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An Exploration of Deaf Education through the Experiences of Culturally Deaf Adults

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Abstract

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Abstract

Deaf students have unique linguistic and cultural needs that are cultivated in social settings; however, these needs have received minimal consideration from school administrators and policy makers when designing and implementing educational programs. Inquiry regarding how Deaf people learn in social situations and whether these processes are present in formal educational settings is necessary to understand how to better serve this population in school. Observations were used to provide insight on how deaf people teach and learn from one another in social/informal settings. Individual interviews with 11 Deaf people ages 18 to 40 provided insight regarding personal experiences in formal and informal educational settings. Constructivism, sociocultural theory, and multiple intelligences theory were the conceptual frameworks for this study. Trustworthiness was established using member checking and detailed accounts of participants' experiences in their educational placements. The findings revealed that deaf people value facets of Deaf culture in all aspects of their lives, including education. Participants expressed the need for school staff and administrators to understand cultural nuances that are important for deaf students, the need for barrier-free communication, the importance of self-identity, and the need for Deaf mentors and or role models in school. In social settings, deaf people use visual communication and require clear sightlines for communication, use expansion techniques unique to ASL, use scaffolding to support and mentor one another, and use repetition for clarity, understanding, and emphasis. The knowledge gained from this study can help actualize educational curricula that improve literacy and increase job and educational opportunities for deaf people.

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Dedication

This work is dedicated to my children, Daryl and Kamden, and my mother Katherine.

Daryl, my first born and my first glimpse of unconditional love. You are smart, you are handsome, and you are witty. Your great smile and even greater hugs are a testament to your personality. Never let anyone dim your light!

Kamden, my scholar and my muse. You are my light and my inspiration. Your soft heart and sweet nature remind me that there are still kind people in this world. Thank you for holding my hand.

Mom, your sacrifices throughout my life have not gone unnoticed. A high school graduate who worked minimum wage jobs, yet, you understood the advantages of education. I admire your commitment to my education and to making me a better person. Thank you.

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First, I would like to thank my Lord and Savior Jesus Christ. Without You, I am nothing.

Thank you to my committee, Dr. Sandra D. Mahoney and Dr. Elisabeth Weinbaum, for your guidance during this process. Dr. Mahoney, your professionalism, encouragement, and responsiveness helped me to regain and maintain my composure during moments of obscurity and dejection.

Secondly, to my inner circle of friends, I am forever thankful for you. Your encouraging words and actions throughout this process have been invaluable. You are the wind beneath my wings and we will soar together. I love you all!

Lastly, a huge thank you to my Deaf and interpreting family. You accepted me into your world, and for that I am forever grateful. I am a more conscious person because of my relationships within this community.

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Chapter 1: Introduction to the Study

Culture is the gateway to identity. In Deaf culture, identity can involve both a hearing impairment or status as a sociolinguistic minority (McIlroy & Storbeck, 2011). This dual definition is at the center of the deaf education debate and is the basis for deaf education programs. Three teaching philosophies attributed to culture and identity are: Total communication, bilingualism/biculturalism, and oralism. However, these philosophies focus on how to communicate with deaf children in teaching environments versus the educational needs of deaf children overall. While communication is a cultural gateway, research and education that focuses on this community must be more cognizant of the lives of deaf people beyond hearing loss and their status as a linguistic minority (McIlroy & Storbeck, 2011). However, the intricacies of Deaf culture that encourage and support learning and how these fit in deaf education programs has been largely ignored.

The discrepancies in deaf and hearing education have been attributed to many factors, including the lower cognitive functioning of deaf people and their inability to grasp the English language, their social isolation due to being deaf, lack of qualified teachers of the deaf, and modes of communication used in deaf education programs. While there have been significant advances in deaf education, a paucity of attention has been paid to integrating Deaf culture in educational interventions. However, there is a lack of research on culturally-informed educational interventions.

Social change is perpetuated by research, as documented evidence can determine the fate of a purported theory (Creswell, 2014). When considering the implications of research involving those who are deaf, empirical data specifically addressing this

community can positively impact deaf literacy and increase educational and employment opportunities for deaf people. This chapter presents the research topic, background about the topic, the purpose of the study, the research questions used to guide the investigation, and the nature of the study. It also provides definitions of key terms and assumptions that are significant to this study. Scope and delimitations, limitations of the study, and the significance of the study are presented. Lastly, the main points are summarized and provide a transition to Chapter 2.

Background

A major component of culture is communication. When discussing deaf education, modes of communication embedded in teaching philosophies guide current practice. Total communication integrates multiple communication methods during instruction, particularly spoken language simultaneously matched with its sign counterpart (Nussbaum, 2011). This method is also known as simultaneous communication (simcom) and is typically used when the instructor is well versed in signed and spoken English. This technique is controversial because it perpetuates the myth that ASL is a visual code for English. ASL and English are two distinct languages with different grammatical structures. Simcom maintains the linguistic properties of English. However, the nuances of ASL such as facial expression and conceptually accurate sign choices are lost (Baker-Shenk & Cokley, 1980, p. 64; LaSasso & Crain, 2015; D. Mitre-Smith, personal communication, February 8, 2010).

The bilingual/bicultural approach uses ASL as the primary language for teaching, with English taught as a second language (Nussbaum, Waddy-Smith, & Doyle, 2012). In

this environment, sign language is not a means of understanding spoken language but is used by children and teachers throughout the school day to actively communicate (Mounty, Pucci, & Harmon, 2014). This method is often preferred by members and allies of the Deaf community as it promotes ASL while teaching a second language. Learning ASL and English creates a bidirectional process that is supportive in developing literacy skills in d/Deaf children (Mounty et al., 2014).

In contrast to bilingual/bicultural education, oral methods encourage the use of vocal communication complemented by assistive listening devices (Nussbaum, 2011). Students are discouraged from signing and encouraged to lip read regardless of the degree of hearing loss. Students in oral programs also receive intensive speech therapy and are trained to focus on the face and mouth for understanding (Nussbaum, 2011). However, it is debatable if this or other communication methodologies used in teaching deaf students are successful in promoting literacy because of the scarcity of empirical support. A historical overview of the emergence of total communication, bilingual/bicultural pedagogies, and oralism provides insight regarding this divide.

Prior to the 19th century, deaf Americans were mainly educated by clergy or other religious leaders who sought to offer them religious redemption (Padden & Humphries, 2005). As some Christian denominations shifted from the perspective of mandatory worship to free will, clergy decided that everyone should be enlightened and provided an opportunity to decide their fate. This included deaf children and adults who were educated in the church using an informal method of manual communication.

A deeper concern for the communication needs of deaf people happened when Minister Thomas Gallaudet noticed his neighbor's deaf daughter and became interested in learning how to communicate with her. He traveled to Europe to study its approach to manual language. While there, Gallaudet traveled to various areas, many of which practiced oral communication. He did not agree with this method and traveled to France after hearing of a young man who was fluent in French sign language.

Gallaudet returned to the U.S. along with a deaf protégé trained in French sign language. Their goal was to educate deaf people using this innovative language he witnessed. In 1817, he established the Connecticut Asylum for the Education of Deaf and Dumb Persons in Hartford using subsidized funds from the government and private donors. It was the first school for the deaf in America and was led by deaf teachers under the tutelage of Gallaudet and his protégé. Teaching involved gestures, symbols, and fingerspelling, which Gallaudet had observed during his European explorations (Gallaudet University, 2016).

However, following the Civil War, educational reformists sought to replace sign language with oral communication. This was done to help deaf people assimilate into the greater society and obviate what some referred to as clan-like behavior (Rosen 2008). Several schools for the deaf erected during this time began to focus on teaching deaf students speech and lip reading and banned the use of manual communication. Oralism was highly popular and soon adopted as the preferred method for teaching deaf students.

During the Conference of Milan in 1880, educators from around the world declared the impracticality of manual language in the education of deaf children and

called for a systemic ban on its use (Coryell & Holcomb, 1997). Deaf teachers were dismissed from their teaching positions and deaf students were not allowed to use sign language in the classroom. This movement stymied the development of self-identity and contributed to the ongoing debate about the education of deaf students in the United States (Eckert & Rowley, 2013).

The literature on the presence of aspects of Deaf culture in deaf education programs is deficient, although there is research that focuses specifically on educating deaf children (Cannon & Kirby, 2013; Garberoglio, Cawthon, & Bond, 2014; LaSasso & Crain, 2015). To investigate the prevalence and continuity of studies addressing educating deaf students, particularly related to teaching reading and literacy, Luckner et al. (2005) combed electronic sources and conducted a manual search of American Annals of the Deaf, Volta Review, and the Journal of Deaf Education and Deaf Studies. Of the 964 studies found, only 22 were eligible for analysis by satisfying the following criteria: all participants must be between the ages of three and 21 and recognized as deaf or hard of hearing, the study was published in a peer-reviewed journal between 1963 and 2003, research must include a narrative of the intervention and use a control group, and statistically relevant data must be included.

The 22 selected studies were scrutinized for uniformity, similarities in the types of measurements and findings, and duplication. The authors found that all the studies were original research and no two studied the same aspect of literacy (e.g. reading comprehension, vocabulary, and writing). Therefore, the studies were not valuable in

providing empirical support for a central methodology useful in educating this population (Luckner et al., 2005).

There is also significant research on the importance of culture and identity in the lives of Deaf people (Flaskerud, 2014; Van Cleve, 2016; Wang & Andrews, 2014). However, the role of culture and its influence and benefit in deaf education programs has rarely been considered. According to Ziv (2015), the complexities of educating this cultural minority demands that attention be given to equality and access versus rehabilitation. Exploring aspects of Deaf culture such as mentoring, communication, scaffolding, and chaining, and their presence in deaf education programs to foster learning offers opportunities to positively affect social change related to the development and application of pedagogy that will promote literacy in deaf students.

Statement of the Problem

Petrova (2013) found that culture is important in education, as it is a conduit for transference of skills crucial to cognitive development. According to Vygotsky (1978), learning that happens as a result of cultural experiences influence how people learn in formal academic settings; therefore, culture is a gateway to higher and more complex learning. Incorporating cultural tools that evolve as activities become more complex helps to develop higher cognitive potential and psychological processing (Petrova, 2013). However, the low literacy levels of d/Deaf adults demonstrates a lack of evolution in the formal education of this population.

After decades of discussion regarding deaf education and education reform, the reading and literacy levels of d/Deaf students continue to be an issue among this

population. Lower literacy levels can lead to marginalization by and underrepresentation in society. The educational disparities between hearing and deaf students are evident in delays in literacy among deaf students (Luckner et al., 2012; Wang & Andrews, 2014). Comparing math and literacy proficiencies among deaf and hearing students, hearing students are far more progressive than their deaf counterparts in both subjects (Kritzer, 2009; Kyle & Harris, 2006; Marschark et al., 2009). Additionally, the average deaf adult reads at a third or fourth grade level (Luckner et al., 2005; Marschark et al., 2009; Parault & Williams, 2010; Wang & Andrews, 2014).

Repeated efforts to reform deaf education by creating national policies for children with disabilities have done little to diminish this disparity (Trezek & Mayer, 2015). Lollis and LaSasso (2009) attributed this to the lack of educational curricula designed specifically for deaf learners and the continued use of inadequate assessment tools. The marginal presence of deaf instructors in the classroom is another prevailing issue in deaf education; therefore, diversifying the teaching pool can provide an array of proficiencies beneficial in teaching this cultural and linguistic minority (Simms et al., 2008). However, there is limited research regarding whether there are aspects of Deaf culture that are valuable in the learning process of this population.

Deaf culture has all of the nuances present in other cultures. Members of this cultural minority share a common language as well as similar beliefs and values. There is a deep sense of belonging characterized by affiliations with and immersion in social institutions, such as Deaf clubs and Deaf residential schools (Ladd & Lane, 2013). Deaf people share a rich history that is conveyed through literature and arts. Members of this

cultural minority have also experienced oppression, as decisions regarding Deaf affairs have traditionally been made by hearing people with little to no regard for the complexities of Deaf culture (Ladd & Lane, 2013). This is the case with deaf education. Many policies and pedagogies are adopted without empirical support or input from Deaf people. According to King (2014), programs that consider the cultural needs of Deaf children allow them an opportunity to assimilate into hearing culture while using aspects of their own culture in the educational process, but unfortunately, little current research is available to guide culture-based revisions to curricula.

Purpose of the Study

The purpose of this qualitative phenomenological ethnographic study was to examine how Deaf people learn in social situations and whether these processes are present in formal educational settings. It also sought to understand the meaning of Deaf culture from a Deaf person's perspective. Knowledge gained will be used to assist administrators and educators in designing and implementing deaf education programs.

Initially, the age range for participation was 18 to 30. This range was selected to garner the most detailed retrospective accounts of educational experiences from the participants' memories. However, after observing Deaf people of varying ages during observations, it was discovered that they have vivid memories of their past experiences, and age was not a determinant of memory. Therefore, increasing the age range for participation would benefit and not hinder this study. Hence, the age range was adjusted to 18-40.

Research Questions

Primary Research Question

RQ1: What are the educational experiences of Deaf people in formal and informal learning environments?

Secondary Research Questions

SQ1: What is Deaf culture from a Deaf person's perspective?

SQ2: How do Deaf people learn in an informal learning environment with or from other Deaf persons?

SQ3: What are the learning experiences of Deaf people in a formal learning environment?

SQ4: How can educational programs improve reading and literacy in d/Deaf students?

Conceptual Framework

Three theories were used to develop the conceptual framework and conduct this study. Sociocultural theory, constructivism, and multiple intelligences theory provided a complementary foundation for how people attain and retain information. The sociocultural theory of learning is based on the mutual dependence of individual and social contributions to learning (John-Steiner & Mahn, 1996; McBride, 2011). According to Vygotsky (1978), social exchanges cultivate learning and language. Hence, culture inspires cognitive and communicative skills that are present in and enhanced by formal education (John-Steiner & Mahn, 1996; Petrova, 2013).

Scaffolding, a culturally applicable concept, is the process in which individual support is provided by more experienced individuals through multifaceted activities, and then steadily removed as autonomy develops (Engin, 2011). In Deaf culture, Deaf mentors assume this role and it is anticipated that instructors will continue this practice in an educational setting. Vygotsky also alleged that intelligence and motivation were best assessed during social interactions, He acknowledged the significance of language in culture and suggested that the phases of language development promote higher mental processing and organization of thoughts evidenced by the evolution of external speech to internal self-talk (Kozulin et al., 2003).

The learning theory of constructivism is based on the belief that knowledge is contrived through personal experience and reflection, both of which encompass language (Gisladottir, 2014; Miller, 2010). According to Gisladottir (2014), the literacy process incorporates meaning gathered from one's understanding of the world, making social and cultural perspectives an asset to the educational environment. People take new information, weigh its legitimacy and pertinence, and apply or dispose of it based on competencies learned through the cultural tool of language (Petrova, 2013).

Howard Gardner's theory of multiple intelligences (MI) is based on the premise that individuals possess various frames of intelligence that activate processing and generate intellect (Gardner, 1983). The eight frames are linguistics, logical/mathematical, spatial, bodily/kinesthetic, musical, interpersonal, intrapersonal, and naturalist (Gardner, 1999). For this research, spatial intelligence is of interest because it involves the ability to comprehend and recreate the visual world and bodily-kinesthetic intelligence which is the

skilled use of the body for the purpose of expression and problem solving (Gardner, 1983).

To determine the effect of MI theory on the academic achievement of students, Bas (2016) conducted a meta-analysis of 75 quantitative studies conducted between 1998 and 2014. The researcher found that MI-based instruction was positively correlated with students' academic achievement. Moreover, Alqatanani (2017) studied the use of MI theory to improve critical reading skills in 59 secondary English language learners. Thirty students were in the experimental group and received instruction using MI based methods and 29 students were in the control group and were taught using conventional methods. A critical reading skills test was administered to both groups before and after instruction.The results showed a statistically significant difference between the post-test scores of the control and experimental groups with the experimental group showing improvement on the post test. Therefore, it was suggested that teachers incorporate MI strategies to enhance critical reading skills.

Brand (2006) examined the value of using a MI approach to cultivate literacy in kindergarten-aged children. The results indicated that the 13 subjects who participated in the MI-based literacy activities demonstrated a 20.69 score increase in patterns of speech sounds and an 18.38 score increase in nonsense word fluency as well as a 41.29 score increase in word use fluency, as measured by the Dynamic Indicators of Early Literacy Skills post-test. Because the language processing centers of the brain are the same for spoken and signed language, this activity should be repeated with deaf students to see if it will yield similar findings.

According to Temur (2007), a MI theory-inspired activity in classroom instruction can make use of skills acquired in everyday life. Activity menus are a list of activities students can choose from to demonstrate their knowledge and understanding of a particular topic (Gardner, 2011). For example, English as second language learners at a university in New York chose dance, art, or writing to express their future goals (Gardner, 2011). This was an antecedent to other activity menus that helped the students learn to read and write English (Gardner, 2011).

The Ernest C. Drury School for the Deaf in Milton, Ontario, incorporated video technology and fostered Deaf identity in an elementary classroom setting. The researcher noted that the incorporation of storytellers in the lesson helped the students' understanding of ASL and increased their awareness of real life. Students in each grade stated that they felt a connection with the storytellers because they were Deaf; moreover, Snoddon (2010) suggested that ASL- fluent Deaf adults can be a valuable asset to the classroom. This project developed Deaf identity by allowing students to integrate traditional Deaf storytelling while demonstrating proficiency in writing the introduction, body, and conclusion of an English paper (Snoddon, 2010).

Socio-cultural theory, constructivism, and MI theory were used to frame this study and are directly related to the learning experiences of Deaf people in formal and informal settings. These ideologies provide a foundation for the acquisition and construction of knowledge and how that knowledge is stored and expressed. Deaf people learn in various ways and these variations allow them to make sense of society. A more thorough explanation is provided in Chapter 2.

Nature of the Study

This study used a qualitative approach which allowed for the examination of a specific group of people in their natural environment to understand a phenomenon. The goal of this research was to examine how Deaf people learn in social situations and whether these processes were present in formal educational settings. According to Kozelski (2017), qualitative methodology provides the foundation for understanding the collective history that has naturally unfolded among members of the same culture. Qualitative research is open to the application of social science theories from other disciplines that may not be overtly related (Frankel & Devers, 2000). A phenomenological ethnographic approach was used for this qualitative exploration.

Ethnography is designed for the examination of shared patterns and behaviors of an established cultural group (Creswell, 2014). Studying societies or cultures in their natural setting, through observations, provide a firsthand experience of interactions (Frankel & Devers, 2000; Smith & Bekker, 2011). Therefore, this method provided significant context for understanding how d/Deaf people facilitate learning with other d/Deaf people. Phenomenology involves interviews to gain further insight into the perceptions of the interactions experienced by those observed (Smith & Bekker, 2011). Moreover, the application of phenomenology has influenced ethnographic studies for decades (Desjarlais & Throop, 2011; Katz & Csordas, 2003). Semi-structured interviews provided firsthand knowledge about the culturally specific learning experiences of Deaf people in educational settings. Data collection and analysis is detailed in Chapter 3.

The data collection process included a screening questionnaire, observations of interactions of Deaf individuals in social situations, and individual interviews. The questionnaire was concerned with gathering demographic information (e.g. age, use of ASL) to determine eligibility for inclusion in this research study. Observations were used to provide insight regarding how Deaf people teach and learn from one another in social and informal settings. Individual interviews provided an opportunity to understand the lived experiences of Deaf persons in formal and informal educational settings. Collected data was coded using common themes and analyzed as described in Chapter 3.

Definitions

American Sign Language (ASL): A visual language consisting of purposeful movements using the arms and hands, facial expressions and eyes, and body position (Baker-Shenk & Cokley, 1980; National Institutes of Health, 2015).

Deaf culture/community: A group of deaf people with shared beliefs and norms, language, values, and other influences that shape identity and provide a sense of belonging (Hamill & Stein, 2011; Padden & Humphries, 2005).

Deaf: Capital "D" Deaf refers to people who identify with the cultural minority and are proud to be Deaf (Hamill & Stein, 2011).

deaf: Lowercase "d" deaf refers to individuals who have a hearing loss (Baker-Shenk & Cokley, 1980; Hamill & Stein, 2011).

Hard of Hearing/HOH/HH: A person with some hearing loss who may or may not identify as a member of the Deaf community (Padden & Humphries, 1988).

Signed Language: Denotes Signed Exact English or SEE (signs in English word order), Pidgin Signed English (a combination of ASL and ENGLISH), home signs, Rochester Method, or ASL.

Assumptions

This study entailed interviewing and observing members of Deaf culture and assumed that participants had access to the Internet and email during this study. It was also assumed that they understood ASL and or English. The presumption was that members of the Deaf community would be willing to participate in a study that examined culture and community and would feel comfortable sharing their educational experiences in formal and informal settings. According to Ladd and Lane (2013), social interactions are a valuable part of Deaf culture, and are often a source of teaching and learning. Lastly, it was assumed that participants would provide honest responses during interviews and engage in natural and unscripted behavior during observations.

Scope and Delimitations

The purpose of this study was to examine how Deaf people learn in social situations and whether these processes were present in formal educational settings. This study was initially limited to Deaf persons ages 18 to 30 who attended at least one semester of a post-secondary education program; however, the age range was extended to 18-40. Also, participants were recruited from the Midwest area of the United States. Due to this study targeting a specific population within this community, the findings may not be applicable to all Deaf people or deaf education programs.

Limitations

This study relied on information provided by the participants. Deaf community members may have tried to appease the hearing researcher by providing exaggerated or oversimplified responses about their educational experiences. The researcher had safeguards against this limitation. This included member checking and the interview procedure discussion which are described in more detail in Chapter 3. The language barrier also presented a limitation as there was a potential for misinterpretation. To reduce or eradicate this issue, an interpreting team fluent in ASL was used. They included a Deaf linguist, a nationally certified interpreter, and the researcher.

Significance

This research was unique in that it sought to present data regarding the intertwining of culture and education to promote reading and literacy in d/Deaf students. The results of this inquiry could promote the development and implementation of educational curricula that correspond to the needs of d/Deaf children. The findings could also impact how teachers of the d/Deaf and program administrators are trained regarding Deaf culture and the educational needs of d/Deaf children. It is anticipated that this research will promote positive social change for this underserved cultural minority by better equipping them with the tools needed to continue their education beyond high school and or obtain gainful employment.

