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Working with Immigrant and Refugee Deaf Students: Strategies and Decision-Making Processes of Interpreters

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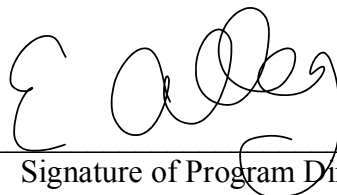

By
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A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts in Interpreting Studies
and Communication Equity

St. Catherine University
St. Paul, Minnesota

June, 2018

Date
6/26/18

Signature of Program Director

Acknowledgements

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Abstract

This study investigates the work of educational interpreters working with D/deaf and hard of hearing (DHH) students who are refugees or immigrants. This investigation occurs at the intersection of several fields of study: American Sign Language (ASL) interpreting, Deaf education, and immigrant and refugee education. Despite the overlap in these fields found in interpreters' work with DHH refugee and immigrant students, to date no research has studied this work. This pilot study, conducted through four interviews of interpreters working in K-12 settings with DHH refugees and immigrants, explores the current practices of these interpreters in these settings. These practices are current practices and are not to be considered best practices. Interviews focus on the strategies interpreters use, as well as the decision-making processes behind these strategies. Results from this study suggest that interpreters use communication with the educational team, frequently outside of interpreting, with the goals of a) problem-solving and collaborating, b) following or making alterations to the IEP, and c) fostering student-teacher relationships. Interpreters also use communication strategies with DHH refugee and immigrant students during and outside of interpreting, including a) modifying the interpreter's language use, b) taking on additional responsibilities, c) establishing and maintaining relationships with students, d) monitoring student comprehension, e) fostering students' self-esteem, and f) encouraging communication with parents in order to foster DHH refugee and immigrant students' linguistic, academic, social, and emotional growth. The interpreters in this study also communicate with DHH refugee and immigrant students' peers and use interpreting strategies to facilitate interactions with DHH refugee and immigrant students and educators or peers. Interpreters use these strategies to foster the growth and success of DHH refugee and immigrant students in K-12 environments.

Chapter 1: Introduction

Background

In the spring of 2014, I was nearing the end of my first year as a K-12 educational interpreter when two new students were added to our team's interpreting schedule. The students, both of whom were refugees, were to join several classes, including an art class I interpreted with several other D/deaf and hard of hearing (DHH) students. One of the DHH teachers, the new students' case manager, explained that the students were in the class to socialize with the other DHH students, who would be language role models, as well as to give them access to art as a visual means of expression. On their first day of class, it became apparent that the new students did not understand me, nor I them. Attempts to sign with them were met by a head shake and an eye-gaze to the floor. It seemed that one had never seen glue before; when the art teacher gave her a bottle, she opened it and almost began to cry as glue spread all over her project, the table, herself, and a neighboring DHH student. The other sat, not looking at anyone, drawing butterflies and flowers and attempting to write the word "school" on her poster paper. Slowly and haltingly, starting with colors and objects in the art room, we learned how to communicate and work with one another.

Though years have now passed, I often recall my first few days with those students. They, and others like them with whom I have had the privilege of working, have become the catalyst for this research. Their educational experiences caused me to wonder about my own work, as well as that of other interpreters working with refugee and immigrant DHH students. How do other interpreters go about this work, and what leads them to make particular choices in their work? I have sought answers to these questions anecdotally with colleagues, as well as through seeking resources on this topic. My search for resources turned up few results.

Therefore, through this exploratory research, I pursue my goal to begin the conversation about K-12 educational interpreters working with refugee and immigrant DHH students, particularly the strategies these interpreters use and how they come to choose those strategies.

It is important to recognize my position in relation to this research, both as an interpreter and as a researcher. I am currently a newer interpreter, with five years of interpreting experience. Most of my work experience comes from working in K-12 environments, with several students who were born in the United States as well as with many who are immigrants and refugees. My work in this setting and with these unique populations has informed my practice, my research, and my perspective on interpreting work. While I have worked to minimize my bias in this study, I maintain a strong professional interest in this research, both as it pertains to my own work and as it pertains to the larger interpreting profession. My position as a researcher is also important to consider. I am an emerging researcher, conducting this study as one of the requirements for my Master's degree. I have conducted this research under the guidance of a faculty advisor and a research advisor. My position as an emerging researcher, guided by the suggestions and expertise of more experienced researchers, also informs this study. My research questions, methodology, and analysis are all impacted by my own research knowledge and experiences, as well as by the experiences and suggestions of my advisors.

Statement of the Problem

A review of the relevant literature on the topic suggests a dearth of information about DHH refugees and immigrants and how American Sign Language (ASL) interpreters work with them in K-12 educational environments. What little research exists on DHH immigrant and refugee students (see Akamatsu & Cole, 2000a; Akamatsu & Cole, 2000b; Guardino & Cannon, 2016; Pizzo, 2016; Willoughby, 2012) suggests that working with this population requires care

and consideration. Those who work with these students must carefully consider the background experiences as well as the needs of these students when working with them, as their cultural and linguistic experiences are unique from hearing refugee students and from non-refugee and - immigrant DHH students (Akamatsu & Cole, 2000b). While research has focused on several aspects of this topic individually, including interpreting, educational interpreting, and Deaf education, no research to date has focused on the current trends in interpreters' work with DHH refugee and immigrant students.

Purpose of the Study

The purpose of this pilot study is to explore how four K-12 educational interpreters who participated in the study work with DHH refugee and immigrant students. Particularly, the study focuses on the strategies these interpreters report using in their work with these students, investigating these strategies through the framework of decision-making processes. A review of the current literature available on different aspects of this topic suggests that interpreters make many decisions in their work with this student population, carefully considering multiple factors in their decision-making processes (Dean & Pollard, 2013; Leeson, 2005; Llewellyn-Jones & Lee, 2013; Seal, 2004; Smith, 2013). In this study, interviews with four interpreters who work in K-12 educational environments with DHH refugee and immigrant students are used to illuminate common themes in the strategies these interpreters use. These interviews are observed through the lens of interpreter decision-making processes to analyze how these interpreters decide upon particular strategies. While it shows what four interpreters report doing during their work with DHH refugee and immigrant students, this study does not indicate what K-12 educational interpreters should do, and should not be understood as a guide to expectations for the interpreter's role or responsibilities in these situations. Rather, these strategies and decision-

making processes help to create a picture of the current practices of the interpreters involved in this study, including the strategies they use and how they decide to use specific strategies.

Research Questions

The research questions for this study focus on the topic of K-12 educational interpreting with DHH refugee and immigrant students. Specifically, this research aims to identify current trends in the strategies educational interpreters use in the K-12 setting when working with immigrant and refugee DHH students. Further, this study questions how interpreters in these settings make decisions to apply particular strategies in their work. This study, which has been conducted through interviews, is an exploration of four K-12 educational interpreters' perceptions about their work with DHH refugee and immigrant students. It is not a guide for how interpreters should work with DHH refugee and immigrant students, nor a discussion of best practices with these students, but an analysis of how four interpreters report doing this work. Through interviews focusing on interpreters' understanding of their own work and how they make decisions, this study begins to create a picture of the current practices of interpreters working in these settings, focusing on the decision-making processes which lead to these practices.

Chapter 2: Analysis of Conceptual Context

Background of the Problem

As mentioned in the previous chapter, there is little research on the work English/sign language interpreters perform in K-12 educational environments when their consumers are DHH refugee or immigrant students. Presently, no research has sought to identify strategies interpreters use in K-12 settings with this student population, nor the factors which influence interpreters' decisions about using particular strategies. This chapter presents a review of the

literature on sign language interpreting, particularly in educational settings and with consumers who are immigrant and refugee DHH students. The following topics will be addressed: a) qualification of sign language interpreters b) education of DHH children, including those who are refugees or immigrants, c) ASL/English interpreting in K-12 educational settings, and d) education of hearing immigrant and refugee children. This literature review reveals a need for more comprehensive research into interpreters' strategies and decision-making processes when working with refugee and immigrant DHH students in K-12 educational settings.

Notes on Terminology and Focus

Several terms and their underlying contexts in this paper require an explanation prior to their use. Terms including Deaf, deaf, and hard of hearing will be used in this paper, each with a different meaning and reflecting the diverse community of D/deaf and hard of hearing people. Identity within the D/deaf and hard of hearing community is highly personal and is often determined by cultural affiliation, degree of hearing, or other factors which impact a person's life (National Association of the Deaf [NAD], 2017). The term "Deaf" using a capital "D" is used to reference persons who identify culturally as a Deaf person and consider themselves a part of the "DEAF-WORLD," regardless of audiological status (Lane, Hoffmeister, & Bahan, 1996, p. 6). Those who identify as Deaf do not consider themselves as having a disability (Lane, Hoffmeister, & Bahan, 1996). The term "deaf" with no capital indicates audiological deafness (Padden & Humphries, 1988). Those who have recently become deaf may be given or use the term "hard of hearing," indicating an association with their hearing past and/or the hearing world (Padden & Humphries, 1988). This paper will use the phrase "D/deaf and hard of hearing" to refer to the D/deaf and hard of hearing community with all its diversity. This phrase will be shortened to the common abbreviation "DHH" in educational contexts. In reference to

educational settings, the term "Deaf education" will be used. The term "Deaf" in this context indicates all D/deaf and hard of hearing children and will use the capital D to include both culturally and non-culturally D/deaf children. People who are not part of the D/deaf and hard of hearing community and who do not have audiological deafness will be identified in this paper by the term "hearing."

Another important consideration in this paper is the terminology which will be used to refer to children who have moved to and are receiving their education in a country other than that in which they were born. The terms "immigrant," "refugee," and "migrant" are all commonly used in reference to those who have left one country or entered another seeking opportunities or relief from persecution. An immigrant is a person who has come to a country with the intent of living there (Immigrant, 2017). A refugee is a person who has escaped a particular country, fleeing some kind of danger, oppression, or persecution (Refugee, 2017). In some ways, the terms are similar: both an immigrant and a refugee have left one country and entered another, with the purpose of living there or at least no longer living in their former country. The reasons for leaving one country or entering another, however, may be different between immigrants and refugees, as refugees are frequently escaping persecution whereas immigrants may simply be seeking a new home. Therefore, in this paper, the terms "immigrant" and "refugee" will be used together, without one replacing the other. Another commonly used word is "migrant," which means a person who regularly moves to seek work (Migrant, 2017). While this term appears in the literature, it may be unclear whether a person who is a refugee or immigrant is also a migrant, who moves multiple times in search of work. Therefore, for the purposes of this paper, the phrases "immigrant and refugee" or "refugee and immigrant" will be used, rather than "migrant," with the exception of describing literature which uses the term.

The focus of this research is another consideration. D/deaf and hard of hearing people exist in every culture and nation and may be refugees or immigrants seeking refuge and opportunities in any number of countries. Further, sign language interpreting and Deaf education are international fields, existing in as many places as D/deaf and hard of hearing people are found. This study specifically addresses refugee and immigrant DHH students in K-12 school settings in the United States. A focus will be placed on interpreters working in the United States, immigrants and refugees to the United States, and on the U.S. school system. International resources will be brought in as they relate to and enhance our knowledge of how interpreters work with refugee and immigrant DHH students in educational settings.

This paper also has a focus on language use and acquisition, particularly of DHH refugee and immigrant children. There is presently no one term to discuss the varied and unique linguistic situations and experiences of DHH children, particularly those who are immigrants or refugees. Rather, a variety of terms appear in the literature. Terms such as "linguistic deprivation" or "language deprivation" (see Humphries, Kushalnagar, Mathur, Napoli, Padden, Rathmann, & Smith, 2012; Skotara, Salden, Kügow, Hänel-Faulhaber, & Röder, 2012) have been used to describe the experiences of children who have not had full access to language. These children, particularly refugees and immigrants, have been described as having "no language" (see Akamatsu & Cole, 2000a) as well as "dysfluent" or "atypical language users" (see Witter-Merithew, 2017). DHH children who may speak their family's heritage language, English, and/or use a sign language with varying degrees of proficiency are sometimes called deaf "multilingual learners" (DMLs; see Pizzo, 2016). Many terms present in the literature indicate a lack of language, a problem with the child's linguistic acquisition and/or ability, and overall suggest a negative view of these children and their language. This paper will discuss

these issues with recognition that lack of language access can cause language deprivation and difficulties with communication; however, a positive viewpoint of the children, their language use, and their communication abilities will be maintained. Issues relating to language will be addressed but will carry no implicit or explicit blame on the child. Further, the language use of children will not be described in this paper as dysfunctional or atypical, as these terms could imply a problem stemming from the child rather than their environment. Such concentration on a negative perspective of a child's language access, language development, and communication may obscure positive occurrences in the child's experiences. Therefore, a focus on access to language and how language impacts a child becomes the foundation in this study for exploring how interpreters work with children who have unique language experiences.

Background Literature

Qualification and decision-making processes of sign language interpreters.
An understanding of what sign language interpreting involves is critical prior to discussing how interpreters use decision-making processes and strategies in their work. Professional sign language interpreters work to facilitate communication amongst people who are D/deaf or hard of hearing and people who are hearing (Registry of Interpreters for the Deaf [RID], 2007). Sign language interpreting takes place in a variety of settings world-wide and includes many languages, both signed and spoken. In the United States, interpreters commonly work between American Sign Language (ASL) and English, using their linguistic, cultural, and technical knowledge to interpret between the two languages (RID, 2007).

Professionalism and qualification.
Professional sign language interpreting is marked by professional regulation and ethical standards. These standards serve to protect consumers of interpreting services as well as

interpreters themselves (RID, 2007). Further, professional behavior, ethical standards, and qualification are the current foundations upon which many interpreters are thought to perform their work and the standards by which an interpreter's work is often judged. As such, it is important to understand professionalism and interpreting qualifications, as these topics may influence interpreters' work in specific contexts and with different consumer populations.

Interpreting organizations and ethical standards have increased the professionalization of the interpreting field. Before the advent of professional sign language interpreters, interpreters were often members of one's family or a part of a local church (Brunson, 2006; Napier & Leeson, 2016). In 1964, the establishment of the Registry of Interpreters for the Deaf (RID) in the United States marked a shift toward regulation of interpreting (Brunson, 2006). Several other countries have also begun to regulate interpreting, and have established national and local-level organizations or are in the process of doing so (WASLI, 2017b). One of the roles of these organizations has been to determine and uphold ethical standards. Ethical codes of conduct guide interpreters' work in a variety of settings as well as present a unified way in which interpreters in a particular region or country should conduct themselves (WASLI, 2017a).

Qualification is another important aspect of professional sign language interpreting. ASL/English interpreters in the United States have sought to increase their professionalism through a national testing and certification process (Brunson, 2006). RID (2007) highlights the importance of credentials in ensuring and indicating an interpreter's qualification. As Napier and Leeson (2016) note, there now exists an expectation that sign language interpreters will have the appropriate certification or licensure to prove their qualification for interpreting work. Qualification is especially important to consider in regard to K-12 educational interpreting, as educational interpreters frequently lack certification or qualifications necessary for interpreting

work. A set of 2009 surveys conducted by the RID Educational Interpreter Committee found that less than 40 percent of respondents held a form of certification, although 43 percent of respondents had been working in education for ten years or more (RID-EIC, 2009, as cited in Winston, 2015). Qualification of K-12 educational interpreters will be discussed later in the paper; however, it is important to consider the overall standards for interpreter qualification, as well as why most educational interpreters do not achieve these standards. A lack of qualification may severely impact the DHH students these interpreters serve, particularly students who are of refugee or immigrant backgrounds.

   Decision-making processes.

   Sign language interpreting is a complex and multidimensional process, involving significant decision-making on the part of the interpreter. In recent decades, several models and frameworks for understanding interpreting have been developed. These frameworks and models help to understand not only what interpreters do as they work, but also what prompts them to make decisions and the impacts of these decisions on the interpreting situation. They are not mutually exclusive, but can be used together to analyze interpreting work. This section will summarize a variety of models and frameworks commonly used in the interpreting field. First, earlier models focusing on ASL/English interpreting including Colonomos's model, which was developed in 1987 (Colonomos, 2015), and Cokely's (1986) taxonomy will be considered. Next, Gile's (2009) effort model, which analyzes the effort capacity of interpreters and how interpreters may choose to spend their efforts, will be discussed. Then models that focus on interpreters' decisions and approaches to the work, including Dean and Pollard's (2013) Demand-Control Schema and Llewellyn-Jones and Lee's (2013) role-space framework, are

discussed. These are some of the models and frameworks which have contributed to our understanding of interpreting work.

The models and frameworks below have been used to explore interpreters' decision-making processes generally, but have not to a great extent been applied to the educational interpreting setting. Nor have they been applied to interpreters' work with refugee and immigrant D/deaf and hard of hearing people, particularly within educational systems. Analyzing interpreters' decision-making processes and knowledge bases when working in educational contexts with refugee and immigrant DHH students will help to identify current practices in the field. In turn, future research studying the effectiveness of these current practices will improve the work of educational interpreters.

Integrated model of interpreting.

The integrated model of interpreting was inspired by Seleskovitch (1978) and was created by Betty Colonomos in 1987 (Colonomos, 2015). This model was one of the first to specifically focus on the cognitive processes of working ASL/English interpreters. It also recognizes the myriad skills interpreters must have, as well as some of the knowledge areas interpreters must have beyond linguistic knowledge. The model, which is shaped like a "Z," takes the interpreter from the message from one speaker/signer, called the "source message," to the end product of the interpretation, the "equivalent target message" (Colonomos, 2015, p. 3). This model was one of the first to apply various considerations interpreters must make when working, including consideration of context, cultures, and languages, to ASL/English interpreting in the United States. The model also considers how information is transmitted or received by participants or the interpreter, including through gestures or body language (Colonomos, 2015).

The model has several interrelated components which work together to show how an interpreter creates an interpretation. The first part of the model is the source message, in which the source message is signed or spoken and the interpreter considers the speaker, context, and message (Colonomos, 2015). The message is then analyzed for meaning and eventually distilled into a language-less visual representation of the message (Colonomos, 2015). The interpreter moves next to the composition stage, in which the interpreter prepares to produce an interpretation of the message (Colonomos, 2015). At the final stage of the process, the interpreter constructs an equivalent target message, including consideration for the audience and context of the message (Colonomos, 2015).

The Colonomos model provided an important beginning for ASL/English interpreters in the United States who are interested in looking at the process of interpreting. It provides one frame for seeing how the interpretation is created by the interpreter. It does, however, place the interpreter at the center, with the interpreter merely considering the speaker and audience in relation to their expression or reception of the message, rather than placing the consumers at the center of an interaction. This model is an important part of understanding how interpreters perceive and make decisions about their work.

Taxonomy of miscues.

Another early approach to analyzing interpreting is Cokely's (1986) Taxonomy of Miscues. This approach is not considered a model or framework per se, but is a way to analyze various "errors" found in an interpretation. The taxonomy consists of five types of errors: omissions, additions, substitutions, intrusions, and anomalies (Cokely, 1986). These errors, which may occur lexically, morphologically, syntactically, or cohesively, are manifested in the

target message (Cokely, 1986). The taxonomy is an important part of the current understanding in the United States of ASL/English interpreters' decision-making processes.

Cokely's (1986) miscues became part of many US ASL/English interpreters' understanding of interpreting work, particularly the focus on "mistakes." It is important to understand how miscues and errors occur in interpretations; however, such errors are only one part of an interpreter's work. Focusing on errors alone may lead interpreters to miss other important aspects of the work that contribute to or diminish the interpretation's effectiveness. Further, occurrences which under the taxonomy constitute miscues may be conscious decisions on the part of the interpreter. For example, in some cases an addition of information may be appropriate, such as the addition of information so that a hearing consumer understands technology a D/deaf or hard of hearing person may use (Leeson, 2005). As the hearing person is likely unfamiliar with this technology, never needing to use it, an "addition" to facilitate the hearing person's understanding may be an appropriate decision by the interpreter. Whether an interpreter views their work through Cokely's lens of "miscues" or as a series of decisions can have a significant impact on their work and how they make decisions as they work. Therefore, the impact of Cokely's taxonomy on an interpreter's decision-making is an important frame to consider when discussing decision-making and interpreting within a U.S. context.

Effort model.

Another key to understanding interpreters' decision-making processes is recognizing how effort is involved and expended in the interpreting process. Gile (2009), a spoken language interpreter and interpreter educator, developed a set of Effort Models for interpreting and translating. Gile had noticed that errors occurred even amongst experienced and skilled interpreters; further, when interpreters interpreted the same information on two occasions, they

made errors in different places during each interpretation (2009). He sought a model that would explain why interpreters have these difficulties despite skill and practice. These models were developed with consideration for both spoken and sign language interpreting.

Gile's (2009) model takes a view of interpreting as a complex mental process requiring significant effort. In simultaneous interpreting, which occurs live and without pauses for interpreters to take notes, interpreters make efforts in three primary areas: listening and analysis, production, and memory (Gile, 2009). According to this model, there is a finite amount of effort, or effort capacity, available to the working interpreter at any given time. Problems may arise if the capacity requirements exceed the interpreter's available effort capacity, or if the interpreter's efforts are inappropriately allocated amongst the three effort areas. In such cases, the quality of the interpretation deteriorates (Gile, 2009).

The Effort Model is one way of understanding the decisions interpreters make as they work. As Gile (2009) notes, how interpreters work is the result of conscious and subconscious decision-making in relation to the effort and memory processes which interpreting requires. Of this process of storing information, he states,

> While some information storage and retrieval operations are subconscious … some are conscious and deliberate, with choices regarding what information to render immediately in the target language or take down as notes and what to store tactically while waiting for more information which will help understand it, confirm it and/or reformulate it into the target language (Gile, 2009 p. 189).

Thus, the process of interpreting is laden with conscious and sub-conscious decisions at the linguistic and cognitive levels.

