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## Exploring the Work of K-12 Interpreters at One School for the Deaf

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**Exploring the Work of K-12 Interpreters at One School for the Deaf**

By  
Lena K. Stavely

An Action Project Submitted in Partial Fulfillment of the

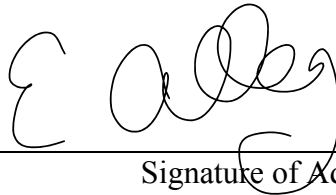
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A handwritten signature in black ink, appearing to read 'Erica Alley', written over a horizontal line.

Signature of Advisor

Date **6/12/18**

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## TABLE OF CONTENTS

LIST OF TABLES.....	vi
LIST OF FIGURES .....	vii
ABSTRACT .....	viii
<b>CHAPTER I: INTRODUCTION.....</b>	<b>1</b>
<b>CHAPTER II: A REVIEW OF THE LITERATURE.....</b>	<b>2</b>
A BRIEF HISTORY: LANGUAGE IDEOLOGIES AROUND DEAF EDUCATION.....	3
<i>Center schools for the Deaf</i> .....	5
<i>Emergent Signers</i> .....	6
EMERGENT SIGNERS' LEARNING WITHIN ASL-DOMINANT SPACES.....	6
BACKGROUND TO THE PHENOMENON .....	8
<i>The intent of IDEA</i> .....	8
<i>Deaf education after P.L. 94-142/IDEA</i> .....	9
<i>The Deaf perspective</i> .....	11
DEAF STUDENTS IN THE MAINSTREAM SETTING.....	13
EDUCATIONAL INTERPRETING IN THE PUBLIC SCHOOLS .....	15
CHALLENGES IN EDUCATIONAL INTERPRETING.....	16
<i>Student language deprivation</i> .....	17
<i>Situational volatility</i> .....	18
<i>Role confusion</i> .....	19
STUDENT PERSPECTIVES OF EDUCATIONAL INTERPRETING.....	20
PROBLEMS OF AN INTERPRETER-MEDIATED EDUCATION.....	21
RECENT SHIFTS .....	23
DEAF EDUCATION WITHIN DEAF SPACES .....	24
<i>Linguistic capital and fluency in ASL</i> .....	24
<i>Deaf community wealth</i> .....	25
CONCLUSION.....	27
<b>CHAPTER III: METHODOLOGY.....</b>	<b>28</b>
THEORETICAL FRAMEWORK.....	28
RESEARCH DESIGN .....	29
THE SETTING OF THE STUDY .....	29
PARTICIPANT RECRUITMENT, PERMISSIONS, AND SAMPLING.....	30
<i>Class/teacher availability and permissions</i> .....	30
CHARACTERISTICS OF THE FOCAL INTERPRETERS .....	31
FILMED FIELD OBSERVATIONS .....	32
EDITING DECISIONS FOR VIDEO ELICITATION INTERVIEWS.....	32
FILMED VIDEO ELICITATION INTERVIEWS.....	33
DATA ANALYSIS.....	34

## TABLE OF CONTENTS (Continued)

<b>CHAPTER IV: RESULTS AND DISCUSSION OF THE FINDINGS</b> .....	34
SETTING THE STAGE FOR UNDERSTANDING THE FINDINGS .....	35
EXAMPLE 1: CRITICAL THINKING SKILLS CLASS .....	37
CRITICAL THINKING SKILLS: A DISCUSSION OF THE INTERPRETING FACTORS AND STRATEGIES.....	42
PROMOTING THE LEARNING OF LANGUAGE AND CONTENT.....	45
FACILITATING PARTICIPATION .....	48
<i>Responding to each emergent signer's interests</i> .....	49
<i>Fostering emergent signers' attentiveness to the signed message</i> .....	50
<i>Cultivating the emergent signers' participation in response to the signed message</i> .....	52
<i>Adjusting the timing of the interpretation vs. labeling the referent</i> .....	53
<i>Intentional omissions</i> .....	54
<i>Seeking supplemental visual resources</i> .....	56
EXAMPLE 2: 2ND GRADE HOMEROOM .....	57
HOMEROOM: A DISCUSSION OF THE INTERPRETING FACTORS AND STRATEGIES.....	63
OPTIMIZING VISUAL ACCESS IN THE ASL-DOMINANT SETTING.....	70
<i>Adjusting physical positioning</i> .....	72
<i>Prioritizing certain signers' discourse over others'</i> .....	75
<i>Relying upon Deaf adults to clarify</i> .....	75
<i>Seeking supplemental visual resources</i> .....	77
SUMMARY: THE PREDOMINANT FACTORS INFLUENCING INTERPRETERS WORKING IN A DEAF K-12 CLASSROOM, AND THEIR STRATEGIC RESPONSES.....	78
LIMITATIONS OF STUDY .....	80
 <b>CONCLUSION AND RECOMMENDATIONS</b> .....	 81
SUMMARY OF THE WORK OF EDUCATIONAL INTERPRETERS' WORK WITHIN ASL-DOMINANT SETTINGS .....	81
IMPLICATIONS FOR ASL/ENGLISH INTERPRETER TRAINING AND EDUCATION.....	83
A CALL FOR FURTHER RESEARCH .....	83
FINAL THOUGHTS .....	84
 <b>REFERENCES</b> .....	 85
<b>APPENDICES</b>	
APPENDIX A: SCRIPT FOR VIDEO ELICITATION INTERVIEWS AND CONVERSATIONAL PROMPTS.....	94
APPENDIX B: TEACHER RECRUITMENT EMAIL AND INFORMED CONSENT .....	95
APPENDIX C: INTERPRETER RECRUITMENT EMAIL AND INFORMED CONSENT .....	103
APPENDIX D: PARENTAL PERMISSION FORM.....	111

**LIST OF TABLES**

TABLE 1: DEMOGRAPHIC INTERPRETER DATA .....	31
TABLE 2: FIELD DATA FROM EACH INTERPRETER .....	32
TABLE 3: INTERPRETERS' ADJUSTMENTS TO PHYSICAL POSITIONING .....	74

**LIST OF FIGURES**

FIGURE 1: DEAF CLASS CONFIGURATION WITH INTERPRETER.....	7
FIGURE 2: EVARISTO QUICKLY GLANCING TO HIS LEFT AT MARLEY AS SHE SIGNS SPANISH... 39	39
FIGURE 3: SHILOH LOOKING BACK AND UP AT GLORIA.....	46
FIGURE 4: HOMEROOM TABLE ARRANGEMENT.....	57
FIGURE 5: EVARISTO MOVING TO GET A BETTER VIEW OF ELIANA .....	58
FIGURE 6: OSCAR, ATTEMPTING TO CLARIFY WHILE MARISOL LOOKS AT ARLO .....	60

## Abstract

Emergent signers are Deaf students with a spoken language foundation who are learning within educational environments where ASL is the shared and dominant language. Emergent signers' growing presence within Deaf school classrooms has created a new opportunity in educational interpreting research because they require spoken language interpreting services while learning within these settings. Interpreting is produced primarily from ASL to spoken English. This pilot case study illuminates the factors that influence interpreters' decision-making in an ASL-dominant K-12 educational setting, at one school for the Deaf. Furthermore, the study documents strategies used by interpreters in response to those factors. This project's methodology includes observations and field notes, video footage of interpreters at work, and filmed video elicitation interviews. Three interpreters participated, whose voices were prioritized in the quantitative data. Results are categorized with Smith's (2013) three overarching aims of educational interpreters. Findings indicate that the highly visual nature of ASL-dominant classroom, particularly during 'question and answer' times generate unique factors that influence interpreters' strategic decision-making. Implications of the study suggest that educational interpreters must be trained to evaluate and prioritize in their moment-to-moment decisions.

*Keywords: emergent signer, school for the Deaf, educational interpreting, eye gaze, ASL-to-English interpreting, ASL-dominant classroom*

## Chapter I: Introduction

Most research about educational interpreting for Deaf<sup>1</sup> students has been conducted within public school settings, where the majority of the interpreting rendered is from English to American Sign Language (ASL) (Antia & Kreimeyer, 2001; Antia, & Stinson, 1999; Brown Kurz & Caldwell Langer, 2004; Caldwell Langer, 2004; Hayes, 1991; Jones, Clark, & Soltz, 1997; Marschark & Hauser, 2011; Smith, 2010). In contrast to traditional public schools, center schools for the Deaf serve as central repositories of collective expertise around Deaf education and culture (Thumann & Simms, 2009; Tucker, 2011). I have worked at one such school, where I have learned and grown as an ASL/English interpreter because of the warmth and patience of the Deaf students and professionals who use ASL as the majority shared language. I have also noticed a change in the scope of work performed by staff interpreters at that school. A new population of students has begun enrolling there, Deaf non-signers who have a spoken language foundation and who require interpreting services to support their education while they are simultaneously acquiring ASL. These students are emergent signers who have been placed in educational environments where ASL is the shared language (Smith & Dicus, 2015). Emergent signers require spoken language interpreting services to access the curriculum as they begin to learn to sign (Smith & Dicus, 2015). To date, there has been a noticeable gap in the research regarding this phenomenon. Other than one survey study of interpreters' experiences with emergent signers (Smith and Dicus, 2015), no research to date has examined the work of educational interpreters who work not only with Deaf students who are emergent signers and their peers, but also alongside and in collaboration with teachers who are fluent signers. This

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<sup>1</sup>According to the Deafhood Foundation (Cantrell, 2017), the term "Deaf" with a capital 'D' may be used to convey affiliation with and value of American Sign Language and Deaf cultural norms *as well as* any affiliation outside of the Deaf community. As the focus of this paper is interpreting within ASL-dominant educational settings, the author will use Deaf throughout to refer to Deaf children with all hearing levels and cultural affiliations.

study responds in part to the new phenomenon of interpreting for emergent signers within Deaf school classrooms.

This pilot case study documents some strategies used by interpreters in an ASL-dominant K-12 educational setting, at one center school for the Deaf, which hereafter will be referred to as a “Deaf school.” Furthermore, findings illuminate factors that influence interpreters’ decision-making. The instruction within this Deaf school is provided in ASL; interpreting is produced primarily from ASL to spoken English, although some interpreting also is rendered from English to ASL. Within this particular school, such interpreting is provided by staff interpreters who also serve other interpreting needs on campus. Emergent signers’ presence within this ASL-dominant educational space offers a new opportunity for educational interpreting research, partly because it offers a chance to observe K-12 interpreters working collaboratively with Deaf teachers and other professionals who are fluent in ASL. Data in this study include observations and field notes, video footage of interpreters at work, and filmed video elicitation interviews, all of which were collected over a period of six weeks from the work of three interpreters employed within a school for the Deaf. These were examined and analyzed to identify themes in order to shed light on the educational interpreting performed in this singular setting and with this population of Deaf students and teachers.

## **Chapter II: A Review of the Literature**

The following literature review will provide this context by looking at 1) historical ideology around what language to use in Deaf education, 2) an explanation of the significance of schools for the Deaf and emergent signers’ educational placement within them, 3) a review of the federal legislation that has impacted educational placement options for Deaf children, and 4) the Deaf community’s response to that legislation and the resulting influx of Deaf children in

mainstream classrooms. It is important to have some understanding of the context and historical background of Deaf education and educational interpreting *outside* of schools for the Deaf before exploring the work of interpreters at work within that unique setting. Additionally, an understanding of American attitudes around the education of Deaf people, particularly with respect to what language and modality should be used, must be explored before delving into the history of Deaf education and educational interpreting in the United States.

This will provide a historical context to the phenomenon of interpreting for emergent signers within center schools for the Deaf. In addition, a discussion of the themes and challenges pertaining to educational interpreting will be provided. An exploration of the value of placing a Deaf child with any hearing levels within a center school for the Deaf will round out this review of this research. A better understanding of these issues will support a deeper grasp of the contextual forces at play when the interpreters who are working within one school for the Deaf engage in strategizing and decision-making.

### **A Brief History: Language Ideologies Around Deaf Education**

Whether Deaf people should be taught through signed language (formerly called manual language) or through the spoken language used by the hearing people around them is a topic that has long persevered in societal debate. That debate has been exacerbated by the fact that at least 95% of Deaf children are born to hearing parents, who may not inherently know the benefits of teaching ASL to their children (Fleischer, Garrow, & Friedman Narr, 2015; Pizzo & Chilvers, 2016). Baynton (1996) detailed the long relationship that educators of the Deaf have had with signed language, by documenting the generations of American ideological shifts around the languages used in Deaf education. He emphasized in his telling that manual language is natural to Deaf people's very biology, and has lived on, in spite of great obstacles (Baynton, 1996). He



also distinguished certain cultural shifts that have been tied to more than a century of oral communication within Deaf educational programming (Baynton, 1996). Oralism is an educational philosophy that began in the mid-1800s, extolling the teaching of spoken language to Deaf children while simultaneously teaching that manual communication would in some way hinder the development of the child. To this day, oralism continues to have sway over programming for Deaf students in many settings.

The tension between manual and oral communication philosophies for Deaf people is deeply connected to the story of schools for the Deaf.<sup>2</sup> The first such school, the American School for the Deaf, was founded in Hartford, Connecticut in 1817 (Schildroth & Hotto, 1994). The school used manual language for its pedagogical approach. Soon after, other schools for the Deaf were founded in other states in order to serve Deaf students residing outside Connecticut.

Later came the Milan Conference of 1880. Many have documented the influence that this conference, and the American historical figure Alexander Graham Bell, had on the system of Deaf education in the United States (Baynton, 1996; Lane, 1992; Tucker, 2011). Both touted a pathological view of deafness, which eschewed manual/visual language, and prioritized the assimilation of Deaf students by teaching them to talk (Baynton, 1996; Lane, 1992; Tucker, 2011). Bell was philosophically against separating Deaf children from hearing children for education (Schildroth & Hotto, 1994), which has been the design of schools and programs for the Deaf. Because of the wave of oralism that swept the United States and the world in the years leading up to 1880 and beyond, many American schools for the Deaf shifted their pedagogical approaches to teach children through spoken English.

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<sup>2</sup> With the historical and cultural significance of schools for the Deaf, there are multiple terms that are often used interchangeably for these institutions. They are sometimes called state schools for the Deaf, residential schools for the Deaf, or Deaf schools. The definition of the term “center school for the Deaf” will be forthcoming.

A return to using and formally teaching ASL in schools and programs for the Deaf in the United States did not occur until the mid 1900s, when ASL began gaining recognition in scholarly realms for having its own merits as a unique and sophisticated language, separate from English (Humphries & Humphries, 2011; Lane, 1992; Padden & Humphries, 1990). However, with the passage of Public Law 94-142 in 1975, the educational centralization for Deaf children in the United States again shifted, as public schools were mandated to serve children with disabilities (Government Publishing Office, 1975). The law, now called the Individuals with Disabilities Education Act (IDEA), allowed students who were Deaf to attend their local education agency, within their home district, instead of relying solely on separate schools and programs for the Deaf (U.S. Department of Education, 2004).

**Center schools for the Deaf.** The term ‘center school for the Deaf’ has recently emerged as a name for Deaf schools that use ASL as a primary and shared language for their students. These schools also teach written English, forming an educational approach that is not only bilingual, but also bicultural (Tucker, 2011). In spite of philosophical and pragmatic tension around language modalities within the field of Deaf education that still exists today, these schools serve as centers for collective expertise regarding Deaf education, Deaf cultural identity, bilingual (ASL/English) education, and which celebrate culturally Deaf ways of knowing (Tucker, 2011). Thumann and Simms (2009) described the importance of cultural approaches to Deaf education, highlighting the wave of bilingual programming that has grown in recent years. In these settings, bilingual instruction is offered through direct communication, via visual modalities, requiring no interpreting (Thumann & Simms 2009). Center schools for the Deaf “serve both as the bedrock of Deaf education and as a wellspring for communities of deaf and hard of hearing learners that share a language and a culture” (Tucker, 2011, p. 31).

**Emergent signers.** Enrollment in separate schools and programs for the Deaf, including center schools for the Deaf, tends to be mostly comprised of students with severe to profound hearing levels (Schildroth & Hotto, 1994). However, over the past decade, a new population of students has begun enrolling in one school for the Deaf where I have worked, transitioning there from public schools where instruction is provided in spoken English. These new students are Deaf non-signers who have a spoken language foundation and who require spoken language interpreting services to support their education while they are still acquiring ASL. For the purposes of this project, to refer to these students I will be using the term *emergent signers*, which Smith and Dicus (2015) used in their survey research of interpreters who have worked with this same demographic of students. Emergent signers can come from a variety of spoken language backgrounds. It has been reported that most interpreters encounter emergent signers on their professional paths (Burke & Nicodemus, 2013; Smith & Dicus, 2015). Since it would appear that emergent signers are people with whom ASL/English interpreters work, it will be important to study the nuanced implications of their growing presence within at least one school for the Deaf.

### **Emergent Signers' Learning Within ASL-Dominant Spaces**

Harbour (2010) discussed the challenges of identifying and supporting students with changes in their hearing levels. She considered the ethical implications of working with students who have progressive hearing loss or who become Deaf after already learning and using spoken language. Students like those described by Harbour (2010) can themselves be emergent signers if they are learning within educational environments where the shared language is ASL.

Such interpreting will look different than that which is performed in traditional public-school inclusion settings. Class size within center schools for the Deaf is generally smaller than

those found in traditional public schools. Marschark and Hauser (2011) recommended that Deaf classes be arranged so that all of the students are facing the teacher, ensuring that the visual-spatial abilities of the Deaf students be optimized. In the school for the Deaf where this study was conducted, classes of up to eight students are seated in a semi-circle, facing the board and the teacher, who faces the students. An interpreter generally will sit or stand behind the students, often close to the emergent signer (see Figure 1).



*Figure 1: Deaf class configuration with interpreter*

While traditional educational interpreting calls most often for signing everything that is spoken within a general education classroom, interpreting for emergent signers within an ASL-dominant classroom most often requires speaking everything that is signed.

Smith and Dicus (2015), noting a rising number of emergent signers within K-12 and post-secondary settings, based on the campus of Gallaudet University, surveyed 73 interpreters who were affiliated with Gallaudet Interpreting Services. Their survey asked about participants' experience with emergent signers, their perspectives, experience and decision-making with this specific population, and the participants' opinions regarding the need for further training. Findings from their study revealed that the interpreters surveyed work regularly with emergent

signers, that the work is distinct in many ways from working with fluent signers, and that there is ambivalence about best practices for interpreting with this population. The linguistic factors that respondents saw influencing them the most were: 1) word/sign choices, 2) speed/pace, 3) mouthing, and 4) prosody. The logistical factors that respondents saw influencing them the most were: 1) placement of the interpreter, 2) volume of the interpretation, 3) placement of the consumer, and 4) the use of technology.

Interpreting for emergent signers within ASL-dominant spaces is a unique phenomenon, one that is very different from the interpreting that happens within traditional public schools or other English-dominant settings. In order to understand exactly why this type of interpreting has emerged within one school for the Deaf, we must examine the changes in federal legislature over the past forty years, which have resulted in significant changes in the educational experiences of Deaf children.