Summary

The aim of this researcher was to examine how Deaf people learn in social situations and whether these processes are present in formal educational settings.

Research addressing Deaf culture and deaf education exclusively is prevalent; however, there is a gap in the literature regarding the relationship between the two. Teaching philosophies remain rooted in bureaucracy while the reading and literacy levels of d/Deaf children and adults remain subpar. The theories used to frame this research consist of the acquisition and cultivation of knowledge through social situations, and various intelligences used to process information. The research questions sought a better understanding of Deaf people's perceptions of Deaf culture, their experiences in social situations with other d/Deaf people, and their educational experiences in formal situations. This researcher sought to elicit data that would answer the research questions and provide useful information for future research and application.

Chapter 2 highlights literature related to literacy development in d/Deaf and hearing children, the history of deaf education, and trends in deaf education programs. It also discusses cultural influences on learning in the Deaf community, including self-efficacy and cultural identity. Lastly, Chapter 2 details the necessity of researching this minority group due to deficiencies in documented studies on this population as they relate to culture and learning and formal education.

Chapter 2: Literature Review

Introduction

Higher educational pursuits and fruitful employment are said to be the results of hard work, determination, and intellectual acumen. During the formative years, significant emphasis is placed on the mastery of written and spoken English, as intelligence is strongly rooted in literacy (Godley & Escher, 2012; Paul, 2005). There is an abundance of literature regarding best practices to promote literacy development in hearing children; however, research exploring this topic with d/Deaf students is scarce.

Deaf adults have substantially lower literacy levels than their hearing counterparts in math and English, regardless of ongoing unsubstantiated pedagogical reformations (Spencer & Marschark, 2010). In their expansive review of the evidence-based practices in deaf education, Spencer and Marschark (2010) researched the reliability and validity of the implemented practices. They found limited empirical support for many of the practices used in deaf education. O'Brien and Placier (2015) suggested that research on deaf education include investigations into the intricacies of Deaf culture and its usefulness in educating d/Deaf children. Understanding how deaf people perceive, process, and retain information can be valuable to curriculum design and development (Campbell, MacSweeney, & Waters, 2008; Holcomb, 2010; Lollis & LaSasso, 2009; Wang & Andrews, 2014). This study was inspired by the lack of existing research on the presence of informal teaching methodologies, as seen in social and cultural settings such as friendly gatherings or Deaf lead meetings, in the formal educational experiences of Deaf students.

The goal of this literature review was threefold. Current research regarding literacy development as well as the relationship between literacy and culture in the Deaf community was presented. Additionally, educational trends and identified practices for teaching d/Deaf children in a formal educational setting was expounded. The target age group for this study was adults ages 18 to 40 with at least one semester of post high school education. The educational specification was added to increase the possibility that participants have the experience, maturity, and comprehension to understand the context of this study. This chapter will conclude with key themes that emerge from the presented literature and a transition to Chapter 3, which explains the proposed study and research methodology.

Literature Search Strategy

A review of literature regarding literacy development in deaf students, deaf identity and culture, trends in the education of deaf students, and evidence-based practices is included. An extensive search of the following online databases was conducted: Academic Search Complete, ERIC, Education Research Complete, SocINDEX, PsychINFO, PsychARTICLES, and Google Scholar. Using *deaf and hard of hearing* as the primary subject headings, this researcher applied *culture, identity, literacy, education, communication, and learning styles* as interchangeable accompaniments. The time frame included works published between 2011 and 2018 to increase the potentiality of applicable research. However, research prior to 2011 was examined for relevance as well. Books presented during my undergraduate courses regarding Deaf culture and sign language were also consulted, particularly the works of Carol Padden, Paddy Ladd, and

Tom Humphries, all of whom are considered experts in the field of deafness and Deaf culture and are referenced in this study.

Conceptual Framework

The conceptual framework of this study manifests in three parts. Socio-cultural theory, constructivism, and MI theory provide a foundation for how people attain and retain information, as described in Chapter 1. Deaf people are more reliant on their other four senses, particularly sight, to comprehend. Increased understanding of how they interact with one another in a social setting and how they construct information could improve the quality of services to the d/Deaf population (National Association of School Psychologists, 2017). Spatial intelligence, which involves the keen ability to comprehend and recreate the visual world, and bodily-kinesthetic intelligence, which is the skilled use of the body for expression and problem solving (Gardner, 1983) were most pertinent to this research. Deaf people rely on both intelligences in their everyday lives.

Adcock (2014) explored the longevity of MI theory in education and found that it continues to be relevant due to the diverse needs of learners. Using an informal survey distributed to 75 graduate students enrolled in a MI theory-based course at the University of Nebraska, Omaha, Adcock (2014) sought to gauge the students' knowledge of the theory and its applicability in their teachings. Eighty-eight percent reported they had learned of MI theory through workshops and or courses, and 44% admitted to using this theory in their current lesson plans. Sixty-six percent of the participants benefited from the lessons developed during the course for teaching using MI theory, 16% found it

useful when learning about brain development as related to MI theory, and 11% shared

that previous research was helpful in learning about MI theory.

Three-fourths of the sample indicated that Gardner's theory was essential in

meeting the individual needs of students, allowing for a variety of teaching strategies

(Adcock, 2014). Conjunctively, Szpringer, Kopik, and Formella (2014) agreed that

providing students with opportunities for expansive development includes instructors

tailoring programs specifically organized for the student. However, the usefulness of MI

theory in education has been disputed.

Waterhouse (2006) questioned the validity of Gardner's intelligences, which she

referred to as skills, by methodically examining the usefulness of MI theory in classroom

settings. Waterhouse argued that MI theory did not have proven success in the classroom

and should not be integrated in curricula, as there was no empirically driven data to

support its application. Allix (2000) acknowledged that MI theory had been particularly

useful in education because it offered a framework for identifying learning needs and

responding to these needs appropriately. Allix found that research literature on this theory

was unsubstantial and inconclusive and received mixed reviews regarding its usefulness.

According to Allix (2000), MI theory was primarily observation-based, which

historically lacks the validity necessary for substantiation or refutation. Moreover, it has

also failed to provide working resources to adequately and thoroughly explain Gardner's

frames as intelligences. There is support for the use of MI theory as one of the principal

schemas in this study. According to Tamilselvi and Geetha (2015), MI theory rebuts the

traditional belief of one dimensional intelligence that is measured using a standardized

intelligence test and provides a framework for approaching students by building on their individual strengths.

Literacy Development

Parts of the brain responsible for language processing are similar for signed and spoken language users (Pickell, Klima, Kritchevsky, Bellugi, & Hickok, 2005). Campbell et al. (2008) identified the left hemisphere as the commonality between both spoken and signed languages. After presenting a brief overview of structures of the brain, including Broca's and Wernicke's areas, Campbell et al. examined an unspecified number of case studies that compared the effects of lesions in the same area of the brain for deaf and hearing people.

Campbell et al. (2008) found overwhelming evidence that the location in both hearing and deaf people resulted in similar outcomes; left frontal injury caused spoken and signed production difficulties, whereas damage to the left temporal lobe resulted in comprehension problems (Campbell et al., 2008). Moreover, auditory abilities are independent of language processing, even though these regions are in close proximity in the brain. Inferences suggesting hearing people have a physical advantage in terms of language and literacy development because of their capacity to hear and speak, as well as differing brain size, are unsupported according to the research reviewed by Campbell et al., 2008.

According to Mayer (2007), between the ages of four and seven children go from emergent literacy, a term used to describe a child's knowledge of reading and writing prior to formal instruction, to conventional literacy or knowledge gained from formal

instruction. It is during this period that deaf students begin to demonstrate below average reading and writing abilities. To examine parallel literacy development in hearing and deaf children, he examined written language samples of 30 deaf children between the ages of four and seven who were participants in a previous study. All of the children attended either a deaf or mainstream public school and all used sign or a combination of sign and speech for communication. Also, none of the children had a solid first language prior to entering school.

All writing samples were divided into three levels previously proposed by Ferreiro (1990) and compared to samples from same age hearing children. Level one involved distinguishing lines in a drawing from lines used to create meaningful words. Level two was the identification of the differences among words and level three was the connection between written words and spoken or signed language. Mayer presented visual examples of both deaf and hearing students' work at each level for comparison.

Deaf children were found to be equal to their hearing counterparts in the transition from using lines in random drawings to making purposeful lines that formulate letters for words (level one) and to differentiate, sequence, and qualitate and quantitate words (level two). However, while deaf students understand there is a connection between written and spoken/signed language (level three), the strategies implemented to make the connection were unsuccessful, demonstrating the first obvious divergence in literacy between deaf and hearing children (Mayer, 2007).

This divergence was clearly presented by Mayer (2007), as seen in the included writing samples in her study. Mayer attributed this deviation to several factors, some of

which appear to be formulated opinions unsubstantiated by research. First, Mayer recognized the syntactical differences between ASL and English as a possible cause for the deviation; however, it was not specified which portion of the sample used ASL versus signed language, as there are various forms of signed languages. Mayer also suggested that the difference may be attributed to the educational program and not the students' abilities. However, information was not provided on their specific educational programs, other than to say they attended deaf or mainstream public schools. Overall, Mayer provided useful information for understanding early literacy development in deaf students.

Certain grammatical structures in English are often more difficult than others for deaf and hard of hearing students to grasp. Cannon and Kirby (2013) researched this area to see if difficulties that plagued this population in years past continue to exist. Their two-part study included reviewing literature from the past 35 years and identifying common themes in deaf and hard of hearing students' struggles with English grammar. Then they conducted their own research to see if those issues had changed or remained the same.

Cannon and Kirby (2013) found that historically, while deaf and hard of hearing students were familiar with individual words, they struggled with syntax and sentence structure. They also noted that this population had difficulty with auxiliary verbs, such as *was* and *is*, in relation to tenses, questions, voices, and negatives. Subject verb agreement, mainly in complex sentences, was also challenging.

The latter study included 26 participants from a K-12 day school for deaf and hard of hearing students. ASL was the primary mode of communication for students and

teachers. Thirteen males and 13 females from kindergarten to fifth-grade used Language

Links Intervention software 10 minutes a day for nine weeks. This software was designed

for special needs students to teach definite articles, possessives, demonstratives, and

interrogatives. It also taught tense, subordinate conjunctions, and relative pronouns and

adverbs.

The results showed that, similar to previous research, deaf and hard of hearing

students continue to struggle with auxiliary verbs, specifically conjugating the *be* verb. In

addition, locative pronouns such as *here* and *there* were also problematic. Students also

had difficulty with regular noun singular and plural structures. Cannon and Kirby (2013)

attributed some of this in part to students being taught individual lexical items as opposed

to an entire syntactic process. Overall, the authors suggested that future research

regarding strategies that teachers of deaf and hard of hearing students can employ to

improve the above problem areas is warranted.

Bowers, McCarthy, Schwarz, Dostal, and Wolber (2014) explored the spelling

errors of deaf and hard of hearing children to determine the etiology. The authors

suspected issues involving linguistic processing or learned mental depictions of words.

Twelve sixth-grade and eight seventh-grade students were selected for participation.

Nineteen of the students were deaf while one was hard of hearing. ASL fluency varied.

The school practiced simcom as their communication philosophy.

Using 19 of the 40 words from the Spelling Sensitivity Score, participants were

given a spelling test by one teacher with a doctorate in education in addition to being

fluent in ASL. For each word, the teacher showed a picture of the word while reading it

out loud in English. If a signed counterpart existed, the word was also signed. Lastly, the word was fingerspelled for meaning clarification. The authors rationalized the use of fingerspelling by equating it to the oral presentation of words for students with no hearing loss. The students were instructed to spell the word after it was presented in the varying forms.

Words were coded as correct, attempted with one letter that matched, attempted with more than one letter that matched, or not attempted if left blank. The results showed that out of 380 words, the total of 19 words for each of the 20 participants, students attempted 308 of them with 149 correct spellings. Of the remaining 159 attempted but spelled incorrectly, 45 attempts included one correct letter and 114 had more than one correct letter. Seventy-two words were not attempted.

The results showed that students struggled with phonological, semantic, or morphological knowledge. Phonology relates to sound, and errors were often made by adding letters not in the word or omitting needed letters. Semantic awareness involves the meaning of words. The subjects either used the wrong word or added a suffix to the correct root word causing the meaning to change. Morphological awareness errors included the incorrect use of prefixes and suffixes, and also tense change.

One limitation of the above study is that the researchers did not consider the role of each linguistic process in the children's native language. While phonology may not be of relevance, depending on the level of hearing loss, morphology and semantics are represented in ASL. Perhaps additional research should consider the role of each in ASL

as compared to English for a more comprehensive look into the spelling habits of deaf and hard of hearing students.

Snodden (2010) investigated the following based on a literacy project at Ernest C. Drury School for the Deaf in Milton, Ontario, Canada: Ways to incorporate students' linguistic and cultural knowledge in the classroom to develop literacy and the usefulness of technology to augment traditional literacy activities in reading and writing. Over the course of three weeks, six students in grade two, six students in grade three, and six students in grade five observed a member of the Deaf community telling a story. They later recorded and rerecorded their own stories incorporating strategies learned from the Deaf story teller and their English teacher.

The students were able to tell their stories in ASL. They incorporated ASL features, learned from the Deaf visitors, such as nonmanual signals (facial expressions) and the use of space to identify time and or distance. At the same time, the story was told in sequence (beginning, middle, end) based on English syntax.

Snoddon's (2010) research focused on the linguistic and cultural importance of ASL in literacy development. The researcher noted that the teachers for each grade were trained on the ASL curriculum. They also played an important role by facilitating discussions on Deaf culture and language, self-awareness and identity, critical thinking, and cognitive engagement.

Snoddon (2010) lauded the value of Deaf adults fluent in ASL in the classroom as a resource both culturally and educationally. She also stated that this project can be useful in bilingual ASL/English text; however, it is unclear how her study enhanced or can

enhance the reading and writing skills of Deaf students. This information was not illuminated and there was no mention of its applicability in future research.

Dostal and Wolbers (2014) investigated the development of language and writing skills in both ASL and English using an approach known as Strategic and Interactive Writing Instruction (SIWI) in teaching. SIWI includes the following seven underlying principles: strategic, interactive, linguistic and metalinguistic, balanced, guided to independent, visual scaffolds, and authentic. Each principle is design so that students learn to diversify their writing based on audience and intent.

Twenty-three students from a deaf residential school in the southeast participated in the study. The children's hearing loss, language proficiency, and reading levels varied, and the school used total communication or simcom method as their mode of communication. Researchers conducted a 10-week quasi-experimental study with one fourth-grade class, two fifth-grade classes, and two sixth-grade classes. Students were subjected to interviews before, during, and after the intervention to measure their growth or lack thereof. Over the first five weeks, students participated in their regular writing instruction. During the next five weeks, the SIWI intervention replaced their standard writing instruction.

The results showed that the students made significant progress in ASL and English during the SIWI instruction, regardless of language proficiency. This was attributed, in part, to the use of ASL and English separately during the intervention. Contrary to total communication that uses ASL and English simultaneously, separating the languages helped students to understand the vastness and differences of ASL and

English (Dostal & Wolbers, 2014). Also, the authors recognized that the use of ASL in teaching English writing concepts was not a hindrance.

While the visual components of this type of instruction can be very beneficial, Dostal and Wolbers (2014) were unable to identify which of the SIWI principles were most effective and suggested that a long term study in this setting or another that uses a different communication philosophy would be more telling. The researchers also proposed that an interactive environment, a component of SIWI, allows students of varying language abilities to apply their individual comprehension and communication skills to understand shared ideas. It was suggested that a shared language between the teacher and student(s) may improve student success.

LaSasso and Crain (2015) investigated the reading processes in deaf versus hearing readers, primarily to determine if there is a need for the formal reading instruction to be different among these two groups. The authors were careful to note that comparing members of either group as it relates to reading depended on several factors. These included language and linguistic environment in the home and school, previous knowledge, intellectual aptitude, and sociocultural factors such as parents' level of education and financial status. Also, for this study, the authors noted that reading referred to reading comprehension and not patterns of letters combined to make sounds in spoken language.

LaSasso and Crain (2015) suggested that if hearing and deaf children used English as their primary language in school and home, reading development can be qualitatively and quantitatively analogous; however, the opposite can be true if their

primary language is not English. Therefore, they concluded that deaf children need access to a clear, visual form of English to develop reading abilities.

According to the LaSasso and Crain (2015), the most complete instructional method for deaf students is cued speech. Cued speech is a phonemic-based visual language that uses handshapes and mouth movements to distinguish between English sounds (National Cued Speech Association, 2016). However, the authors noted that there is no single instructional or communication methodology applicable to all children. Each case is different and all factors should be considered when implementing best practices.

Garberoglio, Cawthon, and Bond (2014) investigated the impact of English literacy levels on the success of deaf and hard of hearing adults. Their study used data previously collected by a larger, federally funded study about the transition process of disabled students from secondary school to adulthood. The original study was conducted over a 10-year span and focused on numerous disabilities. However, for this study, researchers gathered information on deaf and hard of hearing subjects only.

Garberoglio et al. (2014) found that English literacy measures were a predictor of the possibility of postsecondary enrollment, but not of completion. Deaf students who scored higher on the literacy measure were almost three times more likely to enroll in a postsecondary education program after high school. Their inability to complete the program, however, may have been indicative of other factors not presented in this study. English literacy was also a predictor of hourly wages, but not the chance of being employed or job satisfaction. Although deaf and hard of hearing individuals were able to

maintain employment, those with higher English literacy levels earned more money than those of lower literacy.

Because English literacy measures predicted the probability of independent living and self-perception and beliefs, the effects of these measures on the lives of deaf and hard of hearing individuals may extend beyond financial status. Being subjected to numerous mandated assessments throughout the educational experience can influence self-confidence and effect one's ability to think positively about ones abilities (Garberoglio et al., 2014). A more in-depth look at the psychological impact of English literacy is necessary because of the high emphasis placed on such skills in this country (Garberoglio et al., 2014).

Literacy and Culture

Historically, Deaf clubs have been integral in maintaining the sanctity of Deaf culture. It was here that Deaf people gathered to discuss community events, newsworthy stories, personal triumphs and tragedies, tell jokes, and encourage fellowship (Lane, 1999). Deaf clubs provided a place for Deaf people to encourage, empower, and educate one another, without focus on hearing loss (Lane, 1999). Mentoring, informing, and educating, all of which occurred in this environment, were important to personal development and forward movement of this population (Hadjikakou & Nikolariaizi, 2011). Hadjikakou and Nikolariaizi (2011) examined the function of modern day Deaf clubs in Cyprus and Greece and found their purpose to be similar to clubs of old, although the number of clubs had declined dramatically.

Twenty-two participants expressed similar views when questioned about the role of Deaf clubs in Cyprus and Greece. Common themes included the clubs were an avenue to discuss political agendas related to local and national legislation involving deaf people, to relax and enjoy socializing in a signing friendly environment, and to exchange information that may not otherwise be accessible or communicated in ways deaf people can easily understand. Most notably, it was reported that Deaf clubs provided a sense of pride and helped to create and nurture identity.

Understanding identity development and its relationship to the educational experiences of Deaf people was the focus of research conducted by McIlroy and Storbeck (2011). The ethnographic study consisted of nine participants ages 24 to 55, all of whom identified themselves as deaf, Deaf, or hard of hearing. Two participants reported being exposed to Deaf culture through Deaf family members, while the remaining seven were reared by hearing parents in an oral environment. One participant attended a school for the deaf throughout his primary and secondary education, three attended a mainstream program with placement in a hearing-impaired classroom, two participants were mainstreamed during their primary years then transferred to a school for the deaf, one person started at a school for the deaf and transferred to a mainstream program, and two participants attended a mainstream program with placement in a regular curriculum.

Participants who attended deaf education programs also reported sign language as their first language and identified themselves as Deaf. Interviews revealed that the participants, although they understood the medical aspect of hearing loss, were not aware of how their deafness was perceived by hearing people until they entered school. All

reported feeling isolated and frustrated due to communication barriers and found themselves searching for a connection outside of the dominant hearing culture. McIlroy and Storbeck (2011) also found that deaf participants who attended mainstream programs viewed being deaf as a misfortune; however, those who transferred to deaf residential programs reported a sense of belonging and embraced the use of sign language socially and in instruction (McIlroy & Storbeck, 2011).

In this same study, one participant recalled the struggle in accepting her deafness because it alienated her from hearing classmates. It was not until she became aware of the uniqueness of her Deaf identity that she began to feel empowered and have a sense of self. The researchers concluded that self-identity was missing from many of the participants' educational experiences. It was suggested that the richness displayed in the interview narratives demonstrated the breadth of Deaf identity that extended beyond hearing loss (McIlroy & Storbeck, 2011).

One noteworthy issue in the McIlroy and Storbeck (2011) study was the inclusion of one of the researchers based on his "fluid cross-cultural identity" (p. 494). McIlroy identified himself as bicultural, having meaningful affiliations in both the hearing and Deaf communities. While this is an ethically acceptable practice, to avoid researcher influence on shared perceptions, Fischer (2009) suggested that the data be examined and reexamined for imposed and alternative meanings. The process, if any, that the researchers undertook to avoid researcher-participant bias was not stated.

Self-identity is a vital part of the educational experience. Sutton-Spence (2010) studied the role of storytelling in British sign language in helping deaf children develop

identity, particularly because over 90% of deaf children are born to hearing parents (Lane, 1999; National Institute on Deafness and Other Communication Disorders, 2000; Sutton-Spence, 2010). She argued that narratives told by deaf teachers present elements pertinent to maintaining linguistic and cultural traditions found in the Deaf community. In addition, exposure to these narratives provides the foundation for literacy development as they are interdependent.

To defend her argument, Sutton-Spence (2010) interviewed seven members of the British Deaf community, all over age 40, regarding storytelling and Deaf folklore and analyzed actual stories common in this community. The interviews were conducted in British Sign Language (BSL) and translated by the researcher. Attention was paid to two BSL children's stories told by two well-known story tellers in the British Deaf community. These stories were analyzed for cultural and linguistic content. Although participant excerpts regarding stories related to Deaf identity were included, the article did not clearly delineate the interview method or the findings. Because common themes were not well-defined, subject headings used by the author to present participant disclosures could be interpreted twofold: shared beliefs or researcher selected topics for presentation. In addition, Sutton-Spence (2010) identified herself as the translator but did not provide credentials to support her ability to do so. Overall, parts of this study were not clearly elucidated.

