DEAF STUDENTS WHO USE AMERICAN SIGN LANGUAGE AND
THEIR ACADEMIC AND SOCIAL EXPERIENCES
IN MAINSTREAM COLLEGE SETTINGS

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I dedicate this dissertation to Thomas Riggs. He believed in me and always supported me when I was a college student. I would not be here if it were not for him.

Rest in peace, Tom.
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Abstract

Since the enactment of the Americans with Disabilities Act (ADA), the number of colleges/universities offering access and support services has increased and, concurrently, the enrollment of deaf students in mainstream postsecondary institutions has increased dramatically. Yet, in 1999, 75% of all deaf students in higher education had withdrawn from college without a degree even with the provision of access and support services. The literature reveals that deaf students experience different barriers even with interpreting services during their academic and social interactions in mainstream college settings. Through the lens of Vincent Tinto’s theory of student departure, Deaf students’ longitudinal processes of academic and social interactions within their postsecondary institutions were examined. A qualitative study was conducted using Interpretative Phenomenological Analysis (IPA) to explore the lived experiences of five Deaf students, with their participation in all academic and social interactions while working with American Sign Language (ASL) interpreters at a mainstream college. After interviews, data showed that the participants experienced barriers as a result of their ASL interpreters’ language and cultural competencies and professionalism, the office of interpreting services’ approaches and practices, and linguistic/cultural conflicts. Recommendations are provided for the problem of practice and future research.

Keywords: Deaf college students, American Sign Language interpreters, attrition rate, Americans with Disabilities Act, and academic and social participation.
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Chapter 1: Introduction

Statement of the Problem

The Americans with Disabilities Act (ADA) requires colleges and universities to provide access and support services such as American Sign Language (ASL) interpreters to ensure that deaf students have full and equal participation in college academic and social systems (National Association of the Deaf, 2000). Since the ADA’s enactment in 1990, the number of colleges/universities offering access and support services has grown and, concurrently, the enrollment of deaf students in mainstream postsecondary institutions has increased dramatically. As of 2000, 468,000 deaf students were enrolled in colleges and universities (Richardson, Marschark, Sarchet, & Sapere, 2010; Schroedel, Watson, & Ashmore, 2003). However, despite the increase and the availability of access and support services in higher education, deaf students continue to struggle to attain the goal of completing a degree and eventually withdraw from college (Boutin, 2008; Lang, 2002; Richardson et al., 2010, Smith, 2004; Stinson & Walter, 1997). Stinson and Walter (1997) reported that 75% of all deaf students in higher education fail even with access and support services being provided—an alarmingly high attrition rate. Compared to hearing students, the withdrawal rate of deaf students in four-year colleges/universities is 140% higher (Myers & Taylor, 2000).

The literature does not provide a definitive answer to why this happens, but it does offer relevant information that may explain the failure rate. Numerous studies report that deaf students encounter barriers during their academic and social interactions, despite the provision of sign language interpreters. The barriers are categorized into two types: internal and external. Some deaf students faced internal barriers in both academic and social systems when they had to cope with communication struggles, communication skills, prior educational experiences, and deaf
identity/group identification (Albertini, Kelly & Matchett, 2001; Boutin, 2008; English, 1994; Foster & Brown, 1989; Foster & Brown, 1991, Franklin, 1998; Menchel, 1998; Murphy & Newlon, 1987; Saur, Layne, Hurley & Opton, 1986; Saur, Popp-Stone & Hurley-Lawrence, 1987; Stinson, Scherer & Walter, 1987; Stinson & Walter, 1997). Moreover, some deaf students encountered external barriers when participating in ongoing classroom dynamics with hearing peers and instructors and sign language interpreters, such as cultural and linguistic differences, sign language interpreters’ language fluency and interpreting skills, the interpreting process, and the use of space (Foster & Brown, 1989; Foster & Brown, 1991; Foster, Long & Snell, 1999; Marschark, Sapere, Convertino & Seewagen, 2005; Saur et al., 1986; Smith, 2004; Walter, Foster & Elliot, 1987). In the university’s social system, deaf students experienced external barriers as a result of hearing students’ negative perceptions and social prejudices (English, 1993; Foster & Brown, 1991; Foster & Brown, 1989). The internal and external barriers deaf students endured in both academic and social systems of the institution may explain the problem of practice. However, most studies do not explicitly indicate whether or not these barriers led deaf students to withdraw from college.

**Deficiencies in the Evidence**

The extant literature reveals several perceptible deficiencies in information. First, most studies concerning persistence or withdrawal are centered on deaf students from the same institution, the National Technical Institute for the Deaf (NTID). NTID is one of the colleges of Rochester Institute of Technology and has over 1,000 deaf students (Rochester Institute Technology, 2014). Thus, the findings based on NTID students’ experiences cannot shape generalized statements about deaf students who attend other schools with smaller populations of deaf students. The second gap is that most studies sampled deaf students from greatly diverse
backgrounds, lacking homogeneity in communication modes, communication preferences, personal/social identities, and experiences. A group of deaf students who use ASL as their first language and self-identify as culturally deaf likely will not share similar experiences and needs with hard of hearing students who primarily use spoken communication and do not embrace Deaf culture as a part of their identity. Hence, to build an accurate picture of the problem of practice, it is crucial to sample a group of deaf students who share similar characteristics. The third gap is that, while several studies indicated that sign language interpreting was an external barrier, they did not examine the problems associated with sign language interpreting such as the interpreter’s language fluency, interpreting skills, cultural competency, and content knowledge.