### **Background to the Phenomenon**

An examination of the legislative forces that have altered educational options for Deaf children and their families in the United States must begin with Public Law 94-142, which passed in 1975. Prior to this, Deaf children were expected to attend their state's school for the Deaf, which usually offered residential facilities for children who came from distant parts of their state. If Deaf children attended their local public school, they were to do so without accommodations. Today, such accommodations often take the form of the provision of the services of a teacher of the Deaf or an ASL-English interpreter (Marschark & Hauser, 2011).

**The intent of IDEA.** Public Law 94-142 (P.L. 94-142), later called IDEA, was intended to guarantee the right of all children to an education, regardless of expense or the severity of a child's disability (Shapiro, 1994). IDEA mandates that all children are entitled to a free and

appropriate public education within an environment that is least restrictive to that child, and with non-disabled children to the maximum extent appropriate (Cohen, 1994; Lane, Hoffmeister, & Bahan, 1996).

With the passing of this law, certain new terminology began to prevail, such as the term *mainstreaming*, which some people interpret as the practice of educating students with disabilities in the same school as nondisabled children, often within small, self-contained classes (Shapiro, 1994; Stinson & Antia, 1999). The terms *integrated education* and *full inclusion* were also introduced at this time, which connote placing a student with disabilities in the same classroom as their non-disabled peers (Seal, 2004; Shapiro, 1994; Stinson & Antia, 1999). Marschark and Hauser (2011) clarified that *mainstreaming* can refer to a wide range of services within a regular education classroom, “in which deaf and hard-of-hearing students attend classes in regular classrooms but receive support services (like hearing aid adjustment, tutoring, and counseling) in a separate resource room” (p. 107). They also explained that the term *inclusive classrooms* refer to those where services are provided within the regular education classroom (Marschark & Hauser, 2011).

**Deaf education after P.L. 94-142/IDEA.** The case of *Brown v. Board of Education* had far-reaching, if delayed effects on the educational placement of children with disabilities, including Deaf children, as defined by the law. This is because of the decision that the concept of ‘separate but equal’ was erroneous, with the concluding implication that separate schools are inferior to those that serve the hegemony (Cohen, 1994; Ramsey, 1994; Shapiro, 1994). With IDEA, separate schools and programs specifically designed for the Deaf were sometimes deprioritized in the discussion of where a Deaf child would go to school (Lane, Hoffmeister, & Bahan, 1996). In fact, many interpretations of IDEA place schools and programs explicitly

designed for certain populations close to last on the continuum of placement options that IDEA mandates (Cohen, 1994; Lane, Hoffmeister, & Bahan, 1996). The passage of IDEA led to drastic shifts in Deaf student enrollment statistics within separate schools and programs for the Deaf. Cohen (1994) wrote of a growing trend in the 1990s of “inclusion on constitutional grounds, as a civil right, making the inclusion stance political rather than educational” (p. 3).

Mainstream and inclusion options are now the most common educational placement settings for Deaf children (Lane, Hoffmeister, & Bahan, 1996; Schildroth & Hotto, 1994; U.S. Department of Education, 2016). Since the passage of IDEA, there has been an overall downward trend in enrollment at schools and programs for the Deaf, including at center schools for the Deaf (Luckner, 2011; Moores, 2009). Schildroth and Hotto (1994) documented the drastic inversion of demographic enrollment statistics at various educational placements settings that serve Deaf students between 1976, directly after the passing of P.L. 94-142, and 1993. The sharp decline in enrollment in schools for the Deaf during that period may have been partially due to students who had been affected by a rubella outbreak of the 1960s aging out of the American educational system (Schildroth & Hotto, 1994). Still, residential schools and programs for the Deaf saw an enrollment loss of 47 percent within that period (Schildroth & Hotto, 1994). In 2013, 87.5 percent of Deaf students went to school within a mainstream or inclusion education setting for at least part of their school day (U.S. Department of Education, 2016).

The parallel between *Brown v. Board of Education*'s decision and the circumstances facing Deaf children in American educational settings does not end with recent demographic shifts within the public schools. With the start of racial integration within schools in the American South in 1954, few teachers of color transferred to integrated schools to continue teaching the Black students who integrated them; thousands of Black teachers and principals lost

their jobs as a result of *Brown v. Board of Education* (Simon, Johnson, & Reinhorn, 2015). The wave of oralism in the United States in the mid-1800s had similar consequences for Deaf teachers within schools and programs for the Deaf, where educated, scholarly Deaf teachers lost their jobs to less-educated hearing ones who presumably might teach the Deaf students to speak (Baynton, 1996). More recently, the emphasis on integration and mainstreaming has had a great influence on the field of ASL/English interpreting, which has in turn had profound, if not intentional, impacts on the experiences of Deaf children in schools (Seal, 2004). Those experiences will be explored in a later section.

**The Deaf perspective.** People who are culturally Deaf see themselves as a linguistic and cultural minority (Lane, 1992). Prior to 1880, Deaf people were largely able to autonomously and successfully learn through institutions like residential schools and programs for the Deaf (Baynton, 1996; Lane, 1992). Thus, Deaf people now largely perceive a disconnect within the institution of IDEA, a law that is designed to guarantee ‘free and adequate public education,’ but which has had the effect of funneling the education of Deaf children further away from the very people who hold the linguistic expertise that makes them able to best provide that type of education (Baynton, 1996; Lane 1992). Lane, Hoffmeister, and Bahan (1996) argued that IDEA has presented a problem for Deaf people that is twofold: 1) separate schools for the Deaf—many of which are center schools for the Deaf—have been deprioritized on the continuum of placement options as interpreted by the Office of Special Education and Rehabilitative Services, and 2) Deaf children have unique language needs. They require visual language, which is almost never the language of instruction within their neighborhood public schools. Lane, Hoffmeister, and Bahan (1996) also pointed to a larger conflict between Deaf cultural identity and the language found within IDEA, which labels Deaf students as categorically disabled.



Like many others, Tucker (2011) traced oralist ideology in the United States to the Milan Conference of 1880 and Alexander Graham Bell's 1883 *Memoir on the Formation of a Deaf Variety of the Human Race*. However, he was most critical of the role that IDEA has played in disenfranchising Deaf students in the name of mainstreaming by way of placing Deaf students within their local public schools. Tucker found little inclusive about neighborhood school placement, stating that after 35 years of IDEA there has been little empirical evidence of Deaf students' comparative achievement in neighborhood schools. Lane (1992) framed the issue of IDEA as perpetuating colonialism, where the majority group, hearing people, colonize the educational systems that inform young Deaf identities, thus resulting in a colonized population of Deaf people. Cokely (2005), a seminal researcher and historian of ASL/English interpreting, has presented the passing of P.L. 94-142 as so vastly separate from Deaf community values that K-12 educational interpreters are implicated in the continued oppression of Deaf people.

More recently, Humphries, Kushalnagar, Mathur, Napoli, Padden, Rathmann, and Smith (2013) focused on Deaf students' rights to language as they framed a legislative need for *further* structural interventions on behalf of Deaf children. Interestingly, they looked at IDEA and its successor, the Individuals with Disabilities Educational Improvement Act (IDEIA) of 2004 as a validation of this call, arguing that certain clauses within the law highlight "Congress' concern with the value of communication in school, and the unique, individual needs specific to each deaf or hard of hearing student" (Humphries, et. al., 2013, p. 875). This emphasis on a mandate for Deaf students' access to language rich educational spaces is emblematic of Deaf arguments about special education within the last decade, where there is a focus on the language deprivation that is so prevalent among Deaf children, and a call for action to mitigate it. Issues of language deprivation and its implications for educational interpreting will be explored in a later section.

## **Deaf Students in the Mainstream Setting**

Since the passage of P.L. 94-142, much research has examined the successes and failures of placing Deaf children within mainstream spaces. Stinson and Lang (1994) provided a historical recounting of the legislative and cultural forces that have resulted in increasing numbers of mainstreamed students in the last thirty-five years. Like Humphries, et. al. (2013), they dissected the mandate for least restrictive environment within IDEA, stating that separate schools for the Deaf may very well be *least* restrictive and *most* effective for many Deaf students. They also referred to the Department of Education guidance paper (U.S. Department of Education, 1992) that calls for the consideration of the following factors for Deaf children: communication needs and preferences; linguistic needs; severity of hearing loss; academic level; and social, emotional, and cultural needs.

Antia and Stinson (1999) focused on attitudes and techniques for integrating Deaf students into general education settings. They emphasized the importance of collaboration between classroom teachers, teachers of the Deaf, and interpreters, as well as the importance of perceived equality between professionals. They stressed that increased communication between teachers, Deaf students, and their hearing peers significantly impacted Deaf students' social and academic participation and facilitated their independence. They also noted that mainstream programs tend to lack Deaf role models and language models.

In a later piece, Antia, Stinson, and Gaustad (2002) discussed the critical nature of membership within the classroom for Deaf students, arguing that language access alone is not enough to foster an inclusive education. They discussed inclusion as a philosophical concept, noting its roots in citizenship and membership within a community. The authors incorporated perspectives on teaching and learning (behavioral, cognitive, and social constructivist),

emphasizing context-dependent learning and community membership brought by the social constructivist frame, seeing the teacher as an opportunity-facilitator for learning within a social context. They also noted problems associated with interpreter processing time, to be further discussed in this paper, because it hinders organic opportunities for social pedagogical moments.

These findings corroborated the concerns of Winston (1990) and Ramsey (1997), who identified lack of Deaf student participation and membership in school as the price paid for their educational placement within their local public-school setting. Winston (1990) wrote that the mainstream environment is “designed to accommodate learning through both visual and auditory channels. The deaf student has access to only one of these channels and that access, through the interpreter is indirect and incomplete” (p. 60).

Humphries and Allen (2008) explored opportunities for closing the specialty gap between Deaf and mainstream programs, eschewing the label of special education and its focus on delays, which comes associated with the stigma described by Lane (1992) within the Deaf community. They discussed theories in education that pertain to emerging language learners, emphasizing the importance of multilingual education for Deaf students who come from language backgrounds other than ASL or English. Findings from their study suggest that hearing teachers should learn to identify and consider their own privileges when working with Deaf students. Thus, they asserted that integrating practices from the Deaf community and the child's home community can support learning and development. This has implications for the ethical insight that interpreters bring to their work, particularly within the context of providing access to emergent signers within ASL-dominant spaces.

## **Educational Interpreting in the Public Schools**

With the high numbers of Deaf students within mainstream and inclusion settings today, it stands to reason that interpreting services within those settings would also grow and have enormous impacts on the educational experiences of Deaf students there (Seal, 2004; Tucker, 2011). Along with the growing subfield of educational interpreting some common themes have arisen, particularly around interpreter role variability, which can depend upon the various players, context, setting, and particular moment within a school day.

Antia and Kreimeyer (2001) examined personnel perceptions of ASL/English interpreters' role boundaries in one mainstream school in the American southwest. Their findings suggest that each staff position within the school setting brings different notions of appropriate interpreter role and scope of work. Classroom teachers from their study preferred that interpreters have increased and ambiguous duties: to clarify teacher directions, to facilitate peer interaction, to tutor, and to inform educational team members of the Deaf students' progress. However, special educators and administrators preferred interpreters to stay within a strict interpreting role, where the scope of work was defined strictly by input and output of language, with no allowance for any of the above additional duties.

Antia and Kreimeyer's (2001) study implies that educational interpreter role can be varied and that interpreters themselves are not always clear about the parameters of educational interpreter role. These findings lend support to previous ones from Jones, Clark, and Soltz (1997), who surveyed educational interpreters from three states about their level of education and certification, their primary mode of communication while interpreting, and their scope of work and role. Their results suggest that interpreting is just one duty among many for educational interpreters, and that this duty is often deprioritized in favor of aide-like responsibilities.

Smith (2013), in her research documenting and categorizing what qualified educational interpreters do in inclusion settings, found five critical functions within interpreters' day-to-day duties: a) assessing and responding to a constellation of contextual, situational, and human factors; b) interpreting and/or transliterating; c) seeking, obtaining, and capitalizing on available resources; d) interacting with others; and e) performing aide duties and other tasks or be useful or helpful as needed. These findings mark an approach to educational interpreting research that examines the unique circumstances faced by educational interpreters. Smith (2013) dissected and categorized educational interpreters' responses to those factors, helping to further understand educational interpreter role and scope of work.

Smith (2010) also specifically explored K-12 interpreters' strategies for optimizing Deaf students' access to multiple sources of visual information. They were categorized as: a) locating materials, b) looking at visual aids, c) reading printed information, d) generating written information, and e) participating in a hands-on activity either individually or in groups. Interpreters' strategies for dealing with the above competing demands were as follows: a) adjusting physical position in the classroom, b) directing students' attention, c) adjusting the timing of the interpretation, and d) modifying the interpretation itself. In her explanation of the data that led to her findings, Smith (2010) clarified that interpreters' feelings of autonomy and collaboration with classroom teachers were essential to the employment of these strategies.

### **Challenges in Educational Interpreting**

Much interpreting research has been dedicated to documenting and mitigating the challenges faced by ASL-English interpreters in general education settings. Mediated educational access, the time interpreters need to process information and render it into another language hindering Deaf students' social engagement with learning material (particularly during

times of rapid classroom turn-taking), multiple channels of input, competing visual demands, unnatural opportunities for English language development, and difficulties associated with teaching discourse styles are some of the challenges faced by educational interpreters that have been documented in the research (Smith, 2010, 2013; Winston, 1990; 2004). Smith (2013) found that there were three overarching goals pursued by educational interpreters during their work: optimizing visual access, facilitating the learning of language and content, and cultivating opportunities for participation. These goals are constantly tested by the dynamics of K-12 settings, where the above challenges are ever-present.

**Student language deprivation.** Smith (2015) explored the demographic profile of Deaf students who use interpreting services in mainstream K-12 settings, stressing that many are language deprived; they do not have the solid language foundation that one would expect from a hearing child who has had access to language since birth, in ASL or in any language. She compared the issues faced by hearing English language learners in American classrooms to those faced by Deaf students, proposing that Deaf students be seen as dual language learners. This, she suggested, may help educational interpreters to provide access to social and academic discourse in schools, as well as understand students' socioemotional challenges. Smith (2015) also argued that in addition to having experience with issues faced by English language learners and the language deprived, educational interpreters must have a broad bilingual understanding of vocabulary connected to the varied content that is imparted within school settings.

Crump and Hamerdinger (2017) observed that language deprivation, while very rare among hearing people, is more common among congenitally Deaf people due to the small number of whom that are born into families who use manual/visual communication. While Crump and Hamerdinger (2017) focused on language deprivation among Deaf clients within

mental health settings, their explanation of its effects on the human mind holds true, regardless of context. They argued that the cumulative effect of a Deaf individual's lack of exposure to signed language can lead to neurological consequences that result in limitations to language acquisition and use.

One study specifically focused on comparing the language processing skills of German children, both Deaf and hearing, who had access to language since birth to Deaf children who had not (Skotara, Salden, Kùgow, Hänel-Faulhaber, & Röder, 2012). The findings of Skotara et al. (2012) suggest that when a Deaf child has experienced inhibited acquisition of a primary language, his or her second-language processing skills will also be affected. This research indicates that the language deprivation common among Deaf people has vast and compounding impacts on their continued cognitive processes and academic success. Because signed languages generally do not have standardized or consistent written forms, this has profound implications for Deaf children who sign: A strong foundation in signed language will be essential to acquiring the language of the hegemony in its written or spoken form.

The implications here for educational interpreters are vast. Smith (2015) reasoned that language deprivation can impact students' readiness to use interpreters for learning. Her argument for educational interpreters' broad mastery of academic content, as well as expertise in various forms of language fluency in Deaf students' primary language presents the circumstances of language deprivation as yet another compounding factor that has implications for interpreter qualification within the classroom.

**Situational volatility.** In addition to language variability among Deaf students, there are also significant environmental challenges beyond those explored by Smith (2010; 2013) and Winston (2004). Walker and Shaw (2012) addressed interpreter preparedness in medical, mental-

health, legal, Deaf-Blind and educational settings. This was based on data from a survey of recent graduates of interpreter education programs, which asked how prepared graduates felt about each setting. Recent graduates who were working in educational settings responded that circumstances within educational settings could change to include factors for which they were not prepared or qualified. Situational volatility in interpreting occurs when players and discourse content within a setting alter very quickly, suddenly becoming legal, medical, or mental health-related in nature (Walker & Shaw, 2012). This issue has implications for interpreter preparedness, as the paucity of qualified educational interpreters has already been emphasized as a drawback for Deaf students within public school settings (Smith, 2015; Winston, 1994).

**Role confusion.** Role confusion is yet another challenge faced by interpreters in the K-12 classroom, although it is not an issue that is unique to interpreting in the educational realm (Dickinson & Turner, 2008). As early as 1991, Hayes found that interpreters were expected to perform duties such as tutoring, disciplining, and teaching ASL, in addition to interpreting in the classroom. The problem areas identified by interpreters in her study were role confusion partly due to the expectations of surrounding staff, a lack of transparency around decisions that have pedagogical implications, and a tendency toward isolation (Hayes, 1991).

Caldwell Langer (2004) found that although interpreters reported being seen as professionals in community settings, within educational settings they were seen as having lower status, prestige, and power. Educational interpreters also reported conflicts between teachers' and interpreters' short- and long-term goals, with teacher autonomy appearing to be threatened by the interpreter's preparation and needs for efficacy (Caldwell Langer, 2004). They discussed frustration around not being fully autonomous about their placement in the classroom. They also expressed a trend of not having office space and found a ubiquitous problem within interpreter



role definition, when the interpreting needs of a Deaf student conflicted with the interpreter's adult—and obligatory—reporting status (Caldwell Langer, 2004). Interpreters from Walker and Shaw's (2012) research also reported confusion and the perception that interpreters were mere paraprofessionals among other professionals in the educational setting.

The challenges that educational interpreters face have ramifications that can be profound for the Deaf children with whom they work. Interpreter role boundaries may differ from one person to the next, and role confusion can be exacerbated by disagreements around interpreter scope of work, as well as the level of trust between interpreters and other school-based professionals. Additionally, educational interpreters are expected simultaneously to respond effectively to various environmental and interpersonal demands (Dean & Pollard, 2011), all while maintaining the overarching goals of optimizing visual access, facilitating the learning of language and content, and cultivating opportunities for participation (Smith, 2013).

### **Student Perspectives of Educational Interpreting**

To date, there is little research that explores Deaf students' experiences of interpreted education. An early study by Mertens (1991) succeeded in looking into Deaf adolescents' reflections upon the quality of their interpreted education. Participants responded that interpreters' lack of receptive language skills in ASL were consistently problematic. The role of the interpreter was also highlighted by the students as an area of concern, who emphasized that interpreters should not be involved in classroom management (Mertens, 1991).