Myers et al. (2010) investigated the impact of ASL skill, parental involvement and level of education, ethnicity and culture, and early reading experience on the reading levels of black and white Deaf students. The authors presented five hypotheses that

guided their research. Hypothesis one stated that ASL skill was positively correlated to higher reading levels in both groups. Hypotheses two, three, and four stated that both groups would report similar experiences in the following areas: communication practices among members of the immediate family, encouragement from family members to learn ASL and vice versa, and participation in literacy activities with family members. Hypothesis five predicted that white Deaf subjects would report that their parents had a higher level of education than the parents of the black Deaf subjects.

The researchers sampled 47 individuals (17 black and 30 white), all subjects of a larger study, who identified themselves as Deaf. All participants were between the ages of 18 and 40. The 26 females and 21 males were recruited from Gallaudet University. Data were collected using the Visual Language and Visual Learning Background Questionnaire, the American Sign Language-Sentence Reproduction Test, the Early Reading Questionnaire, and the Woodcock-Johnson III Passage Comprehension subtest.

The results showed significant differences among both groups in communication used among the family, encouragement of ASL use by parents, literacy-related activities between parent and child, and the education level of parents. However, the elements proposed by the researchers were not significant in predicting the reading skills of black Deaf subjects. This was attributed to the small sample size of 17 black Deaf participants; therefore, the authors proposed that the study be replicated using a larger sample for validity.

To increase literacy, particularly in linguistic minorities, New Literacy Studies (NLS) postulated that literacy be expanded beyond our current understanding to include

social and cultural aspects (Gisladottir, 2014). Failing to consider this perspective and its

influences on literacy can marginalize a group and put the students at a disadvantage

from the start (Gisladottir, 2014). In her research, Gisladottir (2014) used the theoretical

model of NLS to conduct a self-study to gauge her understanding of literacy and how this

manifested itself in her classroom. Participants included four upper secondary level deaf

students enrolled in a bilingual program at a public school in Iceland. Data were collected

using participant observations, semi-structured interviews with the parents, student work

and relics, and teacher journals. The researcher concluded that to make literacy

instruction student focused, teachers needed to acknowledge and incorporate aspects of

the students' identity in learning, create a space for students to bring in their own literacy

materials, and differentiate between diverging philosophies that have influenced deaf

education. Gisladottir (2014) also found that the formality of the school texts did not

allow for the promotion of individual strengths nor the illumination of the identity of

students as literacy learners. The omission of self-identity in education is common in deaf

education programs.

According to Ziv (2015), the lack of equal opportunity for Deaf students in Israel

is a result of language and cultural oppression, discrimination, typecasting, and low

expectations. Sign language is not recognized as an official language in Israel and is not

used in educating Deaf students. However, empirical data supporting its use has

convinced some schools to teach in sign. In addition, a civil rights group for deaf people

successfully advocated for interpreters and transcription services in universities, at the

expense of the national government.

Despite the proven usefulness of sign language, many hearing instructors and caretakers of Deaf children in Israel refute its importance (Ziv, 2015). They continue to believe that sign language impedes vocal and oral skills. Deaf children are not expected to become proficient signers and are often forced to read lips in classroom settings (Ziv, 2015). According to Ziv (2015), the opposition regarding sign language is perpetuated by using subtle messages about the inferiority of sign language and its role in stifling learning.

In addition, low expectations have become the standard and deaf children are channeled towards lower vocations. Vocational programs mostly offer manual work training such as carpentry and metal work; therefore, deaf students are not challenged to reason or think critically because program administrators question their capabilities. Also, the negative perceptions from teachers and administrators may cause deaf people to internalize them as factual and accept what is being erroneously touted (Ziv, 2015). Overall, the value of sign language and Deaf culture is very low in Israel, despite its substantiated pragmatism in the education and life of Deaf students.

Marschark, Shaver, Nagle, and Newman (2015) examined the importance of language and education in the academic achievement of 500 deaf and hard of hearing secondary students. Researchers used the Woodcock-Johnson III subtests in math calculation, science, reading comprehension, and social studies for this study. All students attended regular secondary schools or state-sponsored special schools for deaf and hard of hearing students.

Marschark et al. (2015) found that the academic achievement of this population hindered on several factors related to the student's characteristics, home environment, and experiences in school. For example, deaf and hard of hearing students who attended regular education programs scored higher than those who attended deaf or mainstreamed programs (Marschark et al., 2015). Also, there was a positive correlation between increased speaking ability and achievement scores. However, students with mild hearing loss had lower scores on the math subtest. The authors attributed this to the possibility that instructors assume that a milder hearing loss indicates higher functioning; therefore, these students may not get the support services needed to be successful.

Additionally, African-American and Hispanic students scored lower than Whites in reading comprehension, social science, and science, but race was not a factor in math. This difference was attributed to socioeconomic status, which is a factor in predicting success in hearing communities as well. Overall, Marschark et al. (2015) were effective in presenting cultural factors that impact education and success. The use of the Woodcock-Johnson assessment demonstrated awareness of the needs of deaf and hard of hearing children, as this tool is appropriate for this population due to its adaptability for students with disabilities (Abu-Hamour, Hmouz, Mattar, & Muhaidat, 2012).

Flaskerud (2014) addressed, among other things, the linguistic diversity of deaf people and the need for the merging of community and culture to enhance the lives of deaf people. She suggested that focusing on community rather than culture allows for acceptance of all levels of hearing, regardless of cultural affiliation. Taking a middle of the road approach, similar to other inclusive communities, can give this population more

influence and power within the dominant hearing culture (Flaskerud, 2014). For example, educating deaf people using the philosophy that best suits their needs, determined by substantiated research, as opposed to insisting that all deaf be taught using a uniform methodology. Allowing all deaf individuals to be members of the community can enhance social-emotional well-being and cohesion (Flaskerud, 2014).

Artiles (2015) argued that the construct of culture, particularly in relation to disabilities, often leads to differences perpetuated by policy and law. These policies and laws aimed at providing resources to minimize inequalities propagate assumptions about disabled people (Artiles, 2015). Additionally, when cultural beliefs and practices are applied in the classroom, the issue of diversity among members of the same culture is ignored. Instead, research and policy continue to investigate issues related to culture and its members as a whole.

According to Artiles (2015), culture is complex and includes dimensions that should be considered when studying its effects on individuals. These dimensions are regulative, (re)productive, interpretive and instrumental, and cohesive. The regulative dimension includes the rules that govern behavior within a culture and the (re)productive dimension involves the embraced traditions and beliefs that are renewed from generation to generation. Interpretive and instrumental dimensions are the psychological perspectives of cultural members as they navigate the world through daily activities. Cohesion can be seen through shared thoughts and actions. Artiles (2015) stated that learners should be viewed as individuals within a culture. Encouraging diversity within a group can help individuals to understand what each person contributes to the whole. In

doing so, administrators can design curricula that are beneficial for individuals as well as the group (Artiles, 2015).

To understand the impact of shared reading on deaf children's literacy development, Berke (2013) videotaped 10 deaf mothers, on at least two occasions, reading to their deaf children. The sessions lasted about 45-60 minutes each and mothers were asked to engage in their typical story time routine during these sessions. All the mothers had some post-secondary education experience and eight were in graduate school. All the children, diagnosed as being deaf in infancy, were between the ages of 3 and 5 and had no other disabilities. The families were provided with narrative books that were new to them to read during the sessions.

In reviewing and analyzing the taped sessions, Berke (2013) noticed a principal theme among the mothers. They all, in varying ways, connected their visual language to the written text. For example, some used a technique referred to as chaining. This consists of pointing to a written word, fingerspelling the word, then using a picture representation of the same word. Others provided English definitions for unknown words. Words that depicted sound such as "whoosh" (fast wind) and "zing" (fast bell) were described as such and explained as noises made during an action. When the text displayed a larger and or darkened font, the mothers showed this as an increase in importance using facial expression and intensified signs. In addition, English grammatical features were incorporated to explicate the source language for the child's understanding.

One feature used by the mothers to keep the children's attention during the story was the establishment of name signs for the main characters. The children were asked to create signs for the characters, thereby providing them an active part in the narrative. Name signs serve an important role in the Deaf community because they establish identity (Holcomb, 2013). Rather than fingerspelling someone's full name, Deaf people create shortened versions of names based on personal characteristics or professional attributes. For example, the name sign for a tall, thin woman named Jenny may be the signed letter J that is elongated to represent her long frame.

Overall, the author noted that the deaf mothers in this study used a variety of techniques during storytelling for understanding and learning. Teaching the nuances of English while telling the stories in the child's primary language help bridge the connection between both languages (Berke, 2013). These skills and strategies can be applied in the classroom to foster literacy development and navigate real world experiences.

Educational Trends

Moores (2010) noted that the movement towards inclusion began at least 25 years prior to IDEA. The definition of inclusion can vary, depending on the source; however, in this context, it refers to deaf students' placement in the least restrictive environment. This typically means deaf children are placed in predominantly hearing classrooms with assistive listening devices or interpreters that allow for their participation in their educational environment (U.S. Department of Education, 2007).

Moores (2010) stated that the concept of inclusion as the preeminent academic environment for deaf students is ongoing and empirically unsubstantiated. Andrews (2006) referred to inclusion as a fallacy, particularly in regards to language proficiency. Using impassioned phrases such as "colossal failure" (p. 295) and "deaf students are starving" (p. 295), Andrews (2006) characterized a generation of deaf students who have not mastered ASL nor English in inclusionary programs. It is suggested that inclusion based programs be reformed to incorporate instruction rich in ASL and English (Andrews, 2006).

The inclination towards inclusion has researchers alarmed by its social ramifications because programs tend to focus on inclusive classrooms rather than an overall inclusive environment (Storbeck & Martin, 2013). Most (2007) argued that academic experiences go beyond simply preparing a deaf student to function in the hearing world. Programs should consider the benefits of all-encompassing extracurricular activities and provide interpreters and transportation for such activities to avoid social segregation and isolation (Antia, Jones, Luckner, Kreimeyer, & Reed, 2011).

Most (2007) examined feelings of isolation and lucidness as it related to speech comprehensibility in 19 deaf students ages 12-14. Using the Loneliness Questionnaire, the Sense of Coherence scale, and a tool for measuring speech comprehensibility, the study investigated individual student placement as well as group placement in special and regular classes in hearing schools. The researcher found that neither group showed significant differences in loneliness or coherence; however, speech intelligibility scores

were higher for students in the individual inclusion track, strengthening the argument for mainstreaming.

In another study, 34 deaf/HOH adults shared their educational experiences and personal development in hearing dominated classrooms. Leigh (1999) purported that being the only deaf/HOH student in a hearing classroom profoundly effects self-perception, social growth, and peer relationships. Open-ended questionnaires revealed that students in supportive educational environments had a more positive school experience, while those who were regularly reminded of their deafness and marginalized because of being deaf reported negative encounters. All of the participants understood the importance of interfaces with hearing peers and 24 out of 34 subjects described feeling lodged between the deaf and hearing communities and expressed a need to be able to function in both.

Kreimeyer, Crooke, Drye, Egbert, and Klein (2000) explored the educational and social gains of classroom instruction jointly taught by a regular education teacher and a teacher of the deaf, also known as a co-enrollment program, using findings of the Stanford Achievement Test, administrative interviews, and classroom accounts provided by a member of the instructional team. The 25 deaf and HOH students enrolled in the Arizona program scored above the deaf/HOH standard for reading vocabulary and comprehension and problem solving during their second and third years of enrollment (Kreimeyer et al., 2000). Socially, deaf/HOH and hearing students interacted more in the classroom setting than outside of this environment.

Marlatt (2014) speculated that educational programs are becoming clinically focused as they promote speech-language pathology and audiology. This is due to the rise in cochlear implants and the notion that implantation fully restores hearing to normal levels; however, this is not the case. Sounds may be amplified, but are often indistinguishable and the same applies to words. It is thought that deaf students do not need the one on one attention provided by resource rooms and can function in general education environments (Marlatt, 2014). As a result, teacher education programs geared toward deaf learners are being cut, leaving future teachers ill-equipped to serve the deaf population. Marlatt called for experts in the field of deaf education to unite against the demise of individualized education and teacher education programs.

Ausbrooks, Baker, and Daugaard (2012) noted a lack of diversity among the pool of deaf educators compared to the multiculturality of deaf students in the classroom. They investigated the priorities for selecting a college among 474 preservice students pursuing a degree in deaf education. While the results showed varying perspectives between hearing and deaf students regarding the importance of faculty diversity, linguistic and cultural background, cost of attendance, curriculum, program reputation, and available academic support, the authors recognized that their sample was almost 84% female and 81% white. This is the population who tends to become deaf educators and the group who currently makes up the majority of the teaching force. While their own research lacked diversity, the researchers called for increased efforts to diversify deaf education teachers.

Healy and Ferreira dos Santos (2014) questioned the preparation of teachers to instruct in an inclusive and diverse setting, particularly in a mathematics classroom. The

authors suggested that mathematical concepts such as reasoning be modified to include strategies that empower the student. Researchers and teachers should come together to develop scenarios that are inclusive of all learners. Through collaborative research projects, teachers can develop their knowledge of inclusion for students with differences not deficiencies (Healy & Ferreira dos Santos, 2014).

Miller (2014) experienced many trends in deaf and hard of hearing education firsthand as the supervisor of a public school program in a regional education agency for this population. He noticed that technological advances such as cochlear implants increased emphasis on sound acquisition causing school administrators to question the usefulness of specialized teachers of the deaf. Miller (2014) suggested that if a program is student focused and school personnel are flexible and are able to adapt and incorporate changes, current or future trends will not negatively impact these students or the educational program.

Evidence-Based Practices

Recent changes in deaf education have centered on inclusion; however, there are insufficient empirical data to support its implementation (Ayantoye & Luckner, 2016; Mitchell & Karchmer, 2006). Parental consent requirements for minors, the unwillingness of poor performing districts to set aside time to participate in research, and HIPAA and FERPA regulations are some of the reasons insufficient data exists (Mitchell & Karchmer, 2006). Gardiner-Walsh, Kemmery, and Compton (2014) stated that the lack of faculty studying and researching deaf education has also impacted available data. According to Mitchell and Karchmer (2006), insufficient data is a concern because

evidenced-based practices, as necessitated by federal policies, have overlooked this population.

The lack of data driven practices is emphasized in an editorial by the American Annals of the Deaf (2006/2007). After publishing three articles in its 2006 winter issue pertaining to 20 practices used to educate deaf and hard of hearing children, the author noted that research does not substantiate the use of active learning, technology in learning, and independent reading. Although these practices are logically based, they lack the empirical support delineated as an expectation or requirement by the "No Child Left Behind" legislation (American Annals of the Deaf, 2006/2007).

Easterbrooks, Stephenson, and Mertens (2006) went further and questioned 37 teachers of the deaf with Master's degrees about the 20 most used practices (e.g. use of technology, language used during instruction, scaffolding, etc.) to teach math, science, and literacy. The practices were based on the content standards identified by the state. The researchers found that none of the teachers could pragmatically support nor denounce any of the perspectives applied. The subjects also suggested that implemented practices be investigated for validity and usefulness (Easterbrooks, Stephenson, & Mertens, 2006).

In her review of the book *Evidence-Based Practice in Educating Deaf and Hard-of-hearing Students,* Hortt (2011) commended authors Spencer and Marschark (2010) for their unbiased examination of practices used to educate this population. They encouraged practitioners to critically analyze data and, based on their analyses, implement practices that are empirically supported, regardless of the method or practice. Focus should be on

the most befitting program for the student and not what is most convenient for the district administration. The book concluded with a breakdown of the practices that have proven to benefit the educational development of deaf and hard of hearing students. According to Hortt, this book is a useful resource for experts who seek to implement strategies to improve the education of this fledgling population.

In an attempt to determine an effective practice for teaching writing to deaf students, Strassman and Schirmer (2012) reviewed 16 studies conducted over a 25-year period on writing instruction for deaf students. The authors were dismayed to find only 16 studies over this time frame. Moreover, approximately 50% of the included studies were published over 15 years ago. The studies were marred by several mitigating issues. The absence of a comparison group to help eliminate variables that may manipulate results, the use of only a qualitative design which offers context and not necessarily effectiveness, and the lack of study replication to validate strategies were noted by the researchers. Strassman and Schirmer (2012) concluded that extensive research as it relates to writing and literacy is a necessity for deaf students. Currently, the research base is limited and inconsistent. Therefore, the empirical support for practice implementation is based on insufficient data (Strassman & Schirmer, 2012). This insufficiency could lead to misrepresentation when reporting progress as required by the NCLB.

Cawthon (2011) expressed concern over the issues of teacher and school accountability mandated by the NCLB and how this could impact schools for deaf and HOH students. Methods used to gauge students' growth measures students in a cohort rather than individually, and are not disability specific. However, growth models, a

method used to measure individual improvement outside of grade level benchmarks, were implemented by some districts across the United States. The goal of these models was to recognize the improvement of students, regardless of grade, in districts that serve below grade average students. According to Cawthom, this model is more applicable to deaf and hard of hearing students because most deaf students are below grade level in reading and literacy. Another aspect of NCLB uses state test scores to determine teacher effectiveness. Cawthon expressed unease over the link between merit pay and student performance. Schools for deaf or hard of hearing students rarely meet the AYP requirements. Therefore, teachers in these institutions are at a disadvantage. Reauthorizing NCLB to account for deaf and hard of hearing learning communities is important to the future of these students (Cawthon, 2011).

Summary

The presented literature addressed several themes that informed this study. First, areas of the brain responsible for literacy development are the same in hearing and d/Deaf people, regardless of hearing capabilities (Campbell et al., 2008). Secondly, culture provides a sense of belonging and serves as a foundation for knowing and learning and Deaf culture is no different. Personal identity and self-empowerment are unsung cross-cultural components important to personal development and they do not cease in educational settings. Lastly, the state of deaf education is wanting and in dire need of empirically based curriculums to promote student success.

According to Miller (2010), our construction of knowledge in a formal educational setting depends on our experiences during informal or social interactions. It

is during these interactions that individuals discern the validity and applicability of what is received and how it is categorized and relayed to others. This ability helps create a sense of belonging to a particular group and develops personal intuitions that maintain individuality. Research regarding the presence of facets of Deaf culture in educating deaf children is scarce. Although deaf education has undergone several reforms and significant advances, particularly involving technology, culture has been omitted from acts of reformation. The following chapter will discuss the research design and methodology used to explore this topic, issues of reliability and validity, and the role of the researcher.

Chapter 3: Research Method

Introduction

The purpose of this qualitative phenomenological ethnographic study was to examine how Deaf people between the ages of 18 and 40 learn in social situations and whether these processes are present in formal educational settings. Vygotsky's constructivism, Howard Gardner's theory of MI, and the socio-cultural theory were used as a guide to uncover experiences and present a basis for future research. Chapter 1 reviewed the history of deaf education in the United States and the emergence of ASL and oralism, and introduced the problem of low literacy rates among deaf people. The chapter included background on various communication modalities such as total communication, oralism, and mainstreaming. It also addressed the challenges that deaf persons have faced with the educational system such as the lack of diversity among the teaching pool, inadequate curricula, and inappropriate assessment tools.

Chapter 2 reviewed the literature related to trends in deaf education programs and evidence-based practices and legislation related to the education of d/Deaf students, as well as the role of identity and culture in literacy. There is insufficient evidence supporting any one pedagogy in deaf education (see Lollis & LaSasso, 2009; Miller, Kargin, & Guldenoglu, 2013); moreover, deaf students' reading levels have failed to improve despite several reforms (Marschark et al., 2009; Paul, Wang, & Williams, 2013). This chapter details the study design and procedures used to obtain and analyze data. It also discusses the role of the researcher, including bias and ethical considerations.

Research Design and Rationale

The research questions were designed to address the limited knowledge on the presence of cultural factors in the formal educational experiences of Deaf people ages 18 to 40. The questions provide direction regarding the course of the study and were used to facilitate the interviews. The interview questions were semi-structured to allow for discussion about the experiences of Deaf people in formal education and the presence of facets of Deaf culture that foster learning in this same environment. The research questions for this study were as follows:

Primary Research Question

RQ: What are the educational experiences of Deaf people in formal and informal learning environments?

Secondary Research Questions

SQ1: What is Deaf culture from a Deaf person's perspective?

SQ3: How do Deaf people learn in an informal learning environment with or from other Deaf people?

SQ3: What are the learning experiences of Deaf people in a formal learning environment?

SQ4: How can educational programs improve reading and literacy in d/Deaf students?

A qualitative approach was chosen for this study for several reasons. Examining a specific group of individuals in their natural environment for subjective experiences is too complicated for quantitative methods (Crain & Kluwin, 2006; Smith & Bekker,

2011). Qualitative research requires in-depth interactions to understand the shared history that has naturally unfolded amongst a population or group (Frankel & Devers, 2000; Kozelski, 2017). It also allows for the incorporation of various theories rooted in numerous social science disciplines that are directly or indirectly related (Frankel & Devers, 2000). For this study, a phenomenological ethnographic approach was used.

The goal of ethnography is to observe societies or cultures in their natural setting to understand the meaning of interactions (Frankel & Devers, 2000; Smith & Bekker, 2011). This approach provides a relevant framework for understanding how d/Deaf people teach and learn from one another. Phenomenology adds to ethnography by using interviews to gain further insight into the meaning and implication of interactions experienced by those directly involved in the interaction (Smith & Bekker, 2011). This allows for the identification of influential factors in learning from a cultural perspective and how these factors are manifested in formal education programs. Gathering information directly from participants provides a firsthand perspective regarding experiences in formal and informal education.

For this qualitative study, interviews and observations were the chosen methodologies, and three interviewing formats were considered: informal conversational interviews, standardized open-ended interviews, and the general interview guide approach. Informal conversational interviewing typically occurs while the researcher is immersed as an active participant in a particular environment (Turner, 2010). The questions are informal and guided by interactions; hence, they are constructed in an improvisatory style and require flexibility and innovation (Turner, 2010). However, this

style of interviewing lends itself to inconsistencies and unanswered questions, as the interviewees may be unable to articulate their experiences (Creswell, 2014; Turner, 2010).

