship with each participant (Ritchie & Lewis, 2003). As director of the interview, I must be prepared to “stage-manage” the didactic exchange in order to sufficiently address the original purpose of the interview. (Ritchie & Lewis, 2003). The interviews were conducted using a six-phase approach as suggested by Robson (2002), Rubin and Rubin (2005) and Spradley (1979). Each of these six stages facilitates and promotes a deeper exploration of the issues throughout the duration of the interview. The stages are provided below put together by Ritchie and Lewis (2003) and can be reviewed through my interview script (Appendix C):

*Stage 1: Arrival* — The process of the interview begins as soon as I arrive to the location of the participant's preference. This part of the interview is when I either introduce or reintroduce myself. Establishing a rapport and a relationship with the participant is crucial for a successful in-depth interview. I have to ensure I correctly identify when the participant is relaxed after connecting with me, this will tell me he/she is comfortable enough for me to move on to the next stage.

*Stage 2: Introducing the research* — The next stage consists of an introduction of my research topic, this allows for the participant to receive a clear picture of the goal of my research and for the interview. Once this happens, I will proceed to turn on the video-camera and move on to stage three.

*Stage 3: Beginning the interview* — With my warm-up questions that cover his/her background, language use, where he/she grew up will allow for me to prepare for potential follow-up questions during the interview. The purpose of the warm-up
questions is to provide an opportunity for the participant to open up and start revealing information.

Stage 4: During the interview — This is when I guide the participant to complex issues and their experience. This is when I will have a series of questions, follow-up questions, and probes. Together, there will be a discovery of ideas, themes and thoughts/feelings.

Stage 5: Ending the interview — By directing the interview, I know when we are close to completion, and I will guide the participant to closure by providing cues such as, now to the final question or only a few questions left. The reason for this approach is to allow the participant to prepare for any unexpressed thoughts or stories they would like to share.

Stage 6: After the interview — As the interview comes to a close and the video-camera is turned off, I thank them for their time, and talk about how it will contribute to the research. This allows for the possibility of final reflections, which may require me to turn on the video-camera gain with their permission. I have to ensure I follow the participant's cues to see if there is more information to be shared. As director, it is my job to make sure I leave the room feeling accomplished.

Data Storage

Data was stored on my laptop with a back-up hard drive used solely for the data. After a successful defense of my dissertation, video recordings and signed consent documents will be destroyed in 3 years after that date. The code table that was used to analyze the data will also be destroyed after a successful defense of my dissertation. The interview transcripts will be kept indefinitely for future data analysis. Confidentiality will be remained and any information that may identify participants will be removed. All data that is stored on the laptop computer will be encrypted to protect the information.
Data Analysis

The data collection process required tape-recording of semi-structured interviews. The researcher then becomes responsible to attempt to understand the meaning that lies within the participant’s perspective by developing transcripts of each interview. As a researcher, I analyzed and engaged with the data provided through transcripts. I engaged with the text through an interpretative step-by-step process to analyze the data (Smith et al., 2009).

Miles and Huberman (1994), Madison (2005), and Wolcott (1994) all provide detailed information of the data analysis process used in qualitative research. All three authors provide different approaches. For this research, Miles and Huberman (1994)’s data analysis strategies were the primary reference, but Wolcott (1994)’s method of highlighting descriptions was used in the first step of the research project. Due to the detailed nature of the interviews and the transcripts becoming the heart of the data, I believed it was necessary to unpack the transcript as the first step. By reading and rereading the transcript, I highlighted sections where there are rich and detailed areas of the interview (Wolcott, 1994). After I became comfortable and familiar with the data, the next step was to write margin notes (Huberman & Miles, 1994). After I became familiar with the text, taking notes was the next step by writing reflective passages and then working with words (Huberman & Miles, 1994). Then I moved on to the coding process,
where I identified codes and then reduced codes to themes (Huberman & Miles, 1994). Counting the frequency of codes allowed me to start looking for a connection among the emergent themes and then start to categorize (Huberman & Miles, 1994).

The raw data was uploaded to a computer software program, NVivo, to assist with the coding process. The software is designed to automatically code transcripts and allow for easy scanning. Within the software, memos were created to record notes and thoughts. The software assisted with data analysis by coding and categorizing and tracking complex code relationships and utilizing code maps to see code relationships. With coding, the software provided queries where I can use text search or word frequency (Appendix E) to look for emerging themes, with this feature, I tested ideas and looked for connections between themes. It also assisted with identifying key themes and trends/patterns in the data. The NVivo software visually displayed the codes through different visualizations to support the research through reports.

**Trustworthiness**

To maintain the trustworthiness and validity of the study, I recorded each interview and then proceeded with the transcribing process. Multiple validation strategies were used to promote accuracy and value of the research (Creswell, 2013). First, the strategy of member checking, an important way to ensure
accuracy. I worked with the participants to ensure accuracy by sharing the data and interpretations with him/her to allow for an opportunity for them to comment on the findings and the themes (Creswell, 2013). This technique is considered by Lincoln and Guba (1995) to be “the most critical technique for establishing credibility” (p. 314).

Second, clarifying researcher bias was an essential strategy because of what I bring to the research topic through my identity as a deaf person who grew up in the mainstreamed setting. By providing an extensive and detailed description of my experiences, biases, prejudices through self-reflection, it provided honest clarity to the research which may resonate with the readers and add to the validity of the findings (Creswell, 2013). “Good qualitative research contains comments by the researchers about how their interpretation of the findings is shaped by their background, such as their ender, culture, history, and socioeconomic origin” (Creswell, 2013, p. 192).

Potential threats to internal validity include the bias of the researcher which is why it is crucial to be honest about my experience with the topic. With an explanation of my personal experiences, beliefs and biases, there was an opportunity for analysis and reflection within the study. Part of my analysis, status within the community was considered and how it may influence the research, “what is important is to understand how you are influencing what the informant
says, and how this affects the validity of the inferences you can draw from the interview” (Maxwell, 2005, p. 109). I cannot eliminate biases and current beliefs but ultimately considered, “the goal in a qualitative study is not to eliminate this influence, but to understand it and to use it productively” (Maxwell, 2005, p.108-109). With an understanding of my biases and perspectives, readers then can interpret and trust the research as I aimed to provide a narrative analysis of how deaf and hard of hearing readers succeed in the mainstreamed setting.
Chapter IV: Results

Report of Research Findings

The purpose of the study was to gain a deeper understanding of the experiences of successful readers so as to serve as a platform for current mainstreamed programs and inform future pedagogy to meet the unique needs of deaf and hard of hearing students. With this narrative inquiry research, I gathered stories and lived experiences of deaf and hard of hearing people educated in the mainstreamed setting. This section will spell out my findings. How did they learn to read and write? What were the factors that contributed to their success? Those stories have the potential of providing resources to current teachers and programs established in the mainstreamed setting with guidelines based on actual experiences of those who were educated in the mainstreamed setting to ensure they meet the needs of deaf and hard of hearing children.

Narrative inquiry, the chosen methodology was used to provide a very detailed understanding of the literacy experiences of deaf and hard of hearing adults who received the majority of their education in the mainstreamed environment. Questions focused on subjects’ literacy experiences and what may have played a role in their success, specifically the influence of social and cultural beliefs of the deaf community, as well as the philosophical approach of the school and teachers. Interviewing adults in regard to their prior childhood experiences
allowed them to reflect upon and discuss the salient components from their educational experiences.

To gather stories and lived experiences of successful deaf and hard of hearing people, I first had to determine how to identify those who were skilled readers. I established the following criteria used to recruit participants: deaf or hard of hearing status, must possess a graduate degree or is in process of obtaining a terminal degree, and must have ten plus years in the mainstreamed setting in their K-12 education experience. As the goal of the study is to take a close look at how deaf and hard of hearing readers become successful in the mainstreamed setting, it is crucial that the participants possess a graduate degree, this serves as justification of their academic success.

**Demographics**

Participants are a crucial part of the research study. The population is very specific as described in the established criteria. Participants were identified as successful deaf and hard of hearing adults with doctorate degrees, in process of a terminal degree, or a graduate degree after spending at least ten years in a mainstreamed setting for their K-12 education experience. Ten plus years allows for a marker that focuses on the full scope of the mainstreamed setting and how it influenced the experience of deaf and hard of hearing readers.
In qualitative research, purposeful sampling is used, which means the researcher must determine who the participants will be (Creswell, 2013). For quality purposes, the criterion sampling strategy was utilized to ensure each participant meet the criteria that will reflect upon the research purpose (Creswell, 2013). The participants’ hearing status varied, from those who present as deaf to those who present as hard of hearing. Participants may have the experience of being the only deaf or hard of hearing student in a mainstream setting or having deaf and hard of hearing peers within a mainstream setting. Their language use also varied, with some communicating via American Sign Language and some via spoken English, and some utilizing both languages. Generally, in the deaf and hard of population, language use varies, with some people having ASL as their dominant language and English as their secondary language, or vice versa. The subjects chosen here mirror the general deaf and hard of hearing population in this regard, so as to allow for a variety of themes and differences to emerge.