Brown Kurz and Caldwell Langer (2004) also looked at current and former Deaf students' thoughts about their experiences with interpreters in mainstream settings, with representation from elementary, middle, high school, college, and graduate school. Through interviews, the Deaf participants reflected upon many themes: a) views on educational

placement, b) preparation for the future, c) social and academic implications, d) identity, e) the roles and responsibilities of interpreters, as well as f) issues related to understanding their interpreters and being understood by them. More than ten years after Mertens's (1991) study, Deaf students were still noting that issues around interpreter qualification and role were significant deficits to their experiences of interpreters in the classroom. All of the students within Brown Kurz and Caldwell Langer's (2004) study also acknowledged that ideally would have been learning within an ASL-dominant setting. Still, the students communicated that they saw schools for the Deaf as less challenging and slower in pace than mainstream programs.

### **Problems of an Interpreter-Mediated Education**

Although the quality of interpreter-mediated education is not directly examined in this study, I would be remiss to not mention it in this discussion of the issues that prevail in educational interpreting research, due to its predominance in the field. There exists long-standing research on whether educational interpreting actually meets the needs of Deaf students.

Winston (1990) stressed that the mainstream classroom environment utilizes what she called "both visual and auditory channels" (p. 60), and that the setting was auditorily centered. Thus, her analysis was centered around the Deaf student's disadvantage of having to process through visual means all of the competing information that hearing students processed simultaneously through auditory and visual channels. She also examined a constraint placed on interpreters in this setting, arguing that the 'question and answer' time of any class period presented a demand that was out of the interpreter's control, since it required that the hearing teacher manage the pace of the interchange between him or herself and the students in order for the Deaf student to be allowed to participate. She asserted, "the [hearing] teacher must be willing to monitor and adjust the style in order for the deaf student to participate." (p. 62). This finding

around Deaf student participation was corroborated by Ramsey's (1997) participant observer study within one school, which found that Deaf students within traditional public-school settings lacked opportunities for true participation within those spaces.

Just four years later, Winston (2004) produced an exposé of multiple, long-standing concerns about interpreted education happening within mainstream programs, referencing the National Association of the Deaf's (1994) apprehensions about such programs truly representing each Deaf student's least restrictive environment when it comes to language and communication needs. She also brought to light the problem of interpreter role confusion and Deaf students' lack of readiness to utilize interpreting services. Winston's (2004) study further highlighted problems that are inherent to interpreted education: a) mediated or second-hand educational access; b) interpreter processing or lag time hindering Deaf students' social engagement with learning material, particularly during turn-taking; c) multiple channels of input putting interpreters in positions of choosing what to convey; d) visual accessibility being hindered by competing demands; e) lack of natural opportunities for English language development; and f) challenges associated with teaching discourse styles. She concluded that no interpreted class in the study provided adequate access for the education of Deaf students, emphasizing the need for Deaf professionals to evaluate educational accessibility, from both visual and linguistic perspectives.

Winston's 2004 study corroborated Winston's (1994) discussion of two myths associated with educational interpreting, that interpreting is a simple substitute for direct communication and teaching, and that an interpreted education is inherently inclusive. Here, she discussed the constraints placed on interpreters and Deaf students, which create inevitable limitations to the dynamic and social nature of learning within mainstream programs (Winston, 2004). The need for linguistic competency in ASL, constraints to social opportunities via the addition of a third

adult party, additional visual processing needs being placed on Deaf students, and classroom discourse demands are all detailed as constraints that render interpreting in the mainstream classroom less than ideal.

The paucity of qualified interpreters within educational settings was also acknowledged by Hayes (1991), Jones, Clark, & Stolz (1991), and Smith (2015) as an egregiously limiting factor. Previously mentioned studies done by Mertens (1991) and Brown Kurz and Caldwell Langer (2004) found that Deaf students are equally concerned about lack of interpreter skill. Winston (1994) remarked that reliance upon unqualified interpreters in educational settings compounds the problems of an interpreter-mediated education. Smith (2015) observed that most educational interpreters are unqualified, ill-prepared, and unbalanced bilinguals.

While there exist vast challenges for interpreters who are employed within the educational realm, as well as for the Deaf students who rely upon them to access their educational environments, there is reason to believe that there are some shifts around educational placement that have occurred in recent years. The following sections will discuss the recent limited data that suggest Deaf children may be turning to other placement options, as well as the reasons why this may be occurring.

### **Recent Shifts**

As was previously explored, since the passing of P.L. 94-142/IDEA, there has been an overall downward trend in educational placement at schools for the Deaf (Luckner, 2011; Moores, 2009). Luckner (2011) found that changes in educational placement trends are due to: a) growing use of universal newborn-hearing screening and early intervention services, b) large numbers of young children receiving cochlear implants, c) improvements in digital hearing aids and sound field devices, d) changes in legislation, and e) a lack of data that would speak to the

effectiveness or cost benefit of educating students with a hearing loss in separate settings.

However, data submitted to Gallaudet Research Institute's Annual Survey of Deaf and Hard of Hearing Youth suggests that between 2010 and 2012, the percentage of enrollment of Deaf students within special or center schools for the Deaf went up by a little more than five percentage points (Gallaudet Research Institute, 2011; 2013). There appears to be no data from subsequent years to test whether this change is a trend, but it does merit an exploration of the possible reasons for this recent shift.

### **Deaf Education Within Deaf Spaces**

Parents of Deaf children and educational teams may consider many factors when making the choice to place a Deaf student within an ASL-dominant space for his or her education. Luckner's (2011) factors that have contributed to changes in educational placement trends certainly play a role in decision making around where a Deaf child will go to school. There are programs that are specifically designed for Deaf students within some general education options, where instruction is provided in ASL (Marschark & Hauser, 2011). In addition, American oralism and the cultural momentum toward monolingualism within its public schools might be another factor that pushes Deaf students into the general education classroom. However, there are still numerous reasons for a Deaf child to learn within a setting that is designed specifically for Deaf students, and where ASL is the majority and shared language.

**Linguistic capital and fluency in ASL.** Henner, Caldwell-Harris, Novogrodsky, and Hoffmeister (2016) examined signing fluency among Deaf children attending ASL-dominant center schools for the Deaf, looking at two age-related variables: a) whether or not the children were exposed to ASL from birth, b) and the age of entry to the school, acknowledging that for non-native signers, that age often means first exposure to ASL. They found that both variables

had implications for signing fluency. Fluency declined with increasing age of first exposure to ASL and entry into an ASL-dominant school. These findings corroborate the research of Skotara et. al. (2012), which was discussed in this paper's section on student language deprivation.

Henner, Caldwell-Harris, Novogrodsky, and Hoffmeister's (2016) results indicated that while Deaf students who have signed since birth are at an advantage, students who acquire it later, but before the age of twelve, still improve their cognitive language processes by learning within a fluent and dynamic signing environment. Emergent signers can fall into that second category. The advantage of ASL fluency can be seen as one piece of something larger that center schools for the Deaf have to offer, which is called Deaf community wealth.

**Deaf community wealth.** ASL fluency and bilingual education are some benefits to learning within center schools for the Deaf. Another compelling advantage is the opportunity for Deaf students to feel a sense of membership within their educational setting. Fleisher, Garrow, and Friedman Narr (2015) took a social justice lens to their exploration of Deaf community wealth, and the power of Deaf-centric learning for Deaf students, emphasizing the six kinds of community wealth that can be found within Deaf spaces: a) linguistic capital, b) social capital, c) familial capital, d) aspirational capital, e) navigational capital, and f) resistant capital.

Multiple researchers have documented Deaf students' experiences of bystandership when placed within inclusion and mainstream settings (Antia, Stinson, & Gaustad, 2002; Ramsey, 1997; Winston, 1990). This would reflect a lack of these six forms of community wealth within their educational experiences. Smith (2015) discussed the impact of an interpreter-mediated education on Deaf students' active participation in the classroom. She highlighted Winston's (2004) assertion that the delay, or processing time endemic to interpreting, makes it virtually impossible for Deaf students to engage fully. Such limitations, which impact students' ability to

harness a sense of autonomy around education, would seem to run counter to the ideals of IDEA, which touts a deep and thoughtful consideration of each child's unique and individual educational needs (Shapiro, 1994). Within center schools for the Deaf, students have the chance to explore elements to their identity through shared language, which move beyond pathological affiliations with deafness.

Valenzuela (1999) also looked at the cultivation of membership within educational spaces in her exploration of the 'authentically caring' teacher and the impact of an intersectional approach to identity cultivation for Mexican American students within American public schools. Simon, Johnson, and Reinhorn (2015) examined the challenges that schools face when attempting to recruit teachers of color to match the demographic profile of students within urban settings. Valenzuela (1999) also remarked on the difficulty of finding Mexican American and Latino teachers to match the demographic profile of schools, noting a correlation between the educational failures of Latino students and a paucity of Latino teachers that surround them. She called the lack of Mexican American and Latino representation in the curriculum and teachers within schools 'subtractive schooling' because it effectively renders the school a place that subtracts intersectional identities from multicultural students' conceptualization of what is valid and scholarly. Yosso (2005) called this 'deficit thinking,' which "takes the position that minority students and families are at fault for poor academic performance because: (a) students enter school without the normative cultural knowledge and skills; and (b) parents neither value nor support their child's education" (p. 75).

Ramsey (1994), in her discussion of American epistemologies around mainstreaming and special education, brought a lens focused on the education of Deaf students to her assessment of this issue. She argued that while the United States is a multilingual, multicultural society, it

offers an educational system that presents our collective American identity as homogeneous and monolingual. She saw two overarching factors within the American mainstreaming and inclusion movement that have had profound effects on Deaf students: the “pressure to assimilate students for their own and society's good and the pressure to ‘repair’ them if they have any ‘broken parts’ (Ramsey, 1994, p. 47). Issues of bystandership, the subtractive schooling inherent to American educational systems, and subsequent pressures to assimilate and be ‘repaired’ are all factors that can make mainstream and inclusive placements within neighborhood schools less than ideal. It is not difficult to see the appeal of center schools for the Deaf, where being Deaf does not set students apart from others, and instead unifies them with their peers.

### **Conclusion**

As was noted previously, the U.S. Department of Education (1992) issued a guidance paper, which calls for the consideration of the following factors for Deaf children: a) communication needs and preferences; b) linguistic needs; c) severity of hearing loss; d) academic level; and e) social, emotional, and cultural needs. Center schools for the Deaf can be seen as places where students can get individualized support, as well as social opportunities with like-peers (Brown Kurz & Caldwell Langer, 2004). They are also loci of Deaf community wealth, where students can learn to make the most of linguistic capital, social capital, familial capital, aspirational capital, navigational capital, and resistant capital (Fleisher, Garrow, & Friedman Narr (2015). As such, they can support the development of a healthy and whole sense of self within these unique educational spaces (Tucker, 2011). These are all reasons why center schools for the Deaf can be seen as desirable placement options for students, including those who are emergent signers.



### **Chapter III: Methodology**

Emergent signers' presence within Deaf school classrooms has created a new opportunity in educational interpreting research. This study explores the work of educational interpreters within ASL-dominant settings. My goal was to document the factors influencing these interpreters, as well as their strategic responses to these factors. I aimed to give voice to the interpreters who took part in the study. This project's methodology included observations and field notes, video footage of interpreters at work, and filmed video elicitation interviews.

I sought to answer two critical questions: 1) What are the factors that influence interpreters' decisions when working alongside emergent signers, their Deaf peers, and teachers who sign fluently in an ASL-dominant K-12 classroom? and 2) What strategies do interpreters use when responding to these factors?

#### **Theoretical Framework**

This study utilizes grounded theory as a theoretical framework. In line with other studies of educational interpreting (Kotzé, 2014; Smith, 2013), theories and themes were induced from the data over repeated reviews. A constant comparative analysis was applied of themes and phenomena arising within a particular setting comprised of two elementary classes and three teachers within one school for the Deaf. The emerging data was analyzed for examples and counterexamples, albeit not necessarily reaching a point of saturation (Charmaz & McMullen, 2011; Glaser & Strauss, 1967; Strauss & Corbin, 1997). Patterns and interrelated coding came from the data and participants themselves, generating substantive theory, which aligns with the philosophy of action research (Strauss & Corbin, 1997; Stringer, 2013). As such, this study's design emulates the methods of one other educational interpreting study that also used grounded theory as a framework, that of Smith (2013). My familiarity with the subjects and setting

informed conversational prompts that were used in the interview setting (see Appendix A), as well as much of the analysis.

### **Research Design**

This is a pilot case study, taking place within a system limited by time and place (Liu, 2011, Stringer, 2013). Participation was defined by convenience sampling because of complications around scheduling within the setting of the study. Three interpreter-participants contributed to the project. These participants were each observed and filmed at work in Deaf school classrooms, and then interviewed roughly one week later. Interviews followed video elicitation interview protocols, where the filmed data from the classroom observations were used as prompts for conversation (Consuegra, Engels, & Willegems, 2016; Gass & Mackey, 2000; Henry & Fetters, 2012).

### **The Setting of the Study**

The study took place within a school for the Deaf where ASL is the shared language for its students and teachers, and where written English fluency is taught. The educational approach at the school is bilingual. While the setting for this research does not name itself a ‘center’ school for the Deaf in any of its written materials, the anecdotal comments that I have seen from countless students, teachers, and alumni of this school during years of working there is that Tucker’s (2011) description of center schools for the Deaf can be applied to the school where this research was conducted. It is a state-wide center for collective expertise regarding ASL/English bilingual education, where culturally Deaf ways of knowing are celebrated. Bilingual instruction is provided there through direct communication, via visual modalities (Thumann & Simms 2009).

The size of the 1<sup>st</sup> and 2<sup>nd</sup> grade classes that were observed had up to eight students per class, with one teacher and one teacher’s aide assigned to each class, although subject areas

rotated between teachers. The classrooms were arranged so that during lecture and discussion times all of the students were facing the teacher or teacher's aide, ensuring that sightlines to multiple sources of visual discourse be optimized for all present, mirroring the recommendations of Marschark and Hauser (2011). The interpreters observed in this setting most often stood or sat behind the students, close to the emergent signer (see Figure 1).

### **Participant Recruitment, Permissions, and Sampling**

The study was approved by both my university's institutional review board (IRB) and the school's superintendent and governing cabinet. Consent followed the IRB and school requirements. To recruit subject participation, all eight staff interpreters were invited via email (see Appendix B). A total of six responses from the pool of eight interpreters were received. Due to limited willingness of the classroom instructors and the children's parents for permission to be filmed, the pool was further limited to three interpreters, all of whom were observed while working in the elementary department.

**Class/teacher availability and permissions.** The elementary department teachers who worked with emergent signers were contacted to obtain permissions to film and observe their classes (see Appendix C). Two teachers expressed interest. These were the 1<sup>st</sup> and 2<sup>nd</sup> grade teachers, who shared the teaching of these students by splitting up the content areas to be taught. Eventually, another teacher was also invited to participate, as he rotated in and out of both classes to teach social studies for several months. Once the teachers gave their consent, they helped with the next phase of obtaining consent, which was seeking permission from the parents of the students in the 1<sup>st</sup> and 2<sup>nd</sup> grade classes.

To do so, a letter was disseminated to the parents of students in those classes requesting their children to be filmed as a part of this study, which included a form for them to sign (see

Appendix D). I was already familiar with most of the parents from having worked with their children and interpreting for meetings with them. Teachers were relied upon to communicate with the parents about the study, as I did not want my personal connection to them to alter their responses.

### **Characteristics of the Focal Interpreters.<sup>3</sup>**

Scheduling observations in the classroom was challenging and had implications for subject participation in the study, which rendered the selection of participating interpreters defined by convenience sampling. Ultimately, nearly 3 hours of field data footage and 3.5 hours of interview data were obtained collectively from the three participating interpreters.

<b>Name of Interpreter</b>	<b>Gender</b>	<b>First Language</b>	<b>Certification</b>	<b>Years of Experience</b>	<b>Years of Experience at Deaf School</b>	<b>Setting where Interpreter was Observed</b>
Evaristo	Male	Spanish	Registry of Interpreters for the Deaf: NIC; BEI Trilingual: Advanced	5	3	2 <sup>nd</sup> grade homeroom 1 <sup>st</sup> grade math and science Combined 1 <sup>st</sup> and 2 <sup>nd</sup> grades, critical thinking skills
Gloria	Female	English	N/A	< 3	< 1	2 <sup>nd</sup> grade homeroom 1 <sup>st</sup> grade social studies
Cici	Female	English	Registry of Interpreters for the Deaf: CI/CT	>17	>1	1 <sup>st</sup> grade math and science

*Table 1: Demographic interpreter data*

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<sup>3</sup> Pseudonyms have been used for all participants.

### Filmed Field Observations

The protocols for filmed field observations were informed by Smith's (2013) study of interpreters in K-12 settings. Two cameras at differing angles were set up for each classroom observation. This was done in order to obtain two differing views of the signed discourse at the same time. In addition, one of these cameras included the interpreter in its frame to capture any English-to-ASL interpreting that might occur. Each interpreter was observed and filmed for only one day, from a time frame of 30 to 90 minutes. At times, filming stopped when it appeared that students became distracted by this process.

<b>Evaristo</b>	Homeroom class	8 minutes
<b>Evaristo</b>	Math and Science	46 minutes
<b>Evaristo</b>	Critical Thinking Skills	30 minutes
<b>Gloria</b>	Homeroom class	5 minutes
<b>Gloria</b>	Social Studies (interactive group)	48 minutes
<b>Cici</b>	Math and Science	38 minutes

*Table 2: Field data from each interpreter*

### Editing Decisions for Video Elicitation Interviews

Classes usually started out with a group conversation and lecture, with an explanation of the lesson by the teacher and multiple questions and conversations from and between the students. This period of time would last from between 8 to 12 minutes and it involved discourse from multiple signers who were situated at various locations around the semi-circle. Various examples of interpreter strategies were featured during this time. Thus, the beginning 10-12 minutes of classes were largely maintained for the purposes of the video elicitation interview.

After the group discussion and lecture time, students were often put into groups or asked to work independently. At this point in time signed conversations were generally one-way or absent as the students worked independently or in small groups. This section of video footage

was edited for the video elicitation interviews. This, according to Henry and Fetters (2012), ensured saving time and energy during the interviews.

Various types of discourse and decision points reflected in the interpreters' behaviors were included in the edited videos. Additionally, factors that had been identified in previous research of educational interpreters and work with emergent signers (Smith, 2010; 2013; Smith & Dicus, 2015; Winston, 2004) were sought and featured. Editing decisions were also informed by my personal experience interpreting in similar environments. Edited video samples included the interpreters' work and interactions in the classroom, as well as samples of teacher lectures and student discourse. The edited videos were no longer than 30 minutes long.

### **Filmed Video Elicitation Interviews**

The procedures that followed for video elicitation interviews were based on the suggestions of Henry and Fetters (2012). All interviews took place within a week and a day of the field observations, so as to take advantage of any memories and thoughts about the work while they were still in the memory of the participants (Henry & Fetters, 2012; Smith, 2013).