The general interview guide approach, while flexible, is more structured than informal conversational interviewing. Formal questions are prepared, but the researcher can adjust these questions based on participant responses to previous questions, and this type of interview can be conducted in a prescribed as well as a social setting (Turner, 2010). The standardized open-ended interview format has the most structured questions (Turner, 2010). While the questions are the same for all participants, the open-endedness allows for an array of responses unique to each person and returns data that are plentiful and more accurate (Turner, 2010). However, the researcher must sift through these responses to find common themes, which can be time consuming.

After careful consideration, the researcher used the general interview guide approach. The nature of deaf people and Deaf culture is rich with narrative (Ladd & Lane, 2013; Padden, 1980). Using a more structured interview approach may obviate negative descriptive attributes associated with this cultural minority.

Observation is optimal for ethnographic studies, and data, if collected appropriately and recorded correctly, can produce valuable information that may not be acquired using other methods according to both Ballie (2013) and Creswell (2014). According to Creswell, observations can be conducted in several ways, and the role of the researcher and extent of disclosure to the participants is crucial for establishing a relationship with participants (Watts, 2011). Qualitative observers can be full

participants, which allows for direct experience with those being observed; however, personal information observed or gathered may be exempt from reporting to avoid violating unspoken confidentiality rules within that specific group (Creswell, 2014).

There is also the complete observer, whose role is concealed as they observe from a distance, not participating in the interaction (Creswell, 2014). While this option may provide raw and genuine data, researchers have an ethical obligation to respect the privacy of the participants and avoid deception (Ballie, 2013). Participant as observer refers to the researcher revealing themselves, yet still partaking in their host environment. Observation is secondary as the researcher tries to be an active participant (Ballie, 2013; Creswell, 2014; Mulhall, 2002). Information can be recorded in real time and researchers can freely interact and ask questions without being intrusive (Ballie, 2013). The observer as participant method was chosen for this study.

Role of the Researcher

The role of the researcher in this study is to explain the lived experiences of Deaf people in education, particularly as it relates to culture. This information was reported based on observations and interviews. The researcher was an active participant while observing the interactions and remained neutral during data collection to help eliminate bias in record keeping. According to Driscoll (2011), remaining neutral helps to present findings without assumptions or interpretations. Furthermore, this researcher did not have any personal or professional relationships with participants and did not foresee any conflicts of interest.

Researcher Bias

Data collection and analysis were the core of this research study; therefore, it was necessary to identify potential researcher bias that could invalidate these processes and govern the researchers' approaches and findings. My interactions with the Deaf community are extensive, as I am a certified sign language interpreter. I have interpreted in a variety of settings, including medical and educational. I also worked in the sign language department of a local university where hearing and Deaf faculty advocated for educational equality, sign language proficiency, and cultural competence in secondary and post-secondary deaf education programs.

My experiences with K-12 deaf education programs have been in a mainstream setting and revealed deaf education teachers and faculty with little to no sign language skills, limited knowledge of deaf culture and the role of identity in deaf students, and the placement of students in classrooms that did not meet their educational needs. For example, a high school resource room teacher with five ninth-grade deaf students, who used ASL as their primary mode of communication, did not sign, assigned primary level stories written in English for the students to read, then required them to respond to questions also written in English.

Similarly, a special education kindergarten classroom consisted of three students with very different needs. Two of the students were deaf, both of whom understood sign language; however, only one was able to consistently reciprocate communication, as he had no other compelling diagnoses and the other was autistic. The third student was hearing, completely nonverbal, and required the constant assistance of an aide.

The teacher was an older male with a special education background; however, he had no experience with deaf students and interacted with the students as if they were older than their years. A typical day started with a question on the board that the students could not possibly answer. Then printed worksheets were distributed for practicing letters and numbers, but the students were given limited time to complete them and often showed frustration when their paper was collected prior to completion. After lunch, the students sat around a table and watched various sing along videos and episodes of Sesame Street. Some days they would be given educational toys to play with or worksheets for coloring. There were very few structured activities typically seen in a kindergarten classroom to foster learning. Also, with the diverse needs of these students, the instructor did not know how to alter his methods or separate activities for each student's needs.

These experiences are noted to identify the researcher's skepticism of the effectiveness of current deaf education programs. This researcher believes deaf students should be taught using a visual, not spoken, language and should be educated in an environment that incorporates culture and fosters self-identity in learning. However, as an ethically driven researcher, one is required to draw upon principles and theoretical models to guide this study (Watts, 2011). This reinforces the focus on content and conduct rather than emotions during research.

As the data collector, it is important that the researcher avoids bias. The researcher minimized bias by setting aside any assumptions, recording data in real time, and including all data in the results. Also, according to Fischer (2009), acknowledging

potential bias helps to bracket influences that may propagandize information and skew results. It also helps to enhance the breadth of research beyond personal understanding and to find other meanings that may appear in the process (Fischer, 2009).

Methodology

An accurate count of the number of deaf people in America is not available (Harrington, 2014). The U.S. census has not included this information in their data since 1930 and the most recent private survey regarding the deaf population was conducted in 1971 by the National Association of the Deaf (NAD; Harrington, 2014). Therefore, according to the Gallaudet Research Institute (2014), there are approximately 38,225,590 people in the United States classified as deaf, hard of hearing, some hearing loss, or trouble hearing. The number of deaf and hard of hearing persons in Michigan is also unclear. Several sources reported information that was either outdated or unsubstantiated.

A report generated in 2006 by a private organization for the Michigan Department of Civil Rights' Division on Deaf, DeafBlind and Hard of Hearing, and the Michigan Department of Education stated that a definitive count of the number of deaf and hard of hearing in the state was unavailable for reasons stated above (Public Policy Associates, Inc., 2006). The deaf and hard of hearing community estimated that there may be as many as one in ten or one million deaf people in Michigan; however, this remains unconfirmed (Public Policy Associates, Inc., 2006). In addition, only a very small proportion of these individuals are members of the Deaf community.

Participant Recruitment

A multi-stage sampling procedure was used to recruit participants for this study. Participants were recruited through the following local organizations: Black Deaf Advocates, Deaf C.A.N., and the Detroit chapter of the National Alliance of Black Interpreters. Flyers were distributed to the organizations for distribution (see Appendix A). Flyers were also posted on social media websites. To identify eligible participants and stratify the sample, a screening questionnaire was used (see Appendix B). It contained questions about age, highest level of education completed, elementary and secondary school placement, mode(s) of communication and primary language, hearing classification (deaf, HOH, etc.), and age at onset of deafness. The questionnaire took 3 minutes to complete.

A link to the questionnaire was made available for those with computer and internet access. The electronic questionnaire was available via streaming video interpreted in ASL by a Deaf person fluent in English and ASL. The questionnaire was also available in written English and hard copies were interpreted live in ASL for those requiring this modality. Each questionnaire requested valid contact information for follow up, if necessary.

Criteria for inclusion in this study were Deaf male or female adults between the ages of 18 and 40 with at least one year of post high school education. The age range was adjusted to maximize retrospective accounts of educational experiences. Also, post high school educational experience potentially allowed for a greater understanding of the concepts and language presented in this study. Participants had some experience in a

mainstream program. Excluded were non-native ASL users, oral deaf with no sign

language skills, any Deaf who used another form of sign language (e.g. Spanish Sign

Language, French Sign Language, etc.), and hearing people with or without ASL skills.

The sample size was 11 Deaf adults who completed the screening questionnaire

and matched the criteria for this study. The original sample size of 15-20 was chosen for

several reasons. An increase in self-awareness has strongly impacted self-identification

(Lane, 1999); therefore, influencing how deaf people refer to themselves. This has

created diversity among a community of people previously grouped together based on

being deaf (Crain & Kluwin, 2006). In addition, deaf people are no longer concentrated

in certain areas, as technology and professional opportunities have contributed to their

distribution across the country. It is increasingly difficult to gather information from this

minority population (Crain & Kluwin, 2006). Furthermore, multiple diagnoses such as

blindness, a learning disability, or other cognitive impairments as well as varying

communication modalities can limit the size of the sample, particularly if these additional

factors are not a focus of the research (Crain & Kluwin, 2006).

According to Seidman (2013), in-depth interviewing that occurs with

phenomenology may provide insight on shared experiences that outweigh the issue of

sample size. However, adequate sample size remains a factor because too large a sample

wastes time and money and too small a sample produces data not applicable to the larger

population (Francis et al., 2010). Saturation was reviewed throughout the interview

process with the researcher using a chart to ensure that no new themes or concepts

emerged. Saturation occurred at 11 interviews; hence, the interviews ceased, and data analysis began.

After reviewing the information from the prescreening survey, those who satisfied the criteria for inclusion were added to a list of potential participants. The researcher considered widening the participant pool to include non-native ASL users if the saturation level was not met, however, this was not necessary. All potential participants were contacted via email about joining this study.

Upon agreeing to participate, the researcher revealed the purpose and structure of the study and informed participants of the procedure. Interviews lasted from 27 minutes to 75 minutes and included the following in written form: consent to participate and be videotaped, the right to withdraw from this study, at any time, without consequence, and the role of the researcher. Participants were also informed of their right to privacy and the potential use of additional certified American Sign Language interpreters and Deaf professionals for video review and or clarification.

Data Collection Instrumentation

Data were collected using observations and the general interview approach. This allowed for the gathering of multiple forms of data typically seen in qualitative research (Creswell, 2014). The researcher attended a Deaf organization meeting, two Deaf Bible study group meetings, and a social event involving a group of Deaf friends and acquaintances for observation. The time frame of the events varied. According to Creswell (2014), seeing individuals behave in their natural environment reduces the risk of a staged or manipulated outcome.

Everyone expected to be present at the Bible study group were informed of the researcher's plan to attend and the intent of this study and asked to consent to observation prior to the meeting. Consent to attend the organization group meeting was approved by the organization's executive board and granted by the organization president prior to attending. Two participants at the social event agreed to be included in the observations. Information was recorded in real time as participants were observed for behaviors specific to this community that are used to relay information and foster understanding. These behaviors include expansion techniques commonly used in ASL, as well as scaffolding, chaining, and the use of written or spoken English and or signed language.

The observational protocol that was used for recording information was a single page divided in half. One side consisted of descriptive notes: physical setting, date and time, type of event, and register of the dialogue, participants, and dialogue reconstruction. The other column included the researcher's reflective notes, such as impressions and ideas. The data collected from the observations were analyzed for the elements stated above and compared with themes procured from the interviews. Information gathered was also used to help guide follow up interview questions related to the social and school experiences of deaf people.

During the face to face interviews, which lasted approximately 27 to 75 minutes, the researcher used predetermined researcher produced questions and added follow up questions based on participant responses. The questions were determined based on the researcher's knowledge and experience in the Deaf community (see Appendix D). The videotaped interviews were conducted in sign language and transcribed into English by

the researcher and the translation team. Videotaping helped to preserve original data and accuracy of transcriptions (Seidman, 2013, p. 117).

Following the interviews, participants were thanked for their time and debriefed on the importance of not discussing the study or their contribution therein with individuals outside of the research team. They were also reminded of the purpose of the study and informed that they could be contacted later for follow up information. Lastly, they were provided the contact information for the researcher in case they have additional questions.

Data Analysis

Common passages identified in the first interview were coded into ordered themes. Coding is the process of chunking information and denoting the commonality with a word or phrase (Creswell, 2014). The themes were divided into primary and secondary based on their relevance to the research topic and theoretical framework presented in the previous chapters. According to Yin (2014), developing a standard for pattern matching will avoid the inclusion of indirect or misinterpreted themes. This was done by using the original transcript as a guide.

As suggested by Smith and Osborn (2008), the initial transcript analysis was used to inform the examination of the remaining transcripts. Lastly, the data from each interview was synthesized and documented (see Figure 1). Common themes were extracted. Cross-case synthesis analyzes individual interviews as though they were a separate study, then aggregates findings from each to increase the strength of the research (Yin, 2014). The results were translated into narratives and illuminated in Chapter 4.

A range of practices was suggested for translating the questionnaire into multiple languages and interpreting the data collected. This researcher focused on the 5-step method outlined by Forsyth, Kudela, Lawrence, Levin, and Willis (2006). This process includes translation, review, initial adjudication, cognitive interview pretesting, and final review and adjudication. A translation team was assembled for translation and evaluation, as a committee approach is more expansive and allows for input from individuals who complement each other (Forsyth et al., 2006; U.S Bureau of the Census, 2005). The participants were offered an opportunity to review the transcripts as well. The team included the following persons fluent in ASL: a Deaf linguist, fluent in sign language and English; a nationally certified sign language interpreter; and the researcher, who is a state certified sign language interpreter and also a graduate of a sign language studies program.

During the translation phase, the team worked together to ensure that the source and target languages were semantically equivalent (U.S. Bureau of the Census, 2005). The translations were reviewed for accuracy and the original translation was revised as necessary. The cognitive interview pretest was not appropriate for this research, as it pertained to the translation of open-ended, comprehensive surveys. Lastly, a final review and adjudication between the source and target languages was conducted and the final transcript was used to inform this study.

Trustworthiness

According to Creswell (2014), while a researcher may validate findings, it is important for the researcher to employ strategies to check for accuracy of the findings and gain the confidence of readers. Bias clarification as it relates to the researcher was

previously discussed. This is addressed again in Chapter 5. Member checking was used to ensure that the participant provided honest responses.

During the interviews, the researcher rephrased or recapped information and questioned the participant to determine consistency (Harper & Cole, 2012). This allowed for the participant to gauge whether the summarized information accurately depicted the accounts (Harper & Cole, 2012). The presentation of information that counters the general perspective of the themes was also included. Contradictory evidence adds a real-life dimension to the research because everyone does not share the same viewpoint (Creswell, 2014).

The researcher used the observational data to inform the interview data by providing a cultural baseline for how Deaf people learn from and interact with one another in a social setting. This type of data collection can be unfiltered and genuine, as the participants are in their natural environment (Ballie, 2013). The information gained from interviews supplemented the observational data and allowed the researcher to investigate the educational experiences of participants and their beliefs about these experiences in relation to learning in Deaf culture. According to Creswell (2014), both data collection methods focus on the application of meaning by an individual or group of individuals.

Ethical Procedures

The researcher protected participants' rights by allowing them to freely participate without coercion or force. They were informed of the study details, including the use of information obtained and protection of their privacy. Also, the pre-screening

questionnaire did not ask for identifying information such as name and address and it provided the opportunity for the participant to decline involvement. Lastly, because the local deaf community is relatively small and concentrated, all consulting interpreters and Deaf professionals were required to sign a non-disclosure/confidentiality agreement (see Appendix C).

All hard copy documents and videotapes are secured in a locked cabinet, only accessible by the researcher. This information will be secured for a minimum of five years per the University's requirements. Identifying information was removed from transcripts. Following the required storage time, paper records will be shredded, and videotapes will be physically destroyed. Walden University's Institutional Review Board approved this research. The approval number is 01-04-18-0261563. There are no known risks to the safety or well-being of participants involved in this study.

Summary

This chapter provided a detailed description and rationale for the proposed research design. Using a qualitative approach that applied an ethnographic lens through participant observations and face to face interviews, the researcher captured the phenomenological experiences of members of the Deaf community between the ages of l8 and 40. Participants were recruited through various local organizations and using social media and selected based on eligibility determined by a screening questionnaire. Potential researcher bias and ethical considerations were also presented. The use of coding, pattern matching, and cross-case analysis was used to synthesize and analyze data. Chapter 4 presents the results of this study.

Chapter 4: Results

Introduction

The purpose of this study was to gain knowledge regarding the learning

experiences of culturally Deaf adults ages 18-40 in social/informal situations and the

presence of these processes in their formal educational experience. The primary research

question was: What are the educational experiences of Deaf people in formal and

informal learning environments? The secondary research questions were:

SQ1: What is Deaf culture from a Deaf person's perspective?

SQ2: How do Deaf people learn in an informal learning environment with or from other

d/Deaf persons?

SQ3: What are the learning experiences of Deaf people in a formal learning

environment?

SQ4: How can educational programs improve reading and literacy in Deaf students?

This chapter presents the findings of this qualitative phenomenological

ethnographic study. This includes a synopsis of each participant's responses and

descriptions of the methods of data collection and analysis procedures, as described in

Chapter 3. The themes extracted from the participants' experiences as well as observed

behaviors were also identified.

Settings

Interviews were conducted over a 5-month period in Southeast Michigan. The

video-recorded face-to-face interviews occurred in locations agreed upon by the

researcher and the participant to preserve confidentiality and maximize each participant's

comfort. Nine interviews happened in private areas at various public libraries. One interview occurred in a conference room of an office building and another in a secluded area of a public cafeteria. The settings included a table and at least two chairs. The video camera was placed on the table, beside the researcher, and faced the participant for adequate recording. Since it is appropriate in Deaf culture and for optimal interaction, the participant and researcher sat directly across from one another to maintain a clear line of sight when communicating.

The observations occurred at a public library during Bible study, an auditorium during an organization meeting, and a bowling alley. The library was mostly quiet, with adequate lighting and seating. Participants sat around a rectangular table on the third floor in view of everyone. The organization meeting occurred in an auditorium with stadium-like seating and a stage. The room was moderately lit, with bright lights illuminating the stage area. Attendees sat in the auditorium seats while the executive board sat on the stage, behind a rectangular table facing the attendees.

The bowling alley was moderately lit as well. There were chairs near the lanes as well as a raised counter with tall chairs behind the lanes. Attendees sat in the chairs and at the bar, and some stood around the area. There were no conditions that impacted the data collection processes (see Table 1).

Table 1

Observation Schedule

Observed Group	Location	Number of Observations	Number of Attendees	Duration
Bible study	Library	2	8	1.25 hours
			9	1.25 hours
Bowling Event	Bowling Alley	1	12-15	2 hours
Organization Meeting	Auditorium	1	28	1.5 hours

Participant Demographics

This study included 11 participants who resided in Southeast Michigan. Due to the close-knit nature of the community from which I recruited participants, to maintain confidentiality, the specifics of each participant were not discussed. Instead, information about the nine women and two men who completed the screening questionnaire and satisfied the criteria for inclusion are presented in Table 2. The average age of participants was 28.5. All participants attended an educational program that used an interpreter, with some attending more than one type of program. Also, 90% reported having used an assistive listening device and one person denied the use of any aids.

Table 2

Participant Demographics

Category	N
Age range	
18-21	1
22-25	2
26-29	5
30-34	1
35-40	2
Self-identification	
Deaf	11
HOH	0
Primary language	
ASL	11
Signed English	0
Educational program (some participants attended more than one type of program)	
Public mainstream with interpreters	10
Deaf residential school	5
Oral deaf school	1
Home schooled	1
Assistive listening device (s) used	
Hearing aid (s)	5
Cochlear implant (s)	5
None	1

Data Collection

Data were collected via interviews and observations. To recruit participants for interviews, the researcher partnered with local deaf and interpreting organizations and agencies who agreed to post and distribute the recruitment flyer (see Appendix A). The flyer contained information to complete a screening questionnaire to determine eligibility to participate. In-depth semi-structured interviews were conducted over 5 months with 11 participants (see Appendix D). The interviews lasted 27 to 75 minutes and were videotaped with the participants' consent.

Interview data collected varied from the plan presented in Chapter 3. The plan was to interview 15 to 20 individuals, as research deems this within the appropriate range to reach saturation (Namey, Guest, McKenna, & Chen, 2016). To monitor this, following each interview, the researcher charted themes and found that no new themes emerged after interview three. Therefore, inquiry ceased after 11 interviews.

Hennik, Kaiser, and Marconi (2016) found that thematic saturation was reached after nine interviews. They concluded that a small sample could be sufficient to capture repetitive themes, although additional data are needed for a deeper understanding of those themes. However, the usefulness of additional data are determined by the parameters of the study (Hennik et al., 2016) and the level of saturation required Namey et al., 2016).
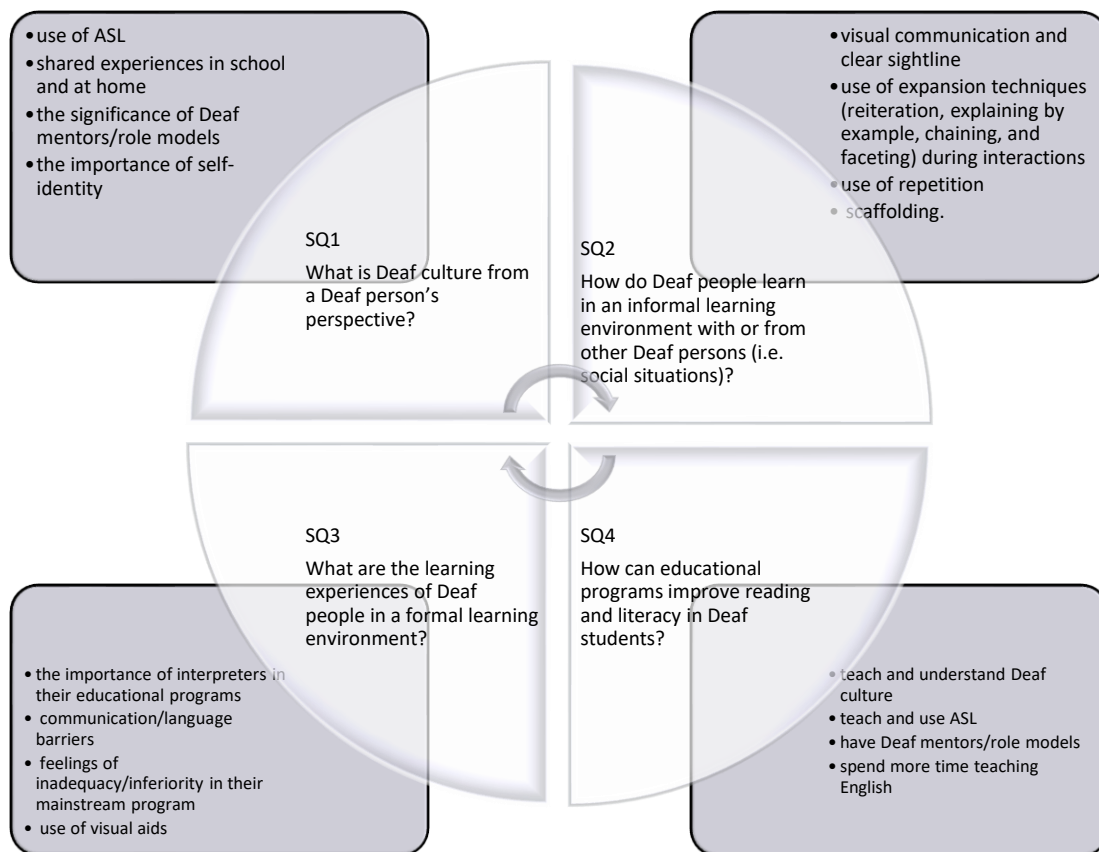
The observations focused on observing Deaf people in social/informal situations. Members of the Deaf community were contacted regarding the dates and times of Bible study, organization meetings, and social events. Observations occurred over a span of 5 months as follows: twice at a library (Bible study), once in an auditorium (organization

meeting), and once at a bowling alley (bowling event). Everyone in attendance was informed of the researcher's presence and only those who gave prior consent were recorded in the written observation notes. Observations lasted from 90 to 150 minutes and data collection proceeded as stated in Chapter 3.