Leeson (2005) agrees with Gile, noting that interpreters frequently make split-second decisions as a part of the work, guided by their linguistic and cultural understanding and with the goal of an equivalent target message. These decisions are some of the coping strategies which interpreters must use to manage the complex task of interpreting. Leeson (2005) suggests a variety of strategies which interpreters may use, including paraphrasing, strategic substitutions, effective use of processing time, and using context to reconstruct partially missed information. Each of these strategies has positive and negative consequences, impacting the interpretation and ultimately the consumers of the interpretation (Leeson, 2005). While interpreting decisions may at the surface seem to be based on linguistic needs and choices, a deeper look shows that there may be other reasons for many decisions, which will be shaped by the context and by the interpreter's understanding of his/her/their role (Leeson, 2005). Therefore, it is critical to look at even decisions which appear to be constrained by linguistics or by effort capacity, as there may be underlying factors influencing these decisions, which impact interpreting consumers.

Demand-control schema.

Dean and Pollard (2013), researchers who studied occupational stress and interpreting, developed another method of analyzing interpreters' decision-making processes called the "Demand-Control Schema" (DC-S). The schema is interpreter-centric, allowing an interpreter to analyze his/her/their own or one another's decisions by understanding what the interpreter experienced or perceived while interpreting. This schema can be used in a variety of contexts, including educational interpreting; therefore, some K-12 educational interpreters may approach their work with refugee and immigrant DHH students using this framework.

According to this framework, interpreting events present with a variety of "demands," features which are present or salient, for or on the interpreter. Demands are categorized as

"environmental," "inter-personal," "paralinguistic," or "intra-personal". Environmental demands are the broader aspects of the setting, including the goal of the environment, environmental characteristics, the people in the environment, and jargon or terminology used (Dean & Pollard, 2013). Interpersonal demands include demands specific to the interaction. Examples include dynamics of power and authority, communication styles, communication goals, the tone or mood of the interaction, cultural dynamics present, and the "thought worlds" of each person involved (Dean & Pollard, 2013, p. 6). Paralinguistic demands pertain to the quality of the expressive language used by each interpreting consumer, including physical or cognitive limitations consumers may have, the physical positioning of consumers, any idiosyncrasies in sign or speech, accents, and changes in volume or pace (Dean & Pollard, 2013). Intrapersonal demands are related to the interpreter. These include the interpreter's feelings or thoughts, physiological distractions experienced by the interpreter, and psychological responses the interpreter experiences (Dean & Pollard, 2013). These demands may overlap and are highly individual; what emerges as a demand for one interpreter may not impact another interpreter.

Interpreters encounter these demands while working, and present responses, or "controls" for the demands. Such controls may occur prior to, during, or even after an interpreted event occurs (Dean & Pollard, 2013). This framework allows interpreters to study the decisions they made within context of the environment, the interaction, and the interpretation. Analyzing the decisions interpreters working in K-12 educational environments with DHH refugee and immigrant students make can illuminate the thought processes behind those decisions, including why interpreters may choose a particular strategy when working in this context.

Role-space.

The concept of role-space, put forth by Llewellyn-Jones and Lee (2013), is another framework for understanding interpreting work, particularly the interpreter's roles in an interaction. Under this framework, the interpreter does not have a strictly governed and pre-determined role, but rather creates and works within a "role-space" (Llewellyn-Jones & Lee, 2013). The characteristics of the interaction determine the "space," the range of options for the appropriate approaches and roles available to the interpreter. The interpreter works within this space, which shifts as the needs of the interaction shift (Llewellyn-Jones & Lee, 2013). Three axes are used to show the range of factors which determine the shape of the role-space: the axis of participant/conversational alignment, the axis of interaction management, and the axis of "presentation of self" (Goffman, 1959/1990, as cited in Llewellyn-Jones & Lee, 2013).

The axis of alignment shows how the interpreter is aligned at any given moment with the participants in an interaction. Interactions are not simply sets of smaller monologues done in turns with other participants. Rather, a shared meaning is established as the participants begin to align with one another, working out an appropriate, comfortable level of social distance (Giles et al., 1991, as cited in Llewellyn-Jones & Lee, 2013). Natural feedback signals given by each participant, including affirmations and checking for understanding, allow participants to create a shared understanding. When these key signals are missing from an interaction, the co-constructed meaning that typically occurs is lost (Llewellyn-Jones & Lee, 2013). This includes signals from the interpreter, as participants seek to ensure that the interpreter has understood them through body language and feedback signals. The interpreter must be present to the other participants by engaging in natural interactional behaviors in order for a shared understanding to occur (Llewellyn-Jones & Lee, 2013). The axis of alignment recognizes that by being present, an interpreter is rarely able to be impartial or neutral in any given interaction (Hale, 2007; Metzger,

1999, as cited in Llewellyn-Jones & Lee, 2013). Therefore, a more appropriate approach is to be "bi-partial," placing oneself in conversational alignment with both (or all) of the participants in an interaction. This allows the interpreter to facilitate a shared construction of meaning, so that participants for whom the interpreter is working have a genuine opportunity to communicate.

The interaction management axis shows the range of interpreter-initiated interventions, or a lack of intervention, which are appropriate and necessary at different times while interpreting. Overlapping talk is one example of a time when an interpreter may or may not intervene in a variety of ways (Llewellyn-Jones & Lee, 2013). Other examples include asking for clarification and alerting a participant that although information was interpreted correctly, it was not understood by the other participant (Corsellis, 2008, as cited in Llewellyn-Jones & Lee, 2013). In some situations, such as conference proceedings, the interpreter has little opportunity to ask for clarification or to manage the interaction. In other interactions, such as between a D/deaf or hard of hearing consumer and a service provider, the interpreter has latitude to make choices about how to manage the interaction so that participants may experience successful communication with one another (Llewellyn-Jones & Lee, 2013). The interpreter's awareness of when, how, and why to appropriately manage interactions impacts the communication between participants.

The third axis is "presentation of self," a term which stems from work by Goffman (1959, 1990, as cited in Llewellyn-Jones & Lee, 2013). According to Goffman, all of us are constantly performing in the presence of others, including how we walk, dress, talk, and behave, to manage how others perceive us. This performance is called "presentation of self" (Goffman, 1959, 1990, as cited in Llewellyn-Jones & Lee, 2013). Awareness of presentation of self is a critical aspect of successful interpreting work. This is in part because all interactions, whether interpreted or not, require trust amongst participants. An interpreter who tries to establish a sense of impartiality

rather than acting similarly to other participants (e.g. introducing him/her/their self) may actually project a false professional self, losing trust with consumers (Llewellyn-Jones & Lee, 2013). Further, not engaging in appropriate conversational behaviors while interpreting, such as providing feedback, can interfere with the shared construction of meaning, as the participants cannot be certain that they were understood (Llewellyn-Jones & Lee, 2013).

The role-space framework allows interpreters to approach the work from a perspective that is not interpreter-centered, but participant- and interaction-centered. The interpreter must manage their work along the three axes during an interaction to provide quality interpreting services (Llewellyn-Jones & Lee, 2013). The goal of this framework is not to make the interpreter invisible or impartial, but to recognize and analyze the impacts interpreters have on an interaction and thereby on the consumers for whom they work. The frame can be used to analyze interpreters working in a variety of settings and interactions, including educational settings. Such an analysis can help interpreters, including those who work in K-12 settings with DHH refugee and immigrant students, better understand the decision-making processes behind their current practices, as well as analyze the potential impacts of these decisions.

The models and frameworks above reflect ways we may consider the complex constellation of decisions interpreters make as they work. No one model or framework can comprehensively describe interpreting and the processes by which interpreters make decisions, nor can any one of them definitively answer why interpreters may make the complete set of decisions they make in an interpretation. These models and frameworks are lenses for viewing an interpreter's work; looking through each lens shows a slightly different image of how and why the interpreter made decisions in a particular way. These frameworks are important to consider in all interpreting settings and have been applied generally across the interpreting profession, but

have not been considered in relation to interpreters' work with DHH refugee and immigrant students. Research into how and why interpreters make decisions when working with this student population will help to map trends in current practices and provide a foundation for identifying effective, practical practices in these settings.

Multicultural competence.

Another focus of interpreting work is culture, both the interpreter's own culture and the cultures of the interpreting consumers. Interpreters attend to not only the linguistic components but also the cultural components of an interaction and particularly cultural differences amongst consumers, all of which can impact an interpretation (RID, 2007). Culture is imperative for interpreters to consider for several reasons. First, culture is a part of every person's experience, acquired as one moves through life (Mindess, 2006). Further, culture is omnipresent; however, despite its impact on even the most basic of our experiences, we remain largely unaware of our own culture or its impacts on our thoughts and behavior (Mindess, 2006). Thus, interpreters must become aware of their own culture and its impacts to better understand their interpreting and decisions they make during the interpreting process. Also important for interpreters to consider are the cultures of the consumers for whom they interpret. D/deaf and hard of hearing interpreting consumers may identify with Deaf cultures, with which hearing people are generally unfamiliar. Additionally, either the D/deaf or hard of hearing consumer or the hearing consumer may identify with a hearing culture other than that of the interpreter. As culture is intrinsically tied to language as well as one's world-view, it is important that interpreters not only study other cultures, but also become multiculturally competent in their interpreting practice.

Cultural considerations appear in many models and frameworks of interpreters' decision-making processes. For example, cultural dynamics and "thought worlds" appear under

interpersonal demands within the DC-S framework, indicating that cultural differences may impact the interpreter's decision-making processes and the interpretation itself (Dean & Pollard, 2013, pp. 6-7). Leeson (2005) notes the importance of cultural awareness, especially when it requires modification to an interpretation. Even more clearly tied to culture is role-space. Cultural differences and expectations amongst participants are significant factors in the interpreter's decisions regarding presentation of self, interaction management, and participant alignment (Llewellyn-Jones and Lee, 2013). Culture and its impacts have been studied generally within the interpreting profession; however, there are several specific areas of interpreting which would benefit from a closer examination in relation to culture. While it has been studied little thus far, the connection between culture and interpreters' work with refugee and immigrant DHH students provides critical information about how interpreters currently serve this population.

   United States culture.

   As most professionals who work with DHH immigrant and refugee children are not Deaf, nor are they immigrants or refugees themselves, it is necessary for these professionals to consider mainstream U.S. culture in order to acknowledge cultural differences (Fletcher-Carter & Paez, 2000). The majority culture in the United States is predominantly White and is grounded in Anglo-Saxon, Protestant values (Welch, 2000). This culture upholds several key values, many of which pertain to the individual: individual choice, self-reliance, and personal achievement are highly valued (Mindess, 2006). A focus on the importance of work and on problem-solving is also common amongst U.S. citizens (Mindess, 2006). According to Sleeter (1996, as cited in Welch, 2000), several of the ideals espoused by U.S. culture heavily impact the people who believe them as well as people of minority cultures living in the United States. Such ideals include the belief that the United States is a land of opportunity to anyone who works and tries

hard enough, the understanding that social problems existed in the past but are no longer present today, and the belief that problems are individual. The most valued characteristics in the U.S. are to be white, male, middle class, heterosexual and able-bodied (Sleeter, 1996, as cited in Welch, 2000). As these characteristics generally cannot be altered if a person does not embody them, it is impossible for many to reach this ideal. The impact of these values on a person – whether they are part of this majority culture or not – can be severe. Therefore, it is critical that interpreters become aware of this cultural mindset and its influence on their interpreting work.

The majority U.S. culture is important for interpreters to understand whether one feels they are part of this culture or not. As Mindess (2006) points out, many U.S. citizens who fit the demographics for the majority culture do not feel that they fit the "typical American" culture, as they feel that they have individually chosen their ideals and preferences (p. 65). This feeling is common amongst U.S. citizens, and a lack of cultural affiliation with other U.S. residents may be a part of the culture itself (Mindess, 2006). Those belonging to this culture may therefore ignore the impacts of culture on their decisions and on their interactions with others. For interpreters, this can severely impact their work, particularly with consumers who are not of the majority U.S. culture. Further, it is important for ASL interpreters working in the United States to consider the impacts of the majority U.S. culture, as demographics suggest that most interpreters belong to it. The 2016 membership demographics for RID show that nearly 87 percent of interpreters self-identified as White or Euro-American, and that over 96 percent of interpreters self-identified as hearing (RID, 2016). These statistics are only for interpreters who belong to RID and are not separated by work environment (e.g. medical, legal, educational); however, similar statistics are likely to be found amongst the subset of interpreters who work in K-12 educational environments. Therefore, it is critically important that these interpreters consider their own

cultural values and the relationship between culture and decision-making, as these factors can influence their work and impact the consumers with whom they work.

Minority cultures in the United States.

While the majority U.S. culture is important, it is not the only culture interpreters must consider. Other minority cultures are also of import to the work of interpreting, as interpreters and consumers may be part of cultures other than the majority culture. Mindess (2006) discusses four minority cultural groups in the United States: Asian American, African American/Black, Latino/Hispanic, and American Indian. Each has its own values, beliefs, languages and language needs, and more (Mindess, 2006). Many who belong to these cultures come from other countries, bringing their heritage languages and cultures with them (Cheng, 2000; Gerner de Garcia, 2000). Hispanic/Latinx/Chicanx cultures include a wide variety of languages and ties to different heritage countries, for example. Many immigrants and refugees from Hispanic countries share experiences of political persecution, a cultural experience which the majority culture does not share (Gerner de Garcia, 2000). There is also wide variety amongst the Asian and Pacific cultures present in the United States. An array of languages are used, including Arabic, Hmong, Vietnamese, and the language varieties of Papua New Guinea (Cheng, 2000). There are several different religious traditions, many of which immigrants and refugees have brought with them in their journey to the United States (Cheng, 2000). There is also a wide range in how and when Asian and Pacific people have come to the United States, as cultural and ethnic groups from Asia moved to the U.S. during different historical periods (Cheng, 2000). In addition to these groups, there are several other cultures in the United States which have not been mentioned; it would be impossible to list them all here. A multitude of cultures exist amongst both hearing and D/deaf and hard of hearing communities, each with unique histories, beliefs, and traditions.

United States Deaf cultures.

ASL/English interpreters must also understand the various Deaf cultures found in the United States, as D/deaf or hard of hearing consumers may identify with Deaf cultures to varying extents. Most generally, Deaf cultures can be considered the bonds that hold Deaf people together, which include common languages as well as common customs, values, and behaviors (Lane, Hoffmeister, & Bahan, 1996). The most significant underpinning of Deaf cultures is the set of visual-spatial languages used by Deaf people – sign languages. In the U.S., American Sign Language is the preferred language of those who identify with Deaf culture, and a high value is placed on fluency in ASL (Lane, Hoffmeister, & Bahan, 1996; Mindess, 2006). ASL has historically been passed down to new generations of Deaf people by members of this minority group in shared spaces. Deaf parents are considered part of the core of Deaf culture, although most D/deaf or hard of hearing people are born to hearing parents (Mindess, 2006). As most children must therefore seek outside their family for a visual language, ASL and the spaces in which it is shared are highly valued. The world of Deaf cultures and the place – physical and cultural – which Deaf people share is called the DEAF-WORLD by authors Lane, Hoffmeister, and Bahan (1996). This world has its foundations in few physical locales, as there is no homeland for the Deaf. However, residential schools for the Deaf are considered part of the foundation of the DEAF-WORLD in the United States as well as other countries, as they are a place of connection, learning, and language access for Deaf children (Lane, Hoffmeister, & Bahan, 1996; Mindess, 2006). As these foundations are part of how Deaf culture is acquired in the United States, it is important for interpreters to maintain an awareness of them.

There is tremendous variety within the Deaf cultures of the United States. Black Deaf culture, for instance, has a history and language norms which differ from White Deaf culture.

Historical segregation in schools for the Deaf caused changes in the language patterns between White Deaf and Black Deaf people, particularly in the Southern United States (McCaskill, Lucas, Bayley, & Hill, 2011). Black Deaf signers have several unique linguistic features, including following convention for signs that formally require two hands, such as DEER, and for placement of signs, such as signing FOR on the forehead, as well as incorporating African American English (AAE) into their language use (McCaskill et al., 2011). By contrast, White signers tend to use one hand for signs that formally require two and may make signs which conventionally appear at forehead level lower on the face. There are also multiple Hispanic/Latinx/Chicanx Deaf cultures, with a variety of languages and language varieties used therein. Hispanic/Latinx/Chicanx Deaf people may use their home or heritage country's sign or spoken language, English, ASL, or a mixture (Gerner de Garcia, 2000). However, this diversity is still little studied, such that many students who enter U.S. schools are labelled as having no language rather than as using their heritage sign language (Gerner de Garcia, 2000).

As Lucas (1995) notes, there is still much sociolinguistic variation to be explored within Deaf communities. Most research has focused on regional variation, with some studies beginning to focus on ethnicity, age, gender, audiological status, and age of ASL acquisition (Lucas, 1995). Further, as we are still studying ASL itself, understandings of how it may vary amongst different signers are still unfolding (Lucas, 1995). What constitutes variation in ASL, and how cultural groups or affiliations can be identified through these variations, may continue to change and develop as the body of research in this area grows. However, the wide variety of Deaf cultural norms and behaviors are crucial for interpreters to know. Interpretation, as it works through language, necessarily also works through culture; therefore, all interpretation has cultural

impacts and implications. These impacts and implications are critical for interpreters to understand and to consider, especially when working with refugee and immigrant DHH students.

Cultures and the different worldviews that come with them are a vital aspect of interpreting work, especially of understanding and respecting interpreting consumers. People hold their cultural affiliations to differing extents, depending on their backgrounds and life experiences; even within each group, there is incredible diversity (Mindess, 2006). Interpreters working with people of cultures other than their own must bear in mind how these cultural affiliations impact the worldviews, languages, and ways of knowing that each person in an interaction will have (Mindess, 2006; National Multicultural Interpreter Project [NMIP], 2000). Further, interpreters must recognize the impacts of their own cultures on consumers of interpreting services. Knowledge of their own as well as other cultures and identities will help interpreters to make appropriate decisions in a variety of cultural contexts and to create more effective interpretations for the people they serve.

Multicultural competence in interpreting.

Multicultural competence is important related to the knowledge and skills interpreters must possess regarding cultures other than their own. Multicultural competence is a set of competencies one gains through a shift away from ethnocentrism to a focus on others. These competencies include knowledge bases, including knowledge of different cultural identities, of behaviors within cultural contexts, and of others' perceptions of the world (NMIP, 2000). These competencies also include behavioral aspects, including appropriate behaviors for working with other cultural groups and trust-building behaviors (NMIP, 2000). The National Multicultural Interpreter Project (2000) defines the multiculturally competent interpreter as an interpreter who possesses the cultural competencies mentioned above, as well as the linguistic competencies

required for effective interpretation. Having these competencies enables the interpreter to make an interpretation that is culturally and linguistically accessible and effective for all parties involved (NMIP, 2000). One way multicultural competence amongst interpreters is being addressed is through the National Multicultural Interpreter Project (NMIP). NMIP is a national initiative begun in 2000 to create curricula for interpreter training programs (ITPs) across the United States to address a lack of multicultural competence amongst ITP graduates. Through this initiative and a growing awareness of other cultures, interpreters will be able to improve their work by engaging in multiculturally competent practices. This includes interpreters working in settings such as education, and those working with cultural groups like refugees and immigrants.

Education of D/deaf and hard of hearing children.

The field of Deaf education studies and works to improve how DHH children are educated. Deaf education focuses on several unique aspects of the education of DHH children, particularly with regard to language acquisition and development, academic development, and social development. This field, though it rarely mentions interpreters, is related to ASL/English interpreting, as interpreters work with DHH students who receive their education through interpretation. Interpreters often work with students in K-12 and other educational environments, interpreting amongst DHH children and their peers as well as teachers and other educators. To understand how interpreters work with students in educational environments, it is important to understand Deaf education, including its history and the challenges DHH children face in the hearing-centric educational system. With this understanding, the unique task of interpreting for DHH students who are refugees or immigrants can then be discussed.

History of Deaf education.

How DHH children are educated in the United States has changed vastly over the last two centuries. The first U.S. residential school for the Deaf opened in Connecticut in 1817 under the guidance of Laurent Clerc and Thomas Hopkins Gallaudet, leaders in Deaf education (Canlas, 2015). The French sign language Clerc brought from Europe spread widely, used freely amongst students and educators, gradually shifting to become the ASL known today (Canlas, 2015). From 1850 to 1950, enrollment in residential schools for the Deaf steadily increased. The rubella outbreak of 1962-1965 caused the number of DHH children in schools to skyrocket during the 1970s. At this time, over a third of all DHH children attended residential schools, and another third attended specially developed programs within larger school systems (Marschark, 1998; Marschark, Lang, & Albertini, 2002). Residential schools were hubs for ASL development and Deaf culture (Lane, Hoffmeister, & Bahan, 1996). This occurred despite the prevalence of the oralism movement in the United States and around the world. In 1880, the Conference of Milan determined that oralism was the official method by which to teach deaf children (Marschark, Lang, & Albertini, 2002). Even prior to this declaration, the debate over manual or oral language had been raging in the U.S. for decades, with schools, politicians, educators, and scientists firmly entrenched in their respective camps (Marschark, Lang, & Albertini, 2002). Despite this division, DHH children were largely educated in specialized schools or programs.

The 1970s to the present have marked a period of drastic change in Deaf education. In 1975, the Education for All Handicapped Children Act (also known as EHA or PL 94-142) guaranteed all children with disabilities the right to a free and appropriate public education (FAPE). This law was amended and renamed the Individuals with Disabilities Education Act (IDEA) in 1990. IDEA required that all children age three to twenty-one years be educated as close as possible to their home in what has been termed their "least restrictive environment"

(LRE), and that all children requiring special education programming have an individualized education plan (IEP) developed for them (Marschark, 1998). These laws worked to address an astonishing realization regarding children who were considered to have a disability: that only about 50 percent of those students were receiving adequate academic services, with over 1 million children being excluded from education altogether (Marschark, 1998).

The impacts on all children with disabilities were great; however, there has been much discussion surrounding the impacts of these laws for DHH children. EHA, now amended to IDEA, is at the heart of this debate, as it has caused major changes to not only the location of education for DHH children, but also to how they access language (Winston, 2015). The LRE requirement, as well as the requirement that children having a disability be educated with non-disabled children "to the greatest extent possible" have caused great confusion as well as change to Deaf education (Marschark, 1998). One of the most evident effects has been the reduction in the number of DHH children attending residential schools and the influx of them in day programs of their local school districts (Marschark, Lang, & Albertini, 2002). By 1985, 68 percent of all U.S. DHH students were placed in either special classrooms or mainstream classrooms with support, typically either an interpreter or DHH teacher (Marschark et al., 2002, as cited in Winston, 2015). These interpreters were needed urgently after the passage of EHA and were placed in classrooms without an understanding of how receiving an interpreted education impacts a child (Winston, 2015). It is these interpreters on whom DHH students in mainstream classrooms rely for their education.