Each interview was scheduled to last for just one session, consisting of a minimum of 45 minutes. Interviews used the edited films as source material to elicit conversation, in combination with conversational prompts. At the beginning of the interview participants were read a script, asking them to review their filmed work and pause when they had something to say about what they saw. They were then shown an edited video of their work to elicit responses to the events that occurred in the classroom. The interviews were filmed with one external camera on the interpreter as he or she watched the filmed data and one screen-shot recording, which captured the spoken conversation along with the footage that was watched.

## **Data Analysis**

I used EUDICO Linguistic Annotator (ELAN, 2018), a coding software, to transcribe the data and identify patterns and themes around the factors that influenced the interpreters, as well as the strategies they employed. These codes were categorized thematically. I combed through the data to find behaviors and factors that were similar to those found in the literature, as well as patterns that appeared to be distinct from what was found in the literature. Using grounded theory to inform the methodology, the process of data analysis was begun as soon as it was collected. Possible themes had already been documented through previous research, and this functioned as pseudo hypothesis development, where potential themes were identified, and then carried through or not, over time (Hildenbrand, 2004). Categories were refined over time as interview data clarified the problems faced by interpreters in this setting and solidified many of their strategies, although as a preliminary study, the categories never reached indisputable saturation. The stories that arose from the participants and their actions were prioritized within the data as a starting point for representing the data analysis.

## **Chapter IV: Results and Discussion of the Findings**

There were two questions driving the data collection and analysis of this study: 1) What are the factors that influence interpreters' decisions when working alongside emergent signers, their Deaf peers, and teachers who sign fluently in an ASL-dominant K-12 classroom? and 2) What strategies do interpreters use when responding to these factors? These questions were conceptualized in an attempt to explore the new phenomenon of educational interpreters employed to work within a center school for the Deaf setting, where the predominant and shared language is ASL.

## **Setting the Stage for Understanding the Findings**

In the analysis of the data from this study, the unique factors inherent to an ASL-dominant classroom were very much intertwined with each discrete strategy that interpreters chose to implement in response. Interpreters were constantly evaluating the various factors they faced and responding to those factors with strategies, which subsequently produced additional factors to which they had to respond. This required constant prioritizing of the various factors and strategic responses in light of their overarching aims. Because of this, the factors and strategies uncovered in this study will be presented in unison, using the stories of interpreters as a backdrop for their presentation.

I sought to examine how these factors and responses were different than those faced by interpreters at work within English-dominant, mainstream K-12 settings. In Chapter II, I discussed existing research regarding interpreter challenges and environmental factors in mainstream classrooms. A few studies stand out as having occurred from observations within the mainstream setting. These studies examined, among other things, the factors that interpreters face there. Winston (1990) examined limitations placed on the interpreter in one mainstream classroom. She argued that any time a class involved questions and answers between the teacher and multiple students, it required that the hearing teacher manage the pace of the interchange between him or herself and the students in order for the Deaf student to be allowed to participate. She called this reliance upon the teacher's management a constraint upon the educational interpreter. She found that this led to a lack of Deaf student participation. This was corroborated by Ramsey's (1997) study within one public school, which found that Deaf students within that educational setting lacked opportunities for true participation and instead predominantly experienced bystandership in school.



Smith (2013), like Winston (1990), found that the participation of Deaf students was a primary endeavor of K-12 interpreters, along with the facilitation of language and content learning, and optimizing visual access. These three overarching motivations for interpreters had major impact on their moment to moment decisions, which led to other factors and strategies that came to light as a result of those motivations (Smith, 2013). Smith, like Winston (1990), conducted her research of interpreters partially by observing them within the classrooms where they worked.

The present study sought to examine how the ASL-dominant educational setting generated factors and strategic responses of the interpreters at work there, as compared to those found in previous seminal research in mainstream settings. As was discussed in Chapter II, most communication and learning will happen via visual modalities within center schools for the Deaf. Furthermore, interactive learning within this ASL-dominant setting translates to multiple people signing from different locations at very nearly the same time, requiring rapidly scanning one's eyes from signer to signer in order to keep up with the conversation. Upon first glance, these factors alone make it unique in educational interpreting settings.

As the data emerged, I found that categorizing the factors to which interpreters responded within the ASL-dominant setting could be accomplished by using the overarching endeavors uncovered by Smith (2013). Within the ASL-dominant classroom, I saw the Deaf or ASL-fluent teacher or teacher's aide take primary responsibility for facilitating the learning of language and content and cultivating opportunities for participation, with the interpreter working in a supplementary fashion to support these endeavors by rendering ASL into spoken English as accurately and accessibly as possible, while also responding with some minor strategies.

However, the third factor described by Smith (2013), optimizing visual access, took proportions that were exaggerated within the center school for the Deaf setting. Furthermore, interpreters had to continuously optimize own access needs in response to this unique environment, and to a lesser degree assessed the access needs of the emergent signers. These constant assessments led to strategies around taking action to prioritize certain visual stimuli over others.

The following sections will use examples from the field data and interviews to lay out the ways that interpreters in this ASL-dominant setting worked alongside the Deaf professionals in their strategic responses to various factors within the visually dynamic educational setting. These sections provide descriptions of the way factors manifested within the visually rich environment of the ASL-dominant classroom, along with descriptions of the strategies that interpreters used in response. While the overarching endeavors discovered by Smith (2013) may remain the same in this environment, within the K-12 setting where the predominant language is ASL, there are unique environmental factors at play, resulting in a variety of strategies.

### **Example 1: Critical Thinking Skills Class**

The following description, taken from the footage of Evaristo interpreting in an ASL-dominant classroom, will help to contextualize the how the factors specific to this context influence the decisions and strategies of the interpreters at work there. The description provides an accounting of multiple factors influencing Evaristo's strategies around cultivating language and content learning, as well as facilitating participation, within an environment rich with visual language. This will set the stage for further discussion of the themes discovered in the data from the factors and strategies of all three interpreters.

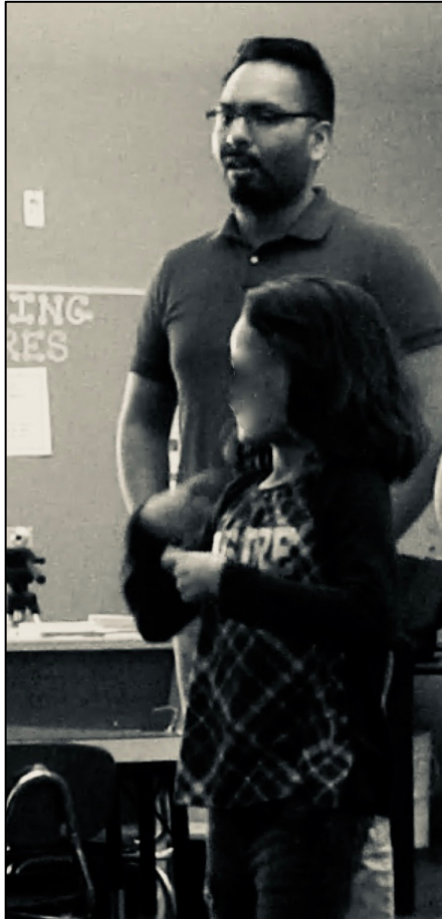
The segment occurred during the final class period of the day on a Friday, lasting for a total of one and a half minutes. This was 1<sup>st</sup> and 2<sup>nd</sup> grade class called ‘critical thinking skills.’ Amy, a hearing teacher, presented the classroom instructions in ASL. The class began in a large group setting, with the students seated on the floor in a semi-circle facing the teacher. Evaristo was the interpreter assigned to interpret the class into spoken English for the two emergent signers, Diego (1<sup>st</sup> grade) and Shiloh (2<sup>nd</sup> grade).

As students filtered in, Amy stood at the front of the room and welcomed each student. Evaristo stood opposite Amy, behind the seated students. Marisol, the Deaf teacher’s aide, stood slightly to the left of Evaristo. Behind Amy, the words *¡Hola! ¿Cómo están?* were written on the board.

Amy began signing to the students, “SOME YOU FINISH NOTICE [pointed at the board]. MYSTERY, SOMETHING STRANGE. YOU NOTICE STRANGE [pointed to the board again]?”

Evaristo, still standing opposite Amy, interpreted this utterance into spoken English, “Some have already noticed something on the board, something maybe a bit strange.” Amy then pointed to the ‘i’ and ‘¿’ on the board, and signed, “WHAT THAT?” Evaristo continued interpreting into English, “Have you noticed this? Look at those! What are those?”

Marley, a 2<sup>nd</sup> grade student, approached the group from behind Evaristo, as she had returned to her seat after leaving her jacket near the entrance of the classroom. As she walked toward the group, she was signing SPANISH repeatedly. As Marley moved into Evaristo’s visual field, Amy looked up and smiled as she saw Marley. Evaristo turned his head to look at Marley, and then quickly looked back at Amy as he interpreted Marley’s answer into English, “It’s Spanish” (see Figure 2).



*Figure 2: Evaristo quickly glancing to his left as Marley as she signs SPANISH*

Amy pointed to Marley. “MARLEY? COME-TO-ME,” she signed. Evaristo interpreted this into spoken English, “Marley?” Marley made her way through the group to stand next to Amy. Facing the seated group and Evaristo, she signed “SPANISH” again. Amy repeated the sign. Evaristo continued interpreting into English, “It *is* Spanish!” Marley then returned to her seat, which was in front of Evaristo.

Amy explained, “WRITE LITTLE-BIT DIFFERENT! HAVE THAT.” She pointed to the ‘¿.’ “WHAT THAT?” She then pointed to the question mark at the end of the sentence and used her hands to depict how the two symbols were the reverse of each other.

Evaristo continued interpreting into English, “So, their writing is a little bit different. They have that symbol—what is that? You know this one, and that’s just turned upside-down, right?” Evaristo’s processing time was very short during this segment. So much so, that when he said, “that symbol,” Amy was still pointing to the ‘¿’ and when he said, “this one,” Amy was pointing to the question mark.

Amy signed, excitedly, “SPANISH HAVE! COOL!” Evaristo interpreted into English, “That’s something that they have in Spanish. It’s pretty cool!”

Amy continued, and so did Evaristo, “Right, Oscar? So, in Spanish they have an upside-down question mark at the beginning. Have you seen it before?” Oscar shook his head. Evaristo glanced over at Oscar, saw the movement, and said, “Uh uh.” Marley, seated directly in front of Evaristo, immediately raised her hand very fast, and said in spoken English, “I do [know what the symbol means]!” Amy continued, with Evaristo interpreting her message into spoken English,

“And same thing with the exclamation mark. They have it upside-down at the beginning, too.” Amy gestured, as if to tell the students not to raise their hands at that time. Marley lowered her hand but signed “ME FINISH SEE.”

Amy and Evaristo continued, “So, does English have that? Does English have those?” At the same time that Evaristo was interpreting this message into spoken English, Marley could be heard saying, in spoken Spanish, “¿Cómo está?”

Amy pointed to the first word on the board and signed, “SAY WHAT?” Evaristo interpreted this into spoken English, “So, what does this say here?”

Amy signed “MEAN,” and then waved her hand as a hello to the group and signed, “ME SAY HELLO.” Evaristo interpreted this explanation with, “Hello! You can say ‘hello’ to someone by saying ‘*hola*.’”

Amy continued signing, now pointing at the second sentence on the board. “NOW, [pointing, she signed] SAY WHAT? Evaristo continued in spoken English, “How about this?” Amy fingerspelled the words, ‘*cómo están*.’

As she was finishing the spelling, Marisol, who was facing her, signed *COMO ESTÁ* in Mexican Sign Language (LSM). Evaristo continued interpreting, now in spoken Spanish, “*Cómo están*.” Marley looked back at Evaristo and repeated in Spanish, “*están*.” Oscar, at the same time shouted in spoken English as he signed the same words, “Means how are you!” Amy signed to Marley and Oscar, “VOICES OFF,” before moving on with the lesson.

About fifteen minutes later, the large group was split into two smaller groups, both with a mix of 1<sup>st</sup> and 2<sup>nd</sup> graders. Shiloh and Diego were in a group of eight students, now seated in a smaller semi-circle on the floor, gathered around Amy and the board. Evaristo stepped closer to the group as this new discussion began, and crouched directly behind the students, between Shiloh and Diego. Amy began by describing what types of books were available to purchase, to donate them to children who were victims of Hurricane Harvey. She had found a list of recommended books that were weather-related to discuss with the students, which she displayed on the white board. The pictures of the book covers were displayed, as well. Amy sat down in a chair next to the board, facing the students, and reviewed various titles of the books, showing the prices of the books, which were listed below.

Amy pointed to one of the books on the list and signed, “TITLE S-E-R-G-I-O AND

T-H-E HURRICANE.” Evaristo interpreted this into spoken English, “Now let’s look at this. The book’s title is, *Sergio and the Hurricane*.” Arlo looked at Marley, to his left and repeated, “Sergio” in spoken English, with a big smile on his face.

After choosing several books to purchase, the lesson ended, and the groups switched.

### **Critical Thinking Skills: A Discussion of the Interpreting Factors and Strategies**

The configuration of this classroom promoted language and content learning, as well as participation, via visual-manual modalities. Students were seated in a semi-circle, so they could see not only the teacher, but they could see each other as well. Perhaps Evaristo’s decision to stand behind the students and face the teacher was a reflection of his experience in this setting, with this teacher and this group of students, since Amy had more to say than the students, and she would ask students to share by stepping to the front of the room next to them before signing. About the negotiating of shared attention in the Deaf classroom, Mather (1987) explained, “the teacher, as current speaker, selects a student as next speaker, but when the student finishes a turn, the turn to speak automatically returns to the teacher” (p. 11).

Because the students were cramped up against each other on the floor, there was no space for Evaristo to sit within the semi-circle. He chose to stand for the large group setting. From his standing position behind the semi-circle of seated students, he could see the writing on the board. However, he could not easily see every student in the classroom, as there were students directly in front of him who had their backs to him as they faced Amy at the front of the room.

When Marley approached the group from behind Evaristo while signing SPANISH, she advanced from outside of Evaristo’s visual field. However, he noticed Amy smiling and making eye contact with someone directly to his left. In order to turn and look at Marley, he had to look away from Amy, which he did for a split second.

A little later, Amy was explaining about the different orthographic elements of Spanish, showing the students how written Spanish uses exclamation points and question marks before and after sentences. She did not name the symbols, but pointed to them, asking the students what they were, and using her hands her hands to depict how the question mark at the beginning of the sentence was the reverse of question mark at the end. Evaristo interpreted her message into spoken English the following way, “They have that symbol...what is that? You know this one, and that’s just turned upside-down, right?” With this approach, Evaristo was able to avoid giving the answer in his interpretation so that Shiloh and Diego could respond if desired.

In this moment, Evaristo was careful to time his interpretation so that as he was saying “that symbol,” Amy was still pointing to the ‘¿’ and when he said, “this one,” Amy was pointing to the question mark. Evaristo made sure that when Amy was pointing, Shiloh and Diego would also hear a spoken pronoun, that was pertinent to the referent to which she was actually pointing. This is critical because if Amy were pointing at something else or not pointing at all at the moment when he was saying “this,” he would have had to use a different strategy, by explicitly labeling the thing she was pointing to.

Indeed, as Amy continued, Evaristo used this different strategy. When Amy pointed to the two symbols as she asked Oscar if he was familiar with them, Evaristo specified the referent by explicitly saying, “in Spanish they have an upside-down question mark at the beginning.” Amy, however, never named the symbols in her explanation, choosing instead to point each time.

A little later, Evaristo used the timing technique described earlier, when Amy pointed to the first word on the board and signed, “THIS SAY WHAT?” As Amy was pointing to the sentence, Evaristo timed his interpretation so that he was saying “this.” Again, it is critical that when Shiloh and Diego hear “this,” they see the referent in question.



When the large group split up and a smaller number of students was grouped with Amy, Evaristo stepped closer to the seated semi-circle and crouched directly behind the students. At that point, Evaristo there were fewer people to see, and when he stepped in closer and crouched, this gave him a narrower range of students in his view. Furthermore, when Amy began by describing the books to purchase, kneeling a little closer to the group also gave Evaristo a better view of the things she was pointing to on the board. When Amy sat down, Evaristo's eyes were directly across from hers, as he was already kneeling. In this position, Evaristo could easily see both the board and Amy.

When Amy pointed to one of the books on the list and signed, "TITLE S-E-R-G-I-O AND T-H-E HURRICANE," Evaristo was able to see her signs clearly, as well as see the title of the book in written English. During his interview, he explained that he had used the information on the board to verify accuracy in his interpretation, to support his aim of cultivating the learning of language and content. After checking with the screen, Evaristo interpreted Amy's message into spoken English, "Now let's look at this. The book's title is, *Sergio and the Hurricane*," and the lesson continued.

The following are a list of influencing factors and Evaristo's subsequent decisions in light of his aim to work alongside Deaf professionals to cultivate language and content learning, as well as facilitate participation from the emergent signers.

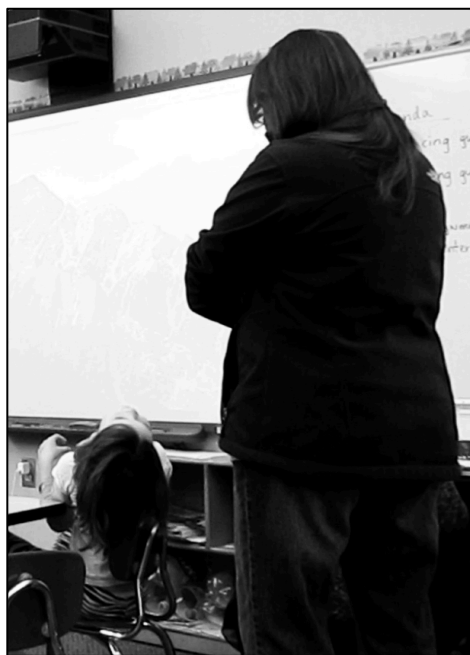
- 1) From where he was standing behind the semi-circle of seated students, Evaristo noticed Amy smiling and making eye contact with someone directly to his left.
- 2) He chose to look away from Amy to Marley for a split second, so that he could see what Marley was signing and interpret it into spoken English.
- 3) Evaristo noticed that Amy was pointing to ask students what some symbols meant.

- 4) Evaristo timed his interpretation into spoken English in a way that left the symbols she was pointing to ambiguous, thus creating the opportunity for Shiloh and Diego to respond if desired. Evaristo had to be sure that Shiloh and Diego would hear a spoken English pronoun that was pertinent to the referent to which Amy was pointing.
- 5) Moments later, when Amy pointed to the two symbols and asked Oscar if he was familiar with them, Evaristo specified the referent by explicitly labeling them.
- 6) When the group split up and a smaller number of students was grouped with Amy, Evaristo stepped closer and crouched, giving him a better view of the things Amy was pointing to on the board.
- 7) Evaristo continuously glanced at the board, so that when Amy pointed to one of the books on the list and signed its title, Evaristo was able to see her signs clearly while also glancing at the book title in written English on the board.