Maximum variation is another sampling strategy that was used so as to allow for variations of deaf and hard of hearing students (Creswell, p.158). Maximum variation is a popular approach, because the findings will allow for “reflection of differences or different perspectives-an ideal in qualitative research” (Creswell, p. 157). Participants are from different geographic locations. They also varied in race and gender to provide diverse perspectives of their experiences.
With the criteria, eight participants were identified and then interviewed. Table 4.1 provides the reader with basic information about each participant. Each participant was given a pseudonym to maintain confidentiality and allows for the reader to refer to upon discussion of the findings. The participants’ ages ranged from 20-50 years old. All eight participants possess a graduate degree or a terminal degree. All eight participants use both American Sign Language and Spoken English with variation in how often the two are used. Two of the participants used additional languages. During the interview process, all the participants used their primary language, American Sign Language.
Table 4.1: Demographics

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age</th>
<th>Gender</th>
<th>Degree</th>
<th>Background</th>
<th>Family</th>
<th>Language Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ashlee</td>
<td>20-30</td>
<td>F</td>
<td>MA, Ph.D</td>
<td>Caucasian</td>
<td>Hard of hearing sibling</td>
<td>ASL/ Spoken English</td>
</tr>
<tr>
<td>2 Valentina</td>
<td>30-40</td>
<td>F</td>
<td>MA, Ed.D</td>
<td>Caucasian/Asian</td>
<td>Only Deaf Person in the Family</td>
<td>ASL/ Spoken English</td>
</tr>
<tr>
<td>3 McKenna</td>
<td>40-50</td>
<td>F</td>
<td>Ph.D</td>
<td>Caucasian</td>
<td>Hard of hearing mother, deaf/hard of hearing relatives</td>
<td>ASL/ Spoken English</td>
</tr>
<tr>
<td>4 Robert</td>
<td>40-50</td>
<td>M</td>
<td>MA</td>
<td>Caucasian</td>
<td>Only Deaf Person in the Family</td>
<td>ASL/ Spoken English</td>
</tr>
<tr>
<td>5 Monica</td>
<td>40-50</td>
<td>F</td>
<td>2 MA</td>
<td>Hispanic</td>
<td>Only Deaf Person in the Family</td>
<td>ASL/ Spoken English/Spoken Spanish</td>
</tr>
<tr>
<td>6 Mark</td>
<td>20-30</td>
<td>M</td>
<td>MSW</td>
<td>Caucasian</td>
<td>Deaf grandparents on mother’s side</td>
<td>ASL/Spoken English/Spoken and signed Polish</td>
</tr>
<tr>
<td>7 Stephanie</td>
<td>30-40</td>
<td>F</td>
<td>Ph.D</td>
<td>Caucasian</td>
<td>Only Deaf Person in the Family</td>
<td>ASL/ Spoken English</td>
</tr>
<tr>
<td>8 Kerry</td>
<td>40-50</td>
<td>F</td>
<td>MA and MSW</td>
<td>African-American</td>
<td>Hard of Hearing Father, Deaf Sibling</td>
<td>ASL/Spoken English</td>
</tr>
</tbody>
</table>

Research Questions

After the first interviews, themes started to emerge, prompting the need to add more questions to the interview script (see Appendix D). With question number three, I added a fourth follow up question/prompt: What was the role of
your speech language pathologist if applicable? Do you feel as if he/she supported your reading success? Realizing the importance of family support and the services received by both the participant and their families, I added a new question, question number six: Did your family receive early intervention services or support? To number six, I also added two follow up questions:

1. Can you briefly explain your family’s role in your success as a reader?
2. Can you describe your family’s experience with the IEP process?

Lastly, I added two wrap-up questions:

1. With your current career/work, what are your strengths and weaknesses?
2. Do you feel as if this is tied to your experience as a deaf and hard of hearing reader in the mainstreamed setting?

**Data Collection**

The chosen software, NVivo is designed to facilitate common qualitative techniques for organizing, analyzing and sharing data. Once the transcript was completed, it was imported into NVivo. With all the data in one place, I had the opportunity to explore the transcript and record my initial reactions and reflections. Then I started the coding process. Using NVivo, I identified the participant’s answers and classified them using nodes to collect all the references. Once I completed the coding process, the software allowed me to gather query results so I was able to review all of the material. A mind map and
different coding frequency visuals (see Appendix F, G, H, and I) developed through the coding process confirmed my initial reactions and reflections. Which then, ultimately brought themes to the forefront and informed my results.

**Themes**

Throughout the course of the interviews and the data collection process, a focus on reading strategies started to shift to a focus on the overall experience and how that influenced each person’s success as a reader in the mainstreamed environment.

Five themes, expanded upon in the next section, emerged from the data: 1. experiences, 2. language use, 3. reading, 4. services, and 5. pathological view of deafness/incongruent pedagogy (see Appendix G).

With the coding process, I chose each theme resulting from the coding frequencies. With three of the themes: experiences, reading, and services, sub-themes were identified to allow for a deeper analysis of the data (see Appendix H). Results of the coding frequencies are seen in Table 4.2.
Table 4.2: Coding Frequency Results

<table>
<thead>
<tr>
<th>THEME 1: EXPERIENCES</th>
<th>SOURCES</th>
<th>REFERENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advocacy</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>Deaf Role-Models</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Deaf Peers</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Hearing Peers</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
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<td><strong>46</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>THEME 2: LANGUAGE USE</th>
<th>SOURCES</th>
<th>REFERENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Use</td>
<td>8</td>
<td>33</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
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<td><strong>33</strong></td>
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</table>

<table>
<thead>
<tr>
<th>THEME 3: PATHOLOGICAL VIEW OF DEAFNESS/INCONGRUENT PEDAGOGY</th>
<th>SOURCES</th>
<th>REFERENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathological View of Deafness/Incongruent Pedagogy</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>7</strong></td>
<td><strong>23</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>THEME 4: READING</th>
<th>SOURCES</th>
<th>REFERENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Involvement</td>
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<td>11</td>
</tr>
<tr>
<td>Role of Teachers</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Strategies</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>8</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THEME 5: SERVICES</th>
<th>SOURCES</th>
<th>REFERENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Room</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Role of Sign Language Interpreters</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>Role of Speech-Language Pathologist</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Self-Contained Classes</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Teachers of the Deaf</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Tutor</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>8</strong></td>
<td><strong>60</strong></td>
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</table>
Below are the explanations of each identified theme and sub-theme to provide the reader with a sense of what each represents.

**Theme 1: Experiences** — This theme covers the overall experiences of the participants in the mainstreamed setting. Participants discussed a variety of topics from their experience with their peers to how there was a need for advocacy along with deaf role-models.

*Sub-theme 1:1: Advocacy* — This refers to experiences of advocating for oneself in the mainstreamed environment, which is most often a difficult and oppressive environment.

*Sub-theme 1:2: Deaf Role-Models* — This describes the participant’s experience with deaf role-models.

*Sub-theme 1:3: Deaf Peers* — This describes the role of other deaf and hard of hearing children plays as it relates to social interaction and language development.

*Sub-theme 1:4: Hearing Peers* — This refers to the role of hearing peers in the participant’s experience in the mainstreamed environment.

**Theme 2: Language Use** — This theme focuses on the role of each participant’s language development, ranging from ASL to spoken English, and their language interactions with their families and other deaf and hard of hearing children. It also covers the participant’s experience being exposed to ASL and/or their experience in learning or using ASL. Participants also discussed the usage of different communication systems (spoken English, signed exact English (SEE), and contact signing). With the usage of different communication systems in the mainstreamed setting, this refers to the participant’s experience with communication.

**Theme 3: Pathological View of Deafness/Incongruent Pedagogy** — This theme represents the overlapping of two concepts, society’s pathological perspective on deaf and hard of hearing children and the result of that perspective, leading to instruction that is not appropriate for deaf and hard of hearing children.

**Theme 4: Reading** — This theme addresses the reading development of participants, and covers three sub-themes: family involvement, the role of teachers in their reading development, and strategies that were utilized in literacy instruction.

*Sub-theme 4:1: Family Involvement* — This sub-theme focuses on the role of the participant’s families in their reading development as a deaf or hard of hearing child. This includes their experiences reading at a young age.
Sub-theme 4:2: Role of Teachers — This covers the times the participants reflected on their experiences reading as a child and how a teacher introduced literacy or a love for reading, or a teacher who encouraged them to read.

Sub-theme 4:3: Strategies — This refers to the role that teachers and families played in introducing reading or instructional strategies to promote development and growth as readers.

Theme 5: Services — This theme covers different identified support services, if any were provided, for each participant in the mainstream environment.

Sub-theme 5:1: Resource Room — This service provides deaf and hard of hearing students a separate environment where they can go for additional help. This is also identified as support or flex classrooms by the participants. Teachers of the Deaf or interpreters are also seen providing support in this space.

Sub-theme 5:2: Role of Sign Language Interpreters — This covers the information shared by the participants about their relationship with their sign language interpreters, their qualifications, and how they served different roles in the classroom.

Sub-theme 5:3: Role of Speech Language Pathologists — This covers the information shared by the participants regarding their speech language pathologists, their experiences with this service provided by their schools/programs or mandated in the IEP.

Sub-theme 5:4: Self-Contained Classes — This service provides deaf and hard of hearing students classes with their deaf peers separate from mainstreamed classes. Participants shared that they took self-contained classes for subjects identified as problematic or elective courses.

Sub-theme 5:5: Teachers of the Deaf — This describes the participants’ experiences and relationships with their teachers of the deaf or identified as itinerant teachers (teachers who were certified to teach deaf and hard of hearing students or certified in special education).

Sub-theme 5:6: Tutors — This covers the time participants discussed their work with tutors to ensure they are progressing in the mainstreamed setting.

Narratives

As the name “narrative inquiry” suggests, the heart of the data lies in the narratives shared by participants throughout the interviews. In order to maintain
the narrative feel, and give the reader a clear picture of the data and the
participants’ experiences, I have shared various participant quotes under each
theme below:

THEME 1: EXPERIENCES

Sub-theme 1:1: Advocacy

The sub-theme of advocacy covered a range of experiences from the
participants, as well as their reflections on what was missing from their programs,
and their wishes for future programs. Participants also talked about the
philosophy/approach of the school/program to the IEP process to how their
families worked with the schools to ensure the participant’s needs were met in the
classroom. Below are participants’ comments:

Ashlee
Self-advocacy skills are so important. The schools should promote
independent skills and teach students about advocacy. For example, if the
interpreter is unqualified or is not the right fit, how do you communicate
this? Also, if the interpreter did not show up that day, how do students know
how to inform their teachers or administrators?

Kerry
There should be training/workshops for parents, more family-educated
opportunities, and the school should encourage parent involvement. The
schools should make sure kids receive appropriate services and establish an
early identification parent-infant program (age 1-3). After the age of 3, deaf
and hard of hearing students arrive to school already behind. I also
recommend home visits, as this provides early intervention services and
teaches parents how to read to their deaf children.

Stephanie
I would have wanted more access definitely. Captioning was always an afterthought, I had to advocate for myself all the time, it would have been nice if it had already been established and ready.

Valentina

Parents were influenced by common myths and therefore focused on oralism and on the mainstreamed experience for their children who were labeled "more likely to succeed". Whereas, parents had low educational standards and expectations for their children who were labeled as developmentally challenged.

IEP meetings for me felt like scolding, like everyone was saying “you did this wrong” or “you did that wrong.” It felt like a punitive gathering, not like, “we are here to give you support. How can you excel?” I’ve always had a negative view on IEP meetings. (pauses) Especially in high school (laughs) I hated it!

Monica

My mother worked closely with the case manager, to ensure the quality of my education was good. She advocated for her daughter. She believed in the importance of education and wanted success for her daughter. Parents nowadays trust the education system. But the education system is failing your children, fight for your children. Family plays a huge role in education, and that investment is important!