Data Analysis

Interview data were translated by the translation team as described in Chapter 3. The team consisted of the researcher, a Deaf linguist, and a nationally certified ASL interpreter. Following translation and transcription, the data were reviewed for accuracy by the team. There were no discrepancies; however, minor changes were discussed and agreed upon regarding sign meaning, based on the facial expression and body language of the participant. For example, participants discussed being upset with their placement in a mainstream classroom. A quick version of the sign upset can represent a minor feeling of being upset, and an exaggerated production of this sign along with eye rolling can be translated as very upset. The original transcript was revised to reflect changes, and a final review yielded the data for this study.

Following the final transcription, the researcher coded the first interview into themes based on the research questions. This transcript was used to guide the remaining interview transcripts. Common themes related to each research question were extracted and documented as shown in Figure 1. There were no discrepant cases in this study.

- use of ASL
- shared experiences in school and at home
- the significance of Deaf mentors/role models
- the importance of self-identity

SQ1

What is Deaf culture from a Deaf person's perspective?

- visual communication and clear sightline
- use of expansion techniques (reiteration, explaining by example, chaining, and faceting) during interactions
- use of repetition
- scaffolding.

SQ2

How do Deaf people learn in an informal learning environment with or from other Deaf persons (i.e. social situations)?

SQ3

What are the learning experiences of Deaf people in a formal learning environment?

SQ4

How can educational programs improve reading and literacy in Deaf students?

- the importance of interpreters in their educational programs
- communication/language barriers
- feelings of inadequacy/inferiority in their mainstream program
- use of visual aids

- teach and understand Deaf culture
- teach and use ASL
- have Deaf mentors/role models
- spend more time teaching English

Figure 1. Research questions and corresponding themes.

Observational data were collected about the participants' use of expansion techniques commonly seen in ASL, as well as chaining, scaffolding, and communication methods. In addition, data were analyzed for the following: physical setting, type of event and style of language used in the dialogue (register), and dialogue reconstruction. Dates, times, and participant descriptions were omitted to maintain participant anonymity and confidentiality.

Evidence of Trustworthiness

During data collection and analysis, trustworthiness was assessed using member checking. First, the researcher repeated information relayed by the participant during the interview for accuracy. Secondly, the researcher asked follow-up questions to determine consistency. According to Harper and Cole (2012), these safeguards are beneficial for member checking and provide an outlet for participant disclosure. Providing detailed descriptions of their experiences adds credibility, as the participants were able to tell their story in their native language. Details of the methodology used in this study, as described in Chapter 3, attest to transferability of results. To demonstrate confirmability, the researcher acknowledged areas of bias and interviews were recorded and translated by the translation team and not just the researcher.

Findings

The purpose of this study was to understand the formal and informal educational experiences of culturally Deaf adults. Information was obtained through observations and interviews. Results are presented using themes related to the four secondary research questions. These, in turn, informed the primary research question.

SQ1

What is Deaf culture from a Deaf person's perspective?

The themes that were found were the use of ASL, shared experiences in school and at home, the importance of self-identity, and the significance of Deaf mentors and or role models.

Use of ASL

All participants described Deaf culture as sharing a common language. Seven

participants specifically recognized ASL as the common language, and one participant

stated that the culture accepts any signed language, not just ASL. Participant 5 stated that

Deaf people have different language preferences, based on their background, but that

does not mean they do not value ASL.

Shared Experiences

According to participants, Deaf people have shared experiences, regardless of

background, which include oppression, communication barriers, and identity confusion.

Participant 3, who is a fluent ASL user, recalled an interaction with an oral HOH woman

with limited sign skills. They discussed their experiences with the dominant hearing

world.

> I watched as she told her story and I realized that it didn't matter if she was a part
>
> of the Deaf community, or if she signed, our experiences were the same. We had
>
> the same problems. Communication is an issue because we both come from
>
> hearing families. Her husband and children are hearing, so communication at
>
> home is a struggle. It doesn't matter where she is, communication is always a
>
> struggle for her. I thought the same goes for me.

Self-Identity

Nine of the participants in this study are from hearing families who know little to

no sign language. Being a part of Deaf culture provides a sense of belonging and identity

and is a place of support and inclusion. Participant 3 stated, "it's the culture that binds

us." Participant 7 stated that deafness does not determine cultural affiliation. Hearing people can be a part of Deaf culture if they share in and relate to the Deaf experience. This means that they participate in events, use sign language, and value the history and traditions associated with the culture.

Deaf Mentors/Role Models

Eleven participants reported having a Deaf mentor(s) or role model(s) who guided them and showed them how to accept their deafness. Participants 6 and 8 came from Deaf families and were exposed to the culture from birth. However, the remaining 9 participants met their mentor(s)/role model(s) during their adolescence or later.

Participant 1 was introduced to Deaf culture and Deaf identity, while in middle school, through a local organization that hosted events for the Deaf community. She relayed being in awe, as the number of Deaf people was much larger than she thought. She also felt disappointed that she was not exposed to the culture before:

> Honestly, it was overwhelming. I realized that there were other deaf people out there, and they signed. It wasn't this small group of deaf people like I thought. We were everywhere. Then in high school, senior year, I started learning about Deaf culture. I started getting out and seeing stuff. I learned about the Deaf university Gallaudet and that there are famous deaf people out there. I felt like I was learning this stuff late. I became fascinated. (Participant 1)

Likewise, participant 5 started to understand his Deaf identity through his Deaf mentor who worked at a local organization. His mentor embraced her deafness and taught him lessons about health and wellness that stayed with him:

> She was really happy with who she was. She didn't care about being deaf. She was always herself and the world was her oyster. I wanted to follow her lead and be like her. (Participant 5)

Participant 10 was in in high school when she learned to be proud of her deafness because of her Deaf role model:

> She showed me to never give up and that deaf people can do it. I became proud of my Deaf identity because of her. She's a role model. She taught me things in a different method than the hearing school. (Participant 10)

Participant 3 recalled joining a local Deaf club in high school. It was here that she learned of her rights and how to advocate for herself. "They started telling me about my rights and accessibility. I was still in high school, so I went to the administration and expressed my needs as a student." She also relayed how members of the club accepted her without question and what she learned left her feeling empowered:

> I never felt embarrassed or ashamed of my deafness with the club. I remember thinking 'we have that many deaf people.' I was shocked. I thought 'where have you been and why didn't you visit my school?' (Participant 3)

Participant 2 reported having Deaf role models as an adult, but as a child, he did not have any Deaf people to admire:

> To be honest, I did not have any deaf role models growing up. I wanted someone to look up to and I was motivated, but there was no one. It was hard for me because I wanted to learn more about Deaf culture and life but, there was no one to teach me. (Participant 2)

Participant 2 also reported that he had a hearing mentor as a teenager. The mentor was fluent in ASL and taught him money management, self-respect and identity, and appropriate behaviors in public. Participant 1 had a hearing mentor who was fluent in ASL and familiar with Deaf culture. Her mentor was encouraging and helped develop her vocabulary and encouraged her to attend college.

SQ2

How do Deaf people learn in an informal learning environment with or from other Deaf persons (i.e. social situations)?

The themes that emerged relative to this research question were collected from observational data and interviews. The themes are visual communication and clear sightline, use of expansion techniques (reiteration, explaining by example, chaining, and faceting) during interactions, scaffolding, and use of repetition.
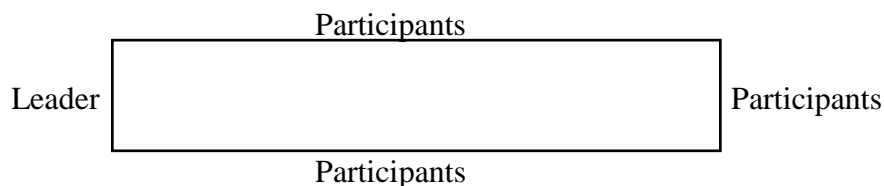
Visual Communication and Clear Sightline

Sign language was the primary mode of communication used at each event, regardless of hearing status or signing ability. During Bible study, the ministerial leader started the meeting by referencing previously distributed written notes that included biblical themes and scriptures. The participants took turns signing scriptures in English, as written in the Bible. If the participant was unsure of the conceptually accurate sign for the English word, a biblical sign dictionary was available for use. Participants also helped one another with signs for accuracy and context.

For example, in ASL, there are several signs for the English word "over," depending on context. In this instance, the signer used the sign for over that typically

represents "crossing over something;" however, the scripture referenced something happening "all over the land" which is a different concept and, therefore, a different sign. Participants corrected the signer for conceptual accuracy.

During the organization meeting, members and participants used ASL only. The meeting agenda was in written English, and the bullet points were signed as the meeting progressed. A PowerPoint presentation was used as a visual aid and this was also presented in English and explained in ASL. Communication at the bowling event was in sign.