### **Promoting the Learning of Language and Content**

The endeavor to promote the learning of language and content, which was uncovered by Smith (2013) in mainstream classrooms, was fundamental to the efforts of the Deaf adults within the ASL-dominant classroom but took backseat to the other factors influencing interpreters who were primarily rendering the classroom discourse from ASL into spoken English. The teachers within this setting were aware of the language and content learning of each individual within the classroom, including the emergent signers. In mainstream settings, the interpreter has to be creative in making the spoken English language of the classroom accessible to the Deaf learner (Smith, 2013). However, within this unique educational environment, the teacher of the Deaf sets up these learning opportunities according to Deaf community norms and values (Thumann & Simms, 2009).

There were minor factors that did surface, specific to the overall endeavor of promoting the learning of language and content. For example, while I observed Gloria in the classroom, I watched her notice the squirming behavior of Shiloh, the emergent signer, who was right in front of her. This was while two other students were talking loudly to one another, which may have impacted Shiloh's auditory access to Gloria's spoken English interpretation. After observing that Shiloh had looked around in her chair at her, Gloria asked her, "Shiloh, can you hear me?" (see Figure 3).



*Figure 3: Shiloh looking back and up at Gloria*

Shiloh turned and seemed to not respond, so Gloria repeated, "Can you hear me, Shiloh?" Shiloh turned and nodded, Gloria affirmed, "Yeah?" and Shiloh nodded again.

In this example, Gloria responded to the emergent signer's behaviors and her recognition of the environmental background noise by using the strategy of directly checking with Shiloh to see if her voice could still be heard. By doing so, she was informing her future decisions to ensure that her rendering of the ASL class content into spoken English would be accessible to the emergent signer. If Shiloh had indicated that she could not hear Gloria, Gloria would have had to

make a change in her approach, by moving closer to Shiloh, speaking more loudly, or checking to see from which ear she could hear more clearly. Thus, in this seemingly simple moment, several factors and decision-points were at play:

- 1) Gloria noticed that there was background noise.
- 2) Gloria noticed that Shiloh was squirming to look at her, which previous experience had sometimes indicated that Shiloh could not hear.
- 3) Gloria evaluated these factors and responded by checking with Shiloh directly.
- 4) Because of Shiloh's response she did not make an adjustment to her approach.

The presence of interpreters within the Deaf classroom had an influence on everyone there, including Deaf students who, while fluent in ASL could also talk and hear. ASL-to-English interpreters brought another modality and language to the stimuli that were present within these Deaf spaces and may have resulted in reactions and behaviors that took the interpreters by surprise. These students were seen correcting interpreters, imitating the language interpreters used, speaking loudly as they signed to one another, and speaking to one another in English and in Spanish, sometimes inadvertently leaving out their peers while doing so.

During her interview, Gloria talked about her awareness that having multiple students in the room who could talk and hear would occasionally flip the parameters of language access, rendering Deaf students who could not hear or understand spoken language excluded. She paused to talk about a moment when a Deaf student who only used ASL for communication was telling another student, who heard and talked quite a lot, to stop flipping the lights on and off. Gloria interpreted the student's ASL scolding into spoken English, and then realized that the student who was flipping the lights had other factors influencing him. Gloria explained,

The student that was flipping the lights was being kind of pushed to do it by another student who was voicing it [in spoken English]. But the student who was telling him to stop couldn't hear that. That's one of those instances that I'm just trying to be always aware of. They're being antagonized to do it in spoken language, and the student who's telling him to stop doesn't know that that's happening, you know? So, it's always really just an interesting dynamic that happens in that class.

This realization did not appear to impact Gloria's decisions in that moment, but it did factor into her awareness. Further research of interpreters performing within Deaf majority settings might offer a deeper exploration of the nuanced factors at play when spoken language is brought into predominantly ASL environments.

### **Facilitating Participation**

Researchers have long drawn attention to the limited participation of Deaf children learning within mainstream and inclusion settings (Ramsey, 1997; Smith, 2010; 2013; Winston, 1990; 1994; 2004). One might expect the same to be for any interpreted education, regardless of the environment. Whereby according to Smith's (2013) study interpreters take on significant responsibility for fostering the participation of the Deaf students within inclusion settings, I found that within the ASL-dominant classroom, the teacher of the Deaf takes on much of those same responsibilities. This observation supports the early assertion of Winston (1990), that the teacher's ability to control his or her pace and interactive discourse occurring within the classroom was the mitigating factor impacting Deaf students' participation within the mainstream classroom she studied.

Teachers within the Deaf classroom also cultivated joint visual attention according to Deaf community norms and values, which supported the emergent signers' participation in the

classroom activities, learning, and social interactions (Mather, 1987). While working alongside the teacher, the interpreter would primarily facilitate participation by ensuring that his or her interpreting was rendered accurately and accessibly, while they also strove to notice the emergent signer's attention and sometimes prompted them where to look in response. The data supporting this premise come from filmed observations of interpreters at work within the ASL-dominant classroom, as well as comments from the interpreters during their interviews.

**Responding to each emergent signer's interests.** Evaristo described a desire to follow the emergent signer's lead in determining which conversation to interpret. In order to assess and respond to each emergent signer's level of participation within ASL-dominant classroom, he periodically checked in with the emergent signer visually to see where he or she was looking. Evaristo described the rationale behind monitoring Shiloh's eye gaze as he first entered the 2<sup>nd</sup> grade homeroom class:

So, right here—I just see myself seeing where [Shiloh] is looking at, too. Trying to see what she's seeing, seeing where her eye gaze is, so that if she is trying to look at a conversation that is going on with the other kids, making sure that that's what I'm interpreting.

In an environment that was rich with multiple simultaneous signed conversations, the emergent signers sometimes looked in a different direction than where the interpreter was looking. Identifying where Shiloh was looking influenced Evaristo's decisions regarding what signed utterances to interpret.

However, this endeavor was not always successful. Evaristo remarked upon how during some moments of interpreting the interactive visual discourse from multiple signers, he had not succeeded in noticing where Shiloh had been looking. He explained,

I'm just looking at the student that I'm interpreting for, and they are not—I think throughout this whole video, they have been looking at the person who is talking very little. That makes me think about my approach.

While he was interpreting, Evaristo could not look in two places at once. Thus, the highly visual nature of the ASL-dominant classroom placed constraints on his ability to monitor the attention and/or interests of the emergent signer. Evaristo sometimes prioritized his access to the interactive signed discourse over identifying what Shiloh was seeing or noticing her behaviors. In the situation Evaristo commented upon, Shiloh was not looking at any signed discourse, and instead appeared to be looking into space. This had gone unnoticed by Evaristo in the moment while he was interpreting, and was only something he reflected upon afterward, in light of his endeavor to support her participation in class by responding to her interests.

**Fostering emergent signers' attentiveness to the signed message.** The following excerpt from Gloria's filmed interpreting sample, as well as her explanation about it afterward, provides an example of how interpreters in the ASL-dominant classroom strive to cultivate an attentiveness to the signed message as a part of their overarching endeavor to facilitate participation.

Gloria was interpreting the 1<sup>st</sup> grade Social Studies class into spoken English for Diego, the emergent signer. Mr. Rogers, the Deaf social studies teacher, had 'Bald Eagle,' U.S. Flag,' and 'Liberty Bell' written as a list on the board. Each time Mr. Rogers would point to one of the items they had learned about previously, he would sign WHAT-THAT, looking back at the students. At one point, Ian, one of Diego's Deaf peers, got the attention of Mr. Rogers, and shared something he had heard from his father about the Liberty Bell in ASL. Gloria interpreted

this into spoken English, “My dad said that—this is Ian—he said that the bell has a crack because it was banging so hard, and that’s why it’s cracked!”

During our interview, Gloria explained that she inserted an explanation of who was talking into her interpretation in an effort to influence the attention of the emergent signer. She explained, “I’m trying to get better about letting our consumer know who is talking, especially because you can kind of see that they’re not even paying attention, really.” In this example, Gloria had noticed that Diego’s eyes were not tracking the signed conversation. Deaf cultural norms dictate that eye gaze is an important regulator in signed discourse, particularly within a Deaf classroom (Mather, 1987). Mather (1987) clarified that in Deaf discourse, “those who are not familiar with or do not employ eye gaze rules find difficulties in signed discourse; e.g. a lack of ‘smooth’ exchange or confusion about turns to sign” (p. 13). Gloria’s decision to supplement her interpretation with an explanation of who was talking can thus be explained as an effort to encourage Diego to watch Ian at the moment he was signing, and not anyone or anything else. Thus, several factors and decision-points were at play:

- 5) Gloria noticed that Ian was signing.
- 6) Gloria noticed that Diego was not watching Ian.
- 7) Gloria knew that according to Deaf cultural and linguistic norms, Diego should watch Ian.
- 8) Gloria evaluated these factors and responded by including information about who was signing in her interpretation, to encourage Diego to look at Ian while he was signing.

Metzger (1996) described this strategy as ‘source attribution,’ “an interpreter-generated non-*rendition* that actually relays information carried within the original discourse” (p. 155). This strategy was used by the interpreters in this study to convey to the emergent signer who was



talking and/or direct them where to look, to support the active participation of the emergent signer in the classroom conversation.

Evaristo, when watching his filmed field sample from the 2<sup>nd</sup> grade homeroom class, noticed that Shiloh, the emergent signer, had not been visually attending to the signed discourse that he had been interpreting into spoken English:

I think throughout this entire video I've maybe identified who was talking maybe a couple of times. I don't remember that I have. So, that's maybe something that this student is really needing to pay attention to whoever is talking.

At the moment where Evaristo had paused his filmed recording, Shiloh had been looking at something that did not appear to be anyone who was signing. Evaristo used the video elicitation interview to reflect upon his practice, thinking about ways to use the strategy of source attribution to influence the emergent signer's visual attentiveness.

**Cultivating emergent signers' participation in response to the signed message.**

Throughout the time that Cici was interpreting math class into spoken English for Diego, the emergent signer, she did not insert the names the individual signers as they were speaking, as Gloria had done. However, when Annika, the Deaf math teacher, pointed at something or someone, Cici, like Evaristo, would make the referent explicit in her interpretation, using students' names in her interpretation when the teacher pointed at students to call on them.

For example, when Annika was explaining to specific students what she expected of them for part of the math period, she did not use their name signs. She signed, "NOW WANT YOU, YOU [pointed to Diego and Moira] WANT GROUP FUN GAME." Cici interpreted this instruction into spoken English, "Right now I want Diego and Moira to do a really fun game that is about math." Before Cici had finished her spoken English interpretation, Diego had already

responded appropriately, by standing up from his seat and moving toward the separate table that had been designated for Moira's and Diego's game. Whether Diego understood the signed message before it had been interpreted, or if Cici's use of his name in her interpretation had help Diego to understand, he showed active participation in the way one might expect of a student who is a member of his learning environment.

**Adjusting the timing of the interpretation vs. labeling the referent.** As was discussed during a critical thinking skills example, Evaristo was seen adjusting the timing of his interpretation so that when Amy, the teacher, was still pointing at the topic in question he did not have to label it in his spoken English interpretation. With this approach, Evaristo was able to avoid giving the answer in his interpretation so that Shiloh and Diego could respond if desired.

This technique was also used by Gloria, when Mr. Rogers, the Deaf teacher, was showing the distance of 24 inches, using a yard stick as a prop. Mr. Rogers had explained that the Liberty Bell has a crack in it that is 24 inches long, and then used a yard stick to describe the length of 24 inches. He pointed to one end and then dragged his other finger up for two feet, stopping at the 24-inch mark. Then he depicted how each of the lines on the yard-stick represented one inch with his finger, and signed, "24," as he pointed to the 24-inch mark. As he was pointing to the distances, Gloria interpreted the message into spoken English "From here to here, all the way. That's a big crack! 24 inches."

However, at a later instance, Gloria chose to label the referents to which Mr. Rogers was pointing. Mr. Rogers pointed out all of the continents on the map across the room from Gloria, counting on his left hand as he pointed to each continent with his right. She interpreted in spoken English, "Look over here. We have Australia, Asia, Europe, Africa, Antarctica, South America and North America." This time, Gloria chose to make explicit what he was pointing to by

naming each of the continents in English but omitting the counting of the continents in her interpretation.

Although these moments appear to be as simple as interpreting for pointing or omitting superfluous details, there is complex decision-making behind each action taken by interpreters facing this situation. Each interpreter had to:

- 1) Identify that the signer was pointing at something specific.
- 2) Identify whether the signer was using pointing with the intention of eliciting a reply, e.g. “what does this symbol mean?”
- 3) Consider how to respond to these factors in a way that would make sense to the emergent signers.
- 4) Strategize their responses by either adjusting the timing of their interpretation in a way that would align with the intent of the signer (prioritizing the emergent signers’ participation) or labeling the referent to which the signer had been pointing (prioritizing the cultivation of content and language).

The interpreters weigh their ability to understand the signed message swiftly and accurately in order to time their interpretation to align it with the signer’s pointing, with the need to make the referent explicit. These techniques support the emergent signers’ acquisition of language and content as well as their participation.

**Intentional omissions.** When interpreting into spoken language, there are few clues to distinguish if someone is attending to the message, since the emergent signer’s comprehension of spoken language does not rely upon eye gaze. Without this as a reliable metric for emergent signers’ engagement with the message, the interpreters in this study talked about *not* interpreting as one way to facilitate visual attentiveness.

I noticed the decision to not interpret from all three interpreters when the emergent signer had independently understood the ASL before the interpretation had been produced, or during independent work time, when the emergent signer was engrossed in their own work and there was a side conversation happening nearby. Gloria explained,

There's moments, especially with the regular teacher for this class in the morning when we're doing math, I don't need to interpret. [Diego is] answering before I can even figure out how to say a coherent English sentence, and [he's] already responding with [his] answer or what [he] thinks is right, before I even have a good sentence. So, there's moments, I just stop. I just let it kinda happen.

Gloria is aware that interpreting the ASL into spoken English could sometimes conflict with her aim to facilitate Diego's participation in class. Thus, in her evaluation of the factors at hand, she notices that he appears to be attending to and understanding the visual ASL on his own, and her response is to let him do so independently.

Evaristo also made a comment about his decision not to interpret during a time when Diego was working independently during math class. However, his purpose for not interpreting was different than Gloria's, although it can still be rationalized with his aim of facilitating participation in mind. He explained,

So, right here I am just watching the conversation that's going on between the teacher and the other student just in case [Diego] is actually watching. And where it's paused right now, I'm checking on whether [he is] actually watching or not. I even start moving my lips, a little bit, just, in like what she's saying. But, I noticed the student is really focused on [his] work, so I decide not to interpret it at this point because I think it's just going to distract [him] from what [he is] focused on.

It would seem that the decision not to interpret can have implications for the emergent signers' ability to participate in class discussions independently, which was explained by Gloria, or focus on their own work independently, as described by Evaristo. While both Gloria and Evaristo talked about naming who was signing at a given time as a strategy to cultivate the emergent signers' attention to the signed discourse, they also talked about not interpreting at all as a strategy to cultivate attention in a different way. These interpreters were using conscious, strategic omissions (Napier, 2005), to facilitate the individual participation in a strategic way.

**Seeking supplemental visual resources.** The nature of simultaneous interpretation leads to occasional moments of human error. This was a factor that all three interpreters tried to mitigate. One of their strategies was to make use of additional visual resources to inform their interpreting choices. This was especially critical for knowing what English vocabulary to use when interpreting signed discourse into spoken English.

As was described earlier, Evaristo explained how he used visual resources during the 1<sup>st</sup> and 2<sup>nd</sup> grades' critical thinking skills period, when Amy was discussing book titles with the students:

Even before this, I remember definitely looking at the screen. Any time the screen comes up you're always looking for information. Especially titles, so as soon as we're talking about titles of books, I was looking at everything that was on there.

The titles of books are fixed in English. Within a classroom where ASL is the language of instruction, the teacher and students may agree on a way of signing a specific concept, proper noun, or title, but the signs themselves may not universally convey the exact combination of words that a book title in English does. Evaristo knew that he could capitalize on the written

resources in his surroundings in order to ensure accuracy in his interpretation of the message in ASL.

Interpreters' efforts within a visually rich educational environment can be supported by the use of supplemental visual materials. However, to optimize these materials, the interpreters had to look away from other visuals, which was most often signed discourse. As such, while supplemental visual materials could be used by the interpreters to enhance their work, they also comprised another component of the visually rich environment and could not always be attended to at the same time that the interpreters were viewing Deaf student and teacher comments. Further discussion of the factors and strategies at play as interpreters strive to optimize visual access when competing signed messages are occurring will be discussed in the next several sections.

### **Example 2: 2<sup>nd</sup> Grade Homeroom**

The following 2<sup>nd</sup> grade classroom proceedings occurred during a segment that lasted three and half minutes toward the end of homeroom class. Evaristo was interpreting the ASL classroom lectures and conversation for Shiloh, the emergent signer. Toward the end of the 25-minute period, the group had finished watching their daily news show in ASL. Marisol, the Deaf teacher's aide, had already welcomed the 2<sup>nd</sup> grade to class, and explained that their regular teacher was sick that day. All of this was interpreted into spoken English by Evaristo, who was seated behind Shiloh (see Figure 4).



*Figure 4: Homeroom table arrangement*

Then Eliana raised her hand. Eliana was seated to the right of Shiloh. When she raised her hand, Evaristo quickly stood up and moved around to stand directly opposite the teacher, where he could see what Eliana had to say from an angle that was facing her (see Figure 5).



*Figure 5: Evaristo moving to get a better view of Eliana*

Oscar, another student, was seated directly in front of Evaristo's new position. While Evaristo was interpreting the discourse between Marisol and Eliana, Oscar began signing to the students on either side of him about what Eliana was saying. Because Evaristo was now directly behind Oscar, he could not see what Oscar was signing. Furthermore, his eye gaze was still directed toward Eliana and Marisol. Several seconds into their exchange, Marisol got the entire class's attention and asked them to look at Eliana while she was signing.

Soon after, the students and Marisol were preparing to transition to another class. Eliana signed, "4-MINUTES" and pointed to the clock. Marisol responded with,

"RIGHT, 4-MINUTES."

Evaristo interpreted Eliana's utterance into spoken English, "Well, now we have four minutes!" and then quickly followed with an interpretation of Marisol's response, "That's right, we have four minutes left." Then Marisol continued,

"REMEMBER, YOU-ALL, REMEMBER, GO-TO AMY, DO-DO?"