Mark

In 1st and 2nd grade, I was mainstreamed all day without an interpreter or CART, I did not have any access at that time. My parents did not want interpreters, and for me not to sign in class. I was left alone with twenty other hearing peers. I really declined in those two years.

It was such a struggle working with a teacher who was clueless about having a deaf child in the classroom, it is so hard to understand one person using the FM system, let alone twenty other kids in the class. I missed a lot of information and I didn’t realize until much later in life.

IEP meetings were basically a room of people who did not understand deaf culture, or the deaf community, who insisted the only way to success, is being oral. On top of that I had a mother who was traumatized by her own
experience, having deaf parents who were not educated. There were layers of misinformation and misunderstandings.

Schools need to provide the services that are asked by the students. I was really traumatized, when I asked for an interpreter, they wouldn't provide one, and when they did, it was half the class, that should have never happened! I missed educational opportunities because of it.

The program isolated 2 different educational approaches, the oral method and total communication. Instead of working together to thrive, they kept it separate and created a lot of angst and tension. After I graduated, the total communication aspect of the program were moved to another building, further separating the two and negatively impacting the students.

**Sub-theme 1:2: Deaf Role Models**

The sub-theme of deaf role models brought up discussions about how hearing teachers cannot serve as role models. Participants discussed what was missing from their experiences and how they would have benefitted from seeing successful deaf professionals. Also, participants discussed how deaf role-models can promote a positive environment for learning through their beliefs in deaf children becoming successful. Below are participants’ comments:

*Ashlee*

Would I consider them as my role models? No, because they are hearing not deaf. That’s one thing I still struggle with, finding deaf role models.

If I had deaf role-models, I think I would have thought more about what I can do in the future instead of no, I can’t, can’t, can’t because I never saw a deaf professional. We did have one deaf teacher’s aide but she was a teacher’s aide not a teacher.

One thing I would change in the mainstreamed setting is to have more deaf role models, have them come to the schools to present. Right now, as an adult, I do go to different schools to present about life as a deaf professional.
I wish I had that growing up. Also, I wish I was exposed to deaf culture and education regarding the deaf experience, like what is Gallaudet? Who was Laurent Clerc? Even a deaf history class would have been beneficial.

Stephanie
There was a family support program for parents and families with deaf children. There were deaf adults, so my family had an opportunity to meet them and receive support from them.

Kerry
We had one deaf teacher from Gallaudet, we were so in awe of her. I was clueless because I was in the hearing world. I remember she signed fluently and all the students loved her.

Monica
I wish we had teachers fluent in ASL, and exposure to deaf culture. I really wish I had deaf role models to look up to.

Deaf role models have the ability to support the students, provide a positive environment, push for higher expectations, and encourage students!

Sub-theme 1.3: Deaf Peers
The sub-theme of deaf peers focused on the participants’ experiences being around other deaf peers. Participants discussed how it benefited their language development and their social development. They also discussed their frustrations when different languages clashed, or the different experiences of students who were self-contained versus those who were placed in a hearing classroom. Below are participants comments:

Ashlee
I was only with hard of hearing students, so I always felt like I was a burden because I needed an interpreter or I didn't hear as well. So when I went to
the second high school, I felt like it was okay not to be fully hard of hearing or oral or whatever. I started becoming more comfortable with using ASL.

Being around other deaf people, which really helped my social development.

Robert
In high school, I was mainstreamed all day, during breaks I would visit the deaf classrooms to get social stimulation by chatting with other deaf students.

Kerry
By the time I was in high school, all of my classes were mainstreamed and I did not have any classes with deaf students. I actually looked down on them, and thought I was better than them, that I regret. They couldn’t speak, so I was embarrassed. I struggled to fit in but I still made friends.

Monica
I had a better experience with deaf peers, I could communicate with them and I could finally fit in. This did not happen with hearing peers.

Mark
I had deaf peers who signed and who were oral. I went through identity challenges; I did not know where I belonged. At home I was not allowed to sign and at school the teachers told me not to sign, but some of my friends signed, it was such a confusing time for me.

I was lonely in middle school and high school, and when I started inviting deaf friends over, my mother saw the life and happiness in me when I started signing, so she would let me have parties with my deaf friends.

The deaf community, sharing the same language, being able to communicate with one another, access to language, all of that really helped me grow.

Valentina
Leo ended up being the man of honor in my wedding and I was the matron of honor in his wedding. We were the only deaf students in the same classroom from kindergarten to high school, just the two of us with all the hearing kids.

Mckenna
My deaf peers were not used to my SEE. A lot of my classmates used ASL, they didn't use SEE. So, there I was using SEE and a lot of mouthing the words.

**Sub-theme 1:4: Hearing Peers**

The sub-theme of hearing peers focused on the participants’ experiences with hearing children in the classroom. Participants reflected on traumatic experiences because of language differences, wearing hearing aids, missing information in the classroom, and being bullied by other children.

Below are participants’ comments:

Ashlee
I think just being in a classroom with hearing students. Reading aloud different passages, everyone taking turns, that kind of stuff. I was always so lost. So, I remember I just read on my own and had the interpreter let me know when it was my turn. I just signed the passage. I felt like that was the most restrictive environment for me. I didn’t know what was going on in the class. That was a big challenge for me growing up.

Kerry
I was bullied because of my hearing aids, I was very self-conscious about them, I tried to cover them with my hair.

I was called a deaf monkey, you can’t hear, HAHA. A lot of misunderstandings happened.

Mckenna
My hearing peers were not used to my voice/speech.

Because I moved so much, I was really determined not to be labeled as the new girl anymore, so I made sure I figured out what strategies will work for me. I utilized different strategies and used my personality to remove the label of being the new deaf girl. (pauses) That's how I connected with my hearing peers and developed a rapport. I never really had a clique, never joined a clique, or had like a specific group of friends. Especially in high
school, I just floated around and was friends with everybody. I was friendly with everybody.

I always felt as if I was constantly chasing after information. I felt like I was always the last one to know. I would have to chase people to get information. I learned not to be afraid to ask questions.

I didn’t want a summary, I wanted the entire thing! Don’t tell me you’ll tell me later, tell me now! So that was a major frustration for me, people saying oh, it’s not important, for me yes it was! If you said it, it’s important!

Stephanie
So my experience, as a deaf child, the social aspect was really hard. Ironically, that helped my reading. So, the kids wouldn’t talk to me? Okay, I would just open up a book and start reading. That’s all I did.

Bullying was so bad. I remember one girl would constantly bully me to the point where I was crying every day. It was really awful. One boy even pushed me off the jungle gym and I broke my arm. I remember lying on the ground in pain and I look up, all the children were laughing at me. That’s so horrible. Those kids were so mean. Oh my god.

We read Helen Keller at school. And of course, I identified with her in some way. The teacher led an activity to allow us to experience the life of Helen Keller, the teacher asked the students to put something in their ears and be blindfolded. I refused because I did not trust them. They kept laughing and enjoying themselves, so I finally gave in and gave it a try. It took so much strength. I put the blindfold on, and I didn't need anything for my ears and started walking around, I couldn’t feel anyone. The bell rang, and they all lined up to leave the classroom and they were just laughing at me. Ugh, it took all of my courage to do it and like what was the teacher doing?! Where was my interpreter?

Mark
The hearing kids made fun of me because of my hearing loss, using the CART system was so embarrassing, I felt so isolated.

Valentina
I remember the hearing kids made fun of me a lot.
Monica
The hearing students picked on me because they perceived me as a weak
target because I was deaf.

THEME 2: LANGUAGE USE

In order to discuss the language use theme, the reader must understand the
three major educational philosophies that are widely utilized, because my
participants mention or allude to them, as their experiences with language and
communication was often determined by the school’s chosen approach. The two
most common philosophies in the mainstreamed setting are Total Communication
and Oral Education. The third philosophy, Bilingual education, is rarely found in
the mainstreamed setting and is most often employed at schools of the deaf. With
total communication, educators practice the belief of using different modes of
communication (as opposed to a natural language): spoken English, Signed Exact
English (SEE), or Pidgin Signed English (PSE), also known as contact
signing. ASL and Cued Speech are also sometimes seen in this approach. The
belief behind this philosophy is that using different modes of communication
allows educators to determine which communication method is best for that child,
individualizing his/her education. However, using different communication
modalities, none of which have been proven effective, there is a lesser focus on a
natural language. Oral Education, similarly, focuses on speaking and listening
skills so students can become immersed in the hearing world. However, ASL, the
natural visual language of deaf people, is not used in this approach, and is often forbidden. Auditory-Verbal Therapy (AVT) is utilized as a teaching method with the oral philosophy and is used for deaf children with technological devices such as the cochlear implant. Contrarily, the bilingual education philosophy and approach uses both natural and true languages, ASL and English (spoken or written). Multiple participants mentioned their desire for a bilingual approach, as well as the injustice that stemmed from misinformed educators valuing and prioritizing spoken English over ASL, often going so far as to use spoken English skills as a pre-measure of intelligence.

Monica
...do not equate brilliance with speaking skills in deaf people.

Kerry
I was considered one of the good ones so they pushed me, but they didn’t push the others. Maybe because I could speak.

Ashlee
The educators thought that deaf people would be more successful if they were hard of hearing and had the ability to speak. So they encouraged their students to speak and the majority of their focus was on that, we were allowed to use ASL but I felt as if they frowned upon this.

The participants had a variety of experiences when it came to the philosophical approach of their education. Those who spoke about oral education expressed identity issues as a deaf person acquiring ASL at a later age. Those who were taught with what was labeled "the total communication philosophy" appreciated the more in depth understanding that the signing afforded them.
Ashlee

I was diagnosed as deaf at 2 and then I was exposed to the oral method for 5-6 months. My mom learned about ASL and then we used both spoken English and ASL simultaneously. But in the school environment, it was a total communication program, so it was both spoken English and ASL.

I think the signing part of total communication did benefit me a lot. I don't think total communication is a bad idea because you do have kids who are more oral but at the same time it forces the teacher to individualize to meet all their needs. So, if you have a big class, some students are more comfortable using spoken English and some students signed or there were different levels of signing.

So I feel like because I was self-contained (in a classroom with other deaf peers) for English class in the beginning, when I was developing language, it was really helpful because I had teachers of the deaf who could sign certain rules for language. If I didn't understand, they could explain specific grammatical rules or the content of the story in ASL. They would have us read the story to ourselves and then sign the story out loud. They would correct us, using ASL to explain, if we didn't understand the concept. So, I feel like the signing part really helped me understand the concept of the English language.

The program really encouraged us as students to go to speech and they actually tried to reduce the use of interpreters to encourage us to speak for ourselves rather than depending on them.