The seating arrangement at each observation was such that the signer was clearly visible. The Bible study group, consisting of nine attendees including the researcher, sat around a rectangular table with no visual impediments on the table. The discussion leader sat at the head of the table. The location of the table was conducive to intimate group discussion and clear communication, without the interference or visual distraction of people passing by. The signer waited for everyone's attention prior to beginning the scripture reading. Figure 2 shows the seating arrangement.

```
                    Participants
         ┌──────────────────────────────┐
Leader   │                              │  Participants
         └──────────────────────────────┘
                    Participants
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Figure 2. Bible study seating arrangement.

The organization meeting was held in an auditorium with stadium like seating. There was a raised stage at the bottom of the room. The seating arrangement is shown in

Figure 3. General members and visitors sat in the stadium like seating and the executive

board (president, vice president, secretary, and treasurer) sat on the stage.
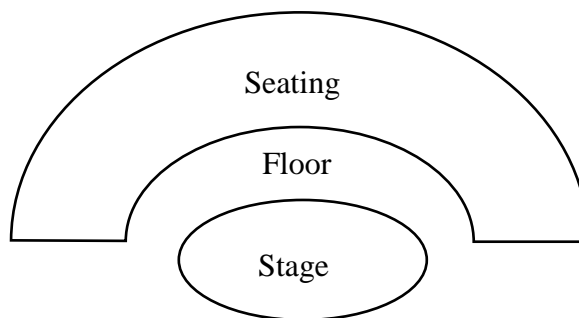
Figure 3. Organization meeting seating arrangement.

When members of the executive board signed, they stood on the raised stage.

Whenever an audience member signed one of three things occurred: the signer moved to

the floor area between the stage and the seating, the signer stood on the stage, or the

signer signed from their seat and another member copy signed for the people whose view

was obstructed. Whichever method was chosen, the goal was to provide a clear line of

sight to the signer for all attendees.

The configuration of the bowling event was that of a typical bowling alley, as

previously described. When attendees were interacting, they clustered in a circle or semi-

circle in the same area, making sure that everyone was visible. If there was distance

between individuals communicating, during which people would walk in the line of sight,

one or more persons moved to create a clear sightline and maintain eye contact.

Expansion Techniques

During Bible study, following the scripture reading, the Bible study group leader,

a minister, summarized the passage. The minister signed slowly and deliberately, waiting

for everyone's attention before starting. For English words that were fingerspelled during the reading, the minister explained the meaning of the word as it related to the scripture. For example, the word Pentecost was fingerspelled, but during the summarization, the minister explained that this meant the coming of the holy spirit to save the people and allow them to be witnesses about the works of Jesus, as predicted by Jesus.

Another passage referenced being "born again." The signer signed this phrase using the signs for "born" and "again." However, during the summarization and discussion, participants indicated that the true meaning of this phrase could be understood as living a new life, becoming a part of God's family, accepting Jesus Christ as your Savior, and giving up your old ways. Members nodded in agreement as participants chimed in with their interpretation.

At the bowling event, the use of reiteration was prevalent. One participant used reiteration to emphasize points of concern or importance. For example, signs such as "excite," "satisfy," "sure," and "awful" were used at the beginning and the end of an utterance. When these signs were used in this manner, those involved in the conversation responded accordingly with a smile, a laugh, a nod, or a scrunched face. The intensity of the non-verbal response seemed to coincide with the reiterated sign.

Explaining using examples was exhibited by participant 4 when describing her struggles with the English language. In attempting to decode the English idiom "bring home the bacon," she explained that she asked people how to sign this in ASL. When someone signed it for her, they used English but clarified it using ASL signs to show that it meant someone going to work, earning money, and using that money to take care of

their home and family. This provided a real-life application using ASL that was confusing to her in English.

When discussing Deaf culture, participant 3 used real life examples to explain how she learned about turn-taking and respecting the ideas or opinion of others. Referring to her experiences with a Deaf teacher, she stated, "For example, if we were discussing something and someone disagreed, the teacher encouraged discussion. She showed us how to disagree respectfully."

Scaffolding

Scaffolding was evident at the organization meeting. The new executive board relied on the former, more experienced board members for direction during the meeting. These included issues of quorum and approval of the minutes from the previous meeting. Instead of providing direct answers to questions by the new executive board, the former board members gave prompts that helped the new board remember procedure. Also, the former board members allowed the new executive board to conduct the business and did not take over the meeting when it seemed that the new board members did not know how to proceed.

Use of Repetition

Repetition was also used during the observations and interviews. During observations, information communicated between individuals was repeated twice, sometimes three times. It was done to clarify a point, check for understanding, or for emphasis. For example, during the organization meeting, the process of making a motion for voting was stated repeatedly by former board members.

During the interviews, all 11 participants repeated at least one of the interview questions back to the researcher for clarity or used the interview question in their answer. For example, when asked, "What does it mean to be a member of Deaf culture," Participants 1, 2, 3, 6, 7, 9, 11 responded with "Being a member of Deaf culture means…." Participant 9 asked for clarity on several questions by paraphrasing the question and waiting for the researcher to respond.

SQ3

What are the learning experiences of Deaf people in a formal learning environment?

The themes which emerged were the importance of the interpreter in their educational programs, language/communication barriers, feelings of inadequacy or inferiority in their mainstream program, and not enough visual aids to accompany the written or spoken lessons.

Importance of Interpreters

Ten of the 11 participants specifically referenced the importance of interpreters in their educational experience. Participant 11 did not rely on interpreters in her educational program because she attended a Deaf residential school where the teachers, hearing and deaf, were required to sign. However, she recognized that interpreters were important in other aspects of her life.

Participant 1 recalled how interpreters were helpful and encouraging during class. She also stated that interpreters took the time to explain information that was not clear, particularly the meaning of English words.

Interpreters helped with questions and repeated information if I wasn't sure. Sometimes, if I were afraid to ask the teacher, they would tell me to not be afraid and to go ahead and ask. They helped build my confidence. They said you can ask the same as hearing students. I was thankful for the confidence and I didn't feel shy. Sometimes they would explain things to me. I didn't feel like they looked down on me or told me that I can't do it. They would tell me I'm smart. They helped me a lot. (Participant 1)

Participant 2 described his experiences with interpreters:

Some interpreters weren't clear, and I couldn't understand them. I needed the interpretation to match what the teacher said. Other interpreters were clear and supportive, and I learned a lot. I appreciated when the interpreter asked if I understood what was said. (Participant 2)

In her mainstream program, participant 3 stated, "The interpreter was my interpreter, teacher, and friend." She felt the interpreter was her teacher because the actual hearing teacher rarely interacted with the deaf students. According to her, "it's like we, the deaf students, were a class within a class." She recalled how she never knew who was speaking because she had to watch the interpreter. "In mainstream classes, I just watched the interpreter and I never knew who said what. Sometimes the interpreter wouldn't interpret because they didn't understand what was being said. So, I just sat there out of the loop." However, participant 3 also recalled how the interpreter helped her fit in by doing things that made the other students laugh so that she could be included in the joke.

Participant 5 admitted that he never had a one on one experience with his teachers. Instead, the interpreter explained things and he typically understood. Participant 8 stated that she used interpreters throughout her educational experience. "Some interpreters did their job and that's it and others went above and beyond to make sure I understood what was going on around me." When she began college, participant 8 noticed that the interpreters were different from her younger years. They no longer provided that support she was used to. According to her,

> When I graduated high school and started college and started working, I saw a different kind of interpreter. They came to do their job and that's it. I realized that I missed that more hands-on interpreter from my younger years.

While recognizing the positive contribution of interpreters to her educational experience, participant 6 also discussed the downside of interpreters. "There were times when interpreters would not interpret things going on around me. When I asked they would tell me it wasn't important or that the person was talking to them not me." According to her, these types of occurrences felt oppressive and did not foster self-identity or help with incidental learning, both of which she considered essential for Deaf people.

Participant 10 stated that interpreters were very helpful during her school experience; moreover, she preferred interpreters who were more expressive, otherwise, she lost interest in whatever was being communicated.

> If the interpreter signed with more expression, I was interested and paid attention. Each interpreter is different, it depends. If they signed plainer, I lost

interest.…Interpreters helped a lot. If I didn't understand they would explain to

me. Of course, they were important because they were my ears. I prefer

interpreters with expression over plain interpreters. They are boring. (Participant

10)

Communication/Language Barriers

Another resonating theme was communication and or language barriers. Ten of

the 11 participants in this study reported that, in their mainstream program, they often felt

left out or disconnected from the teacher and their peers during classroom time and

extracurricular activities. Contrarily, in the deaf classroom or Deaf residential schools,

they felt comfortable and thrived in their surroundings.

Participant 3 disclosed that during her years in a mainstream program she felt like

she was the last to know about things going on around the school. She also stated that she

only participated in sports because there was minimal talking required. The school did

not provide an interpreter, so she caught on by watching other athletes. However, her

experiences were vastly different at the Deaf residential school.

In the deaf school, the teenagers would be signing so fast and I would try to keep

up. It was overwhelming at first, but then I caught on and it became the norm. I

was excited to be able to keep up and included in the discussion. I enjoyed

watching the teacher because she didn't shush people or force them to wait their

turn. She allowed everyone to speak and she would comment towards whoever

was speaking. Then she would summarize their thoughts. I realize that's the

culture. It was happening in the classroom and I had missed that. (Participant 3)

Participant 5 recalled that, because of his Deaf mentor, he grew to love sports, but his experience in school was limited because of communication barriers.

> During track, the interpreter couldn't run with me. During practice, before the race, the interpreter would talk to me and explain everything. Sometimes the interpreter would leave after the event started and not come back. I felt it wasn't fair sometimes because the hearing kids could talk to each other during the race, but I had no one to talk to.…I was stuck because of the communication barrier. (Participant 5)

Participant 10 had a similar experience with sports.

> In school when I played sports, an interpreter showed up but didn't come consistently. Sometimes the coach would write back and forth with me, but he wasn't always in the mood to write because he was focused. (Participant 10)

She went on to say:

> I joined the softball team too, but the coach said I couldn't play because I was deaf. I felt defeated. It really hurt. That's the reason I left that school. That really crushed me. At the Deaf school, I was in the drama club, on the bowling team, and played sports.

Participants also discussed communication barriers related to class size and seating arrangement. In her Deaf residential program, participant 11 stated that there were six to ten students in each class and seating was always arranged so that everyone could see each other. "It has to happen this way in Deaf culture," she said, "so we can maintain that line of sight and we don't have to look around someone else."

Participant 2 stated:

> Fewer students was better because we could interact with each other. I was more
> comfortable sitting in a 'u' shape. I could see everyone's face versus a hearing
> classroom with rows where people sat one behind the other. We had tables that
> we set up to face each other or we all sat at a round table. That is better and more
> comfortable

Participant 5 recalled the seating in the deaf classroom was in a "u" shape, whereas the
seats in the hearing classroom were arranged in rows from left to right.

> As long as I could see, and the communication was clear, I didn't mind the
> seating arrangement. In the mainstream class, I preferred to sit in the front or
> second row because it was comfortable. I wanted to feel like the rest of the
> students. In the deaf classroom it didn't matter where I sat because I could see
> everyone from any seat. I had no preference of one seating arrangement over
> another. (Participant 5)

Participant 7 stated that the deaf classroom had fewer students compared to the
mainstream classroom.

> The deaf classrooms tended to be small. The mainstream classes were bigger. If
> no interpreter, I preferred a smaller class size. It was easier to pay attention, see
> the teacher, and get the information. The teacher had more time for one on one
> interactions. (Participant 7)

> According to participant 10, being in the larger hearing classroom was
embarrassing for her because she had to sit in the front to see the interpreter. However, in

the smaller deaf classroom the seats were arranged so that everyone could see one another.

> There were a lot of students in high school, but the class size was small. Maybe about eight students in a class. We all sat facing each other because of visual communication. We didn't have to look around anyone to see. Hearing classrooms were set up in rows, and I had to sit in the front. I hated sitting in the front. I felt like everyone was looking at me. I preferred sitting in the back. I had to sit in front because of the interpreter, but I was embarrassed, and my confidence was low. I didn't like it. (Participant 10)

Participant 4 also expressed her desire to choose her seat in the hearing classroom and the results of being forced to sit in front.

> In the hearing classroom, I sat near the back, but when the interpreter came, they told me I had to sit in the front. But, when I sat in the front, the teacher kept walking back and forth in front of the interpreter, so I had to look around the teacher to see the interpreter.

Feelings of Inferiority or Inadequacy

Feelings of inadequacy, inferiority, or insecurity in their mainstream programs were also expressed by participants. Participant 1 reported that she felt afraid to ask or answer questions or speak up in hearing classrooms. "It was such a challenging experience because I was the only deaf and I felt like I stood out."

Participant 2 stated:

In the hearing classroom, I didn't always feel comfortable asking questions or

answering them, but in the deaf classroom I was very comfortable answering and

raising my hand. I was more confident because we were all the same, equal.

(Participant 2)

Participant 3 expressed her fear of being placed in an English class with hearing students:

The English teacher told me that I didn't belong in the deaf class for English. I

was like 'what, where do I go?' She said I should go to the hearing English class

and I was totally opposed to that! I was very insecure because English was not my

language. (Participant 3)

In her mainstream program, participant 6 reported feeling inferior to the hearing

students, even though she was more advanced than other deaf students. Participant 7

stated that in her deaf oral program, she still felt inferior to hearing students, even though

she had some hearing and could lip read.

Participant 9 reported feeling afraid about attending a hearing program;

For high school, I went to a hearing school and it was my first experience at a big

school. I was so scared and didn't feel confident again. I was raised around a

hearing family where communication was gestures and now I was back in that

environment at the high school.…I was terrified!

Use of Visual Aids in Teaching

The last resounding theme was the minimal use of visual material in the

participants' educational program. Participant 2 acknowledged that sometimes, with

lecture only, she did not understand what was being taught. However, if the lesson was

accompanied by visual aids, such as a PowerPoint presentation, it helped her comprehension.

Participant 5 reported that his hearing teacher in the deaf classroom often used pictures, more so than words, to teach the lesson. He also revealed that "If the mainstream program used pictures, I would have felt like the classes were equal." Participant 6 reported that there were not many visual aids used in her mainstream program.

Participant 7, who has experience in a deaf oral program, stated:

I feel that the oral deaf program needs to focus more on visual because deaf people are more visual learners. Sometimes the school focuses more on sound and words and speaking and that bothers me. If it were more visual, it would help students. (Participant 7)

Likewise, participant 8 expressed the importance of visual aids in her educational experience:

Sometimes the mainstream classroom was so focused on lecture with no visual aids and the information would go right over my head. I needed visual aids in addition to lecture to help me make the connection. (Participant 8)

In her Deaf residential program, participant 11 stated that teachers used PowerPoint presentations, a projector, and written texts for lessons. She also stated that if the students did not understand a word, they were encouraged to try and figure it out using a dictionary. If the students still did not understand, the teacher explained it using ASL.

SQ4

How can educational programs improve reading and literacy in Deaf students?

The themes which emerged were teach and understand Deaf culture, teach and use ASL, have Deaf mentors and or role models, and spend more time teaching English.

Teach and Understand Deaf culture

All participants in the study referenced some aspect of Deaf culture as necessary for improving reading and literacy in Deaf students. Participants 1, 3, 5, 9 and 10 stated that schools need to teach or understand Deaf culture. Participant 1 explained that understanding Deaf culture helps teachers to challenge Deaf students and not limit them. She added, "Deaf have rights, and in Deaf culture, we support each other and learn from one another." Participant 3 stated, "schools must teach Deaf culture and have a Deaf heart, and the same goes for the administration."

According to participant 5,

Educators should know why Deaf culture is important to us. Deaf culture is really different from other cultures. It will help them identify with the language and who we are as a people. They will realize that we can understand what's going on in our lives, in politics, and education. I feel proud to be Deaf and am happy to see people keeping our culture and community alive. (Participant 5)

Participant 9 expressed her desire for school staff to realize the intricacies of Deaf culture and shared her experiences because of this missing piece.

My 9th grade year was challenging, but I became more comfortable in the 10th and 11th grades. In the classroom, the teachers didn't understand Deaf culture and

neither did the students. They didn't understand accessibility.…I wish educators and the like would research Deaf culture. I wish they would interact with the Deaf students and Deaf staff.

Teach and Use ASL

In relation to teaching and using ASL, except for participant 2, all participants referenced the significance of ASL in the educational process. Participant 3 stated the following regarding the choice of language used in school:

I wish SEE would be tossed out. It should be ASL. If Dr. Seuss can play with language, we should have the same for deaf students with ASL. It's fine if deaf children can speak, but ASL is also important. It doesn't matter if they have minimal hearing loss. (Participant 3)

Participant 4 described how ASL is important to enhance English words and add visual meaning to a story.

To help deaf kids with English, signing paints a picture. The action and facial expressions and everything involved bring the story alive. It helps to see the story. When a story is read from a book, those are just words with no life. ASL is descriptive and English is just words. The meaning gets lost with words only.

"Deaf people are behind," said participant 11, "so I would say use their language first, then English." Participant 7 emphasized that deaf people are visual learners and schools should focus on visual stimulation to help deaf students learn." Likewise, participant 10 stated:

There needs to be more visual things for learning. They also need to teach about

ASL because it's our first language. We can pick up ASL fast. We struggle with

English. Programs need to hire Deaf teachers…or hearing teachers that sign.

(Participant 10)

Deaf Role Models/Mentors

The need for Deaf mentors or role models was also mentioned by 6 out of the 11

participants. Participant 2 recalled not having a Deaf mentor or role model growing up

and expressed the need for Deaf kids to have someone to admire.

Deaf students need more support, so they can set goals and learn how to think

deeply. They also need other deaf to look up to and learn from so that they can

know that they can be successful too. They need someone they can make that

connection with to help motivate them to learn. (Participant 2)

Conversely, participant 8 had a Deaf role model and recognized the influence that this

had on her life.

It's important to be a role model for these children. I remember when I was young

I had a Deaf role model and I really looked up to her. She taught me language

before I knew how to read or write, maybe around the age of 3. She taught my

parents too. We learned to sign as well as understand ASL. She taught me how to

read and write English.…seeing more and more deaf people helped me to feel I

can do it too. It helped me to feel encouraged about my future and future success.

(Participant 5)

Spend More Time Teaching English

The theme of schools spending more time teaching English was referenced by 3 participants. Participant 1 stated, "Give us time to learn English because we are in a hearing world and it's important for writing and communicating." Correspondingly, participant 4 stated:

English has words we don't use in ASL like 'it' and 'to,' so you have to change the message for us to understand. These kinds of words need to be explained so we know how to use them in English and we can make the connection.

(Participant 4)

Furthermore, she stated, "there should be more time spent teaching English to make sure the understanding is there. The lesson shouldn't be short."

According to participant 11,

There's a big difference between English and ASL so we need to know how to translate English into ASL to help us understand more. The foundation needs to be explained. She reiterated the importance of foundation in understanding English. Foundation is really important. Some struggle with the foundation and you really need that. We need to understand how and why things are certain ways. Words like 'are,' 'is,' 'to,' we don't have in ASL, so it needs to be explained how to use these. (Participant 11)

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Summary

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Using data collected from interviews and observations, this chapter presented the lived experiences of Deaf participants in formal and informal educational settings. The

importance of understanding Deaf culture resonated throughout the findings. This included being tolerant of the visual needs of deaf students, respecting their language and identity, making after school activities and sports and other activities accessible for deaf students, and the necessity for Deaf mentors and or role models in the educational process of deaf students. Chapter 5 discusses the implications of these findings and suggestions for social change.

Chapter 5: Discussion, Recommendations, and Conclusion

Introduction

The purpose of this study was to explore the formal and informal educational experiences of Deaf people and whether there is overlap between the practices experienced in informal settings and those in formal environments. Understanding the learning processes of this population can be used to assist in the creation and administration of deaf education programs that improve literacy among deaf students. It can also be used to inform policy related to educating this population. The average deaf adult reads at an elementary school level (Wang & Andrews, 2014), and efforts to improve reading by reforming policies have been unsuccessful (Trezek & Mayer, 2015).

An ethnographic phenomenological approach was used to gain knowledge and data were collected using interviews and observations. Ethnography allows for the observation of cultures in their natural setting to understand interactions among its members (Frankel & Devers, 2000; Smith & Bekker, 2011). Therefore, this methodology provided a relevant framework for understanding how deaf people teach and learn from each other. Phenomenology complemented ethnography through interviews to garner a firsthand in-depth understanding of factors that influenced their educational experiences. This research was initially planned with 15-20 interviews; however, saturation was reached at 11 interviews.

This study found that Deaf people value aspects of Deaf culture that are important for them to learn in a formal educational environment. Participants expressed feelings of insecurity and inadequacy when placed in a classroom with their hearing peers. However,

in deaf classrooms, they felt equal or even superior to their classmates. They recognized the value and limitations of having interpreters throughout school and the impact this had on their education. The participants specifically expressed the need for improved language and communication, understanding of the culture, and fostering of Deaf identity in formal education to enhance their experience and foster educational growth.

Interpretation of the Findings

The process of educating deaf children has been debated among academic scholars and researchers alike. Deaf education programs have been subjected to reformations that measure progress, improve accountability, and provide an inclusive experience for deaf students (Cawthon, 2011; U.S. Department of Education, 2004). However, the implication of culture and its value in the educational process has been vastly ignored. According to Gisladottir (2014), deaf students are at an immediate disadvantage when educational programs do not consider the contribution of Deaf culture in improving literacy.

The themes derived from the data suggest that aspects of Deaf culture related to learning are rarely present in the formal educational experiences of Deaf people. The identified themes are presented in relation to the secondary research questions. Therefore, the primary research question was addressed using the themes identified from the secondary research questions.

Secondary Research Questions

SQ1: What is Deaf culture from a Deaf person's perspective?

The themes that emerged from this question were the use of ASL for communication, shared experiences in school and at home, Deaf mentors and or role models, and the importance of self-identity. This finding substantiated previous research regarding the meaning of Deaf culture and its significance in the lives of Deaf people. According to Ladd and Lane (2013), these themes make up Deaf ethnicity and create the way for deaf people to change their sense of self from having a disability to identifying as part of a specific culture that develops self-pride.

Use of ASL

This study found that participants consider ASL to be an essential component of Deaf culture that is shared by members of this community. The visual and grammatical nature of ASL adds meaning to obscure English words and is a way for Deaf people to interact and exchange information. Ladd and Lane (2013) referred to language as one of the ethnic properties of members of an ethnic group. ASL is a means of self-expression and identity. However, not all participants agreed that ASL use is a determining factor in cultural affiliation.

Shared Experiences

Participant 3 described her interaction with a HOH woman, during which they communicated using gestures, broken sign language, and voice. Although the woman had limited sign skills, the participant credited their shared experiences as creating a bond between them. Even though the participant is fluent in ASL, communication is still a

struggle. Similarly, the HOH woman's English fluency and ability to speak did not fully close the communication gap she experiences in a hearing world. These and other collective experiences unique to deaf people were evidence that Deaf culture includes people from various communication backgrounds. The use of ASL, while important to Deaf culture, is only one facet of a much greater cultural identity (Ladd & Lane, 2013).

Self-Identity

Participants in this study indicated that understanding one's identity is important for Deaf people. This aligns with previous research by Flaskerud (2014), Van Cleve (2016), and Wang and Andrews (2014). All participants acknowledged that they realized their identity through interactions with members of Deaf culture and, as a result, became more involved with the Deaf community. They also expressed feelings of pride and empowerment in understanding and developing their identity. Carter (2015) studied the importance of identity in Deaf people and factors that influence self-identity, and found that the more deaf people actualized their identity, the more their attitudes regarding their deafness shifted. They felt more comfortable associating with other Deaf people and had higher self-esteem.

Deaf Mentors/Role Models

All participants in this study reportedly benefited from having a Deaf mentor/role model, and 10 out of 11 of them did not meet a mentor/role model until adolescence or older. The role model/mentor was central in exposing the participants to Deaf culture and the Deaf community, as well as helping them increase their self-esteem and feel empowered. Approximately 90% of deaf children are born to hearing parents and

therefore, these families have little to no experience with deafness, thus making Deaf role models even more important.