Evaristo interpreted this into spoken English, "Remember, what are we going to do when we go to Amy's?" Arlo and Oscar, who were both to Eliana's right, responded by signing "COOPERATE." Evaristo kept his eyes fixed on the teacher's aide and continued interpreting,

"Yes, when you go to Amy's, you're going to cooperate. No more messing around in class, you have to cooperate, right? And not only with Amy, you have to cooperate here too, and with who else?" While Marisol was signing, the students were throwing out signed responses, such as "YES," "NO," and giving examples of the other places where they should also behave. Evaristo kept his eyes on the teacher's aide and continued as Marisol affirmed, "With your art teacher! Right!"

Oscar then signed something that looked like SIGNING, simultaneously saying something in spoken English that was not clearly audible. Evaristo looked down at Oscar but did not say anything. Marisol responded with, "USE ASL, GOOD," and then looked back in the direction of Arlo and Eliana. Evaristo continued interpreting into spoken English, "Right, we have to remember to sign."

At that point, Oscar interrupted, signing, "I SAID FIGHTING," simultaneously saying the words in English. It appeared that Marisol did not see his comment, because she had already looked at Arlo to see his signed question (see Figure 6).





*Figure 6: Oscar, attempting to clarify while Marisol looks at Arlo*

Arlo asked a question about what their schedule would look like that afternoon, with their teacher absent, but Evaristo did not see it. Evaristo looked down at Oscar, responded to him by saying “fighting” in English, and then looked back up at Marisol. She signed to the whole class, “RIGHT, DON’T KNOW WHICH, HEALTH HERE OR AMY, NOT SURE, ME ASK AMY WILL.”

Because Evaristo was looking at Oscar, who was repeating himself, he did not see Arlo’s signed question. Without the initial question prompt, he was uncertain about what Marisol meant. His facial expression showed he was puzzled, and he raised his hand to get Marisol’s attention. He signed, ASK AMY WHAT? Marisol responded to Evaristo,

“OH! LUNCH FINISH, COME BACK HERE FOR HEALTH OR CST CRITICAL THINKING. ME NOT SURE, HERE OR THERE. ASK AMY. THAT’S ALL.”

As Marisol clarified, Evaristo nodded and began interpreting, “So after lunch, I’m not sure if we’re coming back here or to Amy’s class. We’ll have to ask her if we’re coming back here to talk about health or if we are having our CTS [critical thinking skills] class. I’ll have to ask Amy

where we're going after lunch." While Evaristo was incorporating this clarification into the interpretation, Arlo was signing and saying in English, "No food fights at the cafeteria," and Eliana kept repeating in ASL, "3-MINUTES!".

Marisol then directed her attention to Shiloh, the emergent signer, and tapped her shoulder to get Shiloh's attention. Evaristo immediately began walking a little closer to Shiloh, while keeping his eye gaze on Marisol. He interpreted into English, "Shiloh, are you ready for the long weekend?" Shiloh nodded.

Meanwhile Oscar had gotten the attention of Arlo and Alia, who were on either side of him, and commented about his own plans for the weekend. While this was within the view of Evaristo, he was still looking at Marisol and Shiloh. Marisol continued, and Evaristo interpreted into English, "What are you going to do?" Shiloh shrugged, and then signed "I-DON'T-KNOW."

"You don't know? Just rest? Get some sleep?" Shiloh shrugged. "Yes?"

Shiloh signed, "I-DON'T-KNOW."

"You don't know? Are you going to stay awake the whole time?" Shiloh nodded and laughed lightly. Eliana, who was sitting to the right of Shiloh, had been intently watching their conversation, her eyes moving between Marisol's signed utterances and Shiloh's answers. Then Eliana tapped Shiloh on her shoulder and Shiloh looked around. Eliana asked her a question, and Evaristo interpreted it into English,

"Maybe you'll play games, you'll play with toys!"

Shiloh shook her head and signed "I-DON'T-KNOW." Then, as Eliana continued, she looked at Eliana, and then looked away, as if she was thinking. Evaristo slowly began making his way a little closer to Shiloh and Eliana. I could see him looking down at Eliana, then look away at

Oscar who had begun signing to Marisol, and then back at Eliana. Eliana continued, and Evaristo interpreted into English,

“You could...Eliana’s saying you could play with the iPad.”

Shiloh looked up and a little away from Eliana. Then she signed, “MAYBE.”

Eliana tapped her again. “ASK YOUR MOM, OK?”

Evaristo interpreted, “Well, mom has to say okay.”

Eliana immediately turned around, looked at the clock, and tapped Marisol, signing “2-MINUTES!” Evaristo looked toward the rest of the group while interpreted the message into spoken English, “Two minutes!”

While Evaristo had been interpreting the conversation between Shiloh and the peer next to her, a separate signed conversation was occurring between Oscar and Marisol about the gifts that Oscar had received for Christmas. When Evaristo completed interpreting the first conversation, he turned his attention to this second conversation. Oscar then signed:

HEY! ME PLANE THUMB-CONTROL FLOAT [eye gaze up] ...CONNECT MY MOM  
PHONE [eye-gaze down] THUMB-CONTROL, LOOK-UP SEE HAVE FILM-FROM-  
ABOVE.

While Evaristo’s processing time usually between 0.5 and two seconds during the class proceedings, he took a full 7.5 seconds to begin his interpretation:

“Well there's like this plane that can connect to my mom's phone, like a, like a, kinda like a drone that you can play with my mom's phone.”

### **Homeroom: A Discussion of the Interpreting Factors and Strategies**

The configuration of most ASL-dominant classrooms promotes visual access to signed discourse. Whereas students are seated in rows in most traditional public-school classrooms, the

semi-circle is a common configuration in Deaf school classrooms (Marschark & Hauser, 2011). With this configuration, students can see not only the teacher, but they can also see each other. In the above segment, Evaristo initially decided to sit behind the emergent signer, but soon after moved to a standing position when he noticed a student with her back to him, Eliana, raising her hand. Evaristo talked about this in his interview. He explained,

Here, I'm completely right behind the student that's about to give some sort of comment, so I immediately move out of my seat, so I can see them. I know that I'm not going to be able to see them, so I move all the way around.

Indeed, while he had initially prioritized viewing Marisol's discourse by sitting behind Shiloh and positioning himself so that he could see through Shiloh and Eliana to Marisol, he soon realized the limitations of this decision and decided to stand instead. Because the students were sitting in a semi-circle at a round table that was relatively small, there was little space for Evaristo to join the students to see everyone at the table as they could.

When Evaristo decided to stand and move to position himself in a location where he could see both Eliana and Marisol, he could not see all of the other students. Therefore, when Oscar began signing to the students on either side of him, Evaristo could not see what Oscar was signing without breaking his gaze from Marisol as she conversed with Eliana. In this moment, Evaristo showed deference to Marisol and the attention that she as the teacher's aide was giving to Eliana. These are the utterances that he chose to interpret, not those coming from the other students.

A little later, Evaristo demonstrated this deference to Marisol again, when she began asking the students how they would behave when they went to other classes. Evaristo interpreted this message into English, and even though the students were throwing out many signed

responses, Evaristo chose to keep his eyes on Marisol and interpret only what she signed. In my interview with him, Evaristo spoke about this, as well:

All the students, or rather most of the students were giving those answers to her, all at the same time, and I did not voice any of their responses. Rather, I voiced Marisol's acknowledgement of their responses. "Right, in art." Or, "Right, in Amy's class." I didn't voice any of their answers. I'm not sure that I would have had time to do that, and clearly not mental space in this moment. I could have, but I think it would have sounded really rushed.

When employing this strategy, Evaristo prioritized the discourse of the Deaf teacher's aide, incorporating pertinent content from student responses into the interpretation. This allowed him to produce clear, coherent sentences. In doing so, Shiloh had less access to the way that her peers participated, since all she heard was the teachers' aide's affirmations. If he had chosen to include the students' utterances into his interpretation, there would have been different consequences to his decision.

Moments later, there was a moment of miscommunication between Oscar and Marisol, which also affected Evaristo's interpretation. When Oscar signed an answer to Marisol's question, he also articulated something in English, and Evaristo chose not to interpret over Oscar's voice. Even though, Marisol, the teacher's aide misunderstood what Oscar meant, Evaristo again prioritized her comments, interpreting her message into English, "Right, we have to remember to sign."

Oscar clarified himself by signing and saying aloud, "I SAID FIGHTING," but Marisol was no longer watching him. In this moment, Evaristo chose to affirm Oscar's utterance, by repeating "fighting" back to him, in English. He also looked at Oscar when he did so, causing

him to miss a question signed by Arlo. He looked back at Marisol in time to see her sign a response to Arlo's question, but the response did not make sense according to the contextual frame still held by Evaristo. Evaristo explained,

At this point, it's something that I saw...what they were saying, but I didn't know what they meant. And I asked the teacher for clarification about what...who was arguing or fighting about what—with Amy? Amy's class? Something...and so I asked the teacher what that was about, that came from one of the students.

This decision, to interrupt Marisol and ask for her to clarify, marked another critical moment for Evaristo's interpretation, as well as Shiloh's access to—and her subsequent understanding of—the class discussion. Instead of assuming that there was a specific conflict being discussed because Marisol mentioned Amy's class right after Oscar mentioned fighting, Evaristo asked for more information about what Marisol meant. This allowed Evaristo to frame his understanding of the discourse around the class's afternoon schedule, instead of the behavioral issues that had been discussed previously.

Another of Evaristo's decisions occurred when Marisol tapped Shiloh's shoulder to get her attention. Evaristo began walking closer to Shiloh while keeping his eyes fixed on Marisol. He interpreted into English, "Shiloh, are you ready for the long weekend?" Again, prioritizing the discourse of Marisol, Evaristo made his way toward Shiloh so that if he needed to interpret her spoken utterances into ASL, Marisol would not have to look away from her. However, Shiloh began responding independently in ASL. This point in time also marked Evaristo's decision not to interpret the simultaneous signed discourse between Oscar, Arlo, and Alia. Evaristo decided to prioritize the conversation between Marisol and Shiloh, and even allowed them to sign directly with each other, although he did continue interpreting Marisol's signed

questions into spoken English. If he had instead interpreted the side conversation of her peers, it could have made it more difficult for Shiloh and Marisol to enjoy a direct conversation in ASL, Shiloh's emerging language.

However, Shiloh was given auditory access to her peer when Eliana turned to her and began signing to her. Evaristo had already been looking in the direction of Shiloh and Eliana, although when he had stepped closer to them seconds earlier for Marisol's potential visual access, this gave him a less optimal view of Eliana's signing. Still, he prioritized the communication that was being directed to Shiloh, the emergent signer, and continued interpreting the signed discourse coming from Eliana, while Shiloh signed her own responses.

At one point during Eliana's and Shiloh's conversation, Evaristo chose to explicitly state that Eliana was speaking so that Shiloh would look at Eliana while she signed to her. During the interview, Evaristo explained:

In the beginning I didn't understand what [Eliana] was saying. So, I waited a little bit. But when I finally got a sense of what she was saying, I said, "Eliana's saying," so that [Shiloh] could look, and she still didn't look—and it looked like she was very much thinking, because [Eliana] said, "Is it...like are you going to play with an iPad?", and [Shiloh] was very much thinking, and then responded, and looked at [Eliana], and then responded for herself in ASL.

Shiloh, perhaps influenced by non-Deaf norms, had looked away as Eliana was asking her a question, as if thinking how to answer her. Evaristo noticed this and encouraged her to look at Eliana even as she was thinking while he voiced, by including his own description of who was speaking to Shiloh in his interpretation.

Because he focused his attention on Eliana's and Shiloh's interaction, Evaristo lost the previous focus he had had on Marisol's conversations. When the peer conversation had ended, and Eliana again directed her attention toward Marisol, Evaristo also looked toward the rest of the group while he interpreted her signed utterance into spoken English, "Two minutes!" Then Oscar signed,

HEY! ME PLANE THUMB-CONTROL FLOAT [eye gaze up] ...CONNECT MY MOM  
PHONE [eye-gaze down] THUMB-CONTROL, LOOK-UP SEE HAVE FILM-FROM-  
ABOVE.

At this moment, perhaps because he had not seen the contextual conversation that this utterance followed, Evaristo chose to use more time to process Oscar's signed discourse, taking a full 7.5 seconds to understand Oscar and produce an interpretation into spoken English.

The above example presented numerous, sometimes simultaneous factors, which presented themselves as decision-points for Evaristo to respond to strategically.

- 1) Evaristo seated himself behind Shiloh, where she could hear him and where if she spoke, he was conveniently located to sign her spoken utterances, providing her peers and teacher's aide optimal visual sightlines. This also gave him a clear sightline to Marisol, the Deaf teacher's aide.
- 2) Evaristo noticed that Eliana's hand was raised, that Marisol's eyes were on Eliana and that she had indicated it was Eliana's turn to share.
- 3) Evaristo determined that his current placement did not give him optimal views of Eliana.
- 4) Evaristo chose to stand and move quickly to the right, where he could see Eliana better, and still maintain sightlines to the teacher's aide.



- 5) When subsequently Oscar began to sign, Evaristo could not see him without either adjusting his physical location again. However, he also noticed that Marisol was still giving attention to Eliana. Thus, he did not adjust his positioning to prioritize Oscar's discourse, as he had previously done with Eliana.
- 6) Aware of the hierarchical structure of the Deaf classroom, and the likelihood that Marisol would continue to sign more than any other discourse participant, Evaristo continued to show deference to Marisol, as the Deaf adult in the room, and the attention she was giving to Eliana. He chose to continue interpreting their conversation into spoken English, and to not interpret the utterances of Oscar, Arlo, and Alia.
- 7) When Marisol began asking the students how they would behave when they went to other classes, Evaristo was presented with multiple signed utterances from students in multiple locations around him.
- 8) Evaristo chose to keep his eyes on Marisol and interpret only what she signed, continuing to show deference to her. This allowed him to produce clear, coherent sentences, although it did not allow Shiloh auditory access to her peers' comments.
- 9) Later, when Marisol misunderstood what Oscar meant when he was signing, Evaristo again prioritized her comments, interpreting her message into English, "Right, we have to remember to sign."
- 10) When Oscar clarified himself, Evaristo chose to affirm Oscar's utterance, by repeating "fighting" back to him, in English.
- 11) He also looked at Oscar when he did so, causing him to miss a question signed by Arlo. When he looked back at Marisol, her response did not make sense according to the contextual frame still held by Evaristo.

- 12) Evaristo decided to interrupt Marisol and ask her to clarify, which allowed Evaristo to frame his understanding of the discourse around the class's afternoon schedule, instead of the behavioral issues that had been discussed previously.
- 13) Evaristo noticed when Marisol tapped Shiloh's shoulder to get her attention.
- 14) Evaristo began walking closer to Shiloh while interpreting Marisol's questions into spoken English. This was in anticipation of having to again position himself so that the Deaf discourse participants could see him signing while Shiloh spoke.
- 15) When Shiloh began responding independently in ASL, Evaristo stopped moving and allowed Shiloh and Marisol to sign directly with each other, although he still interpreted Marisol's signed questions into spoken English for Shiloh. He prioritized the conversation between Marisol and Shiloh over the simultaneous signed discourse between Oscar, Arlo, and Alia.
- 16) When Eliana began signing to Shiloh, Evaristo now prioritized the communication that was being directed to Shiloh, even though Marisol had looked away.
- 17) Shiloh had looked away as Eliana asked her a question. Evaristo noticed this and encouraged her to look at Eliana by including his own description of who was speaking to Shiloh in his interpretation.
- 18) Because he focused his attention on Eliana's and Shiloh's interaction, Evaristo lost the previous focus he had had on Marisol's conversations. When he saw Marisol looking at Oscar, he looked at Oscar, too.
- 19) Evaristo chose to use more time to process Oscar's signed discourse before producing a spoken English interpretation of Oscar's utterance.

The following sections will explore the various new strategies that Evaristo employed in this section, incorporating the data from the other interpreter-participants into the discussion.

### **Optimizing Visual Access in the ASL-Dominant Setting**

In order to render the visual language of an ASL-dominant classroom into spoken English, interpreters had to see and understand discourse coming from multiple signers, and this required them to constantly seek ways to optimize their sightlines and prioritize certain signed utterances over others. The configuration of the ASL-dominant classroom generally limited the interpreter to be outside of the discourse circle, either standing over the students or looking between them from behind while seated. However, the interpreters still need to see the discourse of the Deaf teacher as well as various students, all of whom the interpreters could not see at once. Mather (1987) explained that, “signed discourse differs from spoken conversation in that a deaf speaker cannot initiate signing until the specified addressee is looking at the would-be speaker. A person cannot ‘say’ something and be ‘heard’ if the other person is not watching” (p. 13). Within the ASL-dominant Deaf classroom, not only do the teacher and teacher’s aide use ASL, but any of the other students can sign at any given point in time. As long as teacher is looking, their utterances will be “heard,” as described by Mather (1987), and thus worthy of interpreting into spoken English.

Interpreters constantly considered these factors while they were simultaneously cognizant of a pull to be near the emergent signer, so that if the emergent signer the other Deaf discourse participants could see the interpreter’s rendering of spoken English into ASL without having to turn away from the emergent signer. Maintaining proximity to the emergent signer also supported the overarching aim of cultivating language and content learning, as a closer proximity to the emergent signer ensured that their spoken interpretations could be heard.

McKee, Johnson, and Marbury (1991) described the importance, in Deaf conversations, of participants having an awareness of not only where the eyes are looking, but also where the hands are located. They wrote, “the single most important regulator in conversation is eye-gaze, because it determines the boundaries of when one can ‘speak’ and be ‘heard’” (p. 243). They went on to describe the ‘group indicating gaze’ found in group conversations, where there are rapid, sustained, and prolonged messages given via eye gaze, “used in the getting/giving of attention and maintaining conversational turns” (McKee, Johnson, & Marbury, 1991, pp. 245-246). However, the Deaf conversational interaction described by McKee, Johnson, and Marbury (1991) may be complicated when the discourse is interpreted. The interpreter may have no natural way to participate in the group’s consensus around where to look because of many factors, to be explored further in this section.

As was discussed in Chapter II, Smith (2010) specifically explored K-12 interpreters’ strategies for optimizing Deaf students’ access to multiple sources of visual information. The factors she identified as influencing the interpreters who endeavored to maximize visual access were: a) locating materials, b) looking at visual aids, c) reading printed information, d) generating written information, and e) participating in a hands-on activity either individually or in groups.

While these factors influenced the interpreters from the present study, far and away the factor that lead to strategic decision-making from interpreters was the ASL discourse occurring during what Winston (2010) would describe as ‘question and answer’ time. As was described in the above example, often several students and the Deaf adult in a classroom would sign at nearly the same time. Interpreters had to strategize for how to render the visual-spatial language they were seeing into a language that was auditory and sequential in nature. Individual factors

impacting their strategic responses included: a) changes in who was signing b) changes in lines of sight necessary to view the discourse, c) transition times from group discussions to one-on-one conversations, d) the hierarchical structure of Deaf classroom discourse, and e) the desire to ask for clarification.

In the interviews, all three participating interpreters described that they were not always able to look where they wanted to at any given moment. In addition, they discussed the limitations imposed by their positioning in relation to other people and visual stimuli in the classroom. Cici described this multilayered factor from her perspective.