Mark

For my own personal identity, it was not healthy being raised orally. It helped me have access in the hearing world, but I wish I had both languages growing up. I think I would be more successful and have more opportunities if I was exposed to both.

I arrived to America with no language, my family spoke Polish at home, not English, but at school, I had to listen and try to pick up sounds. I wish I was exposed to both languages, ASL and Spoken English.

For me, ASL is the way to sound articulate as I use interpreters, not my spoken English, it does not match my age, ASL now is my primary language, I can communicate more fluently and at a higher level.
I believe I would have become a stronger reader and writer if I was involved in the deaf community, learned the language and had total access to communication. Research shows now that bilingualism is beneficial for deaf and hard of hearing students, especially for them to thrive in the classroom.

CART didn't happen until 3rd grade, before that I had to depend on lipreading and listening, not the best technique when the teacher moves around the classroom.

Mckenna
The environment of my education changed frequently: oral, mainstreamed, sometimes mainstreamed as the only deaf person in the classroom or mainstreamed in a deaf program, sometimes self-contained but it was always oral. I had sign language (SEE) at home. ASL wasn't an integral part of my identity until I arrived at college where I met deaf people who used it fluently. I became immersed in the language and community, which is when I started to really identify as a culturally Deaf person.

Oral education benefited me because it gave me the speaking privilege. Unfortunately, even though my voice/speech is not perfect, it definitely sounds different. I’ve been asked what country I’m from because of the way I spoke. But that gave me the speaking privilege because I can and could get jobs without working with interpreters, depending on them to sign for me or voice for me. Job interviews or talking with clients, whatever, I am able to speak and voice for myself. And no, it didn't help me because I became disconnected with my deaf identity. I didn't know who I was and my speech abilities did not disintegrate. It’s the same as it was since I was a child but when I enrolled in college, I used my voice the majority of the time and didn't become immersed in the deaf community until after I graduated from college. Upon graduation, that's when I started discovering ASL and I started dating deaf people. I eventually married a deaf person, I am now using ASL and living life fully as a deaf person within the deaf community. When I go back to the oral, speaking method, it is A LOT of work. Back then, I didn't know how much work it entailed. Oh my god, it is exhausting! And so unsatisfying. Now, I feel at ease, it’s easy on the eyes and my mind. I don’t have to work as hard.

Kerry
We signed SEE and talked at the same time (Sim-Com). We were encouraged to use spoken English as much as possible.

Robert
In 5th-6th grade, I started learning sign language and I got an interpreter because the classes started to become more advanced and hard to follow.

I interacted with teachers through spoken English and sign language, depending on the moment; I would switch back and forth. As I got older, I became more comfortable and used ASL. I could express myself better that way. The words became more technical and complicated, so I had to depend on my interpreter because I was not sure how to pronounce them. Sometimes, I just cannot keep up.

Valentina
When my mother found out I was deaf, the first thing she did was place me in a deaf program along with speech therapy. She wanted to give me access to different communication modes. Actually, my audiologist was the one who told my mother to put me in a program with ASL and that was in the 1980s, can you imagine?

There were a variety of experiences with language use at home with families and siblings. Several participants provided insight on the importance of communication and how families interact.

Stephanie
Fortunately, my mother met people that encouraged her to start learning sign language, so my whole family learned sign language, not fluently because they are not around deaf people on a regular basis. My family received early intervention services, they focused more on the speech part, but they signed! I got speech training along with learning how to sign.

So yes, I grew up with SEE but because I was around and interacting with the deaf community, so I saw glimpses of ASL as a young child. From a hearing family, there were times where I wanted to be like them, so I would brush aside the signing aspect and spoke with them using my voice.
When you’re in a hearing family, you do what works. My mother spoke and signed with me as well. My mother was more fluent than my father. My father went to work while my mother was the one who brought me to school and events. She also encouraged me to become involved in the deaf community at deaf events, theatre, deaf camps, etc. That was really nice, I had a lot of opportunities and I was very fortunate that she was very supportive and didn’t hold me back in any way.

Well, my families though, weren’t perfect signers, my mom still has a weird attitude about the deaf community, but they loved me. And they supported me and believed in me.

Monica
I also didn’t have any access to signing at home, only spoken language. My first language was spoken Spanish and that was foundational for me. Once I had that, then I could add the other languages. That gave me the foundation, the training for understanding language structure in general, so I could add a 4th language if I wanted to. I don’t think it matters if your first language is signed or spoken, but rather it’s just important that you have communication access first.

My first language was Spanish, at the age of 2 or 3, I started learning English from my older brothers. In middle school, I started learning sign language (Sim-Com/Total Communication). There was no sign language at home.

Kerry
Mom stopped signing with us, because my brother would just talk back to my mother. He didn’t sign back to her, I guess because he knew my mother was hearing. We both could speak. That is a common mistake families make, stopping sign language because their kids can speak, doesn’t mean they catch everything.

Upon arrival to the deaf program, first time I was exposed to deaf people who cannot hear at all and sign language, SEE. I wanted to communicate with everyone so I was excited. My mother and my brother along with myself took sign language classes. My dad didn’t, he was used to hearing with his hearing aid and didn’t have a reason to learn sign language, he functioned fine in the hearing world.
I took an ASL class in college, that’s when I discovered, oh, I am not supposed to use my voice when I signed at the same time, so my language shifted in that sense. When I arrived to Gallaudet, I was in shock, and then my signing evolved within the year to become more ASL like.

Robert
My mom started communicating through SEE when I was in middle school but I would always tell her to just talk to me. My family members took sign language classes but did not really utilize what they learned.

My parents went to Gallaudet to learn about cued speech, so I know some cued speech, to help me break up words and learn how to pronounce them. Then she switched to sign (SEE) when I got a little bit older.

Valentina
My first exposure to ASL was when I met my husband. I was already 30 years old.

THEME 3: PATHOLOGICAL VIEW OF DEAFNESS/INCONGRUENT PEDAGOGY
The pathological view of deafness/incongruent pedagogy was an important theme that emerged in the interview process and was identified by participants as a crucial factor in the development of deaf and hard of hearing children. Utilizing a framework informed by sociocultural theory, I designed my interview questions to help guide a discussion about social interaction, society’s influence on one’s development, cultural beliefs and attitudes that influence learning, and the environment of the learning process. The theory aligns with the themes that have emerged, especially with the environment where learning happens. Incongruent Pedagogy refers to society’s pathological perspective of deaf people having an adverse effect on the education for the deaf and hard of hearing. This incongruent
pedagogy was witnessed in a variety of ways, including students being perceived as incapable of learning or staying on par with their hearing peers. With deaf and hard of hearing children in the mainstreamed setting, the data shows that the pejorative attitude of the schools, teachers, staff members, and families influence learning and, in this case, literacy development.

Talking to Mckenna, she expressed anger upon discussion about placement of students. She was placed in remedial classes because of society’s perspective on students with disabilities, regardless of her actual abilities.

I was in remedial classes, this applied to all deaf students because they never knew how to handle a deaf person who surpassed reading expectations among other skills. So, I was placed in remedial classes.

When I asked what she would change if she could go back and change something in her mainstreamed environment/experience, McKenna did not hesitate to share her feelings about the attitudes of the schools she attended.

... I would change the pathological view of being deaf. The medical perspective of being deaf, being deaf is a failure. Being deaf and not being able to hear is the end of the world, a serious disability. That kind of attitude, I would like to change that.

Stephanie talked about the difference between supportive teachers and those who had a pathological view of deafness.

...I remember many of them had a condescending attitude but when I got older in high school, they finally acknowledged the intelligence in me and we could work together. The others just equated deafness with mental retardation.
Kerry on several occasions talked about how she was negatively affected by society’s perspective, cultural beliefs and attitudes towards deaf and hard of hearing children.

...more of sympathizing view, oh no, deaf kid...I think teachers thought their students were not capable, so those students believed it and performed that way, they were given such limitations, teachers that didn’t believe in them.

Teachers would make me feel so small in class, they would talk to me like I was retarded in front of other students. That was hard for me.

Teachers can present an aura that they believe their deaf children will not become successful, they don’t have to say it. The students can feel it. This needs to change. We need to believe in our children.

In high school, I definitely struggled, I had to work twice as hard as my hearing peers to ensure I kept up in class, there was no way for me to catch everything, the teachers would walk around the classroom and write on the board, and so on and I would miss that information because I couldn’t hear.

Very few students from that program became successful, I think those who were stuck in the self-contained classes didn’t maximize their potential.

I think teachers thought their students were not capable, so those students believed it and performed that way.

Monica expressed frustrations at being placed in an inappropriate educational environment and how deaf students in general were held to lower standards than those who could hear.

When diagnosed with a hearing loss, I was placed in a school for intellectual disabilities.

...the school’s perspective of deaf children..they looked down on us and held us to low standards.
Teachers of the deaf were enablers, they looked down on us, didn’t challenge us, didn’t want to step out of their comfort zone, had low expectations, and just thought it was good enough.

You only earn status and respect if you speak well.

Mark expressed disdain with how the IEP team didn’t believe in him or push him to succeed. His mother received misinformation from the IEP team that limited his language development at an early age.

I was placed in the lowest class possible, I didn’t learn a lot, before high school, in 7th/8th grade, I felt as if I wasn’t challenged enough and was bored. It wasn’t until I asked one of my teachers how I could learn more, the majority of the teachers in the IEP meetings were skeptical of my abilities.

The IEP team and the case manager told my mother that the best way for me to learn was to stay oral and not learn sign language so she never permitted me to learn sign language, so I could be successful.

The power of the IEP resulted in no sign language, teachers that limited my language development because they had to follow the IEP.

Deaf culture was taboo growing up. I learned so much about deaf culture, education, the community after high school, growing up being deaf was recognized as something that was not a great thing.

Participants talked at length about incongruent pedagogy and being placed in inappropriate environments that were designed for hearing children.

Ashlee

Certain tasks were too much or not accessible for me, like reading out loud passages and taking turns or talking about stories. I wanted to participate but the interpreter would be a little bit behind, so I couldn't share my input or thoughts.

Robert
I was placed in a special class, a resource room for students with learning disabilities. That’s where I got one on one help for English

Stephanie
I remember using the FM system, oh I hated that thing! In gym class, it would pound against my chest when I moved, so embarrassing! It didn’t work for me! I kept telling the teacher it doesn’t work, and they would just say you’re not trying hard enough. It felt like a useless item on my body.