Deaf mentors are a valuable resource for deaf children and their families according to Roberson and Shaw (2015), who investigated the educational and familial experiences of Deaf senior citizens from Deaf and hearing families and found that older Deaf people are an asset to the Deaf community. They suggested that families with deaf children seek out Deaf senior citizens as mentors because they can offer guidance and support to families who face decisions and challenges relative to rearing a deaf child. Deaf mentors can also be the gateway to language and communication, as well as events in the Deaf community. Roberson and Shaw posited that including older Deaf people in the lives of younger deaf people shows that families with deaf individuals are vested in their children's well-being, something that several participants in this study missed growing up.

SQ2: How do Deaf people learn in an informal learning environment with or from other Deaf persons?

In informal learning environments, deaf people learn through visual communication and clear sightline. They use expansion techniques such as reiteration, explaining by example, chaining, and faceting during interactions. Additionally, the use of repetition, and scaffolding are the themes extracted from this research question.

Visual Communication and Clear Sightline

The importance of visual communication and a clear sightline was a reoccurring theme identified during interviews and observations. Data for this study was collected

using and observing sign language and translated into English by the researcher and translation team. In the interviews, participants as well as the researcher used sign language to communicate, and during observations, participants used sign for communication. Baker-Shenk and Cokely (1980) identified ASL as a visual-gestural language that uses precise movements of the body, including hands, face, arms, posture, and eyes to convey meaning and intent; therefore, a barrier-free line of sight is warranted for clear communication.

During interviews, participants sat directly in front of the researcher, close enough to prevent others from walking in between, yet, far enough to maintain personal comfort. Participant 6, who arrived at her interview location before the researcher, had determined the seating arrangement prior to the researcher's arrival and it was the same setup. During the Bible study meeting, participants sat around a rectangular table, and when people arrived late, those around the table shifted left or right to allow the latecomers a seat at the table. Likewise, the seating arrangement at the organization meeting was such that everyone could see one another. In the case where view was obstructed, participants were told to stand on the stage to sign or they signed from their seat and someone else with a clear path copied their signs for everyone to see. This finding parallels the definition of ASL as a visual-gestural language.

Expansion Techniques

Expansion or contextualizing is an ASL linguistic feature used to clarify, provide detail, or relay intent (Quinto-Pozos & Reynolds, 2012). During observations of the Bible study group, participants fingerspelled English words that do not have a specific sign,

then used ASL to explain the meaning of that word. This expansion technique is known as chaining. According to Quinto-Pozos and Reynolds (2012) and Higgins (2016), this strategy is commonly used in teaching to help students make connections between varying texts. In this instance, written text was converted to a fingerspelled word and that was converted to a concept using ASL.

Throughout the interviews, participants also used expansion techniques when answering questions. When participant 10 described her fears about going to college, she signed nervous, not confident, and future don't know. Using faceting, a technique in which signs are sequential and go from general to specific, she clarified her feelings and they became more specific. Participants also reiterated points of importance. For example, when asked about Deaf culture membership, participant 7 reiterated that hearing loss does not determine membership by saying, "Anyone can be a member of the deaf community. You don't have to be deaf. If you sign, or have a deaf spouse you can be a member." Likewise, participant 11 reiterated that her Deaf residential school provided a good education. She stated, "School taught us everything. During senior year, they taught us things to help plan for life after school. The school taught us a lot."

Scaffolding

The process of scaffolding was evident in the Bible study and organization meetings. Throughout both interactions, the more experienced participants guided the other participants. The leaders appeared to provide enough support for the participants to feel confident in their ability to lead future meetings on their own. Participants demonstrated understanding by nodding in agreement during guidance and taking charge

when asked the meaning of a Bible verse or facilitating discussions. According to

Kuntze, Golos, and Enns (2014), scaffolding activities can provide the support children

need to understand written English while fostering independence. This includes asking

open-ended questions and offering examples.

Use of Repetition

When participants were interviewed, they often repeated the interview questions

back to the researcher or included the questions in their response. This grammatical

feature is common in ASL and is typically done for clarity, emphasis, and understanding.

Similarly, during observations, information was repeated several times and participants

nodded to show understanding or agreement. This discourse marker is another element of

ASL that fosters understanding by adding cohesion to an utterance, as well as creating

visual stimulation because of its rhythmic movement. This finding extends previous work

by Ladd and Lane (2013) who stated that cultural groups have specific rules for behavior

that includes discourse formation.

SQ3: What are the learning experiences of Deaf people in a formal learning

environment?

The findings related to this question are the importance of the interpreter in their

educational programs both as interpreters and role models. Also, the formal learning

experiences included themes iterating problems areas such as language/communication

barriers, feelings of inadequacy, inferiority, and insecurity in their mainstream program.

The lack of visual aids in teaching was a theme since Deaf people are visual learners.

Importance of Interpreters

The importance of interpreters in formal education, beyond facilitating communication, resonated with all the participants. Although participant 11 attended a Deaf residential school and did not utilize an interpreter in the classroom, she recognized their worth as well. This finding corroborates the results of a study by Ayantoye and Luckner (2016) who found that deaf children valued the contributions of interpreters to their educational achievement.

Participant 1 stated that, during her elementary school years, she had low language skills and struggled to match signs with the meaning of words. She recalled, "Now my language is more expansive, but back then it wasn't. That interpreter was very supportive though. They spoke up for me, encouraged me, and told me to be positive." Other participants positively recalled instances where interpreters were their only friend in school, provided support and encouragement, acted as an advocate for them, and provided instruction.

This finding correlates with research conducted by Antia and Kreimeyer (2001). They found that the role of the interpreter extended beyond facilitating communication and interpreters helped with tutoring, instruction, and peer interactions. They suggested that the interpreter is a valuable member of the deaf child's educational experience and should be treated, to some degree, as a full-participant, and not just a translator, in this environment.

Communication/Language Barriers

The importance of language and communication was reverberated by all participants in this study; however, except for participant 11, all participants experienced communication or language barriers in school. Many reported feeling left out of classroom and peer interactions as well as extracurricular activities because peers, teachers, and administrators did not use sign language. Antia, Jones, Luckner, Kreimeyer, and Reed (2011) found that deaf or hard of hearing students who had access to peer communication in the classroom and participated in extracurricular activities had more positive social interactions and social skills. Additionally, removing barriers related to the physical environment can also improve classroom communication (Antia et al., 2011). Therefore, issues such as seating arrangement can be altered to improve communication.

Feelings of Inferiority, Inadequacy, or Insecurity

Participants reported that they often felt inferior, inadequate, or insecure during the educational journey. Many stated that these feelings centered around communication and their low English skills and felt like they were not as smart as the hearing students. Participants indicated that they were reluctant to ask or answer questions and rarely raised their hands in class. Participant 4 stated, "I used to be embarrassed when I made mistakes." However, this was in stark contrast to their feelings in the deaf classroom or residential school. Participant 2 reportedly felt equal to her deaf peers and was not afraid to participate in class. Likewise, after feeling embarrassed in mainstream classrooms, participant 4 changed following interactions at the Deaf residential school.

People would tell me not to feel that way. It was ok. Everyone makes mistakes.

So, I learned from that. It helped me to grow and become strong and proud. It

helped me to have high self-esteem. I am proud to be deaf. (Participant 4)

Research shows that students who feel comfortable with their deafness and are not afraid

to be assertive in class are more likely to have a successful educational experience

(Ayantoye & Luckner, 2016).

Use of Visual Aids in Teaching

Over half of the participants in this study stated that their educational programs

used very few visual aids. In the mainstream classes, lessons consisted mostly of spoken

and written English. Teachers used the chalkboard and a smartboard, not for illustrations,

but to present written material. Participant 8 reported that she needed visual aids to

supplement the material in her mainstream classroom. Participant 7 stated that more

visual aids are necessary because deaf people are visual learners. This finding reiterates

the need for more visual support when interacting with deaf people as found by Hayashi

and Tobin (2014) and Shuler, Mistler, Torrey, and Depukat (2014).

How can educational programs improve reading and literacy in Deaf students?

The themes that emerged from this question are that Deaf people want deaf

education programs to teach and understand Deaf culture and to teach and use ASL in the

educational environment. Also, having Deaf mentors and role models for students is

important to identity development in deaf students. Lastly, Deaf people think programs

should spend more time teaching English.

Teach and Understand Deaf culture

All participants stated that educational programs with deaf children should understand and teach Deaf culture. According to participants, culture is an important part of deaf identity and school personnel would benefit from realizing the significance of culture in the development of deaf children. This finding supports research by Hadjikakou and Nikolariaizi (2011) regarding the importance of culture. Deaf culture is cultivated in places such as Deaf clubs and it is here that Deaf people embrace and maintain the meaning of culture by participating in actives that promote personal development and empowerment. Participant 3 credited her involvement with a Deaf club as the catalyst to her Deaf identity. Flaskerud (2014) investigated the meaning of Deaf culture and found that the intricacies of being d/Deaf far exceed the ideas people have about this minority group. Higgins (2016) stated that recognizing deaf children as a cultural minority increases awareness regarding their potential to positively contribute to society.

Teaching and Using ASL

A noteworthy aspect of culture is language and, for the participants in this study, ASL was identified as the core of Deaf culture. This was evident during observations and interviews and was reverberated by interviewees. Participants repeatedly stated that being immersed in an ASL rich environment fostered learning and boosted self-identity and self-empowerment. Participant 4 explained how she thrived in the Deaf residential school because of her exposure to ASL. Participant 3, whose mainstream program used SEE, was exposed to ASL in her late teens and reportedly felt an immediate connection to the

language. Participant's 7 and 10 reiterated that ASL, not English, is visually stimulating and more appropriate for visual learners. Yet, ASL was not taught in any of the educational programs that the participants attended, including Deaf residential programs. This supports the findings of O'Brien and Placier (2015) who noted that, although ASL was sanctioned at a Deaf residential school, there were no classes dedicated to teaching ASL. Higgins (2016) recognized that most teacher preparation programs focus on theory in teaching deaf students, and ignore the benefits of ASL proficiency. He suggested that programs provide an in-depth study of ASL, perhaps requiring a license in second language learning rather than special education. Higgins (2016) also suggested that schools seeking to hire teachers of the deaf vet candidates by evaluating their ASL skills and requiring numerous years of ASL experience before being appointed.

Deaf Mentors/Role Models

Another component of Deaf culture is the significance of Deaf mentors and or role models in the lives of deaf children. The participants credited their Deaf mentors and role models with teaching them about the culture and language, encouraging them to never give up, and showing them that deaf people can lead successful lives. Participant 3 recalled her amazement that members of the club readily accepted her.

A few years later I asked, 'why did you accept me? I knew nothing about the culture; I was a girl. He said it was because I accepted ASL. I grew up signing SEE. He said I wasn't afraid to jump right in and if I didn't understand something I wasn't afraid to ask. I started picking up the language really quickly and

advocating at my high school. He said that I didn't come in judging or criticizing,

instead I had an open mind.

This confirms the research of Baker and Scott (2016) who suggested that certified deaf

interpreters or language mentors are assets in the language learning process. Likewise,

Plue (2003) recommended that schools examine the impact of multicultural Deaf role

models by providing students with resources about such.

Spend More Time Teaching English

Most of the participants in this study stated that they struggled with reading and

writing English. Research supports this, as the average d/Deaf adult reads at an

elementary school level (Luckner, Slike, & Johnson, 2012; Marschark, et al., 2009; Wang

& Andrews, 2014). Participants stated that, because of the vast differences between ASL

and English, more time needs to be dedicated to teaching English. Several participants

specifically acknowledged issues with understanding and applying English prepositions

and conjugating the be verb.

Primary Research Question

The primary research question asked about the educational experiences of Deaf

people in formal and informal learning environments. The findings show that, while

culture is the crux of informal educational experiences, cultural nuances are not a key

factor in deaf education programs. This resonates with research conducted by McIlroy

and Storbeck (2011) who interviewed participants regarding their views about their

deafness. Participants in mainstream programs lacked self-identity and viewed deafness

as a calamity.

Additionally, participants experienced communication barriers and longed to connect with other deaf. Gisladottir (2014) found that materials used in school are standard and lack identity development. She concluded that teachers need to incorporate elements that foster identity and individuality. Ziv (2015) found that cultural oppression of Deaf students in school has resulted in a lack of opportunities and low performance. Artiles (2015) postulated that the complexities of culture and its influence on people are considerations when determining policy, laws, and education programs.

Constructivism contends that language helps to construct knowledge and assign meaning (Gisladottir, 2014). This process starts in our social interactions and extends to our educational experiences. Therefore, language helps develop mental processing and thought patterns (Kozulin et al., 2003). This was evident in the experiences relayed by the participants. Language and communication were barriers in the formal educational experiences of the participants in this study. Many participants repeatedly stated that their school programs did not prioritize their primary language, leaving students to rely on interpreters for interactions with teachers, administrators, and peers. Conversely, participants who attended a Deaf residential program reported that interactions and discussions with other Deaf students, teachers, and staff helped them to better understand and feel comfortable with their education.

The socio-cultural theory of learning states that social interactions contribute to individual knowledge and are further developed in formal educational settings. Vygotsky (1978) asserted the importance of culture in developing language and cognition, two processes vital to the educational experience. Scaffolding, a cultural nuance in which

individuals are supported through an activity or event until self-sufficiency develops, was lacking in most of the participants' formal education programs. Participants in this study reported finding Deaf mentors later in life, outside of their school setting, who helped them navigate certain areas in their lives. However, scaffolding was observed during the Deaf Bible study group and the organization meeting. Both groups were led by individuals with expertise and knowledge of the subject over which they presided. Yet, it was evident that they had been prepared to assume these positions, as in the case of the organization meeting, or were being prepared to become leaders, as evident with the Bible study group.

During observations of the Bible study group, participants were able to refer to their own experiences to interpret complex Bible verses and their applicability in everyday life. Similarly, during the organization meeting, instances of turn-taking and the use of formal language during group discussions and informal language during more intimate discussions was also observed. These findings are significant because they contribute to the notion that characteristics of Deaf culture, such as ASL and its grammatical features, learned during informal interactions, are beneficial to overall knowledge acquisition as suggested by Vygotsky (1978).

MI theory is based on the premise that individuals possess frames of intelligence that can be activated in various ways (Gardner, 1983). During observations of the Bible study group, participants were observed using space to recreate stories from the Bible as well as their own narratives. The use of space fostered understanding of the material and is a grammatical tool significant to ASL. Likewise, observations at the organization

meeting revealed that written material was supplemental to visual aids, which is opposite of school curricula. These findings contribute to the perspective of spatial intelligence proposed by MI theory, as Deaf people use space to reconstruct visual images, with precision and clarity, that are not present.

Limitations of the Study

This study relied on information provided by the participants. Deaf community members may have embellished or diminished their experiences to placate the researcher. The researcher had safeguards to diminish this limitation, including member checking and the interview procedure discussion. Participants were provided the purpose of this study, measures taken to ensure confidentiality, and future uses of the results. This encouraged honest and forthright answers in response to the interview questions. The language barrier also presented a limitation as there was the potential for misinterpretation. To minimize this issue, a translation team fluent in ASL was used. They included a Deaf linguist fluent in ASL and English, a nationally certified interpreter, and the researcher.

Recommendations

Future research regarding the educational experiences of Deaf people in formal and informal settings can provide a more in-depth look regarding the educational needs of this population. First, including specific demographic information of Deaf adults with respect to race, socioeconomic status, age at onset of hearing loss, and parental hearing status and educational background could provide additional information useful to these findings. Because hearing loss is measurable and being a member of Deaf culture is a

choice, this could inform individual's feelings about their deafness and their interactions. This is especially relevant since resounding themes of this study were related to culture and self-identity.

Secondly, conducting observations in various deaf education classrooms could confirm or deny the presence of cultural nuances and supplement participant interviews. The results of this study found that the participants felt that communication was a key component in their educational process that was lacking. However, researchers recognize that the communication backgrounds of deaf children are highly varied (Allen, Letteri, Choi, & Dang, 21014) and what some may deem as inadequate communication, others view as acceptable and understandable.

The last recommendation would be to conduct several interviews with the participants to gain more in-depth knowledge about their background. The first interview would gather background information on how they became deaf, family response to their deafness, and experiences in familial settings. The purpose of this information would be to gain insight into what it is like to be deaf. Although, Paul (2014) argued that we can never really know what it is like to be deaf, he does acknowledge that educators need to be sensitive to cultural diversity, particularly in addressing issues related to academic development and achievement. Thus, the second interview would include more detail about the formal educational experiences of this population and could inform the development and modification of deaf education programs.

Implications

Positive Social Change

The results of this study reveal that Deaf people value the nuances of Deaf culture in all aspects of their lives. The participants in this study recognized that culture is the core of who they are, and through cultural experiences, they have developed a sense of self that was otherwise missing. Participant 6 described it by saying, "I always felt like something was missing. At that time, I was being mainstreamed and, in that environment, my identity wasn't there." The participants revealed that during their educational journey, they often longed for a connection with others, but felt like there was no one else. This often led to feelings of sadness, insecurity, and inadequacy related to their hearing loss.

Participant 3 stated that she was in school when she learned that her deafness was permanent. She reported that this was a very traumatic event because, in her mind, if she was a good girl, as reiterated by the hearing adults in her life, she would grow up to be hearing. The adults did not tell her this, but she equated being able to hear with being a good person. When participant 3 saw two Deaf adults signing and the teacher explained that they were Deaf and using sign language, she was stunned, and the teacher was surprised by her reaction. "It was an awakening for her and she brought in Deaf mentors because, as kids, we were missing that component."

Continued investigation into the educational needs of deaf students is necessary to develop policy and laws, as well as educational curricula, that meet the needs of this population. Most studies related to deaf education focus on incorporating these students into the larger hearing culture and measuring their progress based on hearing standards

(Garberoglio et al., 2014). Research dedicated to the relationship between education and culture among this community is lacking (LaSasso & Crain, 2015).

According to Creswell (2014), research can be a catalyst for social change. Policies and laws tend to be influenced by data; therefore, empirical data addressing the educational needs of deaf students, particularly in relation to culture, can positively impact literacy. Improving literacy in deaf people creates post-secondary education and employment opportunities previously unattainable. Deaf people have the ability to succeed academically, but the state of the current education system has stifled many (Danmeyer & Marschark, 2016).

The findings of this study can help educators of deaf children to become culturally sensitive to the needs of deaf students in their teaching. Teacher training programs that specialize in teaching deaf students can integrate aspects of Deaf culture into their curriculum, thus, creating a foundation that can later be cultivated in the classroom. Integrations include providing ASL classes to future teachers and providing courses or seminars on how to create a barrier-free environment regarding communication. Teacher preparation programs can also explore, in-depth, the importance of self-identity and the significance of Deaf mentors in deaf education programs, and the importance of visual aids in classroom instruction. Spencer and Marschark (2010) found that the teaching methods used to educate deaf students are not consistent, as the research available on best practices is paradoxical, thereby, rendering achievement measures unreliable. However, according to Marschark, Spencer, Adams, and Sapere (2011), improved student success can be accomplished and measured by studying the techniques

of teachers of the deaf who have managed to effectively teach based on the needs of their students.

Lastly, findings from this study can be used to inform interpreter training programs regarding the value of interpreter student relationships. All the participants valued the interpreter as a communication facilitator, and many also viewed them as an ally in the educational setting. Many participants reported that the interpreter was their only friend in school, and several still have a bond with their interpreters as adults.

Cultivating a relationship with clients on a more personal level is a debatable issue among interpreters and in interpreter training programs. Therefore, interpreters are challenged with establishing a rapport with clients while maintaining professional boundaries. By considering the deaf students' perspective of the interpreter/student relationship in formal educational settings, programs can place more emphasis on the benefits of such relationship and its impact on students' overall development.

Conclusion

Culture is the foundation of self-identity and it is within culture that we amass the necessary tools to negotiate the outside world. This study provides a glimpse into the educational experiences of Deaf people in formal and informal educational settings. It also illuminates the importance of culture in all aspects of their lives, including education, as told by the participants. During interviews, participants reiterated the need for culturally competent educational environments that include barrier-free communication, access to ASL in instruction and interactions, and encouragement and development of self-identity.

The research findings also corroborated the ethnographic and phenomenological methodologies used to frame this study. Interactions between Deaf people in social and informal settings were observed for meaning. Observations provided information on how Deaf people teach and learn from one another in this environment. Observations were augmented by interviews that provided further insight into the meaning of interactions from the perspective of the participant.

Overall, the findings of this study contribute to the push for attention and the need for change in the education of deaf students. Policy makers, school administrators, teachers, and interpreters are members of the pedagogical community who have opportunities to positively influence the educational experiences of d/Deaf students. A more purposeful approach to educating this population can be achieved if all constituents commit to revamping a system that is failing d/Deaf students.

References

Abu-Hamour, B., Hmouz, H. A., Mattar, J., & Muhaidat, M. (2012). The use of
Woodcock-Johnson tests for identifying students with special needs-a
comprehensive literature review. *Procedia-Social and Behavioral Sciences, 47*,
665-673. doi:10.1016/j.sbspro.2012.06.714

Adcock, P. K. (2014). The longevity of multiple intelligence theory in education. *The
Delta Kappa Gamma Bulletin*, 50-57. Retrieved from
http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=96688866&sit
e=ehost-live&scope=site

Allen, T. E., Letteri, A., Choi, S. H., & Dang, D. (21014). Early visual language exposure
and emergent literacy in preschool deaf children: Findings from a national
longitudinal study. *American Annals of the Deaf, 159*(4), 346-358.
doi:10.1353/aad.2014.0030

Allix, N. M. (2000). The theory of multiple intelligences: A case of missing cognitive
matter. *Australian Journal of Education, 44*(3), 272-288. doi:
10.1177/000494410004400306

Alqatanani, A. K. (2017). Do multiple intelligences improve EFL students' critical
reading skills? *Arab World English Journal, 8*(1), 309-321.
doi:10.24093/awej/vol8no1.22

American Annals of the Deaf. (2006/2007). Educational practices and assessments.
American Annals of the Deaf, 151(5), 461-463. doi:10.1353/aad.2007.0002

Andrews, J. F. (2006). Inclusion: The big delusion. *American Annals of the Deaf, 151(3)*, 295-296. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=17087438&site=ehost-live&scope=site

Antia, S. D., & Kreimeyer, K. H. (2001). The role of interpreters in inclusive classrooms. *American Annals of the Deaf, 146*(4), 355-365. Retrieved from https://eds-a-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=21&sid=5741c378-641b-4097-bd20-7a1979f5a9c4%40sessionmgr4009

Antia, S. D., Jones, P., Luckner, J., Kreimeyer, K. H., & Reed, S. (2011). Social outcomes of students who are deaf and hard of hearing in general education classrooms. *Exceptional Children, 77*(4), 489-504. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=63017931&site=ehost-live&scope=site

Artiles, A. J. (2015). Beyond responsiveness to identity badges: Future research on culture in disability and implications for response to intervention. *Educational Review, 67*(1), 1-22. doi:10.1080/00131911.2014.934322

Ausbrooks, M., Baker, S., & Daugaard, J. (2012). Recruiting deaf and diverse teachers: Priorities of preservice teachers in deaf education. *Journal of the American Deafness and Rehabilitation Association, 360*(1). Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=84402071&site=ehost-live&scope=site

Ayantoye, C. A., & Luckner, J. L. (2016). Successful students who are deaf or hard of hearing and culturally and or linguistically diverse in inclusive settings. *American Annals of the Deaf, 160*(5), 453-466. doi:10.1353/aad.2016.0008

Baker, S., & Scott, J. (2016). Sociocultural and academic considerations for school-age d/Deaf and hard of hearing multilingual learners: A case study of a Deaf Latina. *American Annal of the Deaf, 161*(1), 43-55. doi:10.1353/aad.2016.0010

Baker-Shenk, C., & Cokely, D. (1980). *American sign language: A teacher's resource text on grammar and culture.* Washington, DC: Gallaudet University Press.