Whether positive or negative, legislative changes have impacted how we educate DHH children in the United States. Awareness of the present nature of U.S. Deaf education, including the primary concerns of language acquisition and mainstreaming or inclusion, are critical to

understanding the work environment of educational interpreters and how this environment may impact the decisions interpreters working with DHH students make.

Language acquisition.

One of the primary areas of focus in Deaf education is language acquisition of DHH children. Language is how a student accesses education, and is a tool for interaction, learning, and development (Boys Town National Research Hospital, n.d.-b). In the U.S., over 90 percent of deaf children are born into hearing families, the vast majority of whom do not know a sign language (Marschark, 1998). These children, especially those who are severely or profoundly deaf, do not have access to their families' spoken language(s), and do not acquire a language from birth (Skotara et al., 2012). Early access to language is critical, as there is a short time window during which language can be successfully acquired (Humphries et al., 2012). At or around five years of age, a stage considered "the critical period" in language acquisition, the brain's plasticity begins to decrease (Humphries et al., 2012, p. 16). A child who has not acquired a language by this time may never acquire native-like fluency in any language, becoming linguistically deprived (Humphries et al., 2012). While this only occurs rarely amongst hearing children, it is significantly more common amongst DHH children (Humphries et al., 2012; Skotara et al., 2012). For all children, access to language from a young age is critical, because many aspects of development are impacted by language acquisition (Marschark, 1998).

Language modalities.

One debate within Deaf education regarding language acquisition has been over language modality. Marschark (1998) jokingly notes that old doctors and even grandparents may advise against signing with a deaf baby, as they believe it will negatively impact the baby's ability to speak. However, although it is unfounded, the belief that signing impacts the ability of a DHH

child to speak is still prevalent today. Since the oralism debates of the 1800s, families of DHH children have had difficult choices to make when considering their child's language. One of the choices regards modality: whether the language is spoken or signed.

Some schools have already made this decision, choosing one modality; other schools, however, appear much more conflicted. ASL is the language of preference in residential schools for the Deaf, and is advocated for by Deaf people, including organizations like the National Association of the Deaf (2014). To say that the decision is as simple as choosing ASL or spoken English, however, would be an oversimplification, as many families choose some combination of both rather than make an exclusive decision (Marschark, Lang, & Albertini, 2002). Further, the range of schools which are now responsible for the education of DHH children also have great variety in how they use language with these students. Many school programs use Simultaneous Communication, a method of signing English word order while speaking (Marschark, 1998). Others use Total Communication, a method combining speech and sign through all available methods, including assistive technology such as hearing aids (Marschark, 1998). In many cases, a combination of speech and signing are used to communicate with students.

Signing itself is also riddled with choices, as families and schools must choose amongst ASL and manual systems. ASL is preferred by schools for the Deaf, people who are culturally Deaf, and organizations like the National Association of the Deaf (NAD). ASL is recognized as the appropriate choice by these groups, because it is a natural and legitimate language, complete with its own grammar and syntax systems (National Association of the Deaf [NAD], 2014). NAD argues that ASL is a birthright of all deaf people, and that deaf children will benefit most in educational environments from learning via ASL, a comprehensive language that conforms to linguistic principles, and written English (NAD, 2014). Other options are used in educational

environments, however, including several systems which were developed with the intention of improving English literacy and grammar (Marschark, 1998). Such systems include Signed English, Seeing Essential English (SEE 1), and Signing Exact English (SEE 2). Collectively, they are called manually coded English (MCE), because they are not languages in themselves, but coding systems used to represent English using the hands (Marschark, 1998). Winston (2015) notes that these systems are simply representing some aspects of the spoken language and cannot fully represent language. This is true of direct communication and of interpretation using these sign systems. Many D/deaf or hard of hearing adults who have been exposed to these systems during their education use language which is not necessarily ASL or a signing system. Rather, they use Pidgeon Signed English (PSE), a kind of signing that uses the signs of ASL but has English grammatical influences (Marschark, 1998). Both DHH children and the interpreters with whom they work must navigate the difficulties inherent in the decision-making process surrounding language modality. Language modality impacts not only interpreters and how they do their work, but more importantly, the students they serve and their educational success.

Delayed language acquisition.

A more basic and troubling issue underlying language modality choices is the concern for DHH children who do not acquire language early in life. Recent studies into language acquisition show that children who do not acquire language early in life suffer linguistically as well as in other developmental areas (Humphries et al., 2012; Skotara et al., 2012). These kinds of delays may heavily impact a child's communication and language abilities (Humphries et al., 2012; Skotara et al., 2012). Additionally, they impact the interpreters who work with these children, as they must work with students using language to foster an education, despite the child's lack of language fluency. Monikowski (2004) explains the importance of a child having foundations in a

language prior to being expected to learn through interpretation in that language. Despite this critical factor, many DHH children are placed in classrooms with interpreters who then become their only source of visual language input (Monikowski, 2004, as cited in Winston, 2015).

Lack of early access to sign language has been shown to negatively impact language fluency in any language. Henner, Caldwell-Harris, Novogrodsky, and Hoffmeister (2016), for example, analyzed the language skills of children in a residential school for the Deaf. They compared children who acquired sign language from birth through a signing Deaf parent with those who were exposed before the age of six and those who were exposed after the age of six years, assessing their syntax abilities and analytical reasoning skills. The researchers found that children with exposure to ASL from birth had the best language-learning outcomes, followed by those who were exposed to ASL before age 6. Worst outcomes for language acquisition were when students were not exposed to academic ASL before age 12. The study showed that while there is an advantage to being a native signer, non-native Deaf signers still improve their language-related abilities in signing environments (Henner et al., 2016). Another study by researchers Skotara, Salden, Kügow, Hänel-Faulhaber, and Röder (2012) focused on how a delay in a child's primary language (L1) acquisition impacted their processing skills in their second language (L2). They compared native Deaf signers and children who learned to sign after their first few years of childhood, with a control group of hearing children. All the children recognized semantic violations, indicating that semantics can be acquired regardless of age of acquisition. Language-delayed deaf children, however, did not notice as many syntactic violations, indicating that the syntactic complexity of a complete and natural language, whether signed or spoken, is critical to the acquisition of other languages later in life (Skotara et al., 2012).

Language delays and the resultant lack of fluency and even deprivation have garnered increasing attention amongst researchers in Deaf education. Lack of access to language is a concern for families and educators, as it is well-known that lack of early access to language inhibits later language fluency (Marschark, 1998; Marschark, Lang, & Albertini, 2002; Henner et al., 2012; Humphries et al., 2012; Skotara et al., 2012). These concerns are not only critical for Deaf educators to understand, but also for interpreters, as interpreters work with a variety of DHH students, many of whom have experienced language delays and deprivation. There is a critical need for research indicating how interpreters work with this variety of students, including decision-making processes that go into interpreting with this population. A better understanding of how interpreters work with students who have varying language abilities can serve to influence how these students are educated, improving their educational and linguistic outcomes.

Mainstreaming and inclusion.

As previously mentioned, legislative shifts have resulted in more children attending their local school districts rather than schools for the Deaf. As most local schools are primarily home to hearing students, the DHH child becomes a minority in this environment, a phenomenon called mainstreaming (Marschark, 1998; Marschark, Lang, & Albertini, 2002). This integration of DHH students with hearing students is also known as inclusion (Seal, 2004). While legislation does not specifically mandate mainstreaming of DHH children, the mandate that children must be educated in their "least restrictive environment" (LRE) frequently is assumed by parents, school districts, and politicians to mean that education must occur close to the child's home (Marschark, 1998; Seal, 2004). This is despite outcry from the Deaf community that often this environment, one which serves primarily hearing children, may linguistically and culturally be the most restrictive environment (Marschark, 1998; NAD, 2014). Mainstream environments are

sometimes accessed by DHH students through an educational interpreter. Mainstream environments present many challenges, including social and academic challenges, for DHH students with or without interpreters.

Social success and concerns.

Social success is one area of concern in regard to the education of DHH students, particularly those in mainstream environments. As children grow, they have increasing social needs and their relationships typically extend beyond immediate family members (Marschark, 1998). This is true for hearing children as well as DHH children; however, DHH children, especially those from hearing families, often struggle and are socially uncomfortable (Marschark, 1998). As Marschark, Lang, and Albertini (2002) note, there are social differences among those children who attend residential schools, those who attend local public schools in mainstream settings, and those who attend alternative settings. Being the only DHH child in one's school system can have significant social and emotional consequences (Marschark, Lang, & Albertini, 2002). Social success, therefore, is an area of concern for parents and Deaf educators alike. However, much more study is required to fully understand how to support DHH students socially in different environments (Marschark, Lang, & Albertini, 2002).

One study shows that DHH children can have positive social outcomes in mainstream environments. Research by Antia, Luckner, Kreimeyer, and Reed (2011) focused on social outcomes of students in mainstream environments through a five-year longitudinal study. The researchers interviewed teachers and students as well as assessing students' problem behaviors and social skills over the course of five years. They found that the DHH students in the study were within the normal range for both social skills and problem behaviors every year. The most consistent predictors of social outcomes were the students' participation in classroom

communication and their involvement in extracurricular activities (Antia, Luckner, Kreimeyer, & Reed, 2011). This study shows the importance of a child's ability to communicate and participate with their peers, as these abilities relate to social success.

Other research, however, suggests that DHH students may struggle socially, especially with the presence of an interpreter. Students who access their education through interpreters also access socialization through those interpreters (Winston, 2015). As Winston (2015) notes:

Interacting with peers at the age of twelve, through the mediation of an adult, possibly of a different gender, race, and/or ethnicity than oneself, can be awkward at best, and oppressive at worst, when students are aware that interpreters may report bad behavior as part of their responsibilities (p. 6)

Brown Kurz and Caldwell Langer (2004), in their interviews with DHH students, found that students perceived negative social impacts throughout their interpreted education. Students reported feeling limited in their social interactions or even isolated (Brown Kurz & Caldwell Langer, 2004). Social success is therefore not only a focus for Deaf educators, but is also an area of concern and decision-making for interpreters working with DHH students. As Seal notes, an interpreter who recognizes the social needs of the students with whom they work "probably experiments to find the most appropriate avenue for interpreting social exchanges" (2004, p. 82). Exactly how interpreters do this, however, remains to be seen. More research is needed to understand how interpreters assess and make decisions based on students' social needs, as well as how these decisions are understood and guided by the educational team.

Academic success and concerns.

Other research has focused on academic outcomes of DHH children. Researchers have long been concerned about what seems to be a trend of DHH students to lag behind their hearing

peers academically (Marschark, Lang, & Albertini, 2002). Recent studies, however, show that academic success can be achieved for DHH students in a variety of educational settings, given certain factors. Marschark (1998) notes that amongst hearing and DHH children, academic success is best achieved when parents spend time with the child, facilitate their academic interests, and are supportive in answering the child's questions. Additionally, DHH students who have positive attitudes about their own communication tend to achieve more academic success (Marschark, 1998).

It seems, therefore, that there are certain factors that can contribute to or detract from a DHH child's academic success. Reed, Antia, and Kreimeyer (2008) studied the academic status of DHH students in inclusive classes, seeking to discover the factors that would facilitate or detract from their academic success. Research was conducted through interviews with educators, parents, and DHH students themselves to analyze the students' academic progress. Facilitators and detractors of success were categorized as relating to the child, the family, or the school. A comparison of above- and below-average students did not find a single common detractor or facilitator of academic success. Students with higher academic success did have several facilitators, while those with lower success had several detractors which were considered significant (Reed, Antia, & Kreimeyer, 2008). These results suggest that educators and educational interpreters must work with one another and with families to foster academic success of DHH students in inclusive settings. More research is needed to understand the relationship between educational interpreters and academic outcomes of the DHH children they serve.

The face of Deaf education has changed significantly in the last few decades, with a shift toward mainstreaming in public school settings and away from the Deaf-centered residential schools. Research has shown that for a child to succeed in these environments, language and

communication are key factors. Research has also shown the importance of educators and families working together to foster this success. One important group interacting within and having significant impact upon the education of DHH students is educational interpreters. Researching how interpreters work with students and how their decisions foster or diminish opportunities for social and academic success in educational environments is critical to improving practices for working with DHH students.

Deaf education for refugee and immigrant children.

One significant population served in U.S. public schools is DHH children who are immigrants and refugees. However, research remains to be done on this population and how they are currently served by Deaf educators and interpreters. Such research has become increasingly important as the demographics of U.S. populations, including the D/deaf and hard of hearing population, have changed. The 2015 National Interpreter Education Center (NIEC) Trends Report notes that as the U.S. population gains more immigrants, so does the D/deaf or hard of hearing subset of the population. These populations have "complex and diverse communication needs that reflect their culture, language, education, and socio-economic background" (Cogen & Cokely, 2015). Despite recognition that these populations have unique and diverse needs, there is a dearth of research on this population. In particular, little research has been done regarding refugee and immigrant DHH students (Pizzo, 2016). Further, little progress has been made within educational settings to meet the needs of learners who are culturally and linguistically diverse from their peers who were born in the United States (Delgado, 2000). Further research is needed in order to improve outcomes for refugee and immigrant DHH children.

The little existing research on refugee and immigrant DHH students shows that they have a unique set of educational and linguistic needs. Students with immigrant or refugee backgrounds

often have experiences which are different from students born and raised in North America. These experiences may include inconsistent or no formal education, a lack of family awareness or information regarding deafness and special education services, and language deprivation due to lack of access or exposure to signed or spoken language (Akamatsu & Cole, 2000b). These experiences may be exacerbated for refugee children, as their families did not have time to plan their migration and were under immediate oppression and/or persecution (Akamatsu & Cole, 2000a). As a result of these experiences, the educational needs of refugee and immigrant students are often different from those of other DHH students (Akamatsu & Cole, 2000b). Research will be a key component for interpreters and educators in learning how to best serve these students.

Language needs.

DHH children with immigrant or refugee experiences have different language experiences compared to DHH children who have not had these experiences. Their language experiences and needs also differ from their hearing immigrant and refugee counterparts, as students who are hearing have access to the languages spoken around them. Understanding these experiences and the language practices of refugee and immigrant families with DHH children is critical for educators, including educational interpreters, as language is the vehicle for education.

One critical way in which refugee and immigrant DHH children are unique is in delayed identification of deafness and the resultant delays in acquisition of language. Immigrant and refugee families may not initially be aware that their child is deaf, often due to a lack of early intervention resources available in their home countries (Guardino & Cannon, 2016). Several months or years of language development that could occur are thus missed, as the family is unaware that their child is not receiving language input. Another consideration is the number of languages to which a child may be exposed during their migration. Hearing refugee and

immigrant children may be exposed to multiple languages during their journey, through schooling, casual conversation, and their families. DHH children in this situation, however, have varying levels of access to these languages, including signed and spoken languages (Pizzo, 2016). Lack of access to spoken languages, as well as a lack of exposure to sign languages, is common (Akamatsu & Cole, 2000b). Even when a family has settled in a new country, issues including poverty, location, and documentation status may prevent a family and therefore a child from accessing language courses, including ASL (Pizzo, 2016). Insufficient exposure to language, exposure to multiple languages, and limited access to language and to language learning services all impact D/deaf and hard of hearing refugees and immigrants and their journey to language acquisition (Pizzo, 2016).

Language choices are a complex decision for immigrant and refugee families with DHH children. Such families must not only choose between modality and amongst sign languages or sign systems, but also must determine whether their child learns their heritage language, the language of the host society, or both (Willoughby, 2012). A study conducted in Australia by Willoughby (2012) documents the language choices of several immigrant and refugee families with deaf children. In the study, some of the children migrated themselves, while for others, their families migrated prior to the child's birth. Parents were interviewed to explore their language choices and outcomes for their children. The two children with the most success acquiring their heritage language also had the most success in acquiring spoken English, while those with the most delays in English were similarly delayed in their heritage languages (Willoughby, 2012). The degree of hearing loss was found to be a determining factor in the successful acquisition of spoken languages. Another important finding was that parents may choose the heritage language

based upon religious reasoning: one Muslim family in the study placed a high value on reading and speaking Arabic so that the child could fulfill religious obligations (Willoughby, 2012).

Academic needs.

The academic needs of immigrant and refugee DHH children is another area which requires further study. What is known is that education and academic success occurs through the channel of language. Therefore, language development is a critical aspect of learning content. Considering the language needs of DHH refugee and immigrant students requires educators to take a different approach. Often, "the educational focus for these learners is on expeditiously developing their language and communication skills, often while simultaneously providing them with academic content knowledge" (Guardino & Cannon, 2016, p. 108). Pizzo's (2016) article on Deaf multilingual learners (DMLs), children whose families use a language other than English in the home, suggests a focus on developing vocabulary and background knowledge. Additionally, Pizzo proposes that providing opportunities for children to use language expressively in the classroom as well as providing language instruction will help children develop linguistically and academically (2016). However, little is yet known about the academic needs or trends of refugee and immigrant DHH children. Further study of this population, as well as of how various professionals work with these students, can help to form a picture of current trends and practices. In turn, these trends and practices can be analyzed to seek the practices which produce the best outcomes, improving academic success for this student population.

Sign language interpreting in educational settings.

Underneath the larger umbrellas of Deaf education and sign language interpreting is the specialized field of educational interpreting. Interpreting work in an educational context is frequent and prevalent around the world, and includes conferences, trainings, and workshops in

addition to interpreting within school buildings and for after-school activities (Smith, 2015). In the United States, educational settings include early childhood, K-12 settings, post-secondary settings such as vocational programs and college courses, and adult education classes (Seal, 2004). Educational interpreters in U.S. K-12 settings are frequently responsible for not only interpreting between ASL (or the school's mandated or child's preferred language) and English, but also for working with the educational team to foster the success of the DHH child (Boys Town National Research Hospital, n.d.-b). Despite this responsibility, there is still significant research which remains to be completed on how interpreters work and make decisions that impact the students with whom they work.

History of educational interpreting.

The legislation of the 1970s through the present regarding the education of DHH children has drastically increased the need for interpreters in educational settings (Seal, 2004; Smith, 2015). School districts under these laws cannot simply refer parents of DHH children to schools for the Deaf, but are required to make accommodations if parents determine that the local school district would be the child's LRE (Seal, 2004). For DHH students who require an interpreter to access their education but do not have other specialized instruction needs, section 504 of the Rehabilitation Act, known as the Americans with Disabilities Act (ADA), ensures provision of an interpreter (Americans with Disabilities Act [ADA], 1990). This provision has created a new demand for interpreters working in educational settings, but has occurred without research on the impacts of an interpreted education or how interpreters work with students in these settings.

While demand for interpreters in educational settings has increased, interpreters working in these settings are historically under-qualified for such work (Hayes, 1991; Jones, Clark, & Soltz, 1997; Smith, 2015). Smith (2015) states that as interpreting has been viewed as a volunteer

service or an extra service taken on by classroom aides, the profession in educational settings has suffered a lack of esteem. This negative view of interpreting, coupled with the increased demand for interpreters created by legislation, has resulted in districts experiencing difficulty in attracting and maintaining interpreters in their schools (Smith, 2015). Further, legal requirements for educational interpreters have been unclear – until recently, schools were merely required to provide a "qualified" interpreter, without a clear definition for what constitutes qualification (Smith, 2015). Hayes (1991), who conducted surveys and interviews of interpreters in western Pennsylvania, found that a majority of interpreters in the study did not have the necessary skills for interpreting in educational environments, but were still hired by school districts. Jones, Clark, and Soltz (1997) report similar findings across the states of Kansas, Missouri, and Nebraska, where nearly two-thirds of interpreters in public school districts had no certification. Despite a prevalent lack of certification and potentially of qualification for educational interpreting work, interpreters in the United States commonly work in these environments.

Another complicating factor for educational interpreting is the dearth of research surrounding this work. Several researchers have noted that many areas of educational interpreting have yet to be researched (see Hayes, 1991; Jones, Clark, & Soltz, 1997; Seal, 2004; Smith, 2015). However, since the 1990s, in the wake of the legislation which pushed more interpreters into educational settings, researchers in the interpreting field have begun to turn their focus toward educational settings. Researchers including Antia and Kreimeyer (2001), Jones, Clark, and Soltz (1997), Seal (2004), Winston (2004), Smith (2013; 2015), have begun to delve into this rich research environment. Such researchers have focused on the role and responsibilities of the interpreter in these settings, and more recently, have begun to consider decision-making processes of interpreters in educational environments.

Role of the educational interpreter.

One hallmark of educational interpreting research in the 1990s and early 2000s was a focus on the role of the educational interpreter. The attention paid to the role of the interpreter may have been in part to establish the position of the educational interpreter as complex and unique from other educational positions. It is important to note, however, that these studies of role have not studied the interpreters' effectiveness; rather, they have studied the responsibilities which interpreters have taken on in educational environments. Many researchers have found that the role of the educational interpreter is often unclear and may constitute a myriad number of duties. As early as 1991, Hayes found that many interpreters have responsibilities in addition to interpreting, such as content tutoring for DHH students and teaching sign language to hearing students. Additionally, research participants consistently mentioned a lack of clarity within school districts about the role of the interpreter (Hayes, 1991).

Hayes's (1991) research is corroborated by research later in the 1990s and 2000s. Jones, Clark, and Soltz (1997), for instance, surveyed interpreters about their role and responsibilities. Results showed that interpreters took on or were asked to take on several duties in addition to interpreting, sometimes completing these duties instead of their interpreting duties. It was also noted that, partially in relation to doing non-interpreting duties, other educators sometimes mistook interpreters as classroom aides (Jones, Clark, & Soltz, 1997). Antia and Kreimeyer (2001) also found that interpreters performed many activities as part of their role, and that there was some discrepancy amongst educators about the interpreter's role. They conducted a three-year case study of three interpreters working in inclusive classrooms in a rural Arizona elementary school. The researchers found that in addition to interpreting, interpreters clarified teacher directions, facilitated the DHH children's interaction with peers, tutored the DHH

children, helped with other students in the classroom, and kept teachers informed about the DHH

children's progress. While the interpreters and classroom teachers preferred this full-participant

role, special educators and administrators were concerned about interpreters moving outside the

role of interpreter (Antia & Kreimeyer, 2001). While it showed different perspectives on the role

of the interpreter, this study and other studies of role have not shown which roles or

responsibilities relate to effective provision of services for DHH students.