My family looked at a program, well for kids who were considered “oral failures,” too deaf to succeed in a speech environment. This program, there was sign language 100% of the time.

I remember many of them (teachers) had a condescending attitude but when I got older in high school, they finally acknowledged the intelligence in me and we could work together. The others just equated deafness with mental retardation.

I would suggest a safe environment where kids didn’t feel isolated or under the spotlight at all times.

The support staff, instead of looking down on us, be trained in deaf education and have experience with the deaf community. I could tell when they had a condescending attitude.

THEME 4: READING

Reading, and ascertaining how successful deaf and hard of hearing adults learned to read, is the core of this dissertation. Upon analysis of the data, 3 sub-themes emerged: family involvement, strategies, and the role of teachers in their reading development.
**Sub-theme 4.1: Family Involvement**

With the sub-theme of family involvement, participants reflected on reading with their family members, spending time together, and the importance of the support they received.

Mckenna

I would say my reading skills came from home not from the school. I was a very strong/passionate reader since I was 3 1/2 or 4 years old. My mother and me sat together and read every night. Books after books after books at home before bedtime. That’s where I got my foundation and the love for reading. I would not say it came from a teacher because they didn't implement the love for reading. My mother did, my family. Everyone in my family are strong readers, so that's where I got that from. I still read every day.

We sat next to each other, side by side with a book. I would watch her and read her lips and then look at the book (back and forth). I would connect what my mother said through lip-reading to the words in the book. I kept going back and forth looking at my mother and the book to make connections. When I read myself, I would ask my mother for the meaning of a specific word. She would provide an elaborate definition of that word.

I don’t remember the classroom, but at home, it was always a discussion about the book itself: what the story was about, who were the main characters, what the plot is, what happened at the end, who else was involved in the story and in-depth discussions about the book. My mother would ask me elaborate questions outside of the book itself and reading a page, this was when I was a kid, she would read a page, and then ask me questions about that page, and then flip the page over, and do the same thing. When the book was finished, I would have to summarize the story: what do you remember, what happened, what do you know..etc. (pauses). I started reading on my own at a young age, maybe 6 or 7 years old, I didn't need my mother anymore. She would still sit with me, but she didn't read with me. She would at occasion, check in and say about the book I was reading, oh what is that about? We would talk about the book, and I would explain in depth about the book itself. What it’s about, who was involved, what the
issues are, how did they solve it, etc. We always talked about books growing up at home, we still do!

Ashlee
I also had parents who could sign, and my grandma could sign. And they read with me, so if I didn't understand something, they used sign language as a bridge. So, I think that's the key to my success.

Monica
Felt different from other students because knew they received academic support at home, while I didn’t, their parents spoke English, I didn’t have parents that sat with me and worked with me, it was all myself

Kerry
My mother was big on literacy, word games, we would play Scrabble, Yahtzee, vocabulary games, those games would make me go look up words in the dictionary and improved my vocabulary! I always had a dictionary with me when I would read books and look up words that I didn’t know.

Stephanie
Everyone in my family read, so it was part of my family’s daily life. There were books all over the house. We went to the library all the time and my parents read to me, they would start signing but then I would just grab the book and read the rest myself because I didn’t really like the way they signed it. They weren’t skilled translators but that wasn’t their fault. But they did try to share the experience of reading with me, pointing to things in the book, going back and forth. I remember a lot of shared reading.

My friends who were strong readers, what we all have in common is family involvement, they were supportive and believed in us. Some of them were raised using sign language, and some were oral, but we all received the necessary support. That seemed to be the norm, as for the school, I am not sure.

Robert
Had a great English teacher my junior year, when I learned how to write research papers, she was very hyper and I got lost a lot. My mom knew about her because my sisters took that class. I would record the class and my mother would listen to the class and take notes for me. That helped. My mother was very involved in my education.
**Sub-theme 4.2: Role of the Teacher**

Several participants talked about the positive approaches of their teachers and how those teachers inspired their love for reading by introducing specific texts and the supporting them in the classroom.

**Kerry**

In 2nd grade, my teacher read stories and her way of teaching really encouraged us to read, “Pippi Longstocking”, loved that series. She would let us take turns in reading aloud. I started going to the library, I remember Ramona, I wanted every book written by that author. I had a self-love for books. That teacher really encouraged me. English was always one of my favorite subjects.

**Valentina**

My freshman year, I had a great teacher, he really pushed me and was more critical of my work rather than giving positive feedback. Then, sophomore year, I had a young teacher from San Francisco. She was cool, hip, young, and just moved to the area. She taught English class. She let us read and pick what we wanted to read. For example, when we studied autobiographies, she explained what it was, and how it would be boring to read about a president or someone famous. She instructed the class to pick someone that was not famous and to read about a person we didn’t know about. I read a biography on Jeffrey Dahmer. It was fascinating, I was grossed out and she wanted me to get up in front of the class to explain what I read. I honestly had no idea who he was. I remember she said, imagine the knowledge you will gain by just reading, if you just picked a book. After that, I just kept on reading. In my junior year, in AP English class, the teacher actually kicked me out of the class. We all read the book, “The Great Gatsby” and I loved that book. It was great and he wanted us to write about themes we saw come up in the book. So, my idea of a theme in the book was excessiveness. Many people in the book were living in wealth, partying, drinking, dancing. Excessiveness. So I wrote about it, and he wouldn’t accept my paper. He said that was not a theme. And he wouldn't give me the opportunity to sit down and discuss it with him. My mom and I went outside of school to get a tutor to sit down with me and rewrite the paper. I resubmitted it and he still wouldn't accept it. So that was an awful experience. He ultimately said I shouldn’t be in his class. So I had to switch to another class.
In 1987, my teacher gave me, “The Prince and the Pea” because when we had story time, I wanted to read that book again and again. Everyone was annoyed with me. So when I moved, he gave me that book signed by the class. “The Prince and the Pea” totally inappropriate if you think about it (laughs). But, “The Secret Garden” umm, the “Judy Blume” books, I liked horror stories, (...) and I just loved to read and it was my way of escaping too.

Stephanie
There was one teacher in 5th grade, he had a beard. It was hard to understand him but I never said anything. We met him prior to school starting, and on the first day of class, he showed up without his beard, it was all shaved off, and he said he did it for me so I could read his lips. Wow! I was really touched, it was a really nice thing to do. So, they were really supportive.

Sub-theme 4.3: Strategies

The sub-theme of reading strategies was one that I was particularly interested in learning more about, and that I specifically asked about. However, none of the participants except Ashlee could recall or remember specific strategies that actually helped them develop as readers. Instead, they talked about their overall educational experiences from family support (reading at home with their families) to teachers supporting them and the approach of the program/school. Participants also talked about language use and how that impacted their reading development or survival stories that helped them get through their mainstreamed experience.

Robert
When we had a spelling test, she would say the words, and I would have to write them down, I would quickly glance on my classmate’s paper to see
what word she said so I could write it down. I guess I cheated, sort of? I knew how to spell the words, I just didn’t know which one to write down.

Mark
Sign language really impacted my reading comprehension and this did not happen until college.

Stephanie
...captioning. My mother let me watch so much television because of captioning. My mother thinks captioning really helped my strengths as a reader and writer.

Ashlee
Reading about it and presenting about it was the best way for me to learn. So, I feel like that benefitted me a lot.

I like visuals, like K-W-L, what we already know, how do we look it up if we don't know. I feel like that helped me because I don't overhear people commenting things or picking up on it as fast. Looking it up on my own and how to look it up is what benefitted me the most.

THEME 5: SERVICES

Sub-theme 5.1: Resource Room

Several participants spoke about their experience utilizing the service provided by their school, this service was identified as resource rooms, study halls, or support classrooms. Participants described this space as a place where they had time to do homework, complete tests, have the opportunity to ask their teachers questions and to review coursework with their teachers of the deaf, peers, or interpreters. Some participants mentioned that they were the only deaf or hard of hearing student, as a result, they were placed in resource rooms with other students with disabilities other than deafness so they can receive additional support.
Ashlee

From 5th grade to my junior year, we had a resource room. I went after the day was finished. There was a teacher of the deaf in the classroom. So I took advantage of that for homework or additional help.

Sometimes if I wanted to take a test in a private room, I would go to the resource room. So I would use it for taking tests or doing my homework there. Sometimes if I had a question, I would ask my teacher of the deaf, she would explain it to me, sometimes she would sign the questions for me from the tests, that's what I usually used the room for.

Kerry

We had a resource room, but they could not help me, the material was too hard for them! I just had to do everything myself.

Mark

Support room was beneficial, I used the time to catch up on homework, the teacher was available for questions, and I reviewed what I learned in class. It was beneficial for me.

Monica

I had study period where we all would get support for our classwork. The teachers would guide us, show us what to do, explain things, but other than that I don’t remember what that support looked like.

I only got support during the study hall/flex period in high school when I could ask questions and get explanations where needed from other peers (mostly deaf) and interpreters.

Robert

I had a special class, a resource room for students with learning disabilities, that’s where I got one on one help for English

Sub-theme 5.2: Role of Sign Language Interpreters

In a mainstreamed setting, the role of a sign language interpreter if available was an important one. The participants spoke about a variety of experiences with their interpreters from their role to the struggle of participating in class to getting
along with their hearing peers to their identity as a deaf child in a hearing classroom.

Ashlee

The interpreter would help bridge, if I missed something or if I didn't understand, she would fill me in, so that was helpful. I do remember sometimes after language-based classes when the kids went to lunch, me and the other deaf student would stay afterwards, like 15-20 minutes longer to catch up or clarify on certain things. I think having an interpreter who was also a teacher of the deaf really helped a lot. They would explain or elaborate using their education background to support/help me understand better.

Mckenna

As a person, yes, I liked them. But they were benevolent interpreters who overstepped their boundaries and tried to help me like I’m helpless. I was like no, get away from me haha. It was embarrassing to have an interpreter because I would be the center of attention, it was obvious who the disabled girl was, the deaf girl, or the hearing-impaired girl. So, at times I was like ugh, wanted no part of that image.

Stephanie

She played a huge role in my life, who I am and really impacted my development. She really encouraged me all the time, saying I was special. I think she saw how awful the kids were to me. She would say I was so beautiful, she would get so excited when we talk and reconnect today. She was really important to me, more of a teacher, not the right word, maybe caretaker. She would check on me, what I was eating at lunch time, she was my interpreter and wasn’t really supposed to do that and she would say she would tell my mother. Haha. It is so hard to have boundaries when you are with the same person all day. School interpreting is tough especially with children.