**Significance**

The attrition rate of deaf students at hearing universities is significant because this affects deaf people’s future employment. Failing to obtain a bachelor’s degree can make it more difficult for deaf people to find jobs with decent wages or wages equal to those of hearing people. Some deaf people may end up seeking financial assistance from the government, such as Supplemental Security Income (SSI); in 2009, approximately 430,000 or 11.5% of deaf people were receipts of SSI (Erikson, Lee, & von Schrader, 2010). In 2009, the economic reality of the deaf population in the U.S. continued to lag behind hearing people. More than 1.4 million, or 37.5%, of all deaf people were employed full-time, compared to 93 million hearing people, or 54%, being employed full-time, a deficit of 20% (Erikson, Lee, & von Schrader, 2010). In addition, deaf people earned 50 cents for every dollar made by hearing counterparts (Erikson, Lee, & von Schrader, 2010). Furthermore, the U.S. Department of Education (2006) reported that, “over a lifetime, an individual with a bachelor’s degree will earn an average of $2.1 million – nearly twice as much as a worker with only a high school diploma” (as cited in Albertini, Kelly, & Matchett, 2011, p. 1).
If no corrective action is undertaken to address the attrition of deaf students in higher education at hearing universities, the economic outlook for deaf people can only get worse. Without a bachelor’s degree, deaf people may become increasingly unemployed, suffer wide gaps in their relative earnings, and develop or increase dependence on government benefits.

**Audiences**

This study benefits college/university officials, deaf individuals, and researchers in the field of higher education with a focus on deaf students. College/university officials may develop a better understanding of the experiences of deaf students with support services, and then develop corrective actions to better retain deaf students. This could benefit deaf students and give them greater opportunities to have their voices heard. Because only a few researchers have studied the impact of support services, this study aims to bring recognition to the fact that more research is needed for a stronger relationship between support services and persistence.

**Research Questions**

The problem of practice raises two exploratory questions in order to gain a better understanding of Deaf students’ lived experiences of a particular phenomenon:

1. How do Deaf students working with ASL interpreters experience academic participation in mainstream college settings?

2. How do Deaf students working with ASL interpreters experience social participation in mainstream college settings?

Before discussing the rationale behinds the questions, it is important to understand the use of a capital D for “Deaf.” The capitalized “Deaf” refers to those who identify themselves as culturally deaf, while a lowercase “deaf” refers to the condition of deafness or those who do not embrace Deaf culture (Padden & Humphries, 2005). In this study, the sample was of Deaf
students who identified as culturally deaf and used ASL primarily. Students who did not identify as culturally Deaf and/or did not use ASL were not included in this study because they had vastly different needs and experiences. Furthermore, it was important to include “mainstream college settings” in the questions because this was where most Deaf students worked with ASL interpreters.

The questions were centered on process, not outcomes, and were designed to magnify a particular phenomenon to better understand the process of experiencing academic and social access services (Maxwell, 2005). Such a process occurs when a Deaf student begins participating in academic and social interactions while working with ASL interpreters. Moreover, this process is relevant to those interested in understanding Deaf students’ experiences because Deaf students’ academic and social experiences are dependent on the effectiveness of accessibility services such as ASL interpreting. As one study revealed, the provision of ASL interpreting does not warrant full and equal access, although many colleges/universities do not realize this (Foster, Long, & Snell, 1999). Thus, it is important to explore how Deaf students’ academic and social experiences take shape through access services.

**Theoretical Framework**

**Tinto’s theory of student departure.** This study employs Vincent Tinto’s theory of student departure as a lens to examine the problem of practice being explored. Tinto’s theory draws on three different works—Emile Durkheim’s suicide theory (1961), William Spady’s (1970) application of Durkheim’s theory to student departure, and Arnold Van Geenep’s (1960) rites of passage—to develop a theory of student departure (Tinto, 1993). In Durkheim’s work, suicide is more likely considered when a person struggles to integrate and foster relationships within a community. In order to be a part of the community, Durkheim suggested two forms of
integration: social and intellectual (Tinto, 1993). Spady extended Durkheim’s theory to student persistence in college. Students may consider withdrawal if they are unable to integrate into the community of the college (Tinto, 1993). Tinto then turned to Van Gennep’s work examining the movement of individuals from a membership group to another group or from one status to another status. Van Gennep identified three stages—separation, transition, and incorporation—which Tinto incorporated into his theory (Tinto, 1993). Separation occurs when the student separates from his/her communities (e.g.; family and high school), transition occurs when the student leaves the society of the high school and enters the society of the college, and incorporation occurs when the student is fully integrated into the college community (Tinto, 1993).

Tinto’s explanatory framework is centered on “the longitudinal process of departure as it occurs within an institution of higher education” (1993, p. 112). The longitudinal process of departure begins when the student enters the institution and ends when the student exits the institution with or without a degree. Significantly, the model primarily focuses on those who depart voluntarily, not those who are dismissed involuntarily. Within the longitudinal process of departure, there is a process of interactions among individuals, such as students, faculty, staff, and others, within the institution (Tinto, 1993). They interact at different levels on a daily basis, and the interaction process has a significant bearing on the student’s persistence. As Tinto (1975) noted, “One must view dropout from college as the outcome of a longitudinal process of interactions between the individual and the institution” (p. 103). Moreover, Tinto identified six components within the longitudinal process of interactions: pre-attributes, goals and commitments, institutional experiences, personal and normative integrations, goals/commitments, and outcomes (see Appendix A). All components are interactive and interdependent in such a way that one or several parts influence or are influenced by one or several other parts.
Pre-entry attributes. The first component of the interactive process is pre-entry attributes. Students come to the institution with a wide range of attributes, including personal attributes (e.g., sex, race or disability), family background (e.g., social status and parental education), skills and abilities (e.g., academic and social), prior educational experience (e.g., grade point average), dispositions (e.g., motivation, intellectual, social, and political preferences), and financial resources (e.g., scholarships and grants) (Tinto, 1993). A student’s personal attributes can have a potential effect on his/her goals/commitments and the process of interactions with the institution members. Tinto, however, cautioned that pre-entry attributes do not guarantee persistence or departure, but do affect the process of persistence or departure. For instance, some studies have found that students with high academic proficiency (academic skills and abilities) are more likely to attain higher grade point averages than those with low academic proficiency. This may help the process of persistence, but does not predict the outcome–degree completion or withdrawal.

Goals and commitments. The second component of the process is goals and commitments, which includes intentions and motivation. A student establishes a goal based on intentions to attain a degree or to obtain a specific occupation. Many first-year students, understandably, are uncertain about their occupational goals, which typically is not a concern as long as they are able to choose a path by the end of the first year (Tinto, 1993). The student’s goal(s) can have an impact on the process of persistence. According to Tinto (1993), “Generally speaking, the higher the level of one’s educational or occupational goals, the greater the likelihood of college completion” (p. 38). Commitments reflect the student’s willingness to put time and effort into attaining his/her goal(s). There are three types of commitment: goal, institutional, and external (Tinto, 1993). The student committed to educational and/or occupational goals has a goal commitment. The student committed to attain an educational
goal(s) within a particular institution in which s/he enrolls has an *institutional commitment*. The student committed to occupational or familial needs has an *external commitment*. These commitments are significant because they indicate the student’s level of commitment towards degree completion, and this commitment could become an important part of either the process of persistence or the process of departure (Tinto, 1993).

*Institutional experiences.* The third component of the process is institutional experiences. Students develop institutional experiences as they begin the process of interactions within academic and social systems, with each system containing formal and informal environments. The formal academic system is where the institution puts students’ intellectual abilities and academic skills to the test. For example, students have to learn and understand classroom lectures, complete assignments, and take quizzes or tests. These activities demand and evaluate their intellectual abilities and academic skills. The informal academic system is where students have an opportunity to interact with their instructors outside of the classroom. Tinto (1993) explains that interactions in the formal and informal academic system can have a significant impact on the process of persistence due to congruence or incongruence. Congruence occurs when there is a match between the institution’s academic demands and the student’s skills and abilities; on the other hand, a mismatch results in incongruence.

In the formal social system, the institution offers opportunities for students to socialize with their peers or other members of the institution, such as extracurricular activities consisting of sports, student body government, or other college-sponsored events. In the informal social system, students are offered interactional opportunities either on-campus or off-campus. As in the academic system, the student’s interactive experience arising from the formal and informal social systems could affect his/her process of persistence due to congruence/incongruence. The
student then would have a positive interactive experience if his/her social values, preferences, and behavior styles are similar to those of the members within the institution. As indicated above, the process of interactions with the members within both systems could produce either positive or negative institutional experiences. The student’s institutional experience could either facilitate or hinder his/her process of academic and social integrations.

**Personal and normative integrations.** The fourth component of the process is personal and normative integrations. Successful academic and social integrations emerge from positive institutional experiences, which are a result of congruence between the student’s skills, values, and interests and the institution’s demands, values, and interests in both academic and social systems (Tinto, 1993). It is possible that the student may persist if one aspect of integration (academic or social) is achieved, but Tinto found that achieving academic integration may be more important than social integration. Nevertheless, if the student is integrated into both academic and social systems, it almost warrants that s/he persists until degree completion (Tinto, 1993).

**Goals and commitments.** The fifth component of the process is goals and commitments. While similar to the second component, the difference is that at this stage, students may alter their goals and commitments by strengthening or weakening their commitments based on their institutional experiences. Tinto (1993) found that those who had a high level of positive interaction were more likely to persist until degree completion because their interactive experiences made their goals and commitments stronger. External commitments become important at this stage because students may live off-campus and commute to college. Also, students may participate in external communities such as internships, jobs, and volunteers (Tinto, 1993). Such external commitments could alter the student’s goals/commitments and eventually
affect the student’s process of persistence.

**Outcomes.** There are two possible outcomes: successful graduation with a degree or departure without a degree. The outcomes are contingent upon what rises out of the process of interactions between the student and the members of the institution.

**Validating Tinto’s theory.** Terenzini and Pascarella (1980) examined six studies that used Tinto’s model for validation of his work and found that the model was useful for examining the dynamics of withdrawal from college. All constructs, except pre-entry attributes, within the model were significant when observing the process of persistence or departure. However, the studies were unable to predict one’s persistence based on background traits, and cautioned that one’s background traits were imperative as they could influence the student’s interactive experiences.

**Applying the framework.** Tinto’s model, as described above, is applicable to the problem of practice being studied. The model affords an opportunity for better understanding of the problems that deaf students have encountered by examining their experiences with the process of interactions within the institution.

**Pre-entry attributes.** Deaf students’ pre-entry attributes were considered as having an impact on their process of departures. Deaf students’ backgrounds are widely diverse in terms of educational experiences, academic skills, personal identity, and communication preferences (Stinson, Scherer, & Walter, 1987). While Tinto (1993) did not mention communication preferences, they are an important attribute for deaf students because not all deaf students share a similar communication mode, language, or sign system(s). Some use ASL, some use sign systems such as Signed Exact English, and some use oral methods. This variation determines what access services the institution must provide to ensure access to communication. Also, the
variation can affect how deaf students interact with their hearing peers and instructors.

Another important attribute to consider is personal identity. One cannot assume that all deaf students share a similar identity just because they are deaf. Some students self-identify as being culturally Deaf and others consider themselves as a part of hearing culture. One’s personal identity could have an impact on his or her academic and social interactions with hearing students, teachers, and other members of the institution. Hence, in this study, the sample was of Deaf students who used ASL and embraced Deaf culture as a part of their identity. These pre-entry attributes were considered when Deaf students’ experiences were explored.

**Goals and commitments.** Boutin (2008) identified little research on deaf students’ goals and commitments. It seemed important to examine what goals and commitments deaf students had prior to entry and after the end of the first year. Knowing their goals and commitments was useful for this study, especially if they altered their initial goals and commitments during the process of interactions within the institution. Such a change may lead to relevant clues about their academic and social experiences.

**Institutional experiences.** The component of institutional experiences is the primary interest of this study because that is when deaf students begin interactions with their peers, faculty, staff, and other individuals within the academic and social systems. That process of interactions produces institutional experiences—the central focus of this study. When deaf students begin their process of interactions, ASL interpreting services become necessary because their native language is ASL, and most members of mainstream institutions do not know ASL. Thus, interpreting services not only provide them with access to communication, but also give them the opportunity to demonstrate their abilities, skills, interests, and values. Also, interpreting services help provide deaf students with access to the institution’s intellectual demands, interests,
and values. This is important because, according to Tinto (1993), in order to have a positive institutional experience, students need to recognize the congruence between their academic skills/abilities, interests, and values and the institution’s intellectual demands, interests, and values. While interpreting services do not warrant congruence, such services do make it feasible for both deaf students and the institution to interact, foster relationships and learn more about each other. Even so, deaf students may still experience incongruence due to a mismatch between the students’ personal attributes and the institution’s characteristics. In addition, incongruence may result from a lack of or limited access to services given limited communication between the student and the institution.

While the provision of interpreting services helps provide access to communication, Stinson et al. (1987) demonstrated that providing interpreting services does not necessarily mean that deaf students gain full and equal access to communication. Colleges/universities need to hire qualified interpreters who have completed formal training in ASL interpretation, are nationally certified, and are fluent in ASL. Some colleges/universities do not recognize what a qualified interpreter means, so they may end up hiring interpreters with limited experience and/or limited proficiency in ASL, resulting in significant impacts on Deaf students’ academic and social prowess.

**Personal and normative integrations.** Personal and normative integrations comprise the outcome of the student’s institutional experiences. A positive institutional experience facilitates the process of academic and social integrations while a negative institutional experience hinders it. Students with negative institutional experiences are more likely to withdraw because they are unable to fit into the college life (Tinto, 1993). This study focused on what produced academic and social experiences (process) rather than on the outcome, so this component was not explored.
as extensively as the other components.

**Goals and commitments.** According to Tinto (1993), students may modify their goals and commitments based on their institutional experiences, the degree of academic/social integration, and external commitments. It appears that this area has rarely been explored in relation to deaf students. This study explored whether or not Deaf students’ goals and commitments were altered as a result of their institutional experiences.

**Outcome.** Studies have investigated both deaf students who voluntarily departed from college and those who stayed till graduation. A few of these studies have examined the process of departure or persistence. Thus, the outcomes were not studied; rather, the process of departure and persistence that Deaf students experienced was studied.

**Conclusion.** Tinto’s model was an applicable framework for this study because it is an explanatory and interactive model, allowing this study to be centered on Deaf students’ interactive experience in a mainstream setting. Applying Tinto’s framework, six constructs of the interactive process were applied, and how they shaped Deaf students’ experience of academic and social participations within the institution. Consequently, this examination led to a better understanding of the phenomenon that Deaf students experience.
Chapter Two: Literature Review

The problem of practice is that 75% of deaf college students struggle academically and socially and, as a result, withdraw from college without a degree despite the provision of access services (Boutin, 2008; Lang, 2002; Richardson et al., 2010, Smith, 2004; Stinson & Walter, 1997). Looking through the lens of Tinto’s model of student retention, this study examined Deaf students’ process of interactions with the presence of ASL interpreters within the institution and how interpreters shaped the students’ academic and social experiences. Based on the problem of practice and the theoretical framework, a literature review was conducted with two questions considered:

1. What research exists on Deaf students’ academic experiences in working with ASL interpreters?
2. What research exists on Deaf students’ social experiences in working with ASL interpreters?

Current literature lacks a definite answer to the problem of practice, but it offers significant details about deaf students’ academic and social experiences. There are studies showing that deaf students encountered barriers during their academic and social interactions even with the presence of sign language interpreters. These barriers were in two forms: internal and external. Deaf students experienced external barriers when participating in the classroom’s ongoing dynamics with their hearing peers, instructors, and interpreters. The internal barriers occurred when deaf students’ personal attributes (such as communication skills, prior educational experiences, and personal/social identities) had strong effects on their interactions.

Although these studies provide relevant findings, there are some gaps. For example, one gap is that most studies were conducted at NTID, a college of RIT in New York where over 1,300
deaf students are enrolled (RIT, n.d.). There is a small number of studies sampling deaf students who attended a mainstream program with a small population of deaf students. Another gap is that while some studies mentioned ASL interpreters or deaf students using ASL, there was no study sampling of a single group of deaf students who shared a similar communication mode/preference—specifically, deaf students using ASL. When these studies used the term “sign language,” it was unclear if they were referring to ASL or other sign systems such as Signed Exact English and Pidgin Signed English. This is an important distinction because ASL and other sign systems are dissimilar and incomparable (Nomeland & Nomeland, 2012).

All identified studies are organized into two main themes: Academic Experiences and Social Experiences.

**Academic Experiences**

Students’ academic experiences take shape when they participate in the classroom by learning, interacting with their peers and instructors, and taking quizzes and exams. Deaf students’ academic experiences are not only affected by their interactions inside and outside the classroom, but also by their personal attributes. In this section, two themes reflect deaf students’ academic experience: internal and external barriers. Internal barriers occur when deaf students’ personal attributes affect their academic interactions. External barriers arise from the ongoing dynamics in the classroom between deaf students, and hearing students and instructors.

**Internal barriers.** There were 10 identified studies reporting that deaf students experienced internal barriers and, as a result, the quality of their academic interactions was affected (Albertini, Kelly, & Matchett, 2001; Boutin, 2008; Foster & Brown, 1989; Foster & Brown, 1991; Franklin, 1998; Menchel, 1998; Murphy and Newlon, 1987; Saur, Layne, Hurley, & Opton, 1986; Saur, Popp-Stone, & Hurley-Lawrence, 1987; Stinson and Walter, 1997). The
internal barriers are pre-entry attributes and deaf students’ personal identity and self-perception of how others think. According to Tinto (1993), pre-entry attributes refer to students who come to the institution with a wide range of personal attributes that have a potential impact on their academic and social interactions. One study stated that one of the pre-entry attributes, deafness, did not have an effect on deaf students’ academic interaction (Saur et al., 1987). This statement is relevant because it has been common to assume that the lack of participation is an outcome of a student’s being deaf, when in reality there are other factors at work.

Communication skills and prior educational experiences are pre-entry attributes that can create internal barriers to deaf students’ academic interactions (Albertini et al., 2011; Boutin, 2008; Murphy and Newlon, 1987; Stinson & Walter, 1997). Deaf students’ communication skills can affect their abilities to communicate with students and instructors (Albertini et al., 2011). Unlike hearing students speaking English, not all deaf students share a similar communication mode, language, or sign systems, and each deaf person’s communication mode is typically based on one’s degree of hearing and cultural exposure (Myers & Taylor, 2000). Communication modes are either aural/oral (speech) or visual/gestural (sign). However, some students attempt to use both modes at the same time, commonly identified as Simultaneous Communication (Sim-Com) (Nomeland & Nomeland, 2012). Those who use visual/gestural communication generally used either ASL or sign systems such as Signing Exact English (SEE) and Pidgin Signed English (PSE). However, ASL and sign systems are fully distinct and incomparable (Nomeland & Nomeland, 2012). For instance, SEE is a visual representation of English, while ASL is a separate, independent language with its own grammar and syntax (Nomeland & Nomeland, 2012).
Communication skills not only depend on the level of proficiency a deaf student has with a communication mode, language, or sign systems, but also the level of comfort the student has with his/her communication skills. Murphy and Newlon (1987) found that deaf students who were not comfortable using sign and hard of hearing students who were not comfortable using speech experienced loneliness both in and out of the classroom. This finding suggests that a deaf student may have a difficult time interacting with hearing students and instructors through a sign language interpreter if s/he is not comfortable using sign language—an example of an internal barrier.

Deaf students’ prior educational experiences are another instance of an internal barrier. Not all deaf students participate in similar educational settings (Myers & Taylor, 2000). Some attend a residential school for deaf students, and others attend a non-residential school and/or mainstream program. Residential and non-residential schools are where deaf students typically meet, and receive instruction in their chosen communication mode. Mainstream programs, however, primarily used spoken English and provide accommodations to deaf students for communication such as ASL interpreting and note-taking. In many cases, a deaf student who attends a mainstream school has never met another deaf person (Myers & Taylor, 2000). It is clear that one’s prior educational experience has an effect on academic participation. Those who attend a mainstream school may experience easier adjustments in attending college because they are accustomed to mainstream settings. However, students who attend a residential school on a full-time basis may also find it easier to adjust, too, because they have greater confidence in their identities and/or communication skills, and are more comfortable with residential living.

Two other studies identified a correlation between deaf students’ pre-entry attributes and their academic successes (Franklin, 1988; Menchel, 1998). Their findings suggested the
importance of having strong pre-entry attributes so that deaf students will be less likely to experience internal barriers. Franklin (1988) surveyed 246 deaf students who attended 7 mainstream community colleges and found that those who persisted had better speech skills, attended high schools that provided minimal support, had some pre-college preparatory experience, and made decisions about their majors during their first year of college. Menchel (1998) interviewed 33 deaf students from 18 mainstream postsecondary institutions to learn about their academic and social experiences. All of the students had positive academic experiences. All but one used speech as a primary mode of communication, and 28 students had been mainstreamed from kindergarten through the 12th grade. The distinctive pre-attributes were that they came from high-income and educated families, had a higher-than-average grade point average in high school, used oral-based communication, and were mainstreamed. Those students were also found to be goal-oriented, highly motivated, committed, and academically and socially well-integrated.

The second instance of internal barriers is personal identity and self-perception of what others think. Deaf students experience psychological struggles when they struggle to accept who they are and are concerned about how others perceive them (Foster & Brown, 1989; Saur et al., 1986). Foster and Brown (1989) found that deaf, including those who identified as hard of hearing, students’ sense of separateness was a result of their self-perceptions as deaf students and their interpretations of how they were perceived by their hearing peers. Some said they could sense their hearing peers constantly scrutinizing their behaviors. They were also worried about asking a question that digressed from the topic as a result of the interpreter’s work, giving the wrong answer, and/or making a comment that was difficult to translate. This apprehension came from their own experiences in which they constantly faced functional constraints. One student
shared how his teacher had a stack of papers and was calling out names. The teacher saw an A on the paper and looked at the hearing students, looking for the person the grade belonged to. The deaf student waved his hand but the teacher did not notice him. This forced the interpreter to voice, “He’s over here.” The deaf student got the impression that the teacher did not think that deaf students were capable of getting As, and this affected him psychologically (Foster & Brown, 1989).

Foster and Brown (1989) also found that deaf students were worried about their deaf peers, such as feeling embarrassed when a deaf peer made a mistake such as giving the wrong answer or making an off-the-point comment; they worried that hearing students would assume that one deaf student’s action was the same for all deaf students. Even though deaf students experienced psychological struggles, they used their experiences as motivation to prove that they were as capable as hearing people. Some wanted to distinguish themselves from their peers just to show that they were not like the majority of their peers (Foster & Brown, 1989). Interestingly, hearing students at RIT offered opposing views of what deaf students thought: that deaf students had the same range of competencies and successes in the academic programs as hearing students (Foster & Brown, 1991).

In Saur’s et al. 1986 study, some deaf students struggled with their identities, refusing to accept that they were deaf. As a result, they tried to act like hearing students so that they could be a part of the larger group of students. In addition, deaf students did not like to be treated as special just because they were deaf, wanting to be treated just like their hearing peers. Saur et al. (1986) concluded that if deaf students were treated like other students, and received support services without being judged negatively, they would feel better about themselves and be more motivated to participate in class.
**External barriers.** External barriers arise out of ongoing classroom dynamics between deaf students, hearing students and instructors, and sign language interpreters. There are seven studies identifying four kinds of external barriers: sign language interpreters, the interpreting process, linguistic and cultural differences, and the use of space (Foster & Brown, 1989; Foster & Brown, 1991; Foster, Long, & Snell, 1999; Marschark, Sapere, Convertino, & Seewagen, 2005; Saur et al., 1986; Smith, 2004; Walter, Foster, & Elliot, 1987). These barriers can make full participation in classrooms difficult for deaf students.

The first external barrier, sign language interpreters, emerges when deaf students experience a separation from the ongoing classroom dynamics even with the presence of sign language interpreters (Foster & Brown, 1989). Even though the role of sign language interpreters in the classroom is to facilitate communication between deaf students and hearing peers and instructors, deaf students still often cannot fully participate in the classroom. Foster et al. (1999) surveyed 46 NTID/RIT deaf students about academic engagement, asking what made them feel a part of the classroom. One student made a comment that captured the sentiments of many deaf students: “participate and learning by doing” (Foster et al., 1999, p. 228). This implied that the deaf students in this study preferred to participate directly without sign language interpreters as a third party. Deaf students were asked again what made their communication in the classroom problematic and almost half reported that their interpreters were responsible (Foster et al., 1999). These students based their communication issues on the interpreter’s limited signing skills, poor receptive skills, and lack of content knowledge, citing “limited signing skills” and “poor receptive skills.” There is another study where deaf students expressed similar concerns about their interpreters’ signing skills. Smith (2004) interviewed 14 mainstream undergraduate college students, and some complained that interpreters often misinterpreted what they said. This
suggests that the interpreters had poor interpreting skills and/or were not fluent in sign language. Another complaint reported by the deaf students was that some interpreters were not willing to accommodate their language or sign systems. For instance, a student requested ASL but the interpreter used SEE. This may reflect the interpreter’s language fluency (or lack of); had the interpreter been qualified, the student’s request likely would have been honored.

Both Foster et al. (1999) and Smith (2004) suggested that sign language interpreting could separate deaf students from the ongoing classroom dynamics due to the interpreter’s lack of language fluency and interpreting skills. Marschark, Sapere, Convertino, & Seewagen (2005) conducted a quantitative study on the access to postsecondary education through sign language interpreting, and concluded that sign language interpreting itself could not provide deaf students with the same experiences as their hearing peers in terms of participation and communication. The researchers took extra efforts to ensure that the interpreters had extensive experience, were able to match the student’s communication needs/preferences, and had worked with the study’s sampled students prior to the study. These factors still did not improve the post-test results, and the researchers suggested that the quality of interpreting was a potential factor to the post-test results. While they did not explain what “quality of interpreting” meant in their study, it may refer to the language fluency and interpreting skills as addressed in Smith’s (2004) and Foster’s et al. (1999) studies.

The second type of external barrier is the interpreting process. The speed of presentations and discussions and the number of speakers involved in a discussion can affect the interpreting process such as lag time (Saur et al., 1986). Deaf students working with interpreters experience a lag in receiving information, averaging a 5- to 10-second lag (Foster et al., 1999). The lag time may be longer if the presentation or discussion is more rapid than normal because the interpreter
needs time to interpret, and then transfer, the information from spoken English to ASL. By the
time the deaf students finally receive the information, they are already behind because the teacher
or hearing peers typically have moved on to a new topic. Another obstacle is the number of
speakers involved in a discussion. Hearing participants typically jump in and out of a discussion
quickly and, as a result, the interpreter may receive a large amount of information from various
speakers that needs to be processed quickly. As the interpreter processes the messages from
different speakers, s/he may have no time to indicate which message comes from which speaker.
As a result, Deaf students have no opportunity to break away from the interpreter to make eye
contact with the speaker(s) because they have to concentrate on the interpreter who is still
processing information (Saur et al., 1986)

Saur et al.’s (1986) study is further supported by two other studies. Walter et al. (1987)
conducted a qualitative study and found that deaf students were frustrated they could not receive
information in a timely manner in the classroom while their hearing peers were ahead of them.
They were discouraged by how their teachers were not sensitive to their communication situation.
As a result, they transferred from their first institution, where they were mainstreamed, to
NTID/RIT. The second study by Foster and Brown (1989) reported similar findings: deaf
students reported that lag time limited their participation. One student said that the lag time made
him uncertain of whether or not his questions were appropriate and, after asking questions, he felt
“funny and inferior” (Foster & Brown, 1989, p. 84). As a result of the lag time, deaf students felt
a sense of separateness from their hearing classmates. Deaf students saw a clear distinction of
experiences from their hearing peers, who had direct communication, and their own experiences.

The third external barrier is linguistic and cultural differences. In Saur’s et al. (1986)
study, an interviewee at RIT/NTID shared that she struggled to find the right words in class and
that it was easier to participate when the discussions were centered on concrete information such as real-life experiences rather than abstract information. Her instance is an example of a linguistic barrier, since all information she received was in sign language and she did not have direct access to what English words her instructor and hearing peers used. Again, ASL, a distinct language from English, has its grammatical rules and syntax, and does not directly “show” English words (Nomeland & Nomeland, 2012). Another interviewee cited in Saur’s et al. (1986) study struggled to understand why his hearing peers laughed at a joke in English because he did not find it funny. This likely reflects both linguistic and cultural differences because such jokes may contain certain linguistic and cultural elements to which a particular group can easily relate (Sutton-Spence & Napoli, 2012). Interestingly, hearing RIT students shared that they did notice that deaf students were not able to catch their side conversations and jokes (Foster & Brown, 1991). However, these hearing students added that they wished that the class provided opportunities for them to learn how to interact with their deaf peers (Foster & Brown, 1991).

Cultural and linguistic differences also had an impact on deaf students’ efforts in building relationships with their hearing students and instructors. Saur et al. (1986) identified the issue of how deaf students and their hearing peers and instructors struggled to foster relationships. When they first interacted, they did not have a sense of connection because of the language difference and having to work with a sign language interpreter. For instance, when hearing students communicated with deaf students for the first time, it was difficult for them to maintain eye contact with the deaf students, especially when they heard information in a voice coming from the interpreter (Saur et al, 1986). It was also difficult for hearing students to speak directly to deaf students, since the deaf students had to look at the interpreter to receive the message. Hearing instructors shared this awkwardness and unfamiliarity in how they should interact with deaf
students using sign language. One interviewee in Saur’s et al. (1986) study found it bothersome when she spoke to her instructor and had established eye contact, but the instructor turned and looked at the interpreter while answering the student. Her experience suggests that it is challenging to build relationships with hearing students and teachers if they have no knowledge of linguistic and cultural differences. Despite these challenges, Saur et al. (1986) said that building a relationship was feasible, but only if hearing participants were given ample time to learn and adjust the way they interacted.

In addition to the impact of linguistic and cultural differences on relationship-building, Foster and Brown (1989) found that when deaf students tried to initiate a conversation or join their hearing peers’ informal conversations, they encountered barriers even with an interpreter present. They cited a situational example where a group of hearing students was doing a lab experiment while holding informal conversations. Deaf students tried to participate in their conversations but often were not welcomed or given the opportunity to participate (Foster & Brown, 1989). Deaf students also reported being left out when there were multiple conversations going on at the same time that their interpreters could not keep up with (Foster & Brown, 1989). Their experiences suggest that, even with efforts and the presence of sign language interpreters, it can be challenging to build relationships with hearing peers.

The fourth type of external barrier is the use of space. Deaf students have a visible and separate presence in the classroom (Saur et al., 1986). Given that deaf students use a visual mode of communication, they need to sit in a particular area of the classroom that allows them to view the instructor, interpreter, and classroom materials clearly. Deaf students often sit together as a group, which Saur et al. (1986) called an island because it separated them from their hearing peers. In Foster and Brown’s 1991 study, hearing students reported that deaf students’ seating
arrangements—typically in the front of the classroom—limited opportunities for interaction; had the deaf students sat with their hearing peers, interactions would have been more likely. Clearly, the seating arrangement created a physical constraint that limited interaction opportunities for both deaf and hearing peers (Foster & Brown, 1991).

Foster and Brown (1989) identified another aspect of a physical barrier: deaf students often worked together in small groups and labs because of three reasons. They typically had one interpreter for the entire group, encountered communication difficulties, and saw how hearing students did not want to put extra effort and time in working with them. Foster and Brown (1989) also found that these physical constraints did not necessarily create further obstacles for deaf students. For example, some of the deaf students felt that the physical separation led them to develop a positive group identity and, as a result, they experienced competition, support, and friendship.

**Deficiencies**

There are several deficiencies in the 12 studies examined. The first gap is that nine studies were conducted all at the same entity, NTID/RIT, which has a large population of deaf students. It is difficult to make a general statement about all deaf students based on the study findings if deaf students from other institutions, including those with fewer deaf students, are not included. Only three studies (Franklin, 1988; Menchel, 1995; Smith, 2004) took place outside NTID/RIT.

The second gap is that none of the studies sampled a single group of deaf students who shared a similar communication mode and/or preference. All studies included deaf students with a wide range of communication modes and preferences. Sampling deaf students with varied communication modes is problematic because each communication mode produces a different
and incompatible experience. Stinson, Liu, Saur, and Long (1995) conducted both qualitative and quantitative studies of deaf students’ perceptions of communication ease in the classroom. They found that those who used speech and those who used mixed communication modes did not share similar perceptions of communication ease. Some hard of hearing students who use speech may be concerned about how clearly their hearing peers speak because understanding their speech is important for successful interaction. On the contrary, deaf students are likely to be concerned about the interpreter’s effectiveness (Stinson et al., 1995). They also found that those who used speech and sign language simultaneously experienced a greater gap between comprehension and ongoing classroom discourse. One flaw in this study was that it did not examine deaf students who only used sign language. There was another study indicating that deaf students, who worked with sign language interpreters for communication, experienced lower levels of communication ease (Long, Stinson, & Braeges, 1991).

The third gap is that several studies clearly demonstrated that sign language interpreting was an external barrier, but did not investigate the problems associated with sign language interpreting such as language fluency, interpreting skills, cultural competency, and content knowledge. Even though Marschark et al. (2005) made every effort to ensure that deaf students had interpreters who met all their criteria, it appears that they did not assess the interpreters’ language fluency. It is possible that deaf students’ post-test scores indicated that they could not understand their interpreters because the interpreters were not fluent in ASL. An interpreter with extensive experience with interpreting does not necessarily mean that s/he is fluent in ASL; rather, it likely means that s/he has been in the interpreting field for a considerable period of time. Marschark et al. (2005) took the step of ensuring that both the interpreter’s language/sign systems and students’ language/sign systems were aligned; however, it was not clearly indicated whether
the match also included the interpreter’s and the students’ language fluency. Marschark et al. (2005) also mentioned the importance of knowing a student prior to the class in order to become familiar with the student’s signing style, personality, and language and/or sign systems. One problem with this was that first-semester students often were not given this opportunity to become familiar with interpreters before beginning the semester; instead, the first time they met their interpreters typically was on the first day of class. A significant gap in Marschark’s et al. 2005 study was that it did not address how sign language interpreting affected deaf students’ communication in the classroom; it only focused on the outcomes in the form of post-test scores.

The fourth gap is the phrase, “sign language,” which is a broad term. In many studies, it is unclear if their use of “sign language” refers to ASL, signing systems or even Sim-Com. It is crucial to recognize which language or sign systems the student and interpreter use because it can, and does, affect a deaf student’s academic experience. For example, if a Deaf student using ASL is provided with a SEE interpreter, it is likely that the student will experience communication struggles and be unable to participate fully in the class. Researchers should identify exactly what language or sign systems they examine to avoid potential variation or lack of clarity in their results.

Summary

The literature indicates that deaf students have experienced internal and external barriers during academic interactions. Deaf students also have struggled with academic interactions because of issues with communication skills, prior educational experiences, and negative perceptions of their deaf identity. Deaf students experienced external barriers when they faced problems with sign language interpreters, the interpreting process, cultural and linguistic differences, and the use of space. It is important to recognize that sign language interpreters
themselves are one of the barriers, since they are supposed to have the ability to facilitate communication between deaf students and hearing students and instructors. While all 12 studies provided relevant information, there are several significant gaps, the most noticeable one being that there is no study centered on a single group of deaf students sharing a similar communication mode and/or communication preference. Also, none of the studies further investigated how and why sign language interpreting could be problematic, rather than beneficial, for deaf students’ academic interactions.

Social Experiences

In addition to academic interactions, social interactions take place when deaf students socialize with their own peers, hearing peers, and other members within the institution such as during social gatherings, sporting events, club functions, and informal conversations. The literature shows that deaf students experienced struggles during their social interactions, struggles that arose from internal and external barriers. The internal barriers were deaf students’ personal attributes and experience (Foster & Brown, 1989; Stinson & Walter, 1997). The external barriers were linguistic and cultural differences, hearing students’ negative perceptions of deaf students, and the availability of support services (English, 1994; Foster & Brown, 1989; Foster & Brown, 1991; Stinson et al., 1987).

Internal barriers. Stinson and Walter (1997) found that deaf students’ personal attributes were an internal barrier to their abilities to make social adjustments in order to be fully integrated into the social system of the institution. The personal attributes Stinson and Walter (1997) cited were communication skills, self-identity, and group identification. Furthermore, deaf students’ communication skills varied because not all students shared a similar communication mode, language or sign systems, or educational experiences (Albertini et al., 2011).
In order to socialize and communicate with peers, one has to have communication skills.
Communication skills will not only facilitate access to communication with his/her peers, but also make it possible to foster interpersonal relationships with peers of diverse backgrounds (Stinson & Walter, 1997). Building an interpersonal relationship requires respect and tolerance of diverse characteristics such as cultural and linguistic differences (Stinson & Walter, 1997). Some deaf students may find this challenging because their previous school(s) might not have provided them with enough socialization opportunities with hearing peers. In addition to communication skills and interpersonal relationships, some deaf students struggled to accept their own identity. The struggle created some difficulty in identifying a peer group that fits them. Stinson and Walter (1997) claimed that a deaf student could make a successful social adjustment if s/he accepted his/her identity and was able to communicate, socialize, build a relationship, and successfully identify herself/himself with a peer group.

Menchel’s study (1998) supports Stinson and Walter’s (1997) claim about the importance of having strong communication skills and acceptance of one’s identity in order to socialize with people. In Menchel’s study, students reported that their social experiences were generally satisfactory because they had communication skills and accepted who they were. They also reported that they did not see deafness as a barrier; their perceptions may have helped them feel optimistic and see possibilities in social interactions with their hearing peers (Menchel, 1998).

The second example of an internal barrier is that deaf students’ prior schooling experiences influence whom they choose to interact with (Foster & Brown, 1989). Some students attended a residential school where they interacted with deaf peers sharing a similar language on a daily basis, and they found comfort in this type of interaction (Foster & Brown, 1989). Those who attended a mainstream high school reported experiencing isolation because of
communication issues that they did not want to experience again at NTID/RIT (Foster & Brown, 1989). Some students shared the perception that interacting with students using different communication modes would be time-consuming and even lead to communication breakdowns and eventual rejection (Foster & Brown, 1989). Some students chose to interact with deaf peers because of similar life experiences, perspectives, and backgrounds.

**External barriers.** Based on the literature, deaf students may struggle to interact with their hearing peers because of cultural and linguistic differences. Foster and Brown (1991) interviewed hearing students at RIT who shared that they were reluctant to interact with deaf students for several reasons. When they saw deaf students on a regular basis, they perceived deaf students’ attitudes and cultural behaviors and norms negatively, using words like “immaturity, pushing in line, making too much noise, and blocking the hallway” (Foster & Brown, 1991, p. 24). They also found deaf students’ attitudes to be “rude, cocky, arrogant, privileged, or self-centered”, and they even thought that deaf students refused “to associate with them or to respond to overtures for written communication or friendship” (Foster & Brown, 1991, p. 24). Foster and Brown (1991) also discovered that these hearing students interacted with deaf students who had certain characteristics, such as the ability to speak and read lips, “hearing-like” behaviors, and the desire to associate with hearing people. This suggests that the hearing students did not socialize with deaf students who did not share their language and culture—creating an external barrier for deaf students.

Another instance of an external barrier is social prejudice. Some deaf students reported that social prejudice was one of the reasons they preferred to socialize with deaf peers (Foster & Brown, 1989). Social prejudices clearly existed at NTID/RIT as evidenced in Foster and Brown’s (1991) study. Hearing students there used the term “NIDS” refer to deaf students in a derogatory
fashion and referred to deaf students who displayed a range of negative behaviors and attitudes (Foster & Brown, 1991).

Outside of NTID/RIT, English (1993) conducted a quantitative study to examine the effect of support services on deaf students’ social integration. The finding was that support services did not facilitate the social integration process. Deaf students reported that there were a lack of social opportunities and limited extracurricular activities, which implied that their schools did not have support services available for social opportunities and extracurricular activities (English, 1993). However, English (1993) did not further inquire about how or why support services failed to help integrate deaf students into the institution’s social system.

**Deficiencies**

All studies, except the 1993 study by English, were conducted at the same institution, NTID/RIT. Therefore, the findings in these studies cannot be generalized to deaf students who attend a mainstream school, since much smaller populations of deaf students are at these schools. English’s (1993) findings also cannot be generalized to Deaf students using ASL because the majority of the sample did not use sign language. Furthermore, English’s study did not offer information pertaining to ASL, such as what the language is or how it is distinct from English. There appears to be no study examining what it is like for ASL-using Deaf students who experience social isolation and have very few or no deaf peers at their schools.

**Summary**

It is clear that deaf students may experience struggles in social interactions with hearing people in college. Deaf students’ efforts to build a social life can be a challenge when their hearing peers do not know sign language and/or when they struggle with their deaf identity and group identification. Prior educational experiences have influenced some deaf students into
choosing to interact with deaf peers rather than hearing peers. Deaf students also cope with external barriers such as cultural and linguistic differences and limited social opportunities. Furthermore, the research shows that hearing students at RIT had negative perceptions of deaf students along with social prejudice against them. Outside of RIT/NTID, deaf students at a mainstream college reported limited social opportunities because the college did not offer support services. The problem with these studies is that none of them offers a picture of what it is like for a Deaf student to interact with hearing students at a mainstream college where