Later research still shows that interpreters' work is highly varied in educational

environments and constitutes much more than interpreting. Seal's (2004) work shows various

situations interpreters working in education may encounter, as well as discussion questions and

advice from interpreters and Deaf people. Smith (2013), in her observations and interviews of

educational interpreters, found that they took on several tasks in addition to interpreting. She

labels these tasks "functions," and notes that interpreters use them throughout their work in

educational settings. These functions include: assessing and responding to the DHH students'

needs and abilities, interpreting, finding and utilizing available resources, using teacher and

student interactions to inform choices while working, and taking on additional responsibilities as

necessary (Smith, 2013). Winston (2015) asserts that the current roles in which interpreters often

work are developed from attempting to fill perceived gaps DHH students have in receiving an

education in mainstream environments. These students are recognized as needing someone to

connect the student's language abilities with real world knowledge, someone to manage their

behavior, and a language model; the interpreter by default is thought to fulfill all these needs in

addition to interpreting work (Winston, 2015). However, whether these needs are effectively met

or interpreters are the appropriate people to meet these needs has not yet been explored through

research. Through this research, what has become clear is that the role of the interpreter is often

complex and not at all clear. As such, some researchers have turned from studies of role to focus on how interpreters make decisions in this complicated and dynamic environment.

Decision-making processes in educational interpreting.

Educational interpreters make decisions that impact not only their interpretations, but also the educational outcomes of the students with whom they work. As such, a key aspect of this work can be understood by focusing on decision-making processes educational interpreters use in their practice. Some of the existing general research on decision-making and interpreting is applicable to educational environments. The DC-S framework, for example, uses categories which are applicable to educational environments, including a focus on specific environmental demands as well as inter-personal demands, which in education would include interactions with students and with educators (Dean & Pollard, 2013). The concept of role-space put forth by Llewellyn-Jones and Lee (2013) is also applicable to educational settings, as interpreters may analyze their work along the three axes of participant or conversational alignment, interaction management, and "presentation of self" (p. 56). Using these axes, K-12 interpreters can assess how they made decisions based on a need to align with a certain person in the interaction, how they needed to manage something about the interaction itself, or how they needed to address how "present" they appeared in the interaction which they were interpreting (Llewellyn-Jones & Lee, 2013). Leeson (2005) uses Gile's effort models to suggest that interpreters must focus on the impacts of their decisions. She proposes that there are positive and consequences to each decision an interpreter makes. Further, most decisions, even if they seem linguistic in nature on the surface, have deeper cultural and interactional factors as well. Through a deeper look at these factors and the decision-making processes interpreters go through as they work, interpreters can better understand their own practices and how these practices impact consumers. These models

and frameworks, while not only intended for application to educational interpreting, can help

interpreters in educational settings, including those who work with DHH refugee and immigrant

students, analyze their decision-making processes and consider impacts on their consumers.

Recent research in educational interpreting has begun to address decision-making and

strategies interpreters use in educational settings, although significantly more research is still

necessary, particularly research on whether specific strategies used or decisions made by

interpreters are effective for students. Seal (2004) studied decision-making, using case studies of

classroom situations to describe various decisions interpreters made. Smith (2013) used a

combination of observations and interviews to study interpreters' decision-making strategies.

She researched interpreters' work in the classroom and their decision-making processes in a

study of three different schools. In interview sessions, she asked what the interpreters felt DHH

students need, finding that interpreters focused on visual access, language and learning, and

social and academic inclusion (Smith, 2013). Smith's work takes an in-depth look at not only

what interpreters are doing, but why they make the choices they do. She interviewed interpreters

about their decision-making processes and learned that several factors and concerns helped them

to make decisions while interpreting. Smith states that continued study of the decision-making

processes of interpreters can be used to inform interpreting practice as well as interpreter training

practices. While such work is a beginning to understanding decision-making within the context

of educational interpreting, there is still opportunity for significantly more research, including

that on the effectiveness of certain decisions made by interpreters for DHH students.

The increasing focus on interpreters' strategies and decision-making in K-12

environments is a shift toward exploring some little-researched facets of educational interpreting.

Continued research in these areas will highlight not only what interpreters are doing in

classrooms, but why they make the decisions they do. The most important reason to study why interpreters make certain decisions is to consider the impact of these decisions on the DHH children interpreters serve. Interpreters in educational environments must consider their interpretations from the framework of student needs, including how their decisions impact students socially and academically, and of the school's needs. These discoveries will lead to an understanding of current practices, which can be used in interpreter training programs and workshops. These current practices must also be studied for their efficacy. Awareness and implementation of effective practices can improve educational outcomes, including social and academic outcomes, for DHH children.

Education of immigrant and refugee students.

An area of education which largely has yet to be connected through research to Deaf education or educational interpreting is the education of hearing immigrant and refugee students. Immigrant and refugee students comprise a significant portion of the student population in U.S. public schools. As of 2010, there were 16.7 million school-aged immigrant children and children whose parents were U.S. immigrants (The Annie E. Casey Foundation, 2009; Grigorenko & Takanishi, 2010; Migration Policy Institute, 2008; as cited in Faltis & Valdés, 2010). Yet, there is a dearth of research on how best to serve these students, particularly outside of elementary-level or basic education contexts (Faltis & Valdés, 2010). It is critical to study current approaches to educating hearing immigrant and refugee children, as these approaches may influence how Deaf educators and interpreters work with DHH immigrant and refugee students.

Educational needs of refugee and immigrant children are as varied and unique as the children themselves. Some children are only in U.S. school systems temporarily: for some, their families are migrant, leaving and returning for work purposes, while for others, the United States

is not the final destination on their immigration or refugee journey (Faltis & Valdés, 2010). Another consideration is how long children have been in the United States. Some are first generation immigrants or refugees, while others are second or even third generation. The characteristics and needs of each of these groups will be unique; yet, they are frequently educated in the same classrooms. Children also have highly varied experiences prior to their arrival to the United States, as mentioned previously for DHH refugees and immigrants. Some children's families have had the resources and opportunity to plan their move to North America, while others have fled persecution and oppression, leaving their lives behind and living with only the most basic of necessities as they seek refuge (Akamatsu & Cole, 2000a). The linguistic, social, and academic needs of all of these students will be highly individual. Despite these individual needs, and the myriad cultures of the people who come to the United States as immigrants and refugees, many will be taught in the same classrooms (Faltis & Valdés, 2010).

Current trends in teaching students who are immigrants, refugees, and English learners (EL) show a developing awareness of culture and language and their impacts on education. The National Society for the Study of Education (NSSE), for example, advocates a "no borders" perspective in education and in wider society. This perspective advocates for "practices that aim to tear down the real and invisible borders of segregated housing and schooling, within-school tracking, and restrictive language policies" (Faltis & Valdés, p. 286, 2010). This outlook is in response to several current policies which implicitly or explicitly restrict access to and participation in schools and communities, particularly in the Southwest (Faltis & Valdés, 2010). Changes toward more inclusive practices are critical, as the number of children of immigrant or refugee background in U.S. school districts has significantly increased, and teachers who are primarily White, middle-class, monolingual English speakers have vastly different cultural and

linguistic experiences than the students they serve (Bartolomé, 2010). Bartolomé (2010) suggests that teachers working with students who are new to the U.S. must study their own ideological frameworks, as these frameworks are part of the dominant culture and may be at odds with students' ideologies and with their success in the classroom. A study of dominant ideological frameworks and critical analysis of teaching pedagogy can help prospective teachers to develop their ideas for teaching and for understanding the experiences of the students they will teach (Bartolomé, 2010). While there are still many ways in which this field is growing, changes to how hearing immigrant and refugee children are taught may also influence changes in how DHH immigrant and refugee children are taught. Further, such changes could apply to how interpreters work in classrooms with DHH refugee and immigrant students, encouraging critical analysis of ideological frameworks and cultural influences on interpreting decisions.

Chapter 3: Methodology

Research focus and framework.

This research is an exploratory pilot study of interpreters' thoughts about their work in educational environments with DHH students who are of refugee or immigrant background. As this topic is little researched, a pilot study is an appropriate place to begin creating a picture of the current trends and issues about the work of educational interpreters with DHH refugee and immigrant students (Hale & Napier, 2013). Conducting interviews provided an exploration of the experiences of four interpreters who work in these settings, particularly the strategies and decision-making processes they use, and how they have come to understand their own experiences of this work (Hale & Napier, 2013).

This research takes a qualitative approach, gathering information about interpreters' experiences of their work. While inspired by the researcher's experiences with interpreting and

decision-making, educational interpreting, and work with DHH refugee and immigrant students, such experiences may not be common amongst other interpreters. Therefore, this research begins to collect information about the experiences of other interpreters who work with DHH students of refugee and immigrant background, and begins to create a picture of the current trends in interpreters' work with this student population, laying groundwork for future research.

Study design.

Data for this study were collected over a period of three months from January to March of 2018. In this study, participants were recruited through online posting. Demographic information about participants was collected through a survey that appeared on the recruitment posting, which participants answered via email (see Appendix A). Participants were asked what, if any, certifications or licensures they held, how many years they had been working as an interpreter and as an educational interpreter, and how often they worked in educational settings. They were also asked what kind of work they do in these settings, such as the educational level at which they interpret and the kinds of classrooms in which they work, as well as whether they currently worked with a DHH student who had moved to the United States as an immigrant or refugee within the last five years. The purpose of this survey was to ensure eligibility for the study.

Individual, semi-structured interviews were then set up with each participant who had emailed survey responses and was determined eligible through the survey questions. Interviews were conducted online with four interpreters who worked with DHH refugee and immigrant students. In each interview, participants were asked about different aspects of their experiences serving these students. The purpose of the interviews was to gather data about strategies these interpreters use when working with DHH immigrant and refugee students, as well as the decision-making processes the interpreters used to choose those strategies. A video conferencing

program called appear.in was used to conduct the interviews, which occurred one-on-one. All interviews were conducted in spoken English. Videos were later transcribed for analysis.

Participants.

Participant recruitment.

Participants for this study have been recruited via two means: website message boards and Facebook postings. I created a recruitment email (see Appendix B) and a recruitment post (see Appendix A) for use on Facebook and internet message boards. The recruitment email and post were sent to organizations who were willing to distribute them to potential participants. One organization which helped me recruit participants was the National Association of Interpreters in Education (NAIE). The NAIE president posted my call for participants to the "In the News" section of the NAIE as well as on the NAIE Facebook page. Another organization on which I have relied for participants is the Registry of Interpreters for the Deaf (RID). The organization is divided into five regions and also has specialized member sections, including the Interpreters in Educational and Instructional Settings (IEIS) member section. I contacted each of the region representatives, as well as the chairperson for IEIS. Representatives from regions I, II, III, and V were all willing to post the call for participants on their region's Facebook page, and the Region III representative additionally contacted state chapters of RID on my behalf with my recruitment posting. The IEIS chairperson posted my call for participants on the IEIS Facebook page. The Registry of Interpreters for the Deaf and the National Association of Interpreters in Education provided significant access to the pool of participants for this study, although it should be recognized that not all potential participants could be reached in this way if they are not affiliated with RID or NAIE. Interview participants received $10.00 gift cards to Amazon.com as a token of appreciation for their involvement in this study.

Four participants have been interviewed for this pilot study. Participants were those who responded to recruitment posts and met the following eligibility criteria: a) work at the time of interview as a K-12 educational interpreter regularly and frequently (at least 5-10 times per month); b) have three or more years of experience as a hearing ASL/English interpreter; c) have one or more years of experience interpreting in K-12 educational settings; and d) work with the appropriate student population, DHH students who are immigrants or refugees and have moved to the United States within the last five years. Each participant was given the opportunity to choose their own pseudonym for use throughout this research. The following pseudonyms will be used: Ester, Geri, Sarah, and Whetstone. Each interpreter's certification(s) and interpreting experience (in years) were also recorded (see Table 1).

Table 1

Participant Certification and Experience

Name[a]	Certification(s) Held	Years of Interpreting Experience	Years of Educational Interpreting Experience
Ester	CI/CT	40	10
Geri	Temporary License[b]	5	5
Sarah	NIC	12	12
Whetstone	A:EI[c]; EIPA 3.9	3 (non-consecutive)	3 (non-consecutive)

[a] Participants are identified by a self-selected pseudonym.
[b] State of Kentucky – state-issued temporary license.
[c] State of Colorado – state-issued educational interpreting authorization.

Certifications and qualifications.

Interpreters in this study were not required to have certification in order to participate. It is well-documented that many interpreters working in educational settings do not have formal

certifications or qualifications (Hayes, 1991; Jones, Clark, & Soltz, 1997; Smith, 2017).

However, as mentioned in Chapter 2, certification is an important mark of professionalism and of

qualification in the interpreting field. To recognize both the value of experiences of interpreters

who may be working without certification as well as the value of formal qualifications,

certification was not a requirement for participation, but any certifications or qualifications of

participants have been recorded.

Ester holds a Certificate of Interpretation and Certificate of Translation (CI/CT). She also

has a Master's degree and was a PhD candidate at the time of her interview. She is a graduate of

an interpreter training program (ITP). At the time of interview, Geri was temporarily certified as

an interpreter in the state of Kentucky and was preparing for the Educational Interpreter

Performance Assessment. She has also been through an interpreter training program. Sarah holds

a National Interpreter Certification (NIC) and has gone through an interpreter training program

as well. Whetstone holds a Colorado state certification as an educational interpreter (A:EI) and

received an Educational Interpreter Performance Assessment (EIPA) score of 3.9 in 2015.

Working k-12 educational interpreters.

Participants in this study were all working in educational interpreting situations in the

United States at the time of their interviews. Ester has worked as an interpreter since 1978,

interpreting full-time in an educational setting for the past ten years. At the time of the interview,

she worked in a secondary setting in a mainstream environment, including interpreting activities

during the school day as well as extracurricular activities. Geri had worked as an interpreter for

five years at the time of the interview, all five being educational work in a middle school setting.

Sarah had been working as an interpreter for twelve years at the time of the interview, all twelve

being in education. Ten of those twelve years, including the current year at the time of the study,

were in a middle school setting; Sarah did not mention where she spent the remaining two years. At the time of their interviews, Geri and Sarah were working in the same school. Whetstone had at the time of her interview been working in Deaf education for seven years, working as an educational interpreter for three non-consecutive since 2014. She worked with students in her district at the secondary level and at the post-secondary level at the district's technical college.

Work with appropriate student population.

Interpreters were required to currently work with the appropriate student population to participate in the study. The student population of interest was DHH students who are refugees or immigrants who had moved to the United States within the past five years. However, many interpreters may not have complete access to information about students' backgrounds, such as the date of a student's arrival to the United States. Therefore, potential participants were asked to determine whether the students they served fit this criterion based on their interactions with students and any knowledge they did have regarding the students' backgrounds. At the time of the interview, Ester worked with four DHH immigrant students who fit the study criteria, all of whom had immigrated to the U.S. from Mexico at different times. Geri and Sarah had at the time of their interviews worked with several immigrant students for the previous four to five years. At the time of their interviews, they were working with one immigrant student and one refugee student who fit the study criteria. Whetstone had worked for the past four years with four refugee and immigrant students, and was currently working with several students who were refugees or immigrants.

Materials and procedure.

Interview structure and questions.

Data collection occurred through four individual, semi-structured interviews with educational interpreters working with DHH refugee and immigrant students in K-12 settings. Interviews are a key way of helping others understand a person's experiences in a certain context and the meaning that they make of their experiences (Hale & Napier, 2013). Prior to conducting interviews, participants received informed consent forms (see Appendix C), which helped to ensure that participants understood the research and were willing to participate, as well as a video release form (see Appendix D), which ensured that participants were willing to be video-recorded, to participants. Once participants signed and sent the consent and video forms, a date and time was set for their interview. Semi-structured interviews were conducted using a set of open-ended question prompts (see Appendix E) to guide discussion (Hale & Napier, 2013). Interview participants were emailed the question prompts prior to the interview and invited to look them over. At least two interviewees took notes answering the prompts prior to their interviews, and referred to these notes during their interviews. Interviews were scheduled for one hour and lasted between 30 minutes and 1 hour 15 minutes, allowing each interpreter to explore the questions asked, their ideas, experiences, and thoughts. Seidman's (2006) interview tips guided the researcher, a graduate student conducting the research for her thesis, in conducting the interviews. These tips suggest asking questions to further understand, forming questions which helped an interviewee to reconstruct rather than simply remember, and accepting silence during interviews (Seidman, 2006, as cited in Hale & Napier, 2013). Interviews were conducted using a locked room created on appear.in, accessed through the researcher's locked personal computer. The link to this room was emailed to participants before their allotted interview time. The interviews were audio and video screen recorded using Open Broadcaster Software (OBS).

Data analysis.

Data from interviews were first analyzed by transcribing the full length of each video, with the exceptions of the consent statement at the beginning and the goodbyes at the end of each video. Transcribing full videos ensured that all the words expressed during the interviews were available for future analysis, rather than being pre-sorted according to the researcher's sense of what was important or not important. However, it must be recognized that transcription retains only the words used, and does not include intonation, gesture, or body language, which significantly inform meaning. Transcribing interviews also allowed the researcher to apply the "verbatim principle" to findings (Stringer, 2014). This principle reduces bias by, when possible, using the exact phrasing of an interviewee so that the reader may compare the researcher's constructed meaning with their own constructed meaning of the same words to the extent that the transcript is complete (Stringer, 2014).

The interview videos and transcripts were then uploaded into the computer software program NVivo for analysis. NVivo allows for efficient organization of qualitative data through coding and categorization based on themes. Coding is done in NVivo through "nodes" (now also called "codes"), which are labels for each kind of information the researcher wants to code. These nodes can be organized in a hierarchy as themes develop. The transcribed data was coded through an iterative coding process. Two interviews, Whetstone's and Ester's, as well as part of the interview conducted with Geri, were used for an initial, open coding process. In this process, nodes were created based on observations from the data. Each node was given a title and a working definition, which were adjusted as the research progressed. After the transcription analysis process and open coding were used to identify a set of themes, the nodes were reorganized into hierarchies based on these themes. Each node was redefined and clarified in relation to the themes. Then, using these nodes and their overarching themes, data from all of the

interviews were re-coded. The re-coded data was then analyzed through the frame-work of decision-making. In this process, individual strategies interpreters used as well as larger categories of strategies were analyzed for how and why interpreters decided to use those strategies. Further, the impacts of these strategies, particularly for students, were considered.

Chapter 4: Results and Discussion

This study investigates the decision-making processes and strategies used by interpreters working in K-12 educational settings with DHH refugee and immigrant students. This chapter presents the themes that emerged from a series of interviews with four interpreters working with DHH refugee and immigrant students in K-12 educational settings. Results indicate that interpreters in this study use strategies that primarily fall under two main themes: a) Communication with the Educational Team and b) Communication with DHH Refugee and Immigrant Students. These two overarching themes appeared in 100% of interviews conducted in this study (see Table 2). Two minor themes, c) Communication with DHH Refugee and Immigrant Students' Peers, d) Interpreting Strategies, appeared in 50% and 25% of participant interviews, respectively (see Table 2).

Table 2

Number of Participants Who Addressed Each Emerging Theme Within This Study

Theme	Number of Participants (N = 4)	Percent of Participants
Communication with Educational Team	4	100%
Communication with Student	4	100%
Communication with Students' Peers	2	50%
Interpreting Strategies	1	25%

The section entitled "Communication with Educational Team" highlights ways in which interpreters report using communication with others on the educational team (i.e. teachers, special education administration, counselors and advocates, other interpreters, and parents) as a strategy when working with DHH refugee and immigrant students. Communication strategies are used by interpreters in this study to achieve three goals, including: a) problem-solving and collaborating with the educational team, b) ensuring that the educational team is following or makes alterations to the IEP, and c) fostering student-teacher relationships (see Table 3).

Table 3

Theme 1: Goals of Interpreters When Communicating with the Educational Team

Category Name	Participants (n = 4)	Number of Instances Mentioned
Communication with Educational Team	4	55
Problem-Solving and Collaborating	4	47
Follow or Alter IEP	3	7
Foster Student-Teacher Communication	1	1

The section entitled "Communication with Students" describes ways in which interpreters report using communication in strategic ways with DHH refugee and immigrant students. Communication strategies interpreters use when working with these students include: a) modifying language use, b) taking on additional responsibilities, c) establishing and maintaining relationships, d) monitoring comprehension, and e) fostering self-esteem in DHH refugee and immigrant students (see Table 4).

Table 4

Theme 2: Strategies used by Interpreters with DHH Refugee and Immigrant Students

Category Name	Participants (n = 4)	Number of Instances Mentioned
Communication with Student	4	73
Modify Interpreter Language Use	4	29
Use of Visual Language and Gestures	4	12
Use Visual Aids	3	11
Contextualize Concepts	3	6
Take on Additional Responsibilities	4	27
Support Student Acclimation	4	18
Teach Language	3	6
Establish and Maintain Relationships	3	7
Monitor Comprehension	3	6
Foster Student Self-Esteem	1	4

As indicated in Table 3 and Table 4 (see above), each of the main themes in this research is divided into sub-categories. These sub-categories are not mutually exclusive, as multiple strategies may be mentioned by an interpreter within the same interview. For example, under Theme 1, an interpreter may communicate with the educational team to problem-solve and collaborate team members as well as to ensure that she is following the student's IEP. Under Theme 2, an interpreter may use strategies such as modifying her language use with a DHH refugee or immigrant student by using visual language and gestures and also by providing contextualization, with a goal of increased student comprehension.