Valentina

For the majority of my mainstreamed experience, I was one of two deaf students in the classroom with an interpreter. So, for a while, it was like let’s pair up, and then we as deaf students would be together with an interpreter, separated from the rest of the class. It was not exactly inclusive. But then,
later on we just drifted apart and joined/worked with other people. We had to compromise with that. (pauses…) It was not a comfortable environment.

Monica

My program had a few interpreters, so when one interpreter was out, they usually took mine and I was left without an interpreter in the classroom. I had to adapt by depending on hearing aids and sitting in front of the classroom.

Participation through an interpreter was a difficult experience for deaf and hard of hearing students in the mainstreamed. Ashlee, Stephanie, and Mckenna all mentioned lag time and how it resulted in their resistance in participating in class discussions.

Ashlee

I wanted to participate but the interpreter would be a little bit behind, so I couldn't share my input or thoughts. I was more on the quiet side but..(pauses) I felt it was more challenging, I learned more.

Stephanie

Oh and the lag time in interpreting was hard, when I raised my hand, the interpreter would tell me that the topic already passed. So embarrassing! Haha, and sometimes I would talk to myself and the interpreter would voice it! And the teacher would respond, what? And I would be like nothing nothing!

Mckenna

Through an interpreter. I would raise my hand, but there would be a delay, lag time, by the time the interpreter finished interpreting, the class would move on to the next topic. But if I felt like I really wanted to say something, I would raise my hand and the teacher would call on me and I would voice for myself in class. I’m not sure if everyone understood, but the teacher would understand me fine and repeat what I said to the class.

Sub-theme 5.3: Role of the Speech Language Pathologist
The role of a speech language pathologist was so critical that all of the participants mentioned their experiences with them. There was a mixture of positive and negative experiences. Speech language pathologists have different approaches from focusing on language structure, working on sounds and pronouncing words, vocabulary instruction, or working on real life experiences with their deaf and hard of hearing students. The participants described their experiences in detail describing what was beneficial and what was not.

Ashlee
My speech therapist knew sign language, so I remember half the time we focused on speaking and the other half really focused on language structure.

The speech language pathologist really helped a lot. I was just lucky she could sign and focused on the language part too, not just talking all the time.

Robert
I had speech in elementary and middle school but not high school, it was a waste of my time. I had no time because I had other extra-curricular activities, swimming and marching band. They just wanted to focus on specific sounds and I was done with that.

Stephanie
I remember in high school, I told my speech teacher that I just wanted to focus on language, and she did! She was awesome. We read together, discussed books, and talked about it.

In elementary school, I had a nice speech teacher, but honestly, she didn't know what she was doing, she had experience with students who had speech impairments, not someone who was profoundly deaf. She didn’t know any sign language. She would work on sounds using a piece of paper over her mouth, and it was really pointless.

But in middle school, 6th-8th grade, and high school, they knew what they were doing, they were used to working with deaf students. The focus was
more about communication, if you went to a restaurant, what do you do, what phrases do you expect, how to look for those phrases and predict what will be said. It was more functional and that was a nice focus versus the other school, with pronouncing words from a list. They made real life connection and that was nice.

Kerry
I hated speech, it was a waste of my time. Focusing on pronouncing words was tough.

Sub-theme 5.4: Self-Contained Classes

Self-contained classes is an environment where deaf and hard of hearing students go into a separate classroom with a teacher of the deaf is a service commonly seen in mainstreamed environments where there is more than one deaf or hard of hearing student. In self-contained classes, students have an opportunity to receive direct instruction and to be around other deaf and hard of hearing peers. The participants had a variety of experiences with self-contained classes. Some of them had specific subjects in the classroom with hearing students and an interpreter, and some subjects, usually the area they struggle in, in self-contained classes with teachers of the deaf.

Ashlee
So, I feel like because I was self-contained for English in the beginning, when I was developing language, it was really helpful because I had teachers of the deaf who could sign certain rules for language. If I didn't understand, they could explain specific grammatical rules or the content of the story, they would force us to read the story and then sign/read aloud the story. They would correct us if we didn't understand the concept. So, I feel like the signing part really helped me understand the concept of the language. But as I got older, they weren’t able to meet my needs anymore, so that's why they moved me to the mainstreamed program.
Robert
I remember one time I took a tough Algebra class, I believe Algebra II, it was hard to follow both the interpreter and the teacher as she wrote on the board. I would bring all the material to the deaf classroom and ask the teacher of the deaf to explain everything to me through sign language, direct instruction.

Stephanie
I was in a classroom with an interpreter but I also had the social aspect of being around other deaf students. Like lunch time, gym class, after school events, parties, there were a few classes like deaf culture, and art history. I had to be mainstreamed for the core subjects like English, math, science but when there was information that was standard in all classes, I participated in the self-contained class, and I liked it because I was around the other deaf kids.

Mckenna
Some teachers were very resentful of me because they didn’t know how to teach me. They didn’t know how to be a teacher of the deaf for a deaf student who tested out of English. Or tested out of Science, or tested out of whatever, they were so frustrated. So, I probably made them feel inadequate, so they developed resentment and it showed. While, others were excited with the opportunity to work with me. They would ask what I needed, how they could support me, what they can do, what are you reading now, and they would talk with me. It was a very split experience for me, from resentment to a lot of support.

Ashlee
The teachers of the deaf who were interpreters were perfect for me and really worked out well. I think teachers of the deaf who were also interpreters are equivalent to the quality of interpreters.

Sub-theme 5.5: Teacher of the Deaf

Other services provided in the mainstreamed setting include teachers of the deaf or itinerant teachers that pull out deaf and hard of hearing students from the
classroom or provide services inside the classroom. Teachers of the deaf also provide instruction in self-contained classrooms.

Stephanie
They also provided me with a personal tutor (itinerant teacher), Jane. Ugh, I didn't really like her. She took me out of class, and I didn't like how that looked and I was embarrassed. Don’t do that in the mainstreamed, it makes the kids feel different! Don’t do that.

Mckenna
Itinerant teacher, yes, that was in high school. That person sometimes interpreted because I had one assigned interpreter for the whole day. I think there was a need for a break at some point in the day. Lunch break or something like that. Because she would be interpreting for 8 hours straight. So that itinerant teacher would come in and interpret 1-2 classes for me.

**Sub-theme 5.6: Tutors**

Several participants benefited from tutoring services provided by their schools or programs. See below for comments:

Mckenna
Yes, for math, not for reading. I didn't need one for reading. Math was my (pauses) area that I needed to work on because my mom and the school was so focused on my language development. They made sure I was immersed in English and understanding the English to the point where they ignored and forgot the math. So, I don't have a math learning disability. I have the signs of a learning disability because that muscle was never trained. I didn't really get the math. I had a tutor for math.

Ashlee
I do remember she came for one summer, and then the following summer, I asked my mom why she wasn't coming and she said you didn't need it. So, before that, I’m not sure. I remember we did write stories together, then I would explain what my story was about or she would correct my grammar, that kind of thing. The reason why, I don't know, I’m not sure. It was a long time ago.
Chapter IV provided narratives from each participant as it related to the themes that emerged. With narratives, there is a world of possibilities. As a narrative inquirer, I collaborated with the participants as they reflected upon themselves as developing readers and shared their stories. Their stories were not shared in chronological order, but rather, as an unfolding of their deaf identity as they blossomed into professionals. I very strongly related to each participant’s experience, as their narratives ignited a deeper understanding and had a profound impact on me. I was left with a feeling of hope for the possibilities of change, which I will outline in Chapter V through an analysis of their narratives.
Chapter V: Discussion

Discussion of Findings

Sociocultural theory focuses on the importance of social interaction, society’s influence on one’s development, cultural beliefs and attitudes that influence learning, and the environment of the learning process. The research questions reflect the importance of social interaction between the learner and the parents, caregivers, teachers, peers, and the society. The theory guides the questions by focusing on literacy development that may be controlled by society, social interaction and cultural beliefs. The questions also examined the culture surrounding the reading process and how deaf and hard of hearing students develop as readers in the mainstreamed setting. Now, with all the participant answers, and themes that emerged as a result, let’s return to revisit the original questions of the project:

Central Question:
What are the main underlying factors that contribute to the development of successful deaf readers in the mainstreamed setting?

Answer: The underlying factors that contribute to the development of successful deaf readers are exemplified by the themes that were identified in the data collection process. Those five overall themes: 1. experiences, 2. language use, 3. pathological view of deafness/incongruent pedagogy, 4. reading, and 5. services all played a role in each participant’s development as readers. The theme that was referenced the most, and hence, the most important theme, was the theme of language use. Participant interviews shifted the focus from how they learned how to read, to a focus rather on their overall experiences learning languages and how they communicated in the classroom and at home with their families.
Sub Questions:

1. What is the role of teachers, staff, and interpreters in the development of the reading process of deaf and hard of hearing readers in the mainstreamed setting?

Answer: The role of teachers, staff, and interpreters played an important role in the development of deaf and hard of hearing readers. The top two sub-themes in the theme of services was the role of sign language interpreters and speech language pathologists. Participants stressed the importance of the two positions in the mainstreamed setting. Sign language interpreters served different roles from caretaker, to language model, to co-teaching. When speech language pathologists focused on the overall language experience and co-collaborated with their students, they served a positive role in participants reading development. In addition, participants indicated that, the opposite was also true, when their speech language pathologists or teachers did not believe in their students and their abilities and did not have an understanding of deaf identity or the language of the deaf community.

2. What literacy strategies do staff members utilize to develop deaf and hard of hearing students into successful readers?

Answer: As a researcher, I was hoping for a detailed account of different strategies utilized by different staff members. This question ultimately was left unanswered, and instead participants reflected on their overall experiences reading at home with their families, and at school with their teachers. This brings us to a topic that demands further exploration; how families learn to read with their deaf or hard of hearing children. Is there a possibility of influencing policy change to require early intervention services for families of deaf children? The need for parents to learn a new language, along with learning how to use that language in appropriate ways so as to support the literacy of their children, is of paramount importance and needs to be addressed immediately.

3. What are the challenges of developing as a deaf and hard of hearing reader in the mainstreamed setting?

Answer: The major challenge that was identified in the data collection process is the issue of the pathological view of deafness resulting in incongruent pedagogy. Society’s view of disabled people is generally negative, which effects pedagogical decisions in negative ways. In addition, Deaf Education is unfortunately under the umbrella of Special Education that serves all disabled children. This translates
into having educators schooled in Special Education, instead of specifically specializing in Deaf Education. Whereas, in the Deaf community deaf and hard of hearing children are not seen as disabled, and rather seen as simply normal children using a different language, in the mainstream environment they are seen as disabled, and hence broken. This paternalistic and condescending attitude, as well as general ignorance of deaf children’s language needs, led time and again to incongruent pedagogical decisions that were not meeting the needs of the participants as developing readers.