Ballie, L. (2013). Enhancing observational data in qualitative research. *Nurse Researcher, 20*(5), 4-5. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=108016302&site=ehost-live&scope=site

Bas, G. (2016). The effect of multiple intelligences theory-based education on academic achievement: A meta-analytic review. *Educational Sciences: Theory and Practice, 16*(6), 1833-1864. doi:10.12738/estp.2016.6.0015

Berke, M. (2013). Reading books with young deaf children: Strategies for mediating between American Sign Language and English. *Journal of Deaf Studies and Deaf Education, 18*(3), 299-311. doi:10.1093/deafed/ent001

Bowers, L., McCarthy, J. H., Schwarz, I., Dostal, H., & Wolbers, K. (2014). Examination of the spelling skills of middle school students who are deaf and hard of hearing. *The Volta Review, 114*(1), 29-54. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=98915831&sit
e=ehost-live&scope=site

Brand, S. T. (2006). Facilitating emergent literacy skills: A literature-based, Multiple
Intelligence approach. *Journal of Research in Childhood Education, 21*(2), 133-
148. Retrieved from
http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ754872&sit
e=ehost-live&scope=site

Campbell, R., MacSweeney, M., & Waters, D. (2008). Sign language and the brain: A
Review. *Journal of Deaf Studies and Deaf Education, 13*(1), 3-20.
doi:10.1093/deafed/enm035

Cannon, J. E., & Kirby, S. (2013). Grammar structures and deaf and hard of hearing
students: A review of past performance and a report of new findings. *American
Annals of the Deaf, 158*(3), 292-310. Retrieved from
http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=107969479&sit
e=ehost-live&scope=site

Carter, M. J. (2015). Deaf identity centrality: Measurement, influences, and outcomes.
Identity: An International Journal of Theory and Research, 15, 146-172.
doi:10.1080/15283488.2015.1023442

Cawthon, S. W. (2011). Education of deaf and hard of hearing students and
accountability reform: Issues for the future. *American Annals of the Deaf 156(4)*,
424-430. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=108211555&sit e=ehost-live&scope=site

Coryell, J., & Holcomb, T. (1997). The use of sign language and sign systems in facilitating the language acquisition and communication of deaf students. *Language, Speech, and Hearing Services in Schools, 152*(2), 73-87. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=9711202496& site=ehost-live&scope=site

Crain, K. L., & Kluwin, T. N. (2006). The validity of probability samples in research on deafness. *American Annals of the Deaf, 151*(2), 114-120 . doi:10.1353/aad.2006.0026

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousands Oaks, CA: Sage.

Danmeyer, J., & Marschark, M. (2016). Level of educational attainment among deaf adults who attended bilingual-bicultural programs. *Journal of Deaf Studies and Deaf Education, 21*(4), 394-402. doi:10.1093/deafed/enw036

Desjarlais, R., & Throop, C. J. (2011). Phenomenological approaches in anthropology. *Annual Review of Anthropology, 40*, 87-102. doi:10.1146/annurev-anthro-092010-153345

Dostal, H. M., & Wolbers, K. A. (2014). Developing language and writing skills of deaf and hard of hearing students: A simultaneous approach. *Literacy Research and Instruction, 53*(3), 245-268. doi:10.1080/19388071.2014.907382

Driscoll, D. L. (2011). Introduction to primary research: Observations, surveys, and interviews. In C. Lowe, & P. Zemliansky (Eds.), *Writing spaces: Readings on writing* (Vol. 2, pp. 153-174). Anderson, SC: Parlor Press.

Easterbrooks, S. R., Stephenson, B., & Mertens, D. (2006). Master teachers' responses to twenty literacy and science/mathematics practices in Deaf education. *American Annals of the Deaf, 151*(4), 398-409. doi:10.1353/aad.2006.0044

Eckert, R. C., & Rowley, A. J. (2013). Audism: A theory of practice of audiocentric privilege. *Humanity & Society, 37*(2), 101-130. doi: 10.1177/0160597613481731

Engin, M. (2011). Research diary: A tool for scaffolding. *International Journal of Qualitative Methods, 10*(3), 296-306. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=70139578&site=ehost-live&scope=site

Enns, C. (2009). Critical literacy: Deaf adults speak out. *Exceptionality Education International, 19(2)*, 3-20. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=508036586&site=ehost-live&scope=site

Ferreiro, E. (1990). Literacy development: Psychogensesis. In Y. Goodman (Ed.), *How children construct literacy* (pp. 12-25). Newark, DE: International Reading Association.

Fischer, C. T. (2009). Bracketing in qualitative research: Conceptual and practical matters. *Psychotherapy Research, 19*(4-5), 583-590. doi: 10.1080/1050330090279837

Flaskerud, J. H. (2014). Culture, community, and diversity. *Issues in Mental Health Nursing, 35*, 317-320. doi:10.3109/01612840.2013.835011

Forsyth, B. H., Kudela, M. S., Lawrence, D., Levin, K., & Willis, G. B. (2006). Methods for translating survey questionnaires. *American Association for Public Opinion Research*, 4114-4119. Retrieved from https://www.researchgate.net/publication/239856416

Francis, J. J., Johnston, C. R., Glidewell, L., Entwistle, V., Eccles, M. P., & Grimshaw, J. M. (2010). What is an adequate sample size? Operationalising data saturation for theory-based interview studies. *Psychology and Health, 25*(10), 1229-1245. doi:10.1080/08870440903194015

Frankel, M. R., & Devers, K. (2000). Qualitative research: A consumer's guide. *Education for Health, 13*(1), 113-123. doi:10.1080/135762800110664

Gallaudet University. (2016, April 17). *History of Gallaudet University*. Retrieved from http://www.gallaudet.edu/history/the-legacy-begins.html

Garberoglio, C. L., Cawthon, S. W., & Bond, M. (2014). Assessing English literacy as a predictor of postschool outcomes in the lives of deaf individuals. *Journal of Deaf Studies and Deaf Education, 19*(1), 50-67. doi:10.1093/deafed/ent038

Gardiner-Walsh, S., Kemmery, M., & Compton, M. V. (2014). First steps in the journey from consumers to producers of research in deaf education. *American Annals of the Deaf, 159*(1), 59-74. doi:10.1353/aad.2014.0011

Gardner, H. (1983). *Frames of mind: The theories of multiple intelligences (10th Anniversary ed.).* New York: Basic Books.

Gardner, H. (1999). *Intelligence reframed.* New York, NY: Basic Books.

Gardner, H. (2011). Promoting learner engagement using multiple intelligences and choice-based instruction. *Adult Basic Education and Literacy Journal, 5(2)*, 97-101. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ936698&site=ehost-live&scope=site

Gisladottir, K. R. (2014). Tjaa, I do have ears, but I do not hear: New literacy studies and the awakening of the hearing teacher. *Studying Teacher Education, 10*(2), 179-194. doi:10.1080/17425964.2014.910760

Godley, A., & Escher, A. (2012). Bidialectal African American adolescents' beliefs about spoken language expectations in English classrooms. *Journal of Adolescent & Adult Literacy, 55(8)*, 704-713. doi:10.1002/JAAL.00085.

Hadjikakou, K., & Nikolariaizi, M. (2011). Deaf clubs today: Do they still have a role to play? The cases of Cyprus and Greece. *American Annals of the Deaf, 155*(5), 605-617. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=104838678&site=ehost-live&scope=site

Hamill, A. C., & Stein, C. H. (2011). Culture and empowerment in the Deaf community: An analysis of internet weblogs. *Journal of Community and Applied Social Psychology, 21(5)*, 388-406. doi:10.1002/casp.1081

Harper, M., & Cole, P. (2012). Member checking: Can benefits be gained similar to

    group therapy? *The Qualitative Report, 17*(2), 510-517. Retrieved from

    http://nsuworks.nova.edu/tqr/vol17/iss2/1/

Harrington, T. (2014, February). *Deaf Statistics*. Retrieved from

    http://libguides.gallaudet.edu/content.php?pid=119476&sid=1029190

Hayashi, A., & Tobin, J. (2014). The power of implicit teaching practices: Continuities

    and discontinuities in pedagogical approaches of Deaf and hearing preschools in

    Japan. *Comparative Education Review, 58*(1), 24-46. doi:10.1086/674156

Healy, L., & Ferreira dos Santos, H. (2014). Changing perspectives on inclusive

    mathematics education: Relationships between research and teacher education.

    Education As Change, 18(S1), S121-S136. Retrieved from

    10.1080/16823206.2013.877847

Hennik, M. M., Kaiser, B. N., & Marconi, V. C. (2016). Code saturation versus meaning:

    How many interviews are enough? *Sage, 27*(4), 591-608.

    doi:10.1177/1049732316665344

Higgins, M. (2016). Deaf students as a linguistic and cultural minority: Shifting

    perspectives and implications for teaching and learning. *Journal of Education,*

    196(1), 9-18. doi:10.1177/002205741619600103

Holcomb, T. K. (2010). Deaf epistemology: The deaf way of knowing. *American Annals*

    of the Deaf, 154(5), 471-478. doi:10.1353/aad.0.0116

Holcomb, T. K. (2013). *Introduction to American deaf culture.* New York, NY: Oxford

    University Press.

Hortt, J. (2011). Review of Evidence-based practice in educating deaf and hard-of-hearing students. (P. E. Spencer, & M. Marschark, Eds.) *Deafness and Education International, 13*(2), 89. doi:10.1179/146431511X13050184467401

Humphries, T. (2014). Our time: The legacy of the twentieth century. *Sign Language Studies, 15*(1), 57-73. doi:10.1353/sls.2014.0019

Hyde, M. (2005). Alone and together: The experiences of deaf people in public schools [Review of the book] Alone in the mainstream: A deaf woman remembers public school, by G. A. Olivia]. *Journal of Deaf Studies and Deaf Education*. doi:10.1093/deafed/eni043

Jassal, Y. R. (2017). Learning about deaf culture: More accessible than previously thought. *American Annals of theDeaf, 161*(5), 583-584. doi:10.1353/aad.2017.0008

John-Steiner, V., & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian framework. *Educational Psychologist, 31*(3/4), 191-206. doi:10.1207/s15326985ep3103&4_4

Katz, J., & Csordas, T. J. (2003). Phenomenological ethnography in sociology and anthropology. *Ethnography, 4*(3), 275-288. doi:10.1177/146613810343001

King, J. F. (2014, February). American sign language, English bilingual, bicultural programs. *Exceptional Parent*, 46-47. Retrieved from www.eparent.com

Kozelski, E. (2017). The uses of qualitative research: Powerful methods to inform evidenced-based practice in education. *Research and Practice for Persons with Severe Disabilities, 42*(1), 19-32. doi:10.1177/1540796916683710

Kozulin, A., Gindis, B., Ageyev, V. S., & Miller, S. M. (Eds.). (2003). *Vygotsky's educational theory in cultural context.* Cambridge, UK: Cambridge University Press.

Kreimeyer, K. H., Crooke, P., Drye, C., Egbert, V., & Klein, B. (2000). Academic and social benefits of a co-enrollment model of inclusive education for deaf and hard-of-hearing children. *Journal of Deaf Studies and Deaf Education, 5(2)*, 174-185. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ604994&site=ehost-live&scope=site

Kritzer, K. L. (2009). Barely started and already left behind: A descriptive analysis of the mathematics ability demonstrated by young deaf children. *Journal of Deaf Studies, 14(4)*, 409-4421.doi:10.1093/deafed/enp015.

Kuntze, M., Golos, D., & Enns, C. (2014). Rethinking literacy: Broadening opportunities for visual learners. *14*(2), 203-24. doi:10.1353/sls.2014.0002

Kyle, F., & Harris, M. (2006). Concurrent correlates and predictors of reading and spelling achievement in deaf and hearing school children. *Journal of Deaf Studies and Deaf Education¸ 11(3)*, 273-288. doi:10.1093/deafed/enj037.

Ladd, P., & Lane, H. (2013). Deaf ethnicity, deafhood, and their relationship. *Sign Language Studies, 13*(4), 565-579. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=89521852&site=ehost-live&scope=site

Lane, H. (1999). *The Mask of Benevolence: Disabling the Deaf Community.* San Diego, CA: Dawn Sign Press.

LaSasso, C. J., & Crain, K. L. (2015). Reading for deaf and hearing readers: Qualitatively and/or quantitatively similar or different? A nature versus nurture issue. *American Annals of the Deaf, 159*(5), 447-467. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=26012170&site=ehost-live&scope=site

Leigh, I. W. (1999). Inclusive education and personal development. *Journal of Deaf Studies and Deaf Education, 4(3)*, 236-245. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=15579891&site=ehost-live&scope=site

Lollis, J., & LaSasso, C. (2009). The appropriateness of the NC state-mandated reading competency test for deaf students as a criterion for high school graduation. *Journal of Deaf Studies and Education, 14(1)*, 76-98. doi:10.1093/deafed/enn017

Luckner, J. L., Sebald, A. M., Cooney, J., Young, J. I., & Muir, S. G. (2005). An examination of the evidence-based literacy research in deaf education. *American Annals of the Deaf, 150*(5), 443-456. doi:10.1353/aad.2006.0008

Luckner, J. L., Slike, S. B., & Johnson, H. (2012). Helping students who are deaf or hard of hearing succeed. *Teaching Exceptional Children*, 58-67. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=72081581&site=ehost-live&scope=site

Marlatt, E. (2014). The evolution of the education of deaf and hard of hearing children

    into speech-language pathology, educational audiology, and special education

    [Letter to the editor]. *American Annals of the Deaf, 158*(5), 484-485. Retrieved

    from

    http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=95069110&sit

    e=ehost-live&scope=site

Marschark, M., Sapere, P., Covertino, C. M., Mayer, C., Wauters, L., & Sarchet, T.

    (2009). Are deaf students' reading challenges really about reading? *American*

    Annals for the Deaf, 154(4), 357-370. doi:10.1353/aad.0.0111

Marschark, M., Shaver, D. M., Nagle, K. M., & Newman, L. (2015). Predicting the

    academic achievement of deaf and hard-of-hearing students from individual,

    household, communication, and educational factors. *Exceptional Children, 81*(3),

    350-369. doi: 10.1177/0014402914563700

Marschark, M., Spencer, P. E., Adams, J., & Sapere, P. (2011). Evidence-based practice

    in educating deaf and hard-of-hearing children: Teaching to their cognitive

    strengths and needs. *European Journal of Special Needs Education, 26*(1), 3-16.

    doi:10.1080/08856257.2011.543540

Mayer, C. (2007). What really matters in the early literacy development of deaf children.

    Journal of Deaf Studies and Deaf Education, 12(4), 411-431.

    doi:10.1093/deafed/enm020

McBride, D. F. (2011). Sociocultural theory: Providing more structure to culturally

    responsive evaluation. *New Directions for Evaluation, 131*, 7-13. doi: 10.1002/ev

McIlroy, G., & Storbeck, C. (2011). Development of deaf identity: An ethnographic

study. *Journal of Deaf Studies and Deaf Education, 16(4)*, 494-511.

doi:10.1093/deafed/enr017.

Miller, K. J. (2014). Trends impacting one public school program for students who are

deaf or hard-of-hearing. *Communication Disorders Quarterly, 36*(1), 35-43.

doi:10.1177/1525740114533380

Miller, M. S. (2010). Epistemology and people who are deaf: Deaf worldviews, views of

the deaf world, or my parents are hearing. *American Annals of the Deaf, 154*(5),

479-485. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ887478&sit

e=ehost-live&scope=site

Miller, P., Kargin, T., & Guldenoglu, B. (2013). The reading comprehension failure of

Turkish prelingually deaf readers: Evidence from semantic and syntactic

processing. *Journal of Developmental and Physical Disabilities, 25*, 221-239.

doi:10.1007/s10882-012-9299-8

Mitchell, R. E., & Karchmer, M. A. (2006). Demographics of deaf education: More

students in more places. *American Annals of the Deaf, 151*(2), 95-104. Retrieved

from

http://search.ebscohost.com/login.aspx?direct=true&db=ufh&AN=22422731&site

=ehost-live&scope=site

Moores, D. F. (2010). Integration — inclusion — oblivion. *American Annals of the Deaf,*

155(4), 395-396. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=57247334&sit
e=ehost-live&scope=site

Most, T. (2007). Speech intelligibility, loneliness, and a sense of coherence among deaf
and hard-of-hearing children in individual inclusion and group inclusion. *Journal
of Deaf Studies and Deaf Education, 12(4)*, doi:10.1093/deafed/enm015.

Mounty, J. L., Pucci, C. T., & Harmon, K. C. (2014). How deaf American sign
language/bilingual children become proficient readers: An emic perspective.
Journal of Deaf Studies and Deaf Education, 19(3), 333-346.
doi:10.1093/deafed/ent050

Mulhall, A. (2002). In the field: Notes on observation in qualitative research. *Journal of
Advanced Nursing, 41*(3), 306-313. doi:10.1046/j.1365-2648.2003.02514.x

Myers, C., Clark, M. D., Musyoka, M. M., Anderson, M. L., Gilbert, G. L., Agyen, S., &
Hauser, P. C. (2010). Black deaf individuals' reading skills: Influence of ASL,
culture, family characteristics, reading experience, and education. *American
Annals of the Deaf, 155*(4), 449-457. Retrieved from
http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=508189392&si
te=ehost-live&scope=site

Namey, E., Guest, G., McKenna, K., & Chen, M. (2016). Evaluating bang for the buck:
A cost-effectiveness comparison between individual interviews and focus groups
based on thematic saturation levels. *American Journal of Evaluation, 37*, 425-440.
doi:10.1177/1098214016630406

National Association of School Psychologists. (n.d.). *Defining cultural competence*.

Retrieved from

http://www.nasponline.org/resources/culturalcompetence/definingcultcomp.aspx

National Association of the Deaf. (n.d.). *Interpreting American Sign Language*. Retrieved

from http://nad.org/issues/american-sign-language/interpreting-american-sign-

language

National Cued Speech Association. (2016). *Definition*. Retrieved from National Cued

Speech Association: http://www.cuedspeech.org/cued-speech-definition.php

National Institute on Deafness and Other Communication Disorders. (2000). *National

Institute of Health.* Retrieved from

http://www.nidcd.nih.gov/StaticResources/health/healthyhearing/tools/pdf/comm

optionschild.pdf

National Institutes of Health. (2015, June 24). *American Sign Language*. Retrieved from

http://www.nidcd.nih.gov/health/hearing/pages/asl.aspx#top

Nussbaum, D. (2011, May 20). *Choosing a communication methodology.* Retrieved from

http://clerccenter2.gallaudet.edu/KidsWorldDeafNet/edocs/

Nussbaum, D., Waddy-Smith, B., & Doyle, J. (2012). Students who are deaf and hard of

hearing and use sign language: Considerations and strategies for developing

spoken language and literacy skills. *Seminars in Speech and Language, 33*(4),

310-321. doi:http://dx.doi.org/10.1055/s-0032-1326912.

O'Brien, C. A., & Placier, P. (2015). Deaf culture and competing discourses in a

residential school for the Deaf: Can do versus can't do. *Equity & Excellence in*

Education, 482(2), 320-338. doi:10.1080/10665684.2015.1025253

Olivia, G. (2004). *Alone and together: The experiences of deaf people in public schools.*

Washington, DC: Gallaudet University Press.

Padden, C. (1980). The deaf community and the culture of deaf people. In C. Baker, & R.

Battison (Eds.), *Sign language and the deaf community: Essays in honor of*

William Stokoe (pp. 89-103). Silver Spring, MD: National Association of the

Deaf.

Padden, C., & Humphries, T. (1988). *Deaf in America.* Cambridge, Massachusetts:

Harvard University Press.

Padden, C., & Humphries, T. (2005). *Inside deaf culture.* Cambridge, MA: Harvard

University Press.

Parault, S. J., & Williams, H. (2010). Reading motivation, reading amount, and text

comprehension in deaf and hearing adults. *Journal of Deaf Studies and Deaf*

Education, 15(2), 120-135. doi:10.1093/deafed/enp031

Paul, P. V. (2005). Perspectives on literacy: A rose is still a rose but then again, maybe

not [Review of the book Literacy and Deaf People: Cultural and Contextual

Perspectives]. *Journal of Deaf Studies and Deaf Education, 10*(2), 222.

doi:10.1093/deafed/eni021

Paul, P. V. (2014). What is it like to be deaf? *American Annals of the Deaf, 159*(3), 249-

256. doi:10.1353/add.2014.0022

Paul, P. V., Wang, Y., & Williams, C. (2013). *Deaf students and the qualitative similarity hypothesis: Understanding language and literacy development.* Washington, DC: Gallaudet University Press.

Petrova, Z. (2013). On the relevance of using Vygotsky's theoretical framework to legitimize dialogic teaching/learning. *Journal of Pedagogy, 4*(2), 237-252. doi:10.2478/jped-2013-0013

Pickell, H., Klima, E., Kritchevsky, M., Bellugi, U., & Hickok, G. (2005). Sign language aphasia following right hemisphere damage in a left-hander: A case of reversed cerebral dominance in a deaf signer. *Neurocase, 11*, 194-203. doi:10.1080/13554790590944717

Plue, C. (2003). Multicultural profiles in the Deaf community. *Multicultural Review, 12*(3), 48-56. Retrieved from https://eds-a-ebscohost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=1&sid=50bfdfa2-2471-4b84-b928-9732686f33c5%40sessionmgr4008

Public Policy Associates, Inc. (2006, June). *Department of Civil Rights.* Retrieved from http://michigan.gov/mdcr/0,4613,7-138-58275_28545-161229--,00.html

Quinto-Pozos, D., & Reynolds, W. (2012). ASL discourse strategies: Chaining and connecting-Explaining across audiences. *Sign Language Studies, 12*(2), 211-235. doi:10.1353/sls.2011.0021

Roberson, L., & Shaw, S. (2015). Reflections on deaf education: Perspectives of Deaf senior citizens. *Educational Gerontology, 41*, 226-237. doi:10.1080/03601277.2014.951194

Rosen, R. (2008). Descriptions of the American deaf community, 1830-2000: Epistemic foundations. *Disability and Society, 23*(2), 129-140. doi:10.1080/09687590701841166

Seidman, I. (2013). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (4th ed.). New York, NY: Teachers College Press.

Shuler, G. K., Mistler, Torrey, K., & Depukat, R. (2014). More than signing: Communicating with the deaf. *Nursing Management*, 20-27. doi:10.1097/01.NUMA.0000444299.04190.94

Simms, L., Rusher, M., Andrews, J. F., & Coryell, J. (2008). Apartheid in deaf education: Examining workforce diversity. *American Annals of the Deaf , 153(4)*, 384-395. doi:10.1353/aad.0.0060

Smith, J. A., & Osborn, M. (2008). Interpretative phenomenological analysis. In J. Smith (Ed.), *Qualitative psychology: A practical guide to research methods* (pp. 53-80). Thousand Oaks, CA: SAGE.

Smith, J., & Bekker, H. C. (2011). Theoretical versus pragmatic design in qualitative research. *Nurse Researcher, 18*(2), 39-51. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=58053869&site=ehost-live&scope=site

Snodden, K. (2010). Technology as a learning tool for ASL literacy. *Sign Language Studies, 10*(2), 197-213. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ887456&site=ehost-live&scope=site

Spencer, P. E., & Marschark, M. (2010). *Evidence-based practice in educating deaf and hard-of-hearing students.* New York, NY: Oxford University Press.

Storbeck, C., & Martin, D. S. (2013). Inclusion and cognitive education for deaf learners: Perspectives from South Africa and the USA. *Transylvanian Journal of Psychology*, 67-102. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=94603582&site=ehost-live&scope=site

Strassman, B. K., & Schirmer, B. (2012). Teaching writing to deaf students: Does research offer evidence for practice? *Remedial and Special Education, 34*(3), 166–179. doi:10.1177/0741932512452013

Sutton-Spence, R. (2010). The role of sign language narratives in developing identity for deaf children. *Journal of Folklore Research, 47*(3), 265-305. doi:10.2979/jfolkrese.2010.47.3.265

Szpringer, M., Kopik, A., & Formella, Z. (2014). Multiple intelligences and minds for the future in a child's education. *Journal Plus Education*, 350-359. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=98932972&site=ehost-live&scope=site

Tamilselvi, B., & Geetha, D. (2015). Efficacy in teaching through "multiple intelligence" instructional strategies. *Journal on School Educational Technology, 11*(2), 1-10. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1097414&si
te=ehost-live&scope=site

Temur, O. D. (2007). The effects of teaching activities prepared according to the multiple
intelligence theory on mathematic achievement and permanence of information
learned by 4th graders. *International Journal of Environmental and Science
Education, 2*(4), 86-91. Retrieved from
http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ901272&sit
e=ehost-live&scope=site

Trezek, B. J., & Mayer, C. (2015). Using an informal reading inventory to differentiate
instruction: Case studies of three deaf learners. *American Annals of the Deaf,
160*(3), 289-302. doi:10.1353/aad.2015.0025

Turner, D. W. (2010). Qualitative interview design: A practical guide for novice
investigators. *The Qualitative Report, 15*(3), 745-760. Retrieved from
http://nsuworks.nova.edu/tqr/vol15/iss3/19

U.S Bureau of the Census. (2005, August 24). Retrieved from
http://www.census.gov/srd/papers/pdf/rsm2005-06.pdf

U.S. Department of Education. (2004). *Overview: Four Pillars of NCLB*. Retrieved from
http://www2.ed.gov/nclb/overview/intro/4pillars.html

U.S. Department of Education. (2007). *Building the Legacy: IDEA 2004*. Retrieved from
http://www.ideapartnership.org/index.php?option=com_content&view=article&id
=1344&oseppage=1

Van Cleve, J. V. (2016). A place of their own in history. *Sign Language Studies, 17*(1),

12-25. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=119453093&si

te=ehost-live&scope=site

Vygotsky, L. (1978). *Mind in society: The development of higher psychological

processes.* Cambridge, MA: Harvard University Press.

Wang, Y., & Andrews, J. (2014). Reading and deaf individuals: Perspectives on the

qualitative similarity hypothesis. *American Annals of the Deaf, 159*(4), 319-322.

Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=102628341&si

te=ehost-live&scope=site

Waterhouse, L. (2006). Multiple intelligences, Mozart effect, and emotional intelligence:

A critical review. *Educational Psychologists, 41*(4), 207-225.

doi:10.1207/s15326985ep4104_1

Watts, J. H. (2011). Ethical and practical challenges of participant observation in

sensitive health research. *International Journal of Social Research Methodology,

14*(4), 301-312. doi:10.1080/13645579.2010.517658

Yin, R. K. (2014). *Case study research: Design and method* (5th ed.). Thousand Oaks,

CA: SAGE.

Ziv, H. G. (2015). Education of deaf children in Israel: A case of marginalizing a

minority group. *Journal for Critical Education Policy Studies, 13*(1), 268-290.

Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=108471351&site=ehost-live&scope=site

Appendix A: Participant Recruitment Flyer

!!!WANTED!!!

Have you attended at least one semester of post high school education?
Did you attend a mainstream program?

Deaf men and women ages 18 to 30 to participate in a research study!

You are invited to participate in a research study conducted by Stephanie Beatty, a doctoral student at Walden University. The purpose of this research is to understand if aspects of Deaf culture that nurture learning are included in the educational experiences of Deaf people. The screening questionnaire for inviting participants takes approximately 10 minutes and can be found at https://www.surveymonkey.com/r/662F6GT.
If invited to participate, the interview will take 45-90 minutes.

Information is confidential and no identifying information will be requested. You will be asked to provide a working email address at the end of the questionnaire and will be contacted if you are eligible to participate. Questions? Contact Stephanie at stephanie.beatty@waldenu.edu

Appendix B: Screening Questionnaire

Online questionnaire available at https://www.surveymonkey.com/r/662F6GT

1. Age: _____

2. Are you (choose one)

   Deaf   Hard of Hearing   Deaf/blind   Hearing

3. Do you use or have you ever used any of the following assistive listening devices
   (choose all that apply)

   Hearing Aid   Cochlear Implant

   Other (please describe): _____

4. What is your first language (choose one)

   ASL   English   Signed English   Other: _____

5. Do you currently use ASL to communicate?

   Yes   No

6. Have you attended at least one semester of college or vocational school?

   Yes   No

7. What type of educational program did you attend for elementary, middle, and
   high school (choose all that apply)

   Public mainstream (w/interpreters)   Deaf residential school   Oral program

   Home School   Private School

Please enter your Email address: _____

Appendix C: Non-Disclosure/Confidentiality Agreement

Name of Signer: _____

  During the course of my activity in collecting/viewing/analyzing/translating data for this research, I will have access to information, which is confidential and should not be disclosed. I acknowledge that the information must remain confidential, and that improper disclosure of confidential information can be damaging to the participant.

  By signing this Confidentiality Agreement, I acknowledge and agree that:

1. I will not disclose or discuss any confidential information with others, including friends or family.
2. I will not in any way divulge, copy, release, sell, loan, alter or destroy any confidential information except as properly authorized.
3. I will not discuss confidential information where others can overhear/oversee the conversation. I understand that it is not acceptable to discuss confidential information even if the participant's name is not used.
4. I will not make any unauthorized transmissions, inquiries, modification or purging of confidential information.
5. I agree that my obligations under this agreement will continue after termination of the job that I will perform.
6. I understand that violation of this agreement will have legal implications.
7. I will only access or use systems or devices I'm officially authorized to access and I will not demonstrate the operation or function of systems or devices to unauthorized individuals.

  Signing this document, I acknowledge that I have read the agreement and I agree to comply with all the terms and conditions stated above.

Signature:_____**Date:**_____

Appendix D: Interview Questions

1. What is Deaf culture from a Deaf person's perspective?

2. How do Deaf people learn in an informal learning environment with or from other Deaf (i.e. social situations)?

3. What are the learning experiences of Deaf people in a formal learning environment?

4. How can educational programs improve reading and literacy in Deaf students?

Interview Questions to address Research Questions #1 and #2

1. What is your definition of Deaf culture?

2. What does it mean to be a member of Deaf culture?

3. Think of one or more conversations you have had with other members of the Deaf community that were memorable or impactful. Tell me about those experiences and what you learned from that person or persons.

4. During your memorable interactions described in question 3, who were the people or person involved (older, younger, relative, friend, etc.)? Who was the leader in the conversation? How did they help you to understand or learn (did they use explanations, comparisons, real life examples, etc.)?

5. Who were your Deaf mentors, advisors, supporters and why? How did having this person or persons support make you feel (ashamed, empowered, embarrassed, proud, etc.)?

Interview questions to address Research Questions #3 and #4

6. Describe your educational experiences in school. How did you interact with other students and teachers/administrators? What was the class size? Methods of communication? What types of teaching aids were used? How did you feel in this environment (isolated, a valuable member of the educational community, connected or disconnected from peers, etc.)?

7. What role, if any, did interpreters play in your education? In what ways did having an interpreter make school easier for you? In what ways did it make school harder for you?

8. Who were your non-Deaf mentors, supporters, advisors during your educational experiences and why? How did having this person or persons support make you feel (ashamed, empowered, embarrassed, proud, etc.)?

9. Comparing your memorable social interactions in the Deaf community with your educational experiences, what suggestions do you have to enhance/improve the education of Deaf people? Which parts of Deaf culture do you think would be helpful in a formal education setting?