Theme 1: Communication with Educational Team

In this study, all four interpreters report communicating with members of the educational team in strategic ways in order to achieve goals related to their work with DHH refugee and immigrant students. Results indicate that interpreters in this study see members of the educational team as intertwined with their decisions about how they work with DHH refugee and immigrant students. Members of this team are involved in the process of making decisions about the education of DHH refugee and immigrant students, from day-to-day decisions to IEP goals. As interpreters are legally bound to follow the IEPs which have been developed with or by other members of the educational team, and as they are working in classrooms with educators, interpreters necessarily communicate with other educational team members about DHH refugee and immigrant students (IDEA, 2004). The interpreters in this study indicate that they communicate with educational team members in a variety of strategic ways to facilitate their work with DHH refugee and immigrant students. The following three sections will highlight ways interpreters in this study report using communication with the educational team as a strategy for accomplishing the goals of a) problem-solving and collaborating with team members, b) ensuring that the team is following the IEP or working to make changes to the IEP, and c) fostering relationships between students and parents (see Table 3). Further, the decision-making processes interpreters mention using in relation to these strategies will be discussed.

Goal 1: Problem-solving and collaborating.

Interpreters in this study use the strategy of communication with the educational team in order to achieve goals of problem-solving and collaborating. These interpreters strategically communicate with members of the educational team who are involved with a DHH refugee and immigrant student's education, including: a) case managers or DHH teachers, b) general

education or classroom teachers, c) special education administrators, d) counselors and advocates, e) other interpreters, and f) parents.

Three interpreters in this study report communicating with case managers or DHH teachers to solve problems and collaborate. For example, Whetstone mentions the DHH teacher, who is also the case manager at the district where she works, as a primary resource for problem-solving and collaborating about "things that go on in the classroom" with the DHH refugee and immigrant students. Geri's comments also suggest that she frequently approaches the DHH teacher with whom she works to share daily observations in the classroom with the goal of collaboration. Geri states,

> My DHH teacher has total faith in us, and she's in the building at any time, so I can shoot her a text message or if I see her in the hallway, "Hey we're doing this, do you care if I?" "Oh, no, go ahead, go ahead."

These examples indicate that Whetstone and Geri discuss questions or concerns about the mainstream classroom environment and how they should work within that environment to provide school-expected services for the DHH refugee or immigrant student with whom they are working. According to the role-space framework, Whetstone and Geri may be making decisions to align with the DHH teacher outside of interpreting interactions through problem-solving and collaborating, especially by asking questions and noting observations (Llewellyn-Jones & Lee, 2013). It is not clear, however, what the DHH teachers' perspectives about this alignment or problem-solving are, nor whether such collaboration results in improved outcomes for DHH refugee and immigrant students.

Sarah also uses communication as a strategy for problem-solving and collaborating when working with a DHH teacher. She notes the importance of her communication with the DHH teacher, who in this case works with a variety of students with special needs, in this statement:

So, I work closely with their teacher, who can - she has different strategies she uses she does different cent- like centers, and this small group might be working on something hands-on, while that group is working on something more independent. And just whatever, you know, work very closely with her as to how she's modifying the lesson and differentiating for each of her students in ways that match their learning styles and, you know, "We need something more visual over here, can you find me a video that has closed captioning for social studies instead of that one that doesn't?"

Sarah's conversations with this teacher suggest that problem-solving and collaborating are important aspects of her work with this teacher. She informs the teacher when she needs different resources and asks for assistance with specific aspects of the lesson, in addition working with the teacher to modify lessons for each student. These decisions suggest that Sarah is using interaction management in her decision-making process, and that she may have significant latitude to intervene during the teacher's lesson (Llewellyn-Jones & Lee, 2013). As the DHH teacher is in part responsible for the DHH refugee and immigrant children's education, and as research shows that educators do have concern for how DHH students may lag behind peers, Sarah may feel that these interventions are necessary (Marschark, Lang, & Albertini, 2002). Further, instances such as the uncaptioned video may present as demands for Sarah. For example, the demand may be environmental, as the video may not come with captions and issues such as Sarah's ability to see and interpret the movie may be impacted (Dean & Pollard, 2013). The demand could also be intrapersonal, as Sarah may be frustrated by working with a teacher

who is responsible for providing captions and who is knowledgeable of Deaf education and the laws surrounding education of D/deaf and hard of hearing students (Dean & Pollard, 2013). However, the teacher's perspective on these demands and on Sarah's interventions, as well as the impacts of such interventions for DHH refugee and immigrant students, remain unknown.

Interpreters in this study also report communicating with general education teachers, also called classroom teachers, as a strategy for problem-solving and collaboration in their work. Three interpreters including Geri, Sarah, and Ester report using this strategy with general education teachers. When she perceives that she needs more time to interpret a concept for DHH refugee and immigrant students, for example, Geri briefly explains the situation to the teacher. She describes a potential conversation with the teacher, stating, "I can ask the teacher, 'Hey, can I have a moment? He's not quite getting this, I need to fully explain, clarify for him' using... whatever ... you know, whatever I can possibly do." In this way, Geri uses communication as a strategy to collaborate with the general education teacher, keeping the teacher informed and asking the teacher for time to clarify information. Here, Geri may be making decisions based on understanding her perceived lack of time as a demand of the classroom environment, and she uses a control of communicating with the teacher to request more time (Dean & Pollard, 2013). Additionally, she may be making decisions by using her axis of interaction management to intervene when she perceives that the teacher's pace is too fast for effective interpretation for the particular student (Llewellyn-Jones & Lee, 2013). While these interventions could have a positive impact on her interpreting, they may also negatively impact the student-teacher relationship by not allowing the teacher to further explain information to the student. It is unclear whether Geri should be the person further explaining information to the student or who makes the determination about who should be responsible for such additional explanations.

Sarah notes that she also uses communication with the classroom teacher to problem-solve. She notes that she attempts to avoid dual roles, and talks with the teacher about not taking on additional responsibilities the teacher may otherwise ask her to take on while interpreting. Here, Sarah shows her decision-making process through using a pre-assignment control to talk with the teacher about what she perceives as role conflicts before they occur (Dean & Pollard, 2013). It is unclear whether the teacher or Sarah is the person who makes the final determination in these situations, as well as how supervisors may be involved. The impacts of these decisions on students is also unknown, as it is unclear which responsibilities are not taken on by Sarah, which person takes them on, and who should be taking on such responsibilities.

This finding that some interpreters in this study problem-solve with classroom teachers, working collaboratively, echoes research done by Antia and Kreimeyer (2001). As mentioned in Chapter 2, their research on interpreters in mainstream classrooms also showed that interpreters keep teachers informed about the DHH children's progress, and that teachers and interpreters both preferred this "full-participant" role (Antia & Kreimeyer, 2001). It is uncertain, however, whether this preference also indicates what is beneficial to students. Further, Ester notes that her goals of problem-solving and collaboration are not always achieved, indicating that teachers may not always prefer interpreters taking on this participatory role. She reports ongoing communication with teachers about requesting interpreters for field trips. In these discussions, she reminds the teachers that they need to request an interpreter and why, explaining:

> Anything can happen. That, they have a really hard time understanding. They don't, they don't understand, okay? So, I have to, I have to talk to them, talk to them, and I'm kind of talking myself blue in the face about it, because they don't understand what the difference is, because they have not been hit with a lawsuit, but you know, lawsuits can happen.

And, you know, even if the likelihood of that happening is very seldom. There could be a chance.

As Ester's experience shows, the strategy of communication with other educational team members may not always result in immediate problem-solving and collaboration. However, Ester's description of this situation shows that she persists in talking with teachers about issues which she perceives as important for the DHH refugee or immigrant student's education, indicating her belief that continuing to use communication as a strategy may eventually help her achieve the goal of problem-solving and collaboration.

Interpreters in this study also report using strategic communication to solve problems and collaborate with special education administrators. While they show willingness to communicate with these administrators, the interpreters in this study also indicate a recognition of the status these administrators hold. For example, Whetstone explains that the interpreters in her district asked the administration to use technology such as tablets or cell phones as learning tools when interacting with DHH refugee and immigrant students. She notes that while such technology is not generally used in the classroom, "immediately the administration realized that, for someone in that particular situation, it's a learning tool and we're not using it in a way that's negative." This example shows how communication with administrators, including making requests and explaining a need for resources, can result in problem-solving. The decision-making process behind this strategy may be complex, however, as this technology is not directly associated with interpretation or with those typically involved in the interpreted interaction. It is possible that Whetstone perceives a paralinguistic demand with DHH refugee and immigrant students, with whom she may need to communicate using pictures or videos in addition to sign language (Dean

& Pollard, 2013). Further study into the decision-making processes for interpreters' use of technology in the classroom, as well as of its effectiveness for students, is necessary.

Geri notes that administrators who are involved with student IEPs may have greater ability to call an IEP meeting than an interpreter. She explains how she communicates with administrators to problem-solve with the educational team:

> If we can't figure out something on team, then I'll go to the assistant principal, and they have greater power to call a meeting with the parents, or can, you know, have - have interpreters from other languages come [to interpret for the DHH refugee or immigrant student's parents], and we can have a full-on discussion about what's going on in class.

In this example, Geri may be making a decision to align with multiple different participants outside of a specific interpreting interaction, aligning with them more generally as members of the educational team in order to solve problems she perceives (Llewellyn-Jones & Lee, 2013). She also makes the decision to align specifically with the special education administrator, maintaining an awareness of this person's power to request a team meeting (Llewellyn-Jones & Lee, 2013). While it is unclear whether this decision-making process will then positively impact the student, Geri's decision-making leads her to engage in collaboration and problem-solving that involves the entire educational team.

Sarah describes using communication more broadly as a strategy with administrators, including principals at the school and special education administrators. She describes how she may collaborate or problem-solve with different administrators in her work:

> My boss … is a specialist in D/deaf and hard of hearing, so if I have a problem like school - those kinds, like school related things that, like, maybe no one in the school can help me with, or my principal's like, "I don't know," I can go to her for that as well.

While Sarah's comment does not indicate a specific example, making understanding her decision-making processes more difficult, it is clear that she bases her decisions to collaborate with specific administrators depending on their role or knowledge base. This could indicate that Sarah already has alignment with particular administrators, likely from interactions outside of those in which she was interpreting (Llewellyn-Jones & Lee, 2013). She may then use this alignment to problem-solve about issues she perceives for DHH refugee and immigrant students. Further research is necessary to determine whether such problem-solving results in positive educational outcomes for these students.

Ester's interview indicates mixed results using communication as a strategy with administrators. She notes an experience with a past special education chairperson in her district, in which the chairperson repeatedly limited academic opportunities for DHH students by making decisions such as putting all students in the same class with a single interpreter, rather than providing multiple interpreters and placing students in classes that best suited their needs. Ester explains that she repeatedly communicated with the chairperson in an attempt to problem-solve about improving opportunities for DHH students, but that these conversations did not cause the administrator to change her mind. However, with a new special education chair, Ester reports greater success in her communication, indicating more effective problem-solving. She states,

> Things are much better, and so, she [the special education chairperson] kind of leaves things to me now, and I'm the one who's taking initiative and I inform her of things. And if she does not get into it, then that's fine, then everything's working out fine.

Ester's examples suggest that communicating for the purposes of collaboration or problem-solving may be perceived differently by different educational team members, and may have different outcomes. However, she discusses her continued use of the same strategy but does not

fully explain her decision-making process. Her decision to continue communicating with the administrator despite its ineffectiveness could be related to intrapersonal demands Ester felt about the students' lack of access to different classes (Dean & Pollard, 2013). Additionally, it is unclear why the strategy was less successful at Ester's school than at Whetstone or Sarah's schools. While this study did not ask the opinions of others on the educational team, it is possible that the special education administrator with whom Ester worked in the past had concerns about Ester moving beyond a strict interpreter role, similar to Antia and Kreimeyer's findings with special educators and administrators (2001). However, Ester's description of her relationship with the new chairperson suggests that not all administrators share this concern. Further research is necessary to map current trends in this area.

English Language (EL) teachers, who have experience teaching hearing refugee and immigrant students, are another group of educators with whom some interpreters in this study strategically communicate. Geri notes that she uses communication to problem-solve and collaborate with EL teachers, particularly in asking about resources to help her communicate with DHH refugee or immigrant students' parents. She explains that she often will collaborate with EL teachers if she is confused about something that the parent of a DHH refugee or immigrant student has said or done. She also describes a form EL teachers provided her after she asked them about how to communicate with DHH refugee and immigrant students' parents:

> So it's, it's literally just pictures, and it's like, "I was sick today," and it shows like a little emoji face with the thermometer sticking out, and like, sweat or something and then I forget what the other pictures are, but you know, I think one of them is like a sad face like if somebody died in the family and they're going to a funeral, so it's got like a few

little pictures on it, and they can, parents can just circle which one and then just sign their

name at the bottom, you know, write the date at the top.

Geri's descriptions of her communication with EL teachers indicate that she views their

knowledge of other cultures and languages and their experience with parents who do not

communicate in English as a resource. As such, she may align herself with them in interactions

outside of interpreting, asking for their help and resources, to better understand the information

parents may provide the educational team about the student (Llewellyn-Jones & Lee, 2013). In

light of the unique educational needs of DHH refugee and immigrant students which relate to

their identities as refugees and immigrants, EL teachers - despite the fact that they typically work

with hearing students - may be better equipped than general-education teachers or DHH teachers

to problem-solve and collaborate about some aspects of a DHH refugee or immigrant student's

education (Akamatsu & Cole, 2000a; Akamatsu & Cole, 2000b; Faltis & Valdés, 2010). It is

unclear, however, whether communication with parents is a responsibility Geri has been given or

has taken on, who has made that decision, and why. It is also undetermined how Geri's access to

this knowledge or her collaboration with EL teachers impacts the student(s) involved.

Not all interpreters in this study, however, find EL lessons amenable to DHH learners.

Whetstone, for example, notes that she struggles to work in EL classrooms in which spoken

English, including pronunciation and recitation, are emphasized and DHH refugee and

immigrant students are "not getting half of it." Her comments indicate her preference toward not

having DHH refugee and immigrant students in these classrooms, and therefore toward not

needing to communicate regularly with EL teachers.

The discrepancy between Geri's and Whetstone's experiences with EL teachers indicates

that individual decision-making processes may play a role in the use of this strategy. Geri

appears to see the EL teachers as resources for breaking down linguistic and cultural barriers with parents. Her decision to use communication strategies can be understood through how she manages her role-space (Llewellyn-Jones and Lee, 2013). While she is not interpreting for them, Geri is working with EL teachers, and aligns herself with them through her communication with them (Llewellyn-Jones and Lee, 2013). While Geri works with EL teachers to problem-solve and collaborate on questions about the DHH refugee or immigrant student and the student's family, Whetstone appears concerned with the lack of access DHH refugee and immigrant students have to some activities in the EL classroom. As such, she advocates to the educational team that placement in an EL classroom may not be appropriate for a DHH refugee or immigrant student. Her strategy shows strong alignment with the DHH refugee and immigrant students for whom she interprets, as she shows concern for their access to classroom activities (Llewellyn-Jones and Lee, 2013). The impacts of decisions about EL classroom placements on DHH refugee and immigrant students, however, are unknown.

Interpreters in this study also communicate with other interpreters in strategic ways when working with DHH refugee and immigrant students. Ester mentions that she communicates with other interpreters in testing situations to discuss the meanings of words and problem-solve how to interpret test questions without indicating the answers. Whetstone also mentions discussion with other interpreters as an important aspect of her work with DHH refugee and immigrant students. She notes that they regularly communicate to collaborate and problem-solve:

> Oh yes, we definitely communicate as a team, because that's the only way to really be effective, because we don't all work with the same student. So, we're all working different classes with students and we need to have the same approach or it won't be effective.

Her concern that all interpreters must use the same approach suggests that the interpreters in her district share a goal of collaboration, which is achieved through communication with the educational team as a whole. The way in which Whetstone describes her team working together is an example of the collective interpreting team ensuring that their alignment with the DHH refugee and immigrant students is similar (Llewellyn-Jones and Lee, 2013). Further, such collaboration may be a control for managing attempting to provide similar services across a variety of specific classroom environments (Dean & Pollard, 2013). The interpreters may each give conversational feedback, use similar interpreting strategies, and give students what Whetstone calls "hurdle help," without overstepping boundaries determined by the educational team and doing things for them that the team has determined the student should do on their own.

Sarah also discusses communicating with other interpreters to collaborate and problem-solve issues that arise with interpreting, particularly relating to interpreting sign choices and gauging student comprehension. She explains:

> I think I told you that there's another interpreter who works very closely with me, same kids, we split them half the day. So, I have some in the morning, she has some in the afternoon, or vice versa. So, usually, she's who I go to first, because it's like, "Well, did you all talk about this yesterday, what signs you use?" or "How did you explain it? Cause they're looking at me like I have three heads." Or whatever, you know, whatever problem, her and I can usually hash it out.

Sarah's strategy of asking about sign choices or how the other interpreter explained a concept can be understood as a control for having two interpreters working at separate times in the same school environment (Dean & Pollard, 2013). Sarah uses this communication strategy to facilitate continuity of sign choices, which will be specific to the class subject or environment.

One interpreter in this study reports that her educational team now includes a Deaf interpreter (DI), and that determining classrooms in which the DI will work requires communication. Whetstone notes that she has used communication to advocate for the DI to be placed in a classroom in which she believed she was not providing appropriate services for a DHH refugee or immigrant student. She states:

> [Sometimes] it's obvious that there's someone else that could be doing a better job, and if not a, another hearing interpreter, then there needs to be a DI in that room. And we're definitely, our teacher of the Deaf and the interpreters are very vocal about that. I am NOT going into that classroom without a Deaf interpreter or someone else who thinks they can do better because it is not - I'm not gonna sit through a classroom and know the student's not getting what I'm trying to give them. That's not gonna happen.

In this example, Whetstone as well as other educational team members use communication to voice concerns about what they perceive to be an ineffective interpreting situation. Through this communication, the team can collaborate to problem-solve in that situation, finding another hearing interpreter or a DI to team with the interpreter for more effective communication.

Whetstone also reports using communication as a strategy for problem-solving with her district's family advocate. She states that she provides the advocate with information about her observations of DHH refugee and immigrant students, as well as other students. She notes the kind of issues the family advocate can help the educational team to problem-solve:

> There's also a family advocate in our building, who is an angel, and it's so nice that we have her, because a lot of our kids are homeless, or aren't eating, or, any type of just, you know, basic security-level stuff. She makes sure that the kids are taken care of. And so, some of the things that happen that might be more confidential or have already been

given to the teacher of the deaf, and haven't really been fulfilled, I-I, it's not the, they

won't tell you that (air quotes) this is what you're supposed to do, but I'll go to the family

advocate because I have rapport with her, and she can make things happen without the

case manager being involved.

It is important to note that Whetstone uses communication strategies with the advocate on an

individual level, not with the entire educational team. This occurs when she feels that other team

members may not be the appropriate people with whom to share sensitive information. One

example of this kind of information is an experience Whetstone describes in which a DHH

refugee student informed her that she was pregnant, but did not want her teachers to know.

Whetstone explains her decision to tell the family advocate:

But she [the student] needed things, she kept asking me about WIC and asking me about,

like, all these things, that like, obviously, I'm not - that's not what I'm here for. And so for

that, um, I went to the family advocate, because it was a confidentiality thing, and

connected them together, so they could they could figure that all out.

In this situation, Whetstone determines that the questions the student is asking her are not part of

her role as an interpreter, and identifies the appropriate person who can field these questions. Her

decision-making process may include intra-personal concerns for the student's wellbeing, as well

as inter-personal concerns about her relationship as an interpreter with that student and with the

educational team members, who have different roles and responsibilities in regard to the student

(Dean & Pollard, 2013). Whetstone determines that she is not the appropriate person for this

situation, as well as determining who is the appropriate person based on her awareness of other

team members' roles. It is unknown whether other team members would agree with this decision

or how much latitude Whetstone has to make this decision on the student's behalf.

Two interpreters in this study use communication as a strategy for problem-solving and collaborating with parents of DHH refugee and immigrant students. Parents are also considered members of the educational team (Boys Town National Research Hospital, n.d.-c). One interpreter, Whetstone, mentions that she does use strategic communication with parents such as conducting home visits, although she states that this is "very, very seldom though, because our DHH students already have a lot of contact between parents and teachers." Whetstone's comment seems to suggest that the purpose of communication with parents would be to foster relationships between educators, particularly teachers, and parents. As this is already occurring between parents and teachers, Whetstone may perceive doing home visits as an over-stepping of the boundaries of her role as an interpreter. Whetstone's hesitancy may be reasonable in light of the body of research focusing on the boundaries of the interpreter's role (Antia & Kreimeyer, 2001; Hayes, 1991; Jones, Clark, & Soltz, 1997; Seal, 2004; Winston, 2015). If administrators have not asked or required her to communicate with parents or to do home visits, they may prefer an interpreting role which is not "full-participant," similar to Antia and Kreimeyer's findings (2001). It remains unknown, however, whether interpreters doing home visits positively or negatively impacts DHH refugee and immigrant students' education.

In contrast, one interpreter in this study notes communication with parents as a strategy in her work with DHH refugee and immigrant students. Geri notes that she communicates with parents of DHH refugee and immigrant students with the goal of problem-solving when she believes that she needs information about the students. As noted above, she uses notes with emoji icons from the EL department, which are sent home with students to find out about absences due to illness, funerals, or other situations. She also uses communication tools such as Google Translate to write notes to parents in the students' agendas. She states that this was

helpful in a situation in which a family sent a DHH refugee or immigrant student to school with a seafood lunch without an ice pack. Using Google Translate to communicate in Spanish by writing in the student's agenda, Geri was able to explain the importance of placing an ice pack in a lunch containing seafood and solve the problem of the student potentially eating spoiled food.

Geri's comments also elaborate on her decision to communicate with parents. She suggests that families have vital information that may impact a DHH refugee or immigrant student and that may be important for those working with the student to know. She states:

Communication with the parents, I think that's really important to know, you know, if something's going on at home, you know. I don't want to be too harsh if they've had, you know, like, a family member get deported, or if something has just happened culturally that maybe I don't understand, but I still want to be aware of it. So yeah, communicating with the parents is, is paramount.