4. What was the instructional/philosophical approach of the program/school the subject attended and how did this impact the deaf and hard of hearing reader?

Answer: As a researcher, I was hoping for a detailed account of different instructional/philosophical approaches used in the participants’ programs/schools. As in sub-question #2, this question ultimately was left unanswered, and instead participants reflected on their overall experiences of language use. Participants experienced a range of instructional/philosophical approaches: oral education, total communication, and teachers/interpreters using signed exact English, contact signing, spoken English or ASL. Participants expressed concerns about the focus of speaking rather than the overall language experience. They lauded all attempts to include signing wherever possible.

Trustworthiness

To maintain trustworthiness throughout the data collection process and the presentation of the data, I utilized the method of member checking. This allowed for me to confirm my interpretation of the videos I recorded and then transcribed. I also gave participants the opportunity to confirm language choices and the accuracy of the information recorded. By developing a rapport with participants, I maintained clear communication in terms of their anonymity, how the data was stored, how their names/identifying information such as names of people/schools/programs was not recorded. I also allowed them the freedom to
communicate with me if anything was needed to be removed from the transcripts. I also gave them the opportunity to withdraw from the process or interview at any time. I also recognized my personal experiences and allowed participants to lead without the influence of my experience or my story.

Limitations

After interviewing all of the participants and gathering information about their language experiences, one important limitation that was recognized was that each participant currently has a deaf identity. They were all at the time culturally deaf and are active members in the deaf community. They all also use ASL as their primary language. The data has a possibility of differences if I interviewed deaf and hard of hearing people that are not current members of the deaf community.

Another limitation is my experience as a researcher in the process. I was the only one who transcribed all of the videos and coded all of the information. I did not work with other researchers that could provide different perspectives or interpretations. With my story and my positionality, the data collection process and my coding process could be influenced by my experience. However, I felt as if my validation strategies provided me with confirmation that I captured the participants’ stories without allowing my story to influence theirs.
Influencing Current Educational Practices

The goal for this study was to influence current educational practices in the mainstreamed setting in hopes they can provide an environment where schools can maximize the success of their deaf and hard of hearing students. The role of the sign language interpreter in the mainstreamed environment was identified as a theme that strongly influenced the child’s success. I believe it is necessary to review the role of the sign language interpreter in the K-12 setting. From my interviews with the participants, the interpreters did not serve only their one stated purpose, translating spoken English into sign language for access in the classroom. The interpreters instead were responsible for the child’s language development, reading success, and fostering social development. Sign language interpreters are often not identified as a crucial part of the IEP process and they are not identified as caretakers, teachers, or language-models. In reality, they are indeed serving in those various capacities. Should they be identified with a different title? The title of a “sign language interpreter” in the K-12 setting does not appropriately define their role in the classroom. I would posit that they be afforded the same professional development opportunities, and a seat at the table with other representatives at the IEP meetings.

Another educational practice that needs to be transformed is the influence of negative perspectives of teachers and staff in the mainstreamed setting. The
majority of mainstreamed programs do not have deaf or hard of hearing teachers or staff members. This results in hearing teachers or staff members that have a pathological view of deaf and hard of hearing students. These gaps can be addressed through sensitivity training, cultural awareness seminars, some instruction in sign language, and exposure to successful deaf adults.

Mainstreamed programs often follow misguided educational approaches determined by a random special education educator at their school, rather than following research based best practices. The current research shows that it is essential to expose the child to both ASL and English at a young age in order to allow for language to thrive. Programs that are set on one philosophy such as oral education end up limiting the child’s options resulting in language deprivation, a serious issue that is plaguing deaf education. Every deaf or hard of hearing child is different, exposing them to all options available allows them to thrive linguistically.

The Individuals with Disabilities Education Act (IDEA) allows schools and programs to offer a free appropriate public education (FAPE) in the least restrictive environment (LRE) for deaf and hard of hearing students and ensures that appropriate accommodations are provided. The IDEA also requires schools and programs to provide their students with a planned educational program, one that “offers the opportunity for significant learning.” (Education Law Center, 2008). In
order for students to make meaningful progress in their education, we have to redefine what the LRE looks like in the mainstreamed setting. In the field of special education, it is widely accepted that the LRE for a child with a disability is to be mainstreamed and educated with children who do not have disabilities. However, the language of the mainstream classroom, where the majority of the students are hearing, is spoken English. Schools and programs often fail to recognize the unique needs of deaf and hard of hearing students for language input, and hence fail to provide dual language learning opportunities to allow significant learning to take place. As Pettito (2009) has stated, schools and programs often falsely believe “exposure to two languages too early can cause developmental language delay and confusion.” In fact, current research shows it is the exact opposite. Bilingual language exposure has a positive impact on successful reading acquisition, reading mastery, phoneme awareness tasks, and enhanced reading comprehension (Berens, Kovelman, & Pettito, 2013). Consequently, there is an urgency for the implementation of dual language learning strategies/approaches in the mainstreamed environment, this requires a redefinition of current educational laws.

I have developed three core ideas for mainstreamed programs/environments.  
*Language Fluency:* This is identified as an important part of the IEP, a language plan that provides the child and his/her families an understanding how language
will be acquired. Based on current research, dual language learning promotes reading advantages and language processing advantages (Berens, Kovelman, & Petitto, 2013). Teachers of the deaf, ASL interpreters, and deaf role-models can be appropriately identified as language models or mentors) all serve specific roles in the IEP process. All three positions are essential for the success of mainstreamed students and their families.

Professional Development: This part is for the staff, teachers, interpreters and the families of all the deaf and hard of hearing students in the mainstreamed schools. There is a need for bilingual education training, literacy development training/workshops for both staff/teachers and families and most importantly culture/sensitivity training. There is also a need of a shared reading project, where educators can work with hearing families. This is all an essential part of the child’s growth and success.

Evaluation: Schools need to ensure they appropriately evaluate their teachers, interpreters, and staff members to ensure they are up to date on their certifications and licensure. Also, students need to become an important part of the evaluation process; they know what is working for them and what is not. They need to be given a voice in their education planning in the hearing environment.
Recommendations for Future Research

This study interviewed adult subjects who were asked to reflect on their early childhood experiences. What I found was that most subjects could not recall details of what literacy strategies their teachers, parents, staff or interpreters used. Instead they recalled the gestalt of their experiences in regard to learning how to read. This points toward future research on exploring literacy strategies. With more resources and time, I would suggest also interviewing subjects, teachers, parents, staff, interpreters, and anyone who was present during their early years. In this way, cross referencing, and story collaboration can be established.

This research project also resulted in an understanding of educational practices that worked and did not work. With a deeper understanding of successful deaf and hard of hearing readers, I would also like to see a shift to focus on the experiences of their families. There should be an increase in efforts of evaluating and researching the support successful deaf and hard of hearing people received from their hearing families and how this contributed to their overall experiences. We know 95% of deaf and hard of hearing children are born to hearing parents. With the majority of those parents, the first deaf or hard of hearing person they met was their child. Research should be done with a focus on how they influenced the success of their deaf and hard of hearing children. What did they do right? How can this be used as a model for future parents?
Lastly, in this study, all of the participants shared experiences with a variety of languages. At some point, all of the participants were exposed to sign language. I would like to see future research focus on bilingualism and how it influenced the language development of deaf and hard of hearing children in hearing families and hearing schools.

**Conclusion**

Throughout the journey of this project, as a scholar-practitioner, I tapped into an unknown: a community of brilliant deaf and hard of hearing people who defied the odds, who grew up in hearing environments, who shattered expectations, and ultimately resisted the idea of deaf children not being able to accomplish their dreams. With this community, we shared narratives, developed new ideas, and reflected on our experiences. The one piece that stands out to me, that ran through all five themes, was the use of sign language as the main language of comprehension. While varying educational methods were used, and varying communication strategies were utilized, time and again participants pointed toward the relief at being able to use sign language, whether it was with a teacher, an aide, an interpreter, a peer, or a parent. All participants expressed a degree of gratitude at their training in English, whether it be spoken or written, and as that ultimately being an important part of their education. Notably, though, access to English was understood more readily through explanations in sign language. Categorically, I
believe this points to the importance of a bilingual approach to teaching deaf children.

Interestingly, one other common trait, amongst all my participants, that struck me, was grit. Each individual participant described time and again pushing through, advocating for themselves or being advocated for, and defying the odds that were stacked against them. William Shakespeare said it best, “it is not in the stars to hold our destiny, but in ourselves.” With that said, it is time to become change agents, promote positive changes for mainstreamed deaf and hard of hearing students, and most importantly, to keep reading.

*The more that you read, the more things you will know.*
*The more you learn the more places you’ll go.*
*Dr. Seuss*
References


Enns, C.J. 2006. A Language and Literacy Framework for Bilingual Deaf


Appendix A – Invitation to Participate in the Research

Dear [Name of Participant],

As you may know, I am currently a doctoral candidate at Northeastern University. I will be conducting interviews as part of my research titled *Reading me back into school: Successful deaf and hard of hearing readers in the mainstreamed setting, a narrative inquiry*. As a deaf person who is the product of mainstreaming and has an advanced degree, you are in an ideal position to share valuable firsthand information from your own perspective. I would be honored if you chose to participate in my research, and share some of the secrets of your success.

The goal of this research is to glean pertinent pedagogical information from the experiences of deaf and hard of hearing people learning how to read and write in the mainstreamed setting. My hope is that - with a better understanding of deaf and hard of hearing people's’ reading success - this research can contribute to current practices in mainstreamed programs so they are better able to serve their deaf and hard of hearing students.

The interview will take place in person at the date and time of your choice, and will take about 60-90 minutes of your time. Interviews will be informal, as well as recorded and transcribed. Confidentiality of your participation will be maintained by replacing your name with a pseudonym.

There is no compensation for participating in this study, however, your participation will provide valuable insight and data for my research. Findings could lead to greater public understanding of complex issues that mainstreamed deaf and hard of hearing students face as learners. My hope is that linguistic and cultural narratives may be used as a source of inspiration and guidance for future policy discussions.

If you have questions about my research or you would like to schedule an interview, please contact me directly at (201) 456-9025 or via e-mail at offreda.l@husky.neu.edu. You can also contact the chair of my dissertation committee, Dr. Lynda Beltz at Northeastern University, at (724) 961-8663.