It's like a ping-pong game. I mean, you know, you wish that you had eyes here [at side of head] but also the ability to do this [have eyes move in opposite directions].

Smith (2010) found that strategies interpreters employed for dealing with competing visual demands in the mainstream classroom could be categorized as: a) adjusting physical position in the classroom, b) directing students' attention, c) adjusting the timing of the interpretation, and d) modifying the interpretation itself. All four of these strategies were seen in the ASL-dominant classroom. Additionally, interpreters were seen prioritizing certain signers' discourse over others, relying upon Deaf adults to clarify and relying upon supplemental visual materials

**Adjusting physical positioning.** Smith (2010; 2013) described interpreters adjusting their physical position in inclusion classrooms to create the best possible sightlines for Deaf students who were processing multiple visual sources of information. These visual elements included the ASL interpretation of classroom content and the many visual materials used by teachers to support their learning, such as worksheets, books, and maps (Smith, 2013).

In the ASL-dominant setting, changes in interpreters' positioning were used as a strategy for optimizing the interpreters' sightlines to the signed discourse. They were largely preceded by

a change in the discourse, such as a change in the person signing that required a different line of sight, a transition from a group discussion to a one-on-one conversation, or an attempt to get an adult's attention to ask for clarification. Occasionally students' physical shifts would precede the interpreters' movements. Such movements included not only moving from one location to another, but were also reflected by decisions to stand, kneel, and/or sit. With some interpreters, foot movements were more marked than with others, who tended to shift weight from foot to foot. Thus, physical shifts that involved more than one step and were in combination to visible shifts in eye gaze were labeled as shifts in positioning. During periods of time when there were no shifts in positioning, there were still multiple postural, head, and eye gaze shifts, indicating an awareness of discourse from multiple angles.

Interpreters adjusted their position more frequently during periods with a large amount of interactive discourse as compared to times when students were working independently or in small groups (see Table 3). The interpreters took sitting and kneeling positions when interactive group discourse diminished, such as when students began doing work independently or in small groups. Shifts in positioning while seated consisted of scooting from one location to another or moving from seat to seat. When discourse required no physical movement from the interpreter for clear sightlines, he or she would largely remain in a location that was slightly behind the emergent signer. As students transitioned into independent or small group work, the interpreter would take a seat and not change his or her positioning. All three interpreters eventually took a seat during independent work time and remained seated until filming stopped.

Interpreter	Period	Length of data	Times position shifted	Average shifts per minute	Notes
<b>Evaristo</b>	Homeroom class	8 minutes	14 times	1.75	Interactive group conversation.
<b>Evaristo</b>	Math (group)	8 minutes	16 times	2	Interactive group conversation for first 3-4 minutes.
<b>Evaristo</b>	Math (independent)	38 minutes	3 times	0.08	Interpreter remained seated but scooted 3 times during moments when aide was working on-on-one with emergent signer. The interactions between students and the teacher significantly decreased during this time.
<b>Evaristo</b>	Critical Thinking Skills (large group)	19 minutes	9 times	0.47	2 emergent signers in one space. The 9 shifts were very slight, and all occurred within the first 5 minutes of the class.
<b>Evaristo</b>	Critical Thinking Skills (small group)	11 minutes	0 times	0	Smaller group. 2 emergent signers in one space. Interpreter remained kneeling the entire time.
<b>Gloria</b>	Homeroom class	5 minutes	7 times	1.4	This data excluded the school-wide news segment in ASL. due to the 2-dimensional nature of this filmed discourse. The remainder of the time was interactive group conversation.
<b>Gloria</b>	Social Studies (interactive group)	25 minutes	23 times	0.92	Shifts in positioning were sometimes focused on maintaining optimal sightlines to the teacher, who made use of the entire classroom in his lecture. During these shifts in positioning, the interpreter's eye gaze did not shift to the students.
<b>Gloria</b>	Social Studies (independent work)	23 minutes	12 times	0.52	The interpreter sat down almost 8 minutes into this time, after which she only shifted her positioning once, to observe the emergent signer across the room. The interactions between students and the teacher significantly decreased during this time.
<b>Cici</b>	Math (interactive group conversation)	10 minutes	26 times	2.6	Interpreter took a seat 9 minutes into class, when conversation turned to the teacher's expectations for math. Soon after, the class transitioned to small group work.
<b>Cici</b>	Math (group of two with teacher's aide)	27 minutes	3 times	0.11	Began group work seated at the table with the students and teacher's aide. This positioning did not shift, save a few times when she scooted away from the table and back. There were two additional movements to stand that were not related to the interpretation. The interactions between students and the teacher significantly decreased during this time.
<b>Cici</b>	Science (interactive group)	1.5 minutes	3 times	2	Interpreter began the class seated. Emergent signer was pulled out for a related service, minutes into class. Interpreting services were ended.

Table 3: Interpreters' adjustments to physical positioning

**Prioritizing certain signers' discourse over others'.** To aide in prioritizing whose signed utterances to interpret into spoken English when presented with competing options, interpreters may be informed by the ranked hierarchical structure of the classroom. Not everyone has equal status or signing time (Mather, 1987). In a visually rich, highly interactive educational setting, the interpreter has to position him or herself in a way that consistently prioritizes sightlines to the teacher or other signing adult.

Evaristo pointed out that when there was a lot of rapid conversation going back and forth between the Deaf teacher's aide and multiple students, prioritizing the signed utterances of the Deaf teacher's aide was a strategy he utilized. Later, I observed him prioritizing the discourse of a peer, Eliana, who was signing directly to the emergent signer, while not interpreting for the discourse that was simultaneously signed by others. From the homeroom example, Evaristo consistently showed deference to the Deaf adult in the room, stopping only when there was other simultaneous signed discourse directed specifically at the emergent signer.

**Relying upon Deaf adults to clarify.** As seen from the 2<sup>nd</sup> grade homeroom example, Evaristo relied upon Marisol to elicit clarification about discourse that he had not seen. Both Cici and Evaristo talked about using the responses and clarifications of Deaf adults to fill in contextual gaps and inform their understanding of the signed discourse. Early in Cici's time within the 1<sup>st</sup> grade classroom, a student signed something that she did not understand. About this moment, Cici explained,

I know that like for this kind of thing, I'm going to look to [the Deaf adults] to help me figure out what she's saying. Because their response or clarification will help me if I don't understand. I remember being like, "I don't know what that is. Is that a person? I don't



know. Because then if [the adults] sign it correctly or if they respond in a way that helps me figure it out, then at least I'm back on track.

All three interpreters were seen relying on a Deaf adult in the room to clarify when they did not understand the message. At one point when Cici had been interpreting during an early morning class discussion before math class, Annika, the Deaf teacher, asked a question. She used another teacher's name sign to ask who the students' previous teachers had been. Cici, not knowing who the teacher meant, repeated the name sign with a questioning look on her face, and waited before interpreting. Annika fingerspelled the name of the person she was referring to, Cici incorporated it, and the class moved on.

Gloria relied upon the Deaf adult in the room for clarifications, as well. During her filmed field sample, which lasted for a little more than an hour, she asked for clarification eleven times. Mr. Rogers was the Deaf teacher who provided the clarifications to Gloria as she interpreted during the 1<sup>st</sup> grade social studies class. Gloria reflected during our interview,

I think he's very aware of me. And I think he—if I remember correctly he gave me a lot of feeds. But there were a couple times in particular where he was so on track with what he was doing with the kids that when I asked for clarification, it was like, he didn't even look up. He just gave it, didn't check to see if I got it, just like...[laughs] said it and kept going.

Gloria's comment would suggest that the Deaf educators' willingness to extend support to interpreters had an effect on the interpreters' ability to rely upon them, in order to optimize visual access to the dynamic and interactive signed discourse. However, it also reveals a tremendous resource that the interpreters from this study had in working alongside Deaf teachers and other staff, who could clarify things when they were unsure.

**Seeking supplemental visual resources.** The strategy of seeking supplemental visual resources was used as a response to moments when pertinent ASL utterances were not seen, or when interpreters wanted to verify that what they had seen in a visually dynamic setting was accurate. The strategy itself became a factor to which the interpreters had to respond.

There were no supplemental pedagogical visuals, such as the displays on the board or student worksheets, available during the 2<sup>nd</sup> grade homeroom class. Still, he made use of visual resources to support his interpreting.

For example, when Marisol, the Deaf teacher's aide was explaining that the regular teacher was out sick, she also told the students that a substitute teacher would be coming in soon. Evaristo, before beginning to interpret Marisol's utterance into spoken English, quickly glanced up and behind, at the clock, taking his eyes away from Marisol. Evaristo reflected,

I don't know what was going through my head that I didn't voice, "in a minute," because that is literally what [Marisol] said, that the sub will be coming in a minute. I don't know if it was like some sort of figure of speech or something, so I literally turned around and looked at the clock and—oh, I remember that it was 8:29 and that exactly at 8:30 is when we were expecting that sub to come.

Evaristo's decision to look away from the signed discourse and up at the clock had the benefit of assuring him that he had understood Marisol's explanation. However, the risk associated with looking at the clock was that in doing so, his eyes were no longer accessing the interactive visual discourse at the table.

From Evaristo's comments, it would seem that interpreters' efforts within a visually rich educational environment can be supported by the use of supplemental visual materials. However, to optimize these materials, the interpreters had to look away from other visuals, which was most

often signed discourse. As such, while supplemental visual materials could be used by the interpreters to enhance their work, they also comprised another component of the visually rich environment and could not always be attended to at the same time that the interpreters were viewing Deaf student and teacher comments.

### **Summary: The Predominant Factors Influencing Interpreters Working in a Deaf K-12 Classroom, and their Strategic Responses**

Within mainstream settings, Deaf student and interpreter have to navigate visual attention together (Smith, 2013). The need to prioritize various simultaneous visual stimuli was described by Smith (2010; 2013), who called this an overarching factor within mainstream and inclusion settings. It can be expected that within most educational settings like those described by Smith (2013), when a teacher is talking most of the students pay attention, although some do not attend visually to the source of the spoken language and others do not attend at all.

Within the ASL-dominant Deaf educational setting, the arrangement of the classroom, limitations on student numbers, and experienced staff trained in Deaf education are fundamental to a space where attention is given by way of eye gaze and mutual eye contact. The factors influencing interpreters as they worked alongside Deaf professionals, Deaf students, and emergent signers within ASL-dominant settings were deeply intertwined with the visual nature of the setting and the majority shared language, ASL within it. The interpreters in this study continuously assessed their own access needs in response to this unique environment, and to a lesser degree, also assessed the needs of the emergent signers. These constant assessments led to strategies around taking action to prioritize certain visual stimuli over others.

The factors to which interpreters responded in within this study included: the need for visual sightlines to various discourse participants who use ASL, the Deaf or other adult's

hierarchical positionality within the classroom the interpreter's relationship to the Deaf professional, the content and language goals of the teachers, the linguistic limitations and opportunities inherent to ASL and English, the visual and auditory responses of the emergent signer indicating interest or attentiveness to discourse other stimuli, ASL-users' need for sightlines to signed message, the auditory levels of the emergent signer, the background noise within the classroom, limitations associated with not being able to look in two separate places at once, and the fallibility of the human interpreter.

The strategies employed by the interpreters in this study included: observing the visual and auditory dynamics of the classroom; assessing the emergent signers' interest and/or engagement by observing them or asking them directly; cultivating the emergent signers' interests and/or engagement by using conscious, strategic omissions and additions; labeling the referent, and/or timing the interpretation to match the goal of the teacher; adjusting their physical positioning to see the signed message and provide sightlines to Deaf discourse participants; deferring their attention to the adult or a peer directing their attention at the emergent signer; requesting and applying support from an adult; and seeking supplemental visual resources.

Findings from Smith and Dicus's (2015) study at Gallaudet revealed that the logistical factors that respondents saw influencing them the most were: a) placement of the interpreter, b) volume of the interpretation, c) placement of the consumer, and d) the use of technology. The present study uncovered insight into how these factors resulted in strategic decisions that produced more factors to which interpreters had to respond. The linguistic factors that Smith and Dicus (2015) discovered that respondents found to be influential (word/sign choices, speed/pace, mouthing, and prosody) were not examined in this study.

Other studies of interpreters within the mainstream were seen to have similar overarching themes as those discovered in this study (Ramsey, 1997; Smith, 2013; Winston, 1990). However, many of the challenges uncovered by previous research, such as the situational volatility of the educational interpreting setting (Walker & Shaw, 2012) and role confusion (Caldwell Langer, 2004; Hayes, 1991; Walker & Shaw, 2012) were not seen within this pilot case study. The receptive ASL skills of the interpreters from this study were consistently being put to practice, which was apparently unusual of interpreters in studies where the qualifications of interpreters were implicated (Brown Kurz & Caldwell Langer, 2004; Mertens, 1991). As such, this study brings to light new information about the unique nature of educational interpreting within the ASL-dominant setting and allows us to see how interpreters can work alongside teachers of the Deaf, striving to cultivate language and content learning, foster participation, and optimize visual access to the dynamic linguistic setting.

### **Limitations of the Study**

This study was confined to one location, and with such limited duration it must be classified as a pilot case study. While it uncovered rich material, it did not reach a point of undisputed saturation in any of the themes beyond prioritizing simultaneous visual stimuli. Time constraints placed limits on the depth with which the data could be mined for possible logistic and linguistic factors.

Due to the position of the cameras, not all of the source ASL was captured and it was not always possible to see the eye gaze of the interpreter. Moreover, interviews were scheduled a week after the footage was collected; there were moments when the interpreters could not recall the factors that contributed to their behaviors one week prior.

It has been recommended that when using grounded theory as a theoretical framework using more than one coder may support the process (Liu, 2011; Steinke, 2004). In this study, IRB limitations, large video files, as well as the constraints that distance placed on communication with colleagues and research advisors made a peer review process difficult. There was the possibility of bias in coding, as I had professional experience of my own with the setting.

## **Chapter V: Conclusion**

The aim of this exploratory pilot case study was to illuminate the factors influencing interpreters and uncover the decisions and strategies of interpreters at work within an educational setting where ASL is the majority and shared language. Over the past decade, I have observed growing numbers of Deaf non-signers who have a spoken language foundation enrolling within an ASL-dominant educational setting. Because these students require spoken language interpreting services, they present a new opportunity in interpreting research. Using primarily qualitative methods and data collection, three interpreters were observed and filmed while at work within this setting. These same interpreters were interviewed to uncover their thoughts and internal decisions. The data were analyzed for distinct overarching factors, as well as strategies the interpreters employed in response to these factors. Findings suggest that there are dynamics at play within this Deaf educational environment that may not be present in other K-12 settings. Specific strategies were uncovered, used by participating interpreters to navigate this uniquely visual educational interpreting realm, where the shared majority language is ASL.

### **Summary of the Work of Educational Interpreters' Work within ASL-Dominant Settings**

A statement of the context for this unique interpreting realm must start with an acknowledgement of the visual-spatial nature of ASL. The visual-spatial nature of ASL, which requires access to effective sightlines for comprehension, makes the very educational space

within Deaf classrooms distinct from the kinds of communication one would expect to see in a traditional public school. Within inclusion settings, the Deaf student is typically the only signer in the classroom, and the interpreter's access to the spoken English source message is usually not hindered by visual constraints.

The findings from this study may only scratch the surface in the exploration of the factors faced by interpreters who work in Deaf school classrooms, and their strategic responses. However, as a preliminary exploration of the factors these interpreters faced and their strategic responses, a pattern emerged. The ASL-dominant environment produced unique factors influencing the interpreters as they endeavored to work alongside Deaf and signing professionals to cultivate language and content learning, facilitate participation, and optimize visual access to the dynamic linguistic setting.

The factors influencing interpreters were deeply intertwined with the visual nature of the setting and the visual-spatial nature of ASL. As interpreters aimed to cultivate language and content learning, facilitate participation, and optimize visual access within a visually rich ASL-dominant setting, the interpreters in this study responded in ways that were unique to the environment. Their assessments of the factors at hand led to the prioritization of certain visual stimuli over others, which led to an array of subsequent factors to which they reacted. The factors to which interpreters strategically responded in within this study varied moment to moment. However, they were all informed by the highly interactive visual-spatial nature of the ASL discourse that dominated the setting. The relatively simple premise of studying the factors influencing the interpreters within this unique setting, as well as their responding strategies, resulted in a cascade of varying and interwoven factors and responses.

### **Implications for ASL/English Interpreter Training and Education**

Walker and Shaw (2012) found that a majority of interpreters who participated in their study of interpreter preparedness for specialized settings had worked within educational realms, consisting of both postsecondary and K-12 interpreting settings. Burke and Nicodemus (2013) asserted that a majority of ASL/English interpreters encounter emergent signers at some point along our professional trajectories. With this in mind, it would be prudent to consider this study's findings as important to the work of ASL/English interpreter training and education. While the emergent signer's presence within the Deaf school setting offered a new chance to study interpreting within one ASL-dominant space, findings suggest that the uniquely visual nature of the discourse that occurs within this space was the number one factor impacting interpreter's decisions and strategies.

Spaces where ASL is the dominant and shared language are not limited to schools for the Deaf. The interpreters in this study framed some of their comments around the experience of the emergent signer. However, it would be important to examine the strategies of ASL/English interpreters at work within other spaces where ASL is the majority language, to uncover how their decisions are framed within a different context. These findings can inform the way that students of interpreting are taught and trained, and to learn to be responsive to unique linguistic environments such as this one. Further research into this phenomenon will support the teaching of our future interpreters, those who work both outside and within the K-12 educational realm.

### **A Call for Further Research**

The existing gap in the research is much too wide to be filled with one study; there endures a need for more broadly-scoped studies than the one conducted in this study. One such study might be on the changing demographics of center schools for the Deaf, designed to verify



whether or not this new population of emergent signers within that setting is a nation-wide growing trend. Thus far, only a mention by Smith and Dicus (2015) speaks to the existence of emergent signers' numbers growing within Deaf spaces. A dive into the most recent national demographic data gathered from the Gallaudet Research Institute (2010) yielded no specific information about primary language or audiological levels of students within center schools for the Deaf nationwide. Broader scale replications of the survey research done by Smith and Dicus (2015), or longitudinal studies replicating this one, would support a deeper overall understanding of the problem of interpreting for emergent signers within center schools for the Deaf. Further research of interpreters performing within ASL-dominant Deaf school settings also might offer a deeper exploration of the nuanced factors at play when spoken language is brought into predominantly ASL environments.

The interview data collected was surely influenced by my relationship with the interpreters. Further research of this particular phenomenon in interpreting might require a more systematic approach to editing and coding to ensure replicable results in the findings, as well as a deep consideration of interpreters' vulnerability when talking about their work.

### **Final Thoughts**

I believe that this study offers unique insight into the factors at play for interpreters within Deaf and ASL-dominant spaces. I hope that it leads to further qualitative research of interpreters at work within unique educational realms, as well as within spaces where ASL is the dominant language and where interpreters can work alongside Deaf professionals. Additionally, my hope is that studies such as this one will broaden understanding regarding the skills that are brought to interpreting, and that this can inform the way that interpreters are taught to conceptualize and bring decision-making to their work.

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## Appendix A

### Script for Video Elicitation Interviews and Conversational Prompts

**Researcher:** The goal of this session is to explore what you were thinking, feeling and responding to as you made decisions while at work in the classroom.

Please express anything and everything that is going through your mind while you review your work sample. Feel free to just let your thoughts run free without the worry of producing complete sentences. You may pause the recording at any time, to ensure that you can get your thoughts out before the moment is lost. I may pause the video, as well, and ask you about what I see/hear you reacting to. Before we start, do you have any questions for me?

<b>Question Goal</b>	<b>Sample Question</b>
<b>Thoughts, beliefs, and emotions</b>	What were you doing/trying to do at this point in the interpretation?
	What were you noticing at this point?
	Were there any other thoughts going through your mind?
	Can you tell me what you felt at this point?
	Can you recall more details about your feelings?
<b>Impressions of others and self</b>	What makes this moment in particular stand out to you?
	What did you think they were thinking about you at this point?
	What were your impressions of their actions at this point?
	Why do you think they made that statement at this moment?
	What do you notice about your actions at this point?
<b>Decision making processes</b>	What about your behavior at this point surprises you?
	What information did you use in making this decision?
	What other courses of action were you considering or were available to you?
	How much time pressure did you feel in making this decision?
	If the emergent signer/teacher/peer had said X instead of Y, how would that have influenced your decisions and/or assessment?

## Appendix B

### Teacher Recruitment Email and Informed Consent

Greetings!

My name is Lena Stavely and I am a graduate student in the Master of Interpreting Studies and Communication Equity (MAISCE) program at St. Catherine's University. I am conducting research on the strategies and decisions of interpreters who work at the center school for the Deaf where you work. As you are probably aware, there is very little research on educational interpreting done in ASL-dominant settings. You are receiving this email because interpreters work within your classroom, and I am requesting you to allow your classroom to be one space where I observe interpreters at work in the study.

As part of my study, I will be recording [REDACTED] interpreters at work in the classroom to gain documentation of their behaviors. Schedules allowing, I will observe and film interpreters at work in your classroom for between 1 and 18 hours (at the very most), on various days. These videos will be stored on a password-protected hard drive and will be shared only with people involved in my research, including my research advisors and colleagues from my program. Later on, and only if you grant permission, they may be shared as data samples for publication or educational purposes.

If you agree, we will select dates and times for observations of interpreters at work within your classroom. All information shared during my observation of the study will remain strictly confidential.

This study has been approved by the St. Catherine University Institutional Review Board (###).

You may contact the IRB office with any questions ([REDACTED]). My program director is Dr. Erica Alley who you may also contact ([REDACTED]).

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

### **Informed Consent for Teacher Contribution to a Research Study**

**Study Title:** Educational Interpreting in an ASL-Dominant Space: The Strategies and Decisions of Interpreters Working in the Classroom at One Center School for the Deaf

**Researcher(s):** Lena Stavely

I am formally requesting consent to film the interactions and discourse that occur within your classroom for an action research study. This study is called **Educational Interpreting in an ASL-Dominant Space: The Strategies and Decisions of Interpreters in the Classroom at One Center School for the Deaf**. The study is being done by me, Lena Stavely, a Masters' student at St. Catherine University in St. Paul, MN. The faculty advisor for this study is Dr. Erica Alley, Program Director for the Master of Arts in Interpreting Studies and Communication Equity (MAISCE) at St. Catherine University. The research advisor for this study is Dr. Melissa Smith.

This study aims to document the strategies used by interpreters in an ASL-dominant educational setting. It will examine the work and decisions of interpreters, as well as the

factors that influence those interpreters' decisions. To date, little research has examined the work and decisions of interpreters working with Deaf students who do not yet know ASL fluently (emergent signers), their peers, and their teachers who are fluent signers. Below, you will find answers to the most commonly asked questions about participating in a research study. Please read this entire document and ask any questions you have before you agree to be in the study.

### **Why have I been asked to contribute to this study?**

This study will look at K-12 educational interpreting done within one center school for the Deaf, where instruction is provided in American Sign Language (ASL). You are being contacted because you teach within a center school for the Deaf and you work with interpreters in the classroom. In this setting, interpreting is done primarily from ASL to spoken English, which makes it rare in the research that has documented the work of educational interpreters.

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

If you agree to contribute to this study, you will be asked to do these things:

- Allow me to observe your classroom while there is an interpreter present. This will involve me filming the discourse that takes place within the classroom, including your teaching. I anticipate shadowing each interpreter who participates in the study for a day, expecting to observe at least one classroom period for each interpreter. I expect my time observing your class to be between 30 minutes and 18 hours, at the very most.

Data collection with participating interpreters will begin and end between an eight-week period.

**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. If, at any point during the filmed observations you no longer feel comfortable, you may let me know, and filming will stop. You may withdraw at any time until the observations of your class are complete, after which 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 participants' (interpreters, teachers, or students) health or welfare. No sensitive data will be recorded, and strict adherence to this standard will be met. If, at any point in time, the material being recorded approaches an emotional or volatile state for any participant (interpreters, teachers, or students), recording will be stopped. Strict protocols will be in place to maintain the anonymity of each participant and the confidentiality of all information shared. If you feel comfortable, I ask for your consent for the use of photos or videos to demonstrate data samples, in the event of future publication or presentations.

As a colleague, the researcher (Lena Stavely) has no authority over you, other teachers, or the interpreters who choose to participate in the study. You risk no loss of job or reputation for the behaviors or communications that you exhibit while

participating. All filmed data will be treated as discourse for the interpreter to interpret, and nothing else. All data will be stored and saved on two password-protected hard-drives (one for backup) and locked within a cabinet in the principal investigator's home. Consent forms will be locked in a cabinet within the researcher's home, and labels of footage will be done with pseudonyms. Data that contains identifying information will not be shared with anyone who could use it to justify disciplinary action.

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

There will be no direct benefits to you from contributing to this research. However, this is an opportunity to share insight about the unique work at our school with the interpreting community at large, as well as the Deaf community, who so often is underserved by large systems, particularly educational ones. This study is a chance for interpreters to be transparent with the people who give us our livelihood, about the ways that we can partner with Deaf and other ASL-fluent professionals in the interest of furthering the education of Deaf children.

**Will I receive any compensation for participating in this study?**

You will not be compensated for contributing to 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 inform interpreting decisions made in the classroom, which is the focus of the study. Your language will not be directly analyzed but may be looked at as a factor that influenced the interpreter's decisions. I



will keep the filmed data on a password-protected hard drive, in a locked cabinet, and only I, my advisors, and some colleagues from my program will have access to the records while I work on this project. I anticipate finishing my use of the data by May 30, 2018. If you grant me permission, data that contain your image or discourse may be maintained indefinitely, as we feel they may be useful for educational purposes, publications, or with future students. If you do not want us to keep these recordings for future use, you can still be in our study. In that case I will destroy your recordings by May 30, 2019. Transcripts of research results will be kept indefinitely but will contain no identifying information that would connect you to your contributions. No data that is collected or maintained from this study will be shared with others without your permission.

Any information that you provide will be kept confidential, which means that you will not be identified in the any written reports or publications. If it becomes useful to disclose any of your data in the future, I will seek your permission and tell you the persons or agencies to whom the information will be furnished, the nature of the information to be furnished, and the purpose of the disclosure; you will have the right to grant or deny permission for this to happen. If you do not grant permission, the information will remain confidential and will not be released. If, at any point in time you should decide to rescind permission for the indefinite maintenance of your video data samples, you may do so at any point in time by contacting me.

**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 ( [REDACTED] ) or at [REDACTED]. If you have any additional questions later and would like to talk to the faculty advisor, please contact Dr. Erica Alley at [REDACTED]. 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 [REDACTED].

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

**Statement of Consent:**

I consent to contribute to the study by agreeing to allow my class to be videotaped.

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 Teacher

Date

Please check all that apply. I DO want to:

- participate and have my data included in this study.

Pseudonym with which I would like to be referred: \_\_\_\_\_

allow my recordings to be used for presentations or future educational or publication purposes.

- allow my recordings to be kept indefinitely. \*

\*If, at any point in time you should decide to rescind permission for the indefinite maintenance of your video data samples, you may do so at any point in time by contacting me, the primary researcher [REDACTED]

[REDACTED].

---

Signature of Researcher

Date

## Appendix C

### Interpreter Recruitment Email and Informed Consent

Greetings!

My name is Lena Stavely and I am a graduate student in the Master of Interpreting Studies and Communication Equity (MAISCE) program at St. Catherine's University. I am conducting research on the strategies and behaviors of interpreters who work at the center school for the Deaf where you work. As you may be aware, there is very little research on educational interpreting done in ASL-dominant K-12 settings—the work that you do is very unique. You are receiving this email because you work as an interpreter at one center school for the Deaf where ASL is the primary language of communication, and I am requesting your participation in the study.

As part of my study, I will be recording interpreters at work in the classroom. Schedules allowing, I will shadow you for one to two days, observing and filming your interpreting within ASL-dominant classrooms. Following my observations of your work, I will sit down with you to view the recordings and talk about the strategies and decisions you employed. Videos will be stored on a password-protected hard drive and will be shared only with people involved in my research, including my research advisors and colleagues from my program. Later on, and only if you grant permission, they may be shared as data samples for publication or educational purposes.

If you agree, we will select dates and times for observations of your work in the classroom. Our observation time together should be no more than 6 hours. Following this, we will select a date and time for us to meet and discuss the work, for a minimum of 45 minutes. You will be compensated with a \$20.00 gift card for your time and energy. All information shared during observations and this discussion will remain strictly confidential.

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

### **Informed Consent to Participate in a Research Study**

**Study Title:** Educational Interpreting in an ASL-Dominant Space: The Strategies and Decisions of Interpreters Working in the Classroom at One Center School for the Deaf

**Researcher(s):** Lena Stavely

You are invited to participate in a research study. This study is called Educational Interpreting in an ASL-Dominant Space: The Strategies and Decisions of Interpreters in the Classroom at One Center School for the Deaf. The study is being done by me, Lena Stavely, a Masters' student at St. Catherine University in St. Paul, MN. The faculty advisor for this study is Dr. Erica Alley, Program Director for the Master of Arts in Interpreting Studies and Communication Equity (MAISCE) at St. Catherine University. My research advisor for this study is Dr. Melissa Smith.

This study aims to document the strategies used by interpreters in an ASL-dominant educational setting. It will examine the work and decisions of interpreters, as well as the

factors that influence those decisions. To date, little research has examined the strategies and decisions of educational interpreters who work within ASL-dominant spaces. Approximately three to eight interpreters 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 any questions you have before you agree to be in the study.

### **Why have I been asked to be in this study?**

This study will look at K-12 educational interpreting done with within NMSD, where instruction is provided in American Sign Language (ASL). You were selected for this study because you regularly work in this setting. In this setting, interpreting is done primarily from ASL to spoken English, which makes it rare in educational interpreting, and even more rare in the research that has documented the work of educational interpreters.

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

If you agree to be in this study, you will be asked to do these things:

- Allow me to observe you while you interpret within ASL-dominant classrooms. This will involve me filming the discourse that takes place within the classroom, including your interpreting work. I anticipate shadowing you while you are working in the classroom and would like to observe you at work during at least one classroom period, and at most one whole day of class-periods. I expect this time commitment to be between 0.5 and 6 hours.
- Allow me to sit talk with you about the factors influencing your decisions, as well as the strategies that you employed while working as an educational interpreter within the center school for the Deaf classroom. I will ask you to allot a minimum of 45 minutes for this interview, and the process will involve looking at the filmed discourse in the classrooms where you were at work.

In total, this study will require that we dedicate a minimum of 1.25 hours, and a maximum of 6.75 hours or more together, consisting of time that I observe and film you at work, as well as sit down with you for the interview. Data collection with participating interpreters will begin and end between an eight-week period.

**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. If, at any point during the filmed observations you no longer feel comfortable, you may let me know, and filming will stop. You may withdraw at any time until the observations and interviews are complete, 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 participants' (interpreters, teachers, or students) health or welfare. No sensitive data will be recorded, and strict adherence to this standard will be met. If at any point in time the material being recorded approaches an emotional or volatile state for any participant, recording will be stopped. Strict protocols will be in place to maintain the anonymity of each participant and the confidentiality of all information shared. However, in the event of publication or presentations, photos or videos may be used to demonstrate data samples.

The researcher (Lena Stavely) has no authority over you, the other interpreters, or the teachers or the students who choose to participate in the study. You risk no loss of job or reputation for the behaviors or communications that you exhibit while participating. All filmed data will be treated as discourse, and nothing else. During the interview, I will not ask you to divulge confidential information, but will ask you about the interpreting you did within an ASL-dominant, K-12 setting. If at any point in time the work we do together makes you feel uncomfortable, let me know, and I will do my best to put you at ease. All data will be stored and saved on two password-protected hard-drives (one for backup) and locked within a cabinet in the principal investigator's home. Consent forms will be locked in a cabinet within the researcher's home, and labels of footage will be done with pseudonyms. Data that contains identifying information will not be shared with anyone who could use it to justify disciplinary action.

Footage from interviews will be transcribed, and all identifying information (e.g., names, places) will be erased from the transcripts. You will be asked to give me a pseudonym with which I can refer to you. All filmed data will be stored and saved on a password-protected hard-drive, within a locked cabinet. All transcripts, which will not include any identifying information, will be stored on a password protected google drive.

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

There will be no direct benefits to you from participating in this research. This is an opportunity for us to share insight about the unique work that we do with the interpreting community at large, as well as the Deaf community, which is so often is underserved by



large systems, particularly educational ones. This study is a chance to be transparent with the people who give us our livelihood about the ways that our work affects them. The study might offer solutions to share with the interpreting profession at large for how we can partner with Deaf professionals in the interest of furthering the education of Deaf children.

**Will I receive any compensation for participating in this study?**

You will receive a \$20.00 gift card as a token of appreciation for your participation.

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

I will keep the filmed data on a password-protected hard drive, in a locked cabinet, and only I, my advisors, and some colleagues from my program will have access to the records while I work on this project. I anticipate finishing my use of the data by May 30, 2018. If you grant me permission, data that contain your image or discourse may be maintained indefinitely, as we feel they may be useful for educational purposes, publications, or with future students. If you do not want me to keep these recordings for future use, you can still be in our study. In that case I will destroy your recordings by May 30, 2019. Transcripts of research results may be kept indefinitely but will contain no identifying information that would connect you to your contributions. No data that is collected or maintained from this study will be shared with others without your permission.

Any information that you provide will be kept confidential, which means that you will not be identified in the any written reports or publications. If it becomes useful to disclose any of your data in the future, I will seek your permission and tell you the persons or agencies to whom the information will be furnished, the nature of the information to be furnished, and the purpose of the disclosure; you will have the right to grant or deny permission for this to happen. If you do not grant permission, the information will remain confidential and will not be released. If, at any point in time you should decide to rescind permission for the indefinite maintenance of your video data samples, you may do so at any point in time by contacting me.

**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 [REDACTED]. If you have any additional questions later and would like to talk to the faculty advisor, please contact Dr. Erica Alley at [REDACTED]. 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 [REDACTED]. 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 videotaped.

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

Please check all that apply. I DO want to:

- Participate and have my data included in this study.

Pseudonym with which I would like to be referred:

allow my recordings to be used for presentations or future educational or publication purposes.

- allow my recordings to be kept indefinitely\*

\*If, at any point in time you should decide to rescind permission for the indefinite maintenance of your video data samples, you may do so at any point in time by contacting me, the primary researcher [REDACTED]).

---

Signature of Researcher

Date

## Appendix D

### Parental Permission Form

Dear Families,

I am a St. Catherine University student pursuing a Masters of Interpreting Studies and Communication Equity. An important part of my program is the Action Research project.

I have chosen to study the strategies used by interpreters who work at your child's school, and the factors that influence these strategies. This is an important study as there is little research that has explored the work of educational interpreters within Deaf school environments. I am working with a faculty member at St. Catherine University and an advisor to complete this particular project.

I will be writing about the results that I get from this research. However, none of the writing that I do will include the name of this school, the names of any staff, administration, parents, or students, or any references that would make it possible to identify outcomes connected to a particular student. Only my research advisor, Dr. Melissa Smith, my faculty advisor, Dr. Erica Alley, and possibly other members of my learning cohort will have access to the videos for this study; we will keep them confidential.

When I am done, my written report about this project will be electronically available online at the St. Kate's library in a system called SOPHIA, which holds published reports written by faculty and graduate students at St. Catherine University. The goal of sharing my final research study report is to help other educational interpreters who are also trying to improve the effectiveness of their interpreting within the classroom.

There are no anticipated risks to participants' health or welfare. Strict protocols will be in place to maintain the anonymity of each participant and the confidentiality of all information shared. All participants will be assigned pseudonyms. However, if you permit, in the event of publication or presentations, photos or videos may be used to demonstrate data samples, which could include the image of your child. Please rest assured that I have no authority, disciplinary or otherwise, over the students or their teachers in this study. Any communication or behaviors that appear on film will be treated as content for the interpreter in the classroom to interpret, and nothing else. All recordings will be maintained in a private, secure place, and will not be shared.

Procedures:

If you decide to allow your child to participate, this will mean permitting me to include your child when I film her/his class. This will involve placing a video camera in front of the class, facing the students and interpreter in the class, to capture their language on film. It will also involve placing a video camera behind the students in the class to film the teacher's language. This study will take less than two months to complete, over a period of several sessions within your child's classroom. The total length of time I will be filming will be no more than 18 hours, and no less than 30 minutes, over six sessions.

This study is voluntary. If you decide you do want your child to be a participant and/or have her/his data, (which means the image of your child) included in my study, you need to check the appropriate boxes, sign this form, and return it by [date].

If you decide you do not want your child to participate and/or have her/his data included in my study, you do not need to do anything. There is no penalty for not participating or not having your child's data involved in the study.

If you have any questions, please feel free to contact me, Lena Stavely ([REDACTED]). You may ask questions now, or if you have any additional questions later, you can ask me or my advisor, Dr. Erica Alley ([REDACTED]), who will be happy to answer them. 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 [REDACTED].

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

### Opt In

Please check all that apply. I DO want my child to:

participate in this study, which means having my child's data included in the study.

allow my child's recordings to be kept indefinitely for future educational or publication purposes. \*

\* If, at any point in time you should decide to rescind permission for the indefinite maintenance of your child's video data samples, you may do so at any point in time by contacting me, the primary researcher at [REDACTED] or at [REDACTED].

\_\_\_\_\_  
Signature of Parent/Guardian

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Researcher

\_\_\_\_\_  
Date

Please respond by XXXX.