Geri's explanation indicates an awareness of the unique experiences of refugees and immigrants, including issues of deportation and cultural celebrations or events which may differ from U.S. cultural norms or go un-mentioned in mainstream U.S. media (Faltis & Valdés, 2010). Geri appears to recognize the limits of her multicultural competence and seeks collaboration with other educational team members, including parents and EL teachers, who may have these competencies (NMIP, 2000). Her continuous communication with parents is also partially in line with information from the Boys Town National Research Hospital (n.d.-c), which states that the parents and interpreter, as both are members of the educational team, should be involved in open communication with the teacher. While the site does not say that parents and interpreters should communicate with one another directly or frequently, it does note that communication amongst all members of the education team should be open (Boys Town National Research Hospital, n.d.-

c). Further study is necessary to determine how often interpreters and parents communicate with one another, either directly or as part of the larger educational team, as well as why they communicate with one another.

Interpreters in this study use communication as a key strategy for achieving the goal of collaborating and problem-solving with others on the educational team. This strategy helps interpreters work with educational team members, who can offer different resources to and who have different roles than the interpreter, impacting the services interpreters provide for DHH refugee and immigrant students.

Goal 2: Follow or alter Individual Education Plan.

Communication is also used as a strategy by interpreters in this study to achieve the goals of following or changing the IEP. The educational or IEP team, which legally includes the interpreter, must work together to plan and implement the IEP of each DHH refugee or immigrant student (IDEA, 2004; Boys Town National Research Hospital, n.d.-a). Interpreters in this study use communication strategically with the team in part to ensure that interpreters themselves are following the DHH refugee and immigrant students' IEPs. They also discuss IEPs with the educational team to ensure that the team follows IEPs and the laws that support them. Interpreters in this study also use communication as a strategy for making changes to the IEP.

Both Geri and Whetstone discuss how they communicate with IEP team members to learn expectations and accommodations for the students based on their IEPs. Whetstone describes the importance of communicating to understand the expectations of interpreters working with DHH refugee and immigrant students in relation to the IEP. She explains:

So, when it becomes difficult, and the deaf refugee student is reaching, like, struggles to the point of shutting down, we need to know, like, what is okay to do in terms of, like,

hurdle help and getting them through that, and what is just enabling them and giving

them things that they - the other deaf, or, well, the other hearing refugees aren't receiving.

Whetstone's comments suggest that she believes following student accommodations, including

not assisting students such that the students do not learn to do things for themselves, is important.

Geri also uses the information in IEPs, especially the goals set for students, to guide her work

with students. She states that she finds out "what their [the DHH refugee and immigrant

students'] goals are, what their objectives are, and I try to meet those to try to develop them …

so that hopefully we can have new goals and reach higher objectives." She incorporates

information from discussions about IEPs into her work with DHH refugee and immigrant

students, hoping to see them achieve IEP goals. Both Whetstone's and Geri's decisions to note

and follow accommodations and goals listed on the IEP may be related to the demands of the

educational environment. These demands include the legal mandate to follow IEPs as well as the

broader goals of the educational environment for students to learn, to improve skills, and to do

things independently (Dean & Pollard, 2013). Interpreters in this study use communication about

the IEPs to inform their work and to ensure that they are following the IEP requirements.

Interpreters in this study also indicated the importance of communicating with the goal of

ensuring that the educational team as a whole is following the IEP. Ester notes the importance of

discussion about students' IEPs and the role respect plays in these interactions in this statement:

And, um, I see now that most people who respect what I say and what, what - what we

need to do and what I need to do to make this happen, they still follow the law and the -

the compliance with the IEPs.

Her comments suggest that she uses ongoing communication to ensure that all of the educators

involved understand one another's responsibilities as well as the legal requirements inherent to

the IEP. Sarah notes an example of using communication as a strategy to work with other teachers to ensure that videos the DHH refugee and immigrant students watch have Closed Captions, as required by their IEPs and the ADA (1990). She says that although these students may not be readers at the level of the captions yet, she hopes that they someday will, so it is critical to "always to have them up there, just so they get that exposure." Her decision to advocate for captions is at least partly based on the intra-personal demand of her hope that the students will become proficient readers (Dean & Pollard, 2013). Whetstone similarly discusses that she works with other educators to follow IEPs and make classrooms more accessible, noting that "hopefully the teacher's willing and open to kind of accommodate" the DHH refugee and immigrant students. Interpreters in this study put effort towards communicating about IEPs with the educational team and making sure that IEPs are being followed, although the reasons behind these decisions are not always clear. Further research is needed to determine why and how interpreters determine whether others on the IEP team are following the IEP, as well as how these actions impact students.

Interpreters also used communication with the educational team as a strategy with the goal of altering DHH refugee and immigrant students' IEP documents. Interview results indicate that suggesting changes can involve a positive or negative interaction with other educators. Whetstone provides an example of a positive interaction with other educators that resulted in IEP changes as well as recognition of a learning disability in a student.

> So we, like, brought the teacher in, the teacher had seen that the test would like, was not
> the same type of work that the student is typical of providing, and the teacher was
> actually able to identify that learning disability. I think it's called - just - transference is,
> okay basically when someone looks up at the notes, they can see it, but the second they

go down to write it they lose some of that information. So a typical student can look at it (signs LOOK-AT-BOARD) and they remember words, five words maybe, write (signs (1h)WRITE) five words. After one [for the DHH refugee student] that's it. So that's a constant, so we were able to make accommodations and provide like, right in front of her resources instead of up and down and up and down.

In this case, Whetstone was able to use her observations as well as data from a test score to show another member of the IEP team. Rather than making the decision herself or attempting to "diagnose" the student, Whetstone brought her observations to the teacher so that the teacher could use this information in making decisions about the IEP (Boys Town National Research Hospital, n.d.-a). In this example, discussion between Whetstone and an educational team member resulted in changes in accommodations for the student.

Whetstone reports that she has also used communication as a strategy for convincing the educational team to alter an IEP to include a DI. She describes an experience interpreting with a Deaf refugee student, stating:

So, when she [the Deaf refugee student] came over, and I started interpreting for her I immediately was like, I am not providing any access for the student and this is not an appropriate pairing, and so someone needs to do something. And, like it was like, "What we do? Lalala" (mimicking colleagues), and I was like, "What about a CDI, like it seems an obvious candidate for a CDI," and we had to fight with the school district for about a year. And then, finally, we just wrote it (signs: (1h)WRITE) into the IEP. So, the IEP required this - the DI … Um, so we wrote it into the IEP that they required, at least for … like required content courses like English and social studies and all those things.

Whetstone's example shows her decision to advocate for another interpreter, particularly a DI, for a student based on a lack of effectiveness of her own interpretation. Further, her statement indicates that the district was unwilling to provide a DI without the support of the IEP, and as such, the team as a whole decided to alter the document. As this example shows, communication can be a powerful strategy for making changes to important legal documents like IEPs.

Ester's comments about IEPs show that not all interactions involving changes to IEPs involve positive communication amongst educational team members. She describes a situation in which she worked as the only interpreter in a classroom with five DHH students, some of whom were refugees or immigrants and one of whom had a vision disability. She explains how the interpreters believed that a team of at least two interpreters was necessary, and that this environment was not an appropriate placement for the student with vision loss, but others on the team disagreed. She states,

> When the IEPs came up, my co-workers and myself, we had to force ourselves into her IEP meeting because they would not want us to be there, they did not want to hear anything about anything okay? … So, and for us to be able to get in, and we felt that it was so important for this particular student, because this was not the least restrictive environment for her, and she needed to have another placement. And it took two years for this to happen, because nobody wants to listen to an educational interpreter.

Ester's example shows tension amongst those on the educational team. However, Ester had observed that the student was not experiencing an appropriate placement, as defined by the Least Restrictive Environment (IDEA, 2004). Therefore, she describes continuing to bring up the issue for two years until the team engaged communication, finally coming to a solution together for how to alter the IEP and improve the situation for the student. Although the other interpreters in

this study did not mention such tension relating to being an interpreter, negative views of interpreters, as noted in Ester's comment that "nobody wants to listen to an educational interpreter" may cause tension amongst some IEP teams with interpreters (Smith, 2015).

Goal 3: Foster student-teacher communication.

One interpreter in this study, Geri, reports using communication as a strategy in fostering student-teacher communication. She explains that she will teach classroom teachers a few signs, such as "LUNCH" and "BATHROOM," which teachers may then use during class. Geri reports that this strategy helps ensure that the student and teacher can communicate directly. Geri may be choosing to teach signs to the teacher to manage future interactions between the teacher and student, so that the teacher and student may communicate in a simple interaction directly rather than with an interpreter (Llewellyn-Jones & Lee, 2013). Such an interaction could foster conversational alignment between the student and teacher, a possibility which may have also factored into Geri's decision-making process. While this is a possibility, the impacts of such decisions on the relationship between students and teachers is currently unknown.

Theme 2: Communication with Student

Communication with DHH refugee and immigrant students emerged as a second theme in this study. All four interpreters in this study discuss ways in which they use communication as a strategy when working with DHH immigrant and refugee students. The interpreters use these communication strategies with the goal of fostering the linguistic, academic, social, and emotional growth of the DHH refugee and immigrant students with whom they work. The larger strategy of communication is divided into several sub-categories, including a) modifying the interpreter's language use, b) taking on additional responsibilities, c) establishing and maintaining relationships with students, d) monitoring student comprehension, and e) fostering

students' self-esteem (see Table 4). The following sections will illuminate the ways interpreters in this study use the strategies mentioned above to accomplish their goal of fostering DHH refugee and immigrant students' linguistic, academic, social, and emotional growth.

Strategy 1: Modify interpreter language use.

Interpreters in this study describe modifying their language as a set of communication strategies with DHH refugee and immigrant students (see Figure 2). The following sections will elaborate on specific ways interpreters in this study discuss strategies used to modify their language when working with DHH refugee and immigrant students, including: altering sign language use, using visual aids, contextualizing information, and teaching language.

Use visual language and gestures

Interpreters in this study frequently mention changing the way they communicate with DHH refugee and immigrant students by increasing the visual and gestural nature of their sign language. Several interpreters in this study discuss ways in which they make their sign language use more visual and gestural. Whetstone, who sees her language use with DHH refugee and immigrant students as different than with other students, notes that "it becomes very, almost international style." Ester also mentions an "international" feel to her signing with DHH refugee and immigrant students, while Sarah describes it as akin to using "pantomime."

Several of the interpreters in this study describe more specifically how they modify their language to include more visual signs and gestures as a strategy in their communication with DHH refugee and immigrant students. Geri mentions using what she considers to be the more visual sign when multiple signs are available in this description of her language modifications:

I break it down as far as I can possibly go. I make a lot of things, I mime a lot of things.

Um, using a lot of classifiers as opposed to actual signs, like "walk" (signs "WALK"

with flat hands representing feet) as opposed to like walking on two feet (signs DCL v

'person walking'), you know that's a lot more visual for them.

Geri indicates her preference toward more iconic signs when making decisions about modifying

her language use. Whetstone similarly notes a goal of using language that is more visual in

nature. In describing how her signing becomes more "international" in its style, she states, "You

get down to a level that's completely visual and then, as they get the concept (signs: DCL

"group/unit") you can expand on the vocabulary." Her description suggests that she first

approaches the work without specific signs or fingerspelling for vocabulary being used in the

classroom. Her perception of students' understanding of the topic and of the signs she is using

may be some of the demands Whetstone considers as she makes these decisions (Dean &

Pollard, 2013). As students grasp the concepts, Whetstone states that she then places more focus

on vocabulary, alternating her strategy based on her observations. Further study is necessary to

determine whether these strategies are effective for DHH refugee and immigrant students.

Sarah describes a different set of strategies in her modification of language when working

with DHH refugee and immigrant students. She describes her strategies for making language

more visual and gestural in this statement:

And so, breaking it down to what's the goal of the lesson, what are the main points, the

vocab is typically the thing I focus on. And then, I use a lot of gesture and mime,

classifiers, anything to make it as visual as possible. They are very low readers, so a lot of

times fingerspelling is sort of iffy, especially those long science words or social studies

words, and so it's like, how can I get that concept across that maybe doesn't involve the

fingerspelling? But that they can understand what the - what's happening in the lesson

and at least be able to talk about the lesson if they get called on.

Sarah's decision-making process shows that she also considers several demands while interpreting for these students, including the goal of the lesson and of the educational environment that students learn content and respond to teachers' questions (Dean & Pollard, 2013). Further, Sarah states that fingerspelling may be difficult for this student population, and that she modifies her language to increase visual signs and gestures and to reduce fingerspelling. It is unclear whether this strategy changes as students' receptive language skills improve, or how the strategy of reducing fingerspelling may impact students, either their comprehension of the lesson or their linguistic development.

The choice interpreters in this study make to make their sign language more visual and gestural stands in juxtaposition to many educational environments, which are known for using manual communication systems and English-ordered signs (Marschark, 1998). However, the current available research on DHH children, including children born in the United States and refugee and immigrant children, suggests that the students with whom these interpreters work may have delayed language acquisition or even language deprivation (Akamatsu & Cole, 2000a; Akamatsu & Cole, 2000b; Marschark, 1998; Marschark, Lang, & Albertini, 2002; Henner et al., 2012; Humphries et al., 2012; Skotara et al., 2012). The comments interpreters make which indicate their perceptions of students' language access, acquisition, and use parallel these findings. Ester notes that the DHH refugee and immigrant students with whom she works arrived "extremely language deprived," while Geri comments that one student "didn't come with a lot of language." Sarah mentions a student who, when he started school, had "no language, no sign, no Spanish, no English, nothing," and Whetstone similarly mentions a student who she perceived to have "only home signs and no schooling." The interpreters' perceptions about students' language foundations appear to be an influencing factor in their decision-making about how to modify

their use of sign language. The decision to alter their signing style to include more visual and gestural features seems to follow the existing research on educational interpreting, which has shown that students need language foundations to learn academic content, and that interpreters often become the model for creating those language foundations (Boys Town National Research Hospital, n.d.-b; Monikowski, 2004). Interpreters in this study appear to change the way they sign with DHH refugee and immigrant students, bearing in mind their perceptions of the students' language foundations and the link between language and learning.

Some interpreters in this study mention altering their language use in other visual ways, particularly their facial expression. Geri and Whetstone both describe the importance of facial expression, a key part of ASL grammar and affect, when working with DHH refugee and immigrant students. The ways in which they modify their facial expression, however, differ. Geri notes that she uses her eyebrows as a visual cue to for the student to differentiate the teacher's comments from those of other students in the classroom when working with DHH refugee and immigrant students. She explains how she shows the teacher's authority in the classroom:

> when I'm signing for the teacher, I tend to, you know, I have to show that authoritarian look, you know, so I put on my (signs (1h) EYEBROWS-FURROWED) "angry eyebrows" as he calls them … You know, I have to make sure I have that stern face, and make sure that he knows that this - this teacher is, you know, they're higher up there, they have more authority, you know, not-not that it's like a friendly little chat or whatever. But, you know, the teacher is who leads the classroom, so I definitely have to raise my register on moments like that, so yeah.

Geri's explanation shows a strategic use of eyebrows and facial expression to visually indicate the authority of the teacher in the classroom, possibly during a disciplinary situation. In this

example, Geri uses her facial expression as a form of interaction management (Llewellyn-Jones & Lee, 2013). While she does not "intervene" in the interaction per se, she makes choices to help the student identify the teacher's role and authority (Llewellyn-Jones & Lee, 2013).

While Geri uses significant facial expression in this example, Whetstone explains that she will often use less facial expressions with DHH refugee and immigrant students. She states, "I think it's important that they [DHH refugee and immigrant students] feel safe first and foremost and that, as an interpreter, you're very - your body language and facial expressions are made pretty neutral." Whetstone's comments indicate that she worries that more pronounced or highly visual facial expressions may make DHH refugee and immigrant students feel uncomfortable or unsafe. Notably, Whetstone mentions having a background in trauma-informed care in her interview. It is possible that this background influences the decisions she makes in modifying her language when working with DHH refugee and immigrant students.

The strategies interpreters discuss about making their sign language more visual and gestural relate to Colonomos's model of interpreting, particularly the composition stage (2015). The interpreters plan and adjust their language when producing the message for the context and audience. While they may not directly consider this model, the interpreters in this study consider the context, the speakers, and the language levels they perceive of the DHH refugee and immigrant students receiving the interpreted message (Colonomos, 2015). They make these decisions to achieve several goals including improved social, emotional, linguistic, and academic outcomes for DHH refugee and immigrant students.

Use visual aids.

Using visual aids while interpreting or interacting with DHH refugee and immigrant students is another way in which interpreters in this study report modifying their language use.

Interpreters in this study report using a variety of visual aids in the classroom as a communication strategy to enhance communication with students, including showing pictures, drawing with students, and using classroom resources.

Several interpreters mention the use of pictures while interpreting or interacting as a communication strategy. Whetstone, for example, notes that she uses "language that's paired with pictures" in her work with DHH refugee and immigrant students. She explains how pictures, which she finds using the internet on her phone, help students as well as interpreters:

there's just some concepts that are not ... easily interpreted into a different language and culture, so you, having that is, I think, crucial for an interpreter that's working with a deaf refugee, because you need to be able to, when you have a brain - brain block or when, when there's like just this cultural barrier that you can't navigate (signs "GET-OVER"), to have the pictures (mimics showing picture) is crucial.

Whetstone indicates that she uses pictures in response to demands of cultural barriers between herself and the student and of concepts which are difficult to interpret. These demands are inter-personal, between her and the student and their respective cultures, as well as intra-personal, when Whetstone determines what is difficult for her to interpret (Dean & Pollard, 2013). She uses pictures to achieve the goal of improved educational outcomes.

Sarah states that she uses an iPad at work for a similar purpose to Whetstone's. She reports searching for pictures, videos, and maps, describing her use of visual aids as "Any way to bring it to them so they can see it." Geri states that she uses a picture as a reference when asking students if they have seen something before. These examples indicate that technology is frequently used with DHH refugee and immigrant students because pictures can be accessed easily and quickly. Notably, the interpreters in this study mention their use of pictures when they

perceive that the student does not understand a sign or concept. This strategy may fit with the "Z" model of interpreting, in the composition and target language production stages. As part of these final stages of producing a statement, they find pictures and videos to enhance or clarify what they are trying to communicate to the DHH refugee or immigrant student (Colonomos, 2015). In this way, they use visual aids as a communication strategy to help them achieve goals of improving students social, emotional, linguistic, and particularly academic outcomes.

Sarah and Geri also mention the use of drawing as a visual aid with DHH refugee and immigrant students. Geri notes that drawing may be especially helpful as a communication strategy when students are new to the country. She gives this example of drawing with a student:

> And, um, fortunately, in one of our classrooms, the teacher painted the desk with, like, whiteboard paint. I can use (signs (1h) WRITE) dry erase markers on the desks. You know. I take a turn, he takes a turn, I take a turn and, you know. I mean, he's got more language now, but back when he didn't have as much, it was a wonderful tool for us to use in that respect.

Geri notes the use of interaction through taking turns drawing as part of the strategy she uses. She also highlights the connection between drawing and language when she states, "whether or not students have language, they can draw, they-they can hold a pencil, they can - even stick figures are better than nothing." It appears that Geri is concerned about the delayed language acquisition she perceives in the DHH refugee and immigrant students with whom she works, and that drawing is one strategy she uses to achieve the goal of developing the student's language skills. While the teacher's painting of desks for the purpose of drawing indicates that the teacher approves of such interaction between Geri and the student, it is unclear who determined that Geri should be taking on this task, as well as in what ways it impacts the student.

Geri and Sarah also note the importance of using classroom resources as visual aids. Sarah notes that papers the teacher passes out can become visual aids in the classroom. She explains how she links words on the paper with signed concepts in this example:

> And then any, any papers the teacher hands out, like, "That's the word," and trying to show the word that they're talking about and then give it a conceptually accurate sign - not a sign, but, like, a classifier or something for that class so that they know, "Oh we're talking about this big, long word, and it looks like this," or whatever.

Sarah's use of classroom resources such as handouts as visual aids is an example of a strategy also found in Smith's study, which indicated that interpreters find and utilize available resources (2015). Here, Sarah uses a worksheet available in the classroom to foster a connection between written English and ASL as she works with DHH refugee and immigrant students, working toward goals of linguistic and academic success.

Contextualize Information.

Contextualizing information during interactions is another strategy interpreters in this study discuss in relation to their work with DHH refugee and immigrant students. According to Janzen and Shaffer, contextualization is a naturally occurring feature of discourse as a strategy for managing non-shared knowledge amongst parties in an interaction (2008). Contextualization is also part of the decision-making processes of interpreters when they interpret, as they make conscious choices about how to frame a message and which information may or may not be shared between those in an interaction (Janzen & Shaffer, 2008). Interpreters in this study report using contextualization, which has been erroneously called "expansion," for further explaining and clarifying information with DHH refugee and immigrant students. Descriptions of contextualization which emerged from interviews in this study indicate that it goes hand-in-hand

with using visual language and gestures, as interpreters choose concepts to describe in detail using highly visual language and gesturing actions. For example, Sarah discusses her use of contextualization as well as of altering her use of sign language when she states,

> There's just a lot of expansion and a lot of, just, clarifying. You know, like, lag time like you wouldn't believe when it comes to things like that, because I just have to break it down as - as low as I possibly can and then build it back up from those concepts that I've started.

Here, Sarah notes the extra time that contextualizing information can take; however, she also indicates that she believes it is necessary in situations in which she has to "break down" the concept and the language she is using with the DHH refugee or immigrant student. Whetstone also explains that the timing of contextualizing can be an issue for her. She states:

> I would say one of the most obvious and most difficult [aspects of working with DHH refugee and immigrant students] is keeping up with classroom content, um, in regards to, concepts that aren't there yet and having to expand on concepts that aren't there yet while other things are being discussed. And having the, like processing time, the lag time to be able to catch a student up. And then it becomes less like interpreting and more like, a tutoring situation, which obviously in educational interpreting does happen, but it - happens more frequently with a deaf refugee student just because they don't have the same background knowledge that other students have in the classroom. So that's definitely a big one, which information is pertinent, because obviously you can't expand every single concept that they don't understand, but you have to pick what's relevant to the current topic, and to the assignments that are assigned, etcetera, and make sure that they are having the same access as the other students in the room.