Thank you for considering your participation,

Liza E. Offreda
College of Professional Studies
Northeastern University
Appendix B – Unsigned Informed Consent Form for Interview

Northeastern University, College of Professional Studies

Name of Investigator(s): Principal Investigator, Dr. Lynda Beltz; Student Researcher, Liza E. Offreda

Title of Project: Reading me back into school: Successful deaf and hard of hearing readers in the mainstreamed setting, a narrative inquiry

Request to Participate in Research

In my role of doctoral candidate writing my dissertation, I would like to invite you to take part in a research project. The purpose of this research is to analyze the literacy development of successful deaf and hard of hearing readers who received the majority of their K-12 education in the mainstreamed setting. With your insight, it will provide me with a deeper understanding of the experiences of successful deaf and hard of hearing readers. I am hoping to use the information collected in this research to provide support for current mainstreamed programs that serve deaf and hard of hearing students.

You must be at least 18 years old to be in this research project.

The study will take place in a location TBA and at a date/time of your choice. The interview will take about 60-90 minutes. If you decide to take part in this study, I will ask you to discuss your experiences and stories related to your literacy development as a mainstreamed deaf and hard of hearing student.

There are no foreseeable risks or discomforts to you for taking part in this study.

There are no direct benefits to you for participating in the study. However, your answers may help me to learn more about issues that deaf and hard of hearing readers face in the mainstreamed setting.

Your part in this study will be handled in a confidential manner. Only the researchers will know that you participated in this study. Any reports or publications based on this research will use pseudonyms instead of your name.
The decision to participate in this research project is up to you. You do not have to participate and you can refuse to answer any question. Even if you begin the study, you may withdraw at any time.

You will not be paid for your participation in this study.

If you have any questions about this study, please feel free to call Liza E. Offreda (201.456.9025) or via email at offreda.l@husky.neu.edu), the person mainly responsible for the research. You can also contact Dr. Lynda Beltz (724.961.8663), the Principal Investigator.

If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, 490 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: n.regina@neu.edu. You may call anonymously if you wish.

You may keep this form for yourself.
Thank you,
Liza E. Offreda
Appendix C – Interview Script

Note: Questions may be modified, added, or removed as themes develop through data collection. Follow-up and probing questions will also be used as themes or ideas emerge during the interview.

Introductory Script

Thank you again, for agreeing to this interview. As a deaf person who is the product of mainstreaming and has an advanced degree, you are in an ideal position to share valuable first hand information from your own perspective. I appreciate your willingness to share your experiences. My hope is that – by focusing on the reading success of deaf and hard of hearing people like yourself, it will result in a better understanding of the reasons for that success. My research can contribute to current practices in mainstreamed programs so they are better able to serve their deaf and hard of hearing students.

This interview will take about 60-90 minutes, but if you need to pause at any time and continue at a later date, you are allowed to do so. You are also free to stop at any time, because your participation is voluntary. With your permission, this interview will be video-recorded, this way I can transcribe at a later date rather than taking notes. This interview will be done through American Sign Language and the only way to record with accuracy, is through video. To ensure I gather correct information, I will send you a copy of the transcript for approval. Again, your name will not be used in the transcript; it will be replaced with a pseudonym to respect your confidentiality. Do you agree to the video recording? [participant will response, if yes, researcher will thank him/her and then will proceed]. Do you have any questions before we proceed?

Wonderful, let’s get started, [researcher will turn on the video-recording].

Part I: Warm-up questions

1. Can you describe your current career?
2. What is the highest degree you attained? Do you plan to continue your education, if so, what are your future plans?
3. Can you briefly explain your language background? What is your first language? When did you learn American Sign Language? How did you learn (eg. school, family, friends)?
4. How many years were you mainstreamed from K-12? How about college?
Part II: Content

I am interested in exploring the factors that affected you as a student in the mainstreamed setting.

1. Can you describe your mainstreamed program?
   a. Were you in a self-contained setting and/or alone in a hearing classroom with an interpreter?
   b. Approximately how many deaf and hard of hearing students were enrolled in the program?
   c. What support services were provided?
   d. Did your program have teachers and staff designated for your program? If so, can you describe their qualifications (eg. Fluency in ASL, deaf education background, deaf/hard of hearing language models)?

2. What was the instructional/philosophical approach of the program/school (eg. Bilingual/bicultural, oral, total communication)?
   a. What are your thoughts on this approach?
   b. Did you feel as if this approach benefited you? If so, how? If not, why not?
   c. If the approach did not benefit you, how did you become a successful reader?

3. Can you explain the role of teachers, staff, and interpreters in your development as a reader?
   a. Did you feel as if you had a particularly close relationship with any of them? Was he/she a role model for you?
      i. Prompt: Can you give me an example or a story you remember about that person. How did he/she impact you as a reader?
   b. Did you receive one on one support or tutoring services inside/outside of the classroom?
   c. If you worked with an interpreter or a cart provider, can you explain his/her qualifications? Do you feel if she/he helped you with your success as a reader?

4. What literacy strategies did staff members utilize to develop you as a deaf and hard of hearing successful reader (eg. read alouds, graphic organizers, vocabulary instruction, summarizing, K-W-L, story maps)?
a. Were they the same strategies used with hearing students?
b. Were those strategies consistent among your teachers? Or did they vary?
c. What was your favorite strategy and explain why?
d. What was the most effective strategy, is it the same as your favorite, if not, explain why?

5. What were the challenges of developing as a deaf and hard of hearing reader in the mainstreamed setting?

6. Describe your relationship with your deaf and hard of hearing peers if applicable, and describe your relationship with your hearing peers if applicable.
   a. Do you recall a time you were frustrated? Can you describe what happened? What did you do in response?
   b. Can you describe your relationship with your hearing teachers through an interpreter?

7. If you could go back to your mainstreamed program, what would you change and why?

8. What do you see as the key to your success?
Appendix D – Revised Interview Script

Introductory Script

Thank you again, for agreeing to this interview. As a deaf person who is the product of mainstreaming and has an advanced degree, you are in an ideal position to share valuable firsthand information from your own perspective. I appreciate your willingness to share your experiences. My hope is that – by focusing on the reading success of deaf and hard of hearing people like yourself, it will result in a better understanding of the reasons for that success. My research can contribute to current practices in mainstreamed programs so they are better able to serve their deaf and hard of hearing students.

This interview will take about 60-90 minutes, but if you need to pause at any time and continue at a later date, you are allowed to do so. You are also free to stop at any time, because your participation is voluntary. With your permission, this interview will be video-recorded, this way I can transcribe at a later date rather than taking notes. This interview will be done through American Sign Language and the only way to record with accuracy, is through video. To ensure I gather correct information, I will send you a copy of the transcript for approval. Again, your name will not be used in the transcript; it will be replaced with a pseudonym to respect your confidentiality. Do you agree to the video recording? [participant will respond, if yes, researcher will thank him/her and then will proceed]. Do you have any questions before we proceed?

Wonderful, let’s get started, [researcher will turn on the video-recording].

Part I: Warm-up questions

1. Can you describe your current career?
2. What is the highest degree you attained? Do you plan to continue your education, if so, what are your future plans?
3. Can you describe your family background? Was there anyone in your family other than yourself who are deaf or hard of hearing?
4. Can you briefly explain your language background? What is your first language? When did you learn American Sign Language? How did you learn (eg. school, family, friends)?
5. How many years were you mainstreamed from K-12? How about college?
6. Where was your K-12 education (city, state)?
7. When did you graduate from High School?

Part II: Content

I am interested in exploring the factors that affected you as a student in the mainstreamed setting.

1. Can you describe your mainstreamed program/experience?
   a. Were you in a self-contained setting and/or alone in a hearing classroom with an interpreter?
   b. Approximately how many deaf and hard of hearing students were enrolled in the program?
   c. What support services were provided?
   d. Did your program have teachers and staff designated for your program? If so, can you describe their qualifications (eg. Fluency in ASL, deaf education background, deaf/hard of hearing language models)?

2. What was the instructional/philosophical approach of the program/school (eg. Bilingual/bicultural, oral, total communication)?
   a. What are your thoughts on this approach?
   b. Did you feel as if this approach benefited you? If so, how? If not, why not?
   c. If the approach did not benefit you, how did you become a successful reader?

3. Can you explain the role of teachers, staff, and interpreters in your development as a reader?
   a. Did you feel as if you had a particularly close relationship with any of them? Was he/she a role model for you?
      i. Prompt: Can you give me an example or a story you remember about that person. How did he/she impact you as a reader?
   b. Did you receive one on one support or tutoring services inside/outside of the classroom?
   c. If you worked with an interpreter or a cart provider, can you explain his/her qualifications? Do you feel if she/he helped you with your success as a reader?
   d. What was the role of your speech language pathologist if applicable? Do you feel as if he/she supported your reading success?
4. What literacy strategies did staff members utilize to develop you as a deaf and hard of hearing successful reader (eg. read alouds, graphic organizers, vocabulary instruction, summarizing, K-W-L, story maps)
   a. Were they the same strategies used with hearing students?
   b. Were those strategies consistent among your teachers? Or did they vary?
   c. What was your favorite strategy and explain why?
   d. What was the most effective strategy, is it the same as your favorite, if not, explain why?

5. What were the challenges of developing as a deaf and hard of hearing reader in the mainstreamed setting?
   a. Describe your relationship with your deaf and hard of hearing peers if applicable, and describe your relationship with your hearing peers if applicable.
   b. Do you recall a time you were frustrated? Can you describe what happened? What did you do in response?
   c. Can you describe your relationship with your hearing teachers through an interpreter?

6. Did your family receive early intervention services or support?
   a. Can you briefly explain your family’s role in your success as a reader?
   b. Can you describe your family’s experience with the IEP process?

7. If you could go back to your mainstreamed program, what would you change and why?

8. What do you see as the key to your success?

9. With your current career/work, what are your strengths and weaknesses? Do you feel as if this is tied to your experience as a deaf and hard of hearing reader in the mainstreamed setting?
Appendix E – Word Frequency Query
Appendix F: Themes: Coding Frequency Results

![Pie chart showing coding frequency results for various themes.]
Appendix G: Overall Themes: Coding Frequency Results

OVERALL THEMES

- SERVICES: 30%
- EXPERIENCES: 23%
- READING: 18%
- LANGUAGE USE: 17%
- PATHOLOGICAL VIEW OF DEAFNESS/INCONGRUENT PEDAGOGY: 12%
Appendix H: Mind Map
Appendix I: Overlapping Themes