Whetstone's explanation of how she decides when to contextualize information aligns with Leeson's suggested interpreting strategies of effectively using processing time (2005). However, Whetstone notes not only the difficulty in the timing of expansions, but also in deciding what information to expand upon with the student. She notes that the DHH refugee and immigrant students may not have the same background knowledge as their peers, but that it is not possible to expand upon every concept which the student does not know. This difficulty lies at a deeper level than timing, and is also, as Leeson (2005) as well as Janzen and Shaffer (2008) suggest, shaped by the context of the interpreting situation, including the student's background knowledge, and Whetstone's understanding of her role in the classroom. However, despite the difficulties inherent in contextualizing information, interpreters in this study do contextualize information as a communication strategy for improving students educational outcomes.

Strategy 2: Take on additional responsibilities.

Interpreters in this study report taking on responsibilities in addition to interpreting work as part of their communication strategy with students. These responsibilities include supporting DHH refugee and immigrant students' acclimation to the U.S. school system and the greater U.S. culture, as well as teaching them ASL and written English. These responsibilities support interpreters' goals of improving students' linguistic, academic, social, and emotional outcomes.

Support student acclimation.

Interpreters in this study discuss supporting students as they become acclimated to the United States, including the school systems, the wider U.S. culture and knowledge systems, and English. Several interpreters in this study mention working with students to acclimate them to the school environment. For instance, Sarah asserts that some DHH refugee and immigrant

students with whom she has worked arrived at the school not knowing expectations of the school environment. She recalls:

> Well, we like - for our two who most recently arrived in the United States, just knowing how to do school. They did not go to school in their home country, or if they did it was spotty and not, you know, not beneficial to them. So knowing that we're gonna sit here for a period of time, and you're expected to write, you know. These funny-looking things are letters, those are numbers, like. Spend-spending weeks just how to do school and then trying to get vocab in, so they could get needs and wants met. And then aside from we're sitting in this teacher's classroom and she's teaching us science, like forget that, science is not important right now, you need to know how to do school, and to get your needs and wants met, and once we had kind of a basis, then we could do concepts and vocab related to the content.

Sarah's description indicates that before she believes she can do any interpreting, she must first help refugee or immigrant DHH students become acclimated to the school, including teaching them school-expected behaviors and what to expect in the school environment.

Geri shares an example of a student who appeared unaware of age-appropriate behavior and appropriate classroom behavior in U.S. schools in her locale. This student was a middle-school aged boy who repeatedly brought and played with toys during class lessons. She explains how she worked with the student to help him become aware of school expectations as well as of what she perceived to be age-appropriate behavior, telling the student:

> "Because, you see nobody else has toys and, you know, nobody else is bringing their toys to class, nobody else is drawing during class, so you have to be ... like them. You know, big boys, big boys - they don't, they don't do that kind of stuff. You can you can

play with your toys on the bus, but in school, when you're supposed to be working and learning and being a big boy, you have to, you know, you have to make sure your toys are in your backpack still, you can't play with your toys."

In this example, Geri makes decisions based on her concern for the student's understanding of behavioral norms in the classroom, as well as her concern that the student is not acting in a way that she considers appropriate for his age during class time. However, while her decision may in some ways foster the student's acclimation to the classroom and to social situations with his same-age peers, it may also close opportunities for him to learn language and concepts through play. Both the positive and negative impacts of such decisions on DHH refugee and immigrant students must be considered.

Sarah and Geri's perceptions that DHH refugee and immigrant students may not already be acclimated to the U.S. educational environment are supported by current research. According to Akamatsu & Cole (2000b), DHH refugee and immigrant students may have never experienced formal education, and may not have had the language to access any available educational opportunities. As such, DHH refugee and immigrant students who arrive to the U.S. may be experiencing a formal school environment for the first time, needing not only classroom instruction but also support in becoming acclimated to the U.S. school system.

While Sarah's comments indicate that interpreters may have significant involvement in this acclimation process when they first arrive in the United States, students may eventually learn cultural norms and interpreters' involvement in teaching students appropriate behavior may change over time. As Whetstone notes,

And as you, and as the Deaf refugee gets more acclimated, and they get a stronger grasp on ASL, and they can advocate for themselves a little bit more, you obviously want - it's almost like that elementary school to high school thing, where you back out.

Whetstone's comment suggests that she is aware of students' potential lack of knowledge of the norms of the U.S. school system, but also that she modifies her strategy of supporting acclimation as the students become acclimated to their new environment.

Interpreters in this study also support the acclimation of DHH refugee and immigrant students to the greater mainstream U.S. culture. Ester provides this support by talking with students when they ask her questions. She mentions a tendency amongst DHH refugee and immigrant students to ask her questions that may or may not be related to the academic topic at hand. She notes instances in which the Mexican immigrant DHH students with whom she works have asked about negative news reports about Mexico and Mexican people. She states,

My seniors now, they are the students who are asking me about these things, because they don't understand how this is related to them. Because they don't feel that they are bad. They don't feel that their parents are bad, and why is it that people have this view of Mexicans? What's wrong with being a Mexican person?

Ester's interview indicates that she communicates with students when they bring these issues up to help them increase their understanding of mainstream U.S. culture. Ester uses her own multicultural competence to increase the DHH refugee and immigrant students' awareness of their culture as well as of the new culture into which they are being immersed (NMIP, 2000).

It is noteworthy that Ester is an immigrant herself, and frequently relies on her own immigrant experiences to predict where students will need more support with acclimation to U.S. culture and to English. She notes that she has experienced stereotyping, and calls on that

experience when students bring up their own experiences of being stereotyped. These experiences may become an intrapersonal demand on her, in which she decides to talk with students about their experiences (Dean & Pollard, 2013). Ester also reports using her own experiences to know where students may experience pitfalls, and intentionally provides support in these areas. For example, she notes that context clues are difficult for non-native English users to comprehend, including DHH refugee and immigrant students. She explains:

> I think probably one of the biggest myster- mysteries for D/deaf students is, how can you get context clues if you don't understand what it said? But, a person who's never encountered this challenge to, to really, trying to learn another language, uh, you don't understand why it might be difficult to understand context clues … So, I assume that I am a step ahead, because of my long experience with this thing. So I can foresee when they're gonna have problem[s]. I jump on those problem areas, that I think they're gonna have problems with because those are the exact same things that I had problems with. So, I can help them conquer that.

Ester anticipates areas in which students will struggle, and states that her own experience with acclimating to the English language and understanding context clues guide her in supporting students with their own acclimation. In using these communication strategies, Ester as well as other interpreters in this study work to help DHH refugee and immigrant students become acclimated, with the goal of improving the students' outcomes in their new environment.

Teach language.

Another additional responsibility interpreters in this study indicate taking on is that of teaching language to DHH refugee and immigrant students. Geri, Sarah, and Ester mention teaching or tutoring both written English and ASL in this study. For example, Ester discusses

how she shows students both ASL and English as she works, stating, "I am making the connection – ASL, English, ASL, English, all the time." Geri notes that teaching signs is part of her everyday work. She explains:

> I teach them appropriate signs, I teach them how to walk quietly in the hallway, I, you know, teach them this and that, just all sorts of things. And if I have any available time with my students, we're working on language, we're working on concept building, and. You know, just how to - how to be independent.

Geri's explanation indicates she uses time that the teacher is not actively using to focus on teaching language as she communicates with students. As having language foundations is a prerequisite for learning through interpretation, Geri may be using this strategy to build the students' language foundations and to facilitate the students' interpreted education (Monikowski, 2004, as cited in Winston, 2015). It is not clear, however, whether she is taking on these responsibilities on her own or as a result of an educational team decision. Additionally, it is not yet known how such language building impacts DHH refugee and immigrant students.

Two interviews in this study indicate that these interpreters feel a responsibility to be a language model or even teacher for DHH refugee and immigrant students. Geri notes, "I'm responsible for a lot of their language development, so in that respect, I feel like a teacher." These findings are corroborated by research since the 1990s, which has shown that interpreters take on several responsibilities in addition to interpreting (Antia & Kreimeyer, 2001; Hayes, 1991; Jones, Clark, & Soltz, 1997). However, as Winston (2015) points out, interpreters may be language teachers by default, as they perceive gaps in the students' education and seek means to fill them. Whether interpreters are the appropriate people for this work and how such teaching affects students positively or negatively are areas for future discussion and research.

Ester's comments regarding the strategy of teaching language suggest that she feels a responsibility for the language development of the DHH refugee and immigrant students with whom she works. Of these experiences, she says:

So, they were extremely language deprived. And, so, a lot of my energy went into teaching American Sign Language, so they could have a platform, kind of a base, something to understand academic material. So, in four years, they have gone from very basic to pretty advanced American Sign Language. But it also means that I have - as soon as I've seen an ungrammatical sentence, I'm there correcting, correcting, correcting, correcting. But it has not been based on their background, per se. It has been based towards an ideal of them having a language for the future.

Ester notes here not only how she communicates with students to teach them language, but why she takes on this additional responsibility. She bases her decision to teach language on her perceived need for the students to improve their language for the future. This decision also shows her goal of improved linguistic outcomes for students.

Ester's perceptions of the language levels of the DHH refugee and immigrant students with whom she works parallel the small body of research on this student population. As previously mentioned, many DHH refugee and immigrant students have been exposed to multiple languages and have lacked access or exposure to sign languages, resulting in delayed language acquisition (Akamatsu & Cole, 2000b). Perhaps because of this, Ester focuses on not only interpreting but on teaching language as one of her strategies for working with DHH refugee and immigrant students.

Notably, Whetstone is the only interpreter in this study to not mention teaching language, whether ASL or English, as a strategy in her work with DHH refugee and immigrant students.

One reason for this may be that Whetstone mentions working with a Deaf interpreter (DI) several times throughout her interview. It is possible that at the district where Whetstone works, the DI takes on, either formally or informally, the responsibility of teaching DHH refugee and immigrant students language. The statements of the interpreters who do teach language, however, show that they take on this responsibility to improve outcomes, specifically linguistic outcomes, for DHH refugee and immigrant students.

     Strategy 3: Establish and maintain student-interpreter relationship.

     Interpreters in this study also mention establishing and maintaining relationships with DHH refugee and immigrant students as a strategy in their work. Interviews indicate that interpreters in this study work to build and maintain relationships in different ways, including talking with students about events or feelings. Establishing and maintaining relationships is yet another way interpreters work to accomplish their goals of improving DHH refugee and immigrant students' linguistic, academic, social, and emotional outcomes.

     The specific strategies interpreters use for establishing and maintaining relationships, as well as the reasons interpreters work to build these relationships, are varied and overlapping. For example, Ester explains how she builds relationships with students by discussing the students' experiences and family lives. She states:

> But of course, there are certain things that, I do take an interest in their experience. I take an interest in their huge families. I take an interest in their, their celebrations, and I always make sure that I ask them, "how was - how was this party, what did you do? What happened?"

Her interest in the students' lives, including how they may differ from her own, indicates that Ester uses her multicultural competence and her recognition of the students' unique identities to

build relationships. Further, Ester explains that the importance of taking such an interest in students' lives lies in the way that it helps build trust. She states, "the relationship with your students is extremely important for them to trust you and to actually absorb what you are trying to communicate with them about." Sarah also uses student experiences to build relationships. She mentions the example of discussing a video game with a student, which she uses as a way to build a relationship with him that also allows him to develop his language skills:

> Is it of interest to them, and like, can I relate on that? For the - for one little boy, he is really into video games and so, if I can somehow relate to him on a video game, like, "Yeah, I've seen that one," or I know what - you know, just to be able to kind of gesture through that video game with him, we had a shared experience or whatever, and that helped him, like, build some language there, too.

In this case, Sarah uses her experiences of a video game as well as the experiences the DHH refugee or immigrant student has had to create a shared experience of talking about the video game together.

Results also indicated that interpreters in this study establish and maintain relationships with DHH refugee and immigrant students out of concern for the students' abilities to communicate with their families. The strategy of establishing and maintaining relationships is used by interpreters in this study to mitigate potential issues with the DHH refugee and immigrant students' access to language at home. Geri discusses this concern in her explanation of why she sometimes places herself in a "therapist" role:

> You know, their families don't have ... don't have a great amount of knowledge in the field of deafness, so I would call it "involuntary ignorance," is what I would call it. I mean, because - because who else are they gonna talk with? Nobody at home. I mean,

they have their home signs, but they can't really delve into something deep, like "Oh, somebody hurt my feelings today at school, and I really didn't like it." You - they can't communicate that with their parents, so in that respect I'm kind of like a therapist so to speak, like "it's okay, calm down, you're gonna be okay," and just, you know, because I'm one of a few very few people that they can actually communicate with on a day-to-day basis.

In this example, Geri describes building relationships as a strategy to help students discuss their feelings, working toward her goal encouraging students' emotional development. Her decision to do so may in part be based on intrapersonal concerns about the students' home lives, including their abilities to communicate with family members (Dean & Pollard, 2013). However, Geri's decision to take on this responsibility could also lead students away from seeking other adults' advice, either at school or at home. The potential positive and negative consequences of these decisions for the students must be considered.

Ester's thoughts echo Geri's emphasis on the importance of building relationships for students who may not be able to communicate with their families. She points out:

You might be the only adult that they can have real conversations with, and conversations, they're powerful, because that doesn't only give them insight and understanding about how to see the world and make the connections between themselves and the world, but it also helps them to build higher level of thinking skills.

Ester's comments show the importance she places on building and maintaining relationships with the DHH refugee and immigrant students with whom she works and the multiple reasons she believes this is important. The perception of these interpreters that the students with whom they work cannot communicate with their families is supported by research on DHH refugee and

immigrant students and on DHH students from hearing families. As previously stated, DHH

refugee and immigrant students often have little to no spoken or signed language access

(Akamatsu & Cole, 2000b). This lack of language access includes access to communication with

family members, who may not have access to resources on sign languages or deafness. Research

has also shown that DHH students from hearing families do not acquire a language from birth,

and that many children miss critical thresholds for language acquisition and fluency (Humphries

et al., 2012; Skotara et al., 2012). As none of the interpreters in this study mentioned that any of

the students with whom they worked have Deaf parents, it is likely that the students' parents are

hearing and that the students may have experienced complications with language acquisition.

Establishing and maintaining an interpreter-student relationship may discourage the students

from talking with other adults, but does ensure that there is at least one person with whom the

student can communicate directly, even if no one at home is able to do so. Further, establishing

these relationships may facilitate the interpreters reaching their goals of improved academic,

linguistic, social, and emotional outcomes for DHH refugee and immigrant students.

Strategy 4: Monitor comprehension.

Interpreters in this study monitor the comprehension of DHH refugee and immigrant

students as another strategy used during communication. Ester comments that the students with

whom she works do not always understand concepts fully, noting, "They cannot see the whole

picture. They have a hard time to make connections." To help students build connections and

comprehension, Ester states, "I ask them to apply the information in sentences, what it means,

everything, and so scaffolding back and forth, back and forth, so they can make the connection."

This approach is similar to what is suggested in current research on DHH refugee and immigrant

students. Guardino and Cannon (2016) suggest that the focus for DHH refugee and immigrant

students should be on developing language and communication skills while also developing an understanding of academic content, all in a shortened time frame. The strategies that Ester is using of monitoring comprehension through asking students to discuss and apply information facilitate her goal of helping students develop linguistically and academically.

Geri notes that she will ask DHH refugee and immigrant students questions to help her monitor their comprehension of concepts. She reports using this strategy particularly often with a DHH immigrant student who was still learning sign language and often forgot signs. She says that she asks, "You know, (signing and speaking) "this is what it means, do you understand, is it clear?" You know, (signing and speaking) "you tell me again, you explain to me again what I said. Okay, so you understand?" Geri's decision to check for comprehension goes beyond monitoring her interpretation to checking for understanding of content and of specific signs. While it is not clear that the rest of the educational team knows Geri is checking for comprehension in this way, her strategy mirrors current practices for working with DHH refugee and immigrant students, including Pizzo's suggestion of having students use language expressively as a learning technique (2016).

Whetstone also reports monitoring the comprehension of DHH refugee and immigrant students, as well as using her observations to determine whether a different interpreter should work with the student. She states that the student's facial expressions and reactions are key to monitoring comprehension, noting, "you can see the student's face there's like, the face is pretty flat and things that are supposed to be funny aren't funny, or, um. Things that are supposed to be serious aren't serious." These markers indicate to Whetstone that the student is not understanding academic content or social interactions in the classroom. Whetstone states that a lack of comprehension is an indicator to her that another interpreter is necessary, either another hearing

interpreter who interprets the class instead of her or a DI who interprets the class with her. This strategy of monitoring the student's comprehension during communication to determine that they need a different interpreter, particularly a DI, is unique to Whetstone's interview. Her interview indicates that she has deep concern for students' educational outcomes that strongly impacts her decision-making, even such that she will state when she believes she is not an appropriate interpreter match for a student. She uses a variety of communication strategies including monitoring comprehension and basing her decisions off of observations of student comprehension to facilitate students' progress toward her goals for them of linguistic, academic, social and emotional growth.

Strategy 5: Foster student self-esteem.

Fostering self-esteem in DHH refugee and immigrant students is another communication strategy that emerged in this study in Ester's interview. Ester mentions concerns about DHH refugee and immigrant students' self-esteem, stemming from their identities as D/deaf or hard of hearing people as well as from their status as immigrants or refugees. For example, she focuses on fostering students' self-esteem related to their D/deaf or hard of hearing identities in this example of how she talks with students about ASL and Deaf culture:

> So, I try to, to make them … proud of being able to speak American Sign Language, and have Deaf culture. But it's very oppressed in their native, so I hear many times, "Oh, ASL, it's so bad, it's so ugly, and it's not a good language," I hear a lot of these things. And, I say, "Who says that?" "I don't know." But I could, you know, it's what, discussion that is around them.

Ester shows concern for how the students' families talk about deafness and sign language, and fosters students' self-esteem as a communication strategy for mitigating negative perceptions

students may have about themselves as D/deaf and hard of hearing people. Her response to these perceived concerns is supported by research. Research has shown that DHH students may struggle socially and emotionally in mainstream settings (Marschark, Lang, & Albertini, 2002). However, as Marschark (1998) notes, DHH students with positive attitudes about their communication have higher levels of academic success. Ester's choice to foster students' self-esteem, including encouraging pride in their deafness and in their language use, shows awareness of these concerns. Her strategy of building self-esteem aligns her conversationally with the students as she shows support for their language use and their identities as D/deaf and hard of hearing people (Llewellyn-Jones & Lee, 2013).

Ester also indicates that she fosters DHH refugee and immigrant students' self-esteem when they bring up issues related to their identities as immigrants or refugees. She sets forth self-esteem as one of her highest priorities in interpreting, stating:

My top concern is to support them to feel confident and comfortable in their own skin. And they're just... good. Perfect. The way they are. Doesn't matter if you're D/deaf, doesn't matter if your Mexico[an], it doesn't matter what. You are fine, the way you are.

Notably, Ester is the only interpreter in this study to mention fostering self-esteem as a strategy in her work with this student population. As an immigrant herself, it is possible that Ester was more aware of or placed more importance on the goal of student self-esteem. Ester's comment that she has experienced stereotyping and that she uses these experiences when working with refugee and immigrant students suggests that she may be more sensitive to issues of stereotyping and self-esteem that the students experience. She may therefore feel a strong sense of alignment with the students, as well as an intrapersonal demand of recalling her own experiences and wanting to support the students through their experiences (Llewellyn-Jones & Lee, 2013; Dean

& Pollard, 2013). More research is needed to find whether there is a link between interpreter immigrant status and the strategy of fostering student self-esteem. Ester uses her experiences to foster self-esteem in the DHH refugee and immigrant students, a strategy which may help her achieve her goals of improved social and emotional outcomes for those students.

Minor Theme 1: Communication with Student Peers

The first minor theme in this study is communication with student peers (see Table 5). Interpreters in this study report strategically communicating with peers of the DHH refugee and immigrant students to make students feel comfortable while socializing through an interpreter or to help students communicate without an interpreter. Through these strategies, interpreters work to accomplish goals of fostering the social and emotional development of DHH refugee and immigrant students, along with the development of their peers.

Table 5

Minor Emerging Themes

Category Name	Participants (n = 4)	Number of Instances Mentioned
Communicate with Students' Peers	2	2
Interpreting Strategies	1	6
Cultural Mediation	1	3
Explicitly mention linguistic challenges	1	3

Geri discusses her communication strategies for making students feel comfortable in an interpreted interaction with a DHH refugee student. She provides an example of what she may say to the student's peers:

I try to make sure, "Okay I'm-I'm here just to interpret, whatever you tell me, I'm not

gonna go tell everybody else, unless it's something serious that I have to tell another

adult, or what have you, but you know if you want to talk to my student, you can talk -

you know, tell me what you want to say, and I'll try to tell them as best I can, he might

not understand, it's gonna be slow, so just be patient."

Geri's remarks suggest that students who want to talk with a DHH refugee or immigrant student

may notice differences from other conversations, such as the pace and the DHH refugee or

immigrant student's level of comprehension. In this example, Geri aligns herself with the student

peer, explaining the process of interpreting and how to work with the interpreter to reduce

anxiety and to address the aspects of interpreting which may appear different to the student than

conversations with peers that occur without an interpreter (Llewellyn-Jones and Lee, 2013). This

strategy also allows Geri to recognize that she is the way the DHH refugee or immigrant student

accesses socialization, and is one way to mitigate the awkward nature of mediating a peer-to-

peer conversation (Winston, 2015).

Sarah's comment shows a different way of using communication with student peers to

foster relationships amongst the students, including the DHH refugee and immigrant students.

She notes that teaching the other students different signs has fostered peer-to-peer relationships:

But the smaller groups, we work with their peers on just knowing how to say, like, "good

morning, how are you?" and the appropriate responses to those. "Please," "thank you,"

"sorry," and then, we've been building vocab with them as well so they can hold ... a

fairly, you know, a two or three turn conversation with a peer with their teacher in- in

sign language, which is... You know, they feel included, their peers all want to learn, they

think - you know, they're fascinated, so... They're a pretty tight-knit little group.

In this example, Sarah uses strategic communication with other students in the class to teach students signs, enabling the hearing students and DHH refugee and immigrant students to hold short conversations without interpreters. Her comments show that she sees social development as a result of using this strategy, as the DHH refugee and immigrant students feel included and the class has become a "tight-knit" group. Her strategy also acknowledges that DHH refugee and immigrant students often access socialization through interpreters, and provides a way to have a short conversation without the mediation of an interpreter (Winston, 2015). The strategies both interpreters use of communicating with the peers of DHH refugee and immigrant students show their awareness of the part they play in these students' educational experiences, including their access to socialization and their social and emotional outcomes.

Minor Theme 2: Interpreting Strategies

The second minor theme in this study was the set of strategies interpreters mentioned which were specific to interpreting (see Table 5). Interpreters mention two interpreting strategies that they use while interpreting with DHH refugee and immigrant students, including a) cultural mediation and b) explicitly mentioning linguistic challenges faced by students. These strategies are used to facilitate the interpretation, which in turn helps interpreters work toward their goals of fostering students' social, emotional, linguistic, and academic success.

Strategy 1: Cultural mediation.

One interpreter in this study reports using cultural mediation as a strategy when interpreting with DHH refugee and immigrant students and teachers. Interpreters must move between multiple cultures as they interpret, including the culture(s) to which the DHH refugee or immigrant student belongs, the culture(s) to which the teacher belongs, and the filter of their own

cultural experiences. Geri uses cultural mediation in interpreted interactions between teachers and DHH refugee and immigrant students, with the goal of fostering a shared understanding.

Geri notes that students may bring up cultural information or events about which the teacher is unaware. In that case, she notes that she uses cultural mediation in her interpreting:

> That's - that's something that I strive for, I try to make sure, like, for example, if... If a student brings up something specifically related to that culture, I try to voice it as... and to expand it in a way that they [the teacher] can understand it.

Further, she states that terms for respect do not always translate easily between cultures. She provides an example of a student using Spanish words of respect:

> So, there are a lot of cultural differences, like he tends to call everybody "abuela" or "abuelo," but he doesn't necessarily mean (signs "GRANDMA, GRANDPA") grandma or grandpa, he means, that old-that old person over there, you know? I think that's like a sign of respect and a lot of in Spanish culture that, you know, "You're an older person, I'm gonna respect you by calling you abuela, abuelo," what have you.

Geri's comments indicate that she is aware of cultural differences presenting barriers to understanding. Geri turns away from her own understanding of the world to how the student sees the world, including culturally relevant events and terms of respect, and works to ensure that the teacher understands them as well (NMIP, 2000). Additionally, her choices can be seen as conscious decisions to contextualize non-shared information while interpreting (Janzen & Shaffer, 2008). Notably, only Geri mentioned multicultural competence in this study, despite the myriad cultures from which DHH refugee and immigrant students as well as teachers come. Further research is necessary to determine whether and how often interpreters use cultural mediation when working with DHH refugee and immigrant students.

Strategy 2: Explicitly mentioning linguistic challenges.

Another interpreting strategy mentioned by one interpreter in this study is explicitly mentioning linguistic challenges during interpretations into spoken English. This strategy involves attempting to show linguistic challenges a DHH refugee or immigrant student may be showing in an interaction. In her interview, Geri states that she works to show these challenges students are experiencing in her interpretations with the goal of giving the teacher the opportunity to understand the student's linguistic abilities and to assist the student.

Geri notes that as she interprets, she works to show linguistic challenges DHH refugee and immigrant students face by changing her affect and her sentence lengths. She states, "I try to make sure that the affect in my voice is very childlike, not a lot of full sentences," to show the incomplete utterances through which DHH refugee and immigrant students may communicate. This choice is deliberate, and intended to provide the teacher with information they otherwise would not be able to access about the students due to their inability to understand sign language. Geri states, "If I don't - if I don't interpret that way, then the teacher's not clued in to how to best help the student … that student's not gonna get the services they need." She indicates that information about how students use language can be helpful to teachers, and that she interprets intentionally showing these linguistic challenges to convey that information to the teacher. Whether the teacher is aware of Geri's decision to show these challenges through her interpretation, and how this may change the teacher's ways of working with the student in positive or negative ways, is unclear. However, it is possible that with this information from the interpreter, the teacher is more informed and able to help the student.

Chapter 5: Summary and Conclusion

Limitations

There are several recognized limitations to this research. First and foremost, this study is exploratory in nature, with inherent limitations as such. There are no current patterns already discovered in this area of study or literature directly discussing educational interpreters' work with DHH refugee and immigrant students. Therefore, research and knowledge from several related fields were discussed to find intersections and patterns, informing the research questions and interviews. However, the lack of available research provided a clean slate from which to explore the data in this research for patterns and themes.

Another limitation is the size of the study, as the study included four participants. This may be due in part to the transient nature of the student population of interest in this study. Immigrants and refugees, may enter a school for a time but may not be at their final destination, only staying at a school for a short time (Faltis & Valdés, 2010). For DHH refugees and immigrants, this may mean only going to school and working with an educational interpreter for a short time before moving on to another school district. Considering the transient nature of this population, the criterion that interpreters must work "currently" with DHH refugee or immigrant students may have been a limiting factor on the participant pool. Further, as previously stated, not all interpreters who work in education are affiliated with NAIE or RID; further, not all are on Facebook or a part of the Facebook groups run by NAIE and RID. This also limits the participant pool, particularly because Facebook was the primary way in which calls for participants were distributed. However, the study is exploratory in nature, with a goal of beginning to find current trends in interpreters' work with DHH refugee and immigrant students. In this way, despite a small participant group, the study achieved its goal of beginning exploration into this topic.

A level of bias is also involved in this research by the researcher's relationship to this topic. The chosen topic, research questions, and decision-making framework are all based on the

researcher's experiences as an educational interpreter working with the student population of interest. Awareness of this biased perspective is critical, as it informs the research. Transcripts and quotes from participants were used, maintaining the researcher's bias in mind. Directly quoting participants as often as possible rather than paraphrasing into the researcher's words allows readers to compare the researcher's understanding of participant comments with their own understanding (Stringer, 2014). This study also contains bias in the researcher's experience as an emerging researcher. The study contains the stumbling blocks experienced in emerging research, such as to the small number of participants. It also is informed by the suggestions and counsel from more experienced researchers who were advisors for this study.

It is also critical that this study be understood as filtered through the lenses of the interpreters interviewed. The interviews themselves do not show the interpreters' work; rather, they are interpreters' self-reported observations of their experiences. Interpreters' perceptions about their work may be different from the perceptions of other educational team members, of other interpreters, and perhaps most importantly, different from the perceptions of the students these interpreters serve. However, these interviews and the collection of strategies and decision-making processes interpreters discussed can also be understood as a starting point for future research. Future research can use the themes which emerged from this study to compare perceptions to recorded interpretations to gain a clearer picture of the influencing factors on interpreting work and the strategies interpreters currently use in this work.

Summary

This research begins to create a picture of current trends in interpreters' work with DHH refugee and immigrant students by investigating which strategies interpreters report using and why interpreters use particular strategies. The four interviews conducted show two prevalent

themes amongst the strategies interpreters describe using when working with DHH refugees and immigrants: communication with the educational team and communication with the DHH refugee or immigrant student. These themes suggest that interpreters use communication in strategic ways, both directly with the student and with the educational team, to provide services for the DHH refugee or immigrant student.

The first theme, communication with the educational team, suggests that interpreters communicate with many people on the educational team, including a) teachers, b) administrators, c) interpreters, d) counselors and advocates, and e) parents when working with DHH refugee or immigrant students. This research indicates that interpreters strategically communicate with the educational team in order to a) problem-solve and collaborate, b) follow or alter the IEP document, and c) foster teacher-student relationships.

The second theme, communication with the DHH refugee or immigrant student, suggests that interpreters also use communication in strategic ways while interpreting and interacting with the student. Such communication strategies include: a) modifying the interpreter's language use, b) taking on additional responsibilities, c) establishing and maintaining relationships with the students, d) monitoring student comprehension, and e) fostering the DHH refugee and immigrants' self-esteem. This study indicates that interpreters communicate in these strategic ways to foster student success, improving academic, linguistic, social, and emotional outcomes.

Two minor themes were also discovered in this study: a) interpreting strategies and b) communication with DHH refugee or immigrant students' peers. Interpreters used strategies while interpreting to mediate between multiple cultures as well as to explicitly mention students' linguistic challenges in spoken English interpretations. They also communicated with the

students' peers, working to make them comfortable in interpreted interactions and to foster relationships amongst students.

Future Research

There exist a multitude of opportunities for further research on the topic of interpreters' work with DHH refugee and immigrant students. This study is exploratory, finding patterns amongst four interpreters' work with this student population. Each of the themes found in this study may be further explored through interviews with interpreters to discover whether these themes constitute patterns across the work of educational interpreters working with DHH refugee and immigrant students. Each theme can also be explored further; for example, interviews could be conducted with members of the educational team to understand the communication strategies and goals other members of this team have in relation to the student and to interpreting. It is also necessary to research this topic through observation of interpreters' work with DHH refugee and immigrant students. Patterns in the work can be found, and interviews in which the interpreters comment on their strategies and decision-making processes can further illuminate the strategies interpreters use in their work and how they decide to use those strategies.

Conclusion

This research is an initial exploration of the strategies and decision-making processes used by interpreters who work in educational settings with DHH refugee and immigrant students. While research has occurred on different aspects of this topic, including ASL interpreting, Deaf education, and the education of refugees and immigrants, this research is one of the first forays into the area where these three fields intersect.

There is still much that remains unknown about D/deaf and hard of hearing refugees and immigrants, specifically about their educational experiences. Little is known about how

interpreters work with them, especially in educational environments. The themes found in this study suggest that we must look deeper into the strategies interpreters employ when working with DHH refugee and immigrant students, as well as into whether the chosen strategies foster student success. As more research is conducted using interpreters' self-reported information about their work, recorded samples of interpreting work, and interviews from DHH refugees and immigrants about their experiences with educational interpreters, we can begin to create a picture of the current trends in interpreting for these students. It is only with an understanding of the current interpreting trends from multiple perspectives that we can begin to see whether those trends are effective for the refugee and immigrant DHH students receiving interpreting services.

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   association

Appendix A

Recruitment Post

Hello,

My name is Carly Fischbeck and I am a graduate student conducting my Master's thesis research in Interpreting Studies and Communication Equity (MAISCE) at St. Catherine University. The purpose of my research is to explore the strategies and decision-making processes used by interpreters in K-12 educational settings who work with D/deaf and hard of hearing students who are refugees or immigrants. I am requesting your participation in this study.

I aim to interview interpreters who have worked within different K-12 educational environments and who have had varying experiences. Interpreters in this study must have at least three years of interpreting experience and at least one year of educational interpreting experience. Interpreters in this study must work regularly and frequently (5-10 times per month or more) in K-12 environments. Interpreters must also work with at least one student who has moved to America as a refugee or immigrant within the last five years.

If you agree, we will select a date and time for an interview. Our discussion will take approximately one hour. It is possible that I may contact you at a later date with follow up questions. You will be compensated with a $10 Amazon gift card for your time. I may ask for your permission to use a specific video clip of your interview for educational or research purposes. With the exception of any approved video clips for educational or research purposes, all information shared during this discussion will remain strictly confidential per Institution Review Board approval # 968.

If you are interested in participating, please address the following questions in an email to me at crfischbeck@stkate.edu :

1. What, if any, interpreting certifications or licensures do you hold?
2. How many years have you been working as an interpreter? As an educational interpreter?
3. How often do you work in educational settings?
4. In what kind of educational settings do you work? (ex. Elementary, secondary, mainstream, self-contained, extracurricular activities, etc.)
5. Do you work with at least one student who has moved to America as an immigrant or refugee within the last five years?

I will follow up with you via email explaining that you will be contacted within two weeks to find a date and time for participation in this study.

This study has been approved by the St. Catherine University Institutional Review Board # 968. You may contact the IRB office with any questions (irb@stkate.edu or 651-690-6204). My thesis advisor is Dr. Erica Alley, who you may also contact (elalley@stkate.edu or 651-690-6018).

Thank you for your consideration and I look forward to hearing from you.

Carly Fischbeck, NIC

Graduate Student in the ASL and Interpreting Department

St. Catherine University

Appendix B

Recruitment Email

Dear (name),

My name is Carly Fischbeck and I am a graduate student conducting my Master's thesis research in the ASL and Interpreting Department at St. Catherine University. The purpose of my research is to explore the strategies and decision-making processes used by interpreters in K-12 educational settings who work with D/deaf and hard of hearing students who are refugees or immigrants. I will conduct this study by interviewing interpreters to gain insight into their experiences. You are receiving this email because you are a member of the Interpreters in Educational and Instructional Settings (IEIS) Member Section of the Registry of Interpreters for the Deaf (RID) and I am requesting your participation in this study.

I aim to interview interpreters who have worked within different K-12 educational environments and who have had varying experiences. Interpreters in this study must have at least three years of interpreting experience and at least one year of educational interpreting experience. Interpreters in this study must work regularly and frequently (5-10 times per month or more) in K-12 environments. Interpreters must also work with at least one student who has moved to America as a refugee or immigrant within the last five years.

If you agree, we will select a date and time for an interview. Our discussion will take approximately one hour. It is possible that I may contact you at a later date with follow up questions. You will be compensated $10 for your time. I may ask for your permission to use a specific video clip of your interview for educational or research purposes. With the exception of any approved video clips for educational or research purposes, all information shared during this discussion will remain strictly confidential per Institution Review Board approval # 968.

If you are interested in participating, please address the following questions in an email to me at crfischbeck@stkate.edu :

1. What, if any, interpreting certifications or licensures do you hold?
2. How many years have you been working as an interpreter? As an educational interpreter?
3. How often do you work in educational settings?
4. In what kind of educational settings do you work? (ex. Elementary, secondary, mainstream, self-contained, extracurricular activities, etc.)
5. Do you work with at least one student who has moved to America as an immigrant or refugee within the last five years?

I will follow up with you via email explaining that you will be contacted within two weeks to find a date and time for participation in this study.

This study has been approved by the St. Catherine University Institutional Review Board # 968. You may contact the IRB office with any questions (irb@stkate.edu or 651-690-6204). My thesis supervisor is Dr. Erica Alley, who you may also contact (elalley@stkate.edu or 651-690-6018).

Thank you for your consideration and I look forward to hearing from you.

Carly Fischbeck, NIC

Appendix C

Informed Consent Form

ST CATHERINE UNIVERSITY
Informed Consent for a Research Study

Study Title: Strategies and Decision-Making Processes of Interpreters Working with Immigrant and Refugee Deaf Students

Researcher(s): Carly Fischbeck, NIC

You are invited to participate in a research study. This study is called "Strategies and Decision-Making Processes of Interpreters working with Immigrant and Refugee Deaf Students. The study is being done by Carly Fischbeck, a Master's student at St. Catherine University in St. Paul, MN. The faculty advisor for this study is Dr. Erica Alley, Program Director of the Master of Arts in Interpreting Studies and Communication Equity (MAISCE) program in the ASL and Interpreting Department at St. Catherine University.

The purpose of this study is to explore strategies and decision-making processes used by K-12 educational interpreters when working with immigrant and refugee students who are D/deaf or hard of hearing. This study is important because results of this study may benefit the interpreting profession at large and the quality of interpreting services in educational settings. How interpreters work with D/deaf and hard of hearing immigrant and refugee students is a little-researched topic in the interpreting field. Information about the strategies and decision-making processes of interpreters when working in educational settings with refugee and immigrant deaf students may serve to improve the provision of interpreting services with these students in educational settings.

Approximately 5-10 people are expected to participate in this research. Below, you will find answers to the most commonly asked questions about participating in a research study. Please read this entire document and ask questions you have before you agree to be in the study.

Why have I been asked to be in this study?

You have been asked to participate in this study because you are a member of the Interpreters in Educational and Instructional Settings (IEIS) Member Section of the Registry of Interpreters for the Deaf (RID), are a member of the National Association of Interpreters in Education (NAIE), or follow either RID or NAIE message boards on sites like Facebook.

I am interviewing interpreters who have worked within different K-12 educational environments and who have had varying experiences. Interpreters in this study must have certification and must work regularly and frequently (5-10 times per month or more) in K-12 environments. Interpreters must also work with students who have moved to America as refugees or immigrants within the last five years.

If I decide to participate, what will I be asked to do?

If you meet the criteria and agree to be in this study, you will be asked to do these things:

- Participate in an interview with the researcher regarding your experiences as an educational interpreter working with immigrant and refugee D/deaf and hard of hearing students. The interview will focus on strategies and decision-making processes used during your work. This interview will require approximately one hour of your time.

In total, this study will take approximately 1.25 hours of your time including emails and one interview session.

What if I decide I don't want to be in this study?

Participation in this study is completely voluntary. If you decide you do not want to participate in this study, please feel free to say so, and do not sign this form. If you decide to participate in this study, but later change your mind and want to withdraw, simply notify me and you will be removed immediately. You may withdraw until the interview is completed, after which time withdrawal will no longer be possible. Your decision of whether or not to participate will have no negative or positive impact on your relationship with St. Catherine University, nor with any of the students or faculty involved in the research.

What are the risks (dangers or harms) to me if I am in this study?

There are no anticipated risks to your health or welfare if you participate in this study; however, you will be sharing information regarding your experience as an interpreter in the K-12 educational setting. This is considered minimal risk because the information that you provide can be associated with you. Strict protocols will be in place to maintain the anonymity of each participant and the confidentiality of all information shared.

What are the benefits (good things) that may happen if I am in this study?

You will benefit in an indirect way by being involved in this study because results will benefit the profession at large and the quality of interpreting services in K-12 educational settings. Information about the decision-making process that interpreters use within this field may serve to improve the provision of educational interpreting services.

Will I receive any compensation for participating in this study?

You will be given an Amazon gift card in the amount of $10 for your willingness to participate in this study.

What will you do with the information you get from me and how will you protect my privacy?

The information that you provide in this study will be strictly managed in order to protect your privacy and confidentiality. All hard copies of documents will be kept in a locked cabinet in the researcher's home which is accessible only by myself, the researcher. Video recordings will be transcribed into written English. Any video recordings and transcripts will be identified only by a pseudonym, which you will choose. Video recordings and transcripts will be viewed only by myself and by my advisors. Transcripts will be stored on the researcher's password protected computer. Transcripts and

analyses will be stored in NVivo, a qualitative research software program which will be downloaded onto the researcher's computer. The documents within this program will be protected by a unique password and only accessible to the researcher and her advisors. All video recordings will be stored on a password protected computer. An additional copy of the video recordings will be stored on an external hard drive, which will be stored in a locked cabinet in the researcher's home which is accessible only to the researcher. I will finish analyzing the data by May 2018. Video recording clips may, if you agree, be used for educational purposes such as during presentations of research findings. Portions of videos will be kept with permission from participants for educational purposes. Video recordings, except for clips kept for educational purposes with participant permission, will be destroyed by June 2021, four years after the conclusion of this study.

Any information that you provide will be kept confidential, which means that you will not be identified or identifiable in the any written reports or publications.

Are there possible changes to the study once it gets started?
If during the course of this research study I learn about new findings that might influence your willingness to continue participating in the study, I will inform you of these findings.

How can I get more information?
If you have any questions, you can ask them before you sign this form. You can also feel free to contact me at crfischbeck@stkate.edu or (651) 357-3355. If you have any additional questions later and would like to talk to the faculty advisor, please contact Dr. Erica Alley at elalley@stkate.edu or (651) 690-6018. If you have other questions or concerns regarding the study and would like to talk to someone other than the researcher(s), you may also contact Dr. John Schmitt, Chair of the St. Catherine University Institutional Review Board, at (651) 690-7739 or jsschmitt@stkate.edu.

You may keep a copy of this form for your records.

Statement of Consent:
I consent to participate in the study and agree to be video recorded.
My signature indicates that I have read this information and my questions have been answered. I also know that even after signing this form, I may withdraw from the study by informing the researcher(s).

_____
Signature of Participant   Date

_____
Signature of Researcher

Appendix D

Video Release Form

I, _____, agree to be video recorded as part of my participation in the study "Strategies and Decision-Making Processes of Interpreters Working with Immigrant and Refugee Deaf Students" conducted by Carly Fischbeck. I understand that the video recording will be labeled using a chosen pseudonym and kept secure on an external hard drive stored in the researcher's home. I understand that the video will be kept by the researcher and used for research purposes. The video will only be viewed by the researcher and her advisors. The video will not be shown to others without my written permission.

Please read the following and check those for which you give consent. Please note: you cannot participate in the study if you are unwilling to be video-recorded.

- ☐ YES, I give permission for my video recorded data to be used in scholarly presentations and publications. I will approve any video data that will be used (i.e. the researcher will contact me and show me the clip(s) to be used).
- ☐ NO, I DO NOT give permission for my video recorded data to be used in scholarly presentations and publications.
- ☐ YES, I give permission to be contacted by e-mail about future experiments. My e-mail address is _____
- ☐ NO, I DO NOT give permission to be contacted by e-mail about future experiments.

_____   _____
Participant's Signature   Date

_____   _____
Primary Investigator's Signature

Appendix E

Proposed Interview Questions

- What interpreting certifications or licensures do you hold?

- How many years have you been working as an interpreter? As an educational interpreter?

- How often do you work in educational settings? In these settings, what is your job title?

- In what kind of educational settings do you work? (ex. Elementary, secondary, mainstream, self-contained, extracurricular activities, etc.)

- Have you ever had training in working with d/DHH students who are refugees or immigrants? In d/DHH students and language deprivation?

- How many d/Deaf and hard of hearing students who present with language deprivation due to refugee or immigrant status do you presently work with?

- What countries of origin are these students from? What do you know about their journey to and arrival in the United States?

- Does the information you have about their backgrounds impact your work with them? If so, how? (Can you think of an example?)

- When they arrived here, did the students know any spoken or signed languages? How does their language base shape your work with them?

- What kind of language do you use when interacting with or interpreting for these students? Why?

- What strategies do you use when interpreting for these students to address linguistic challenges? (ex. Non-gendered language, avoiding regional signs, etc.)

- What are your top priorities or concerns when you are interpreting for these students? Why?

- When you work with these students, do you take on other responsibilities in addition to interpreting? If so, what responsibilities? How did you decide to take on those responsibilities?

- If you have a problem while you are working, to whom do you go for help and why? (ex. Child is having trouble understanding content, class does not seem to be appropriate fit for student, etc.)

- What makes working with this population unique or different from working with other d/DHH students?

- Why did you choose to work with students in this population? If you did not intentionally choose it, what has made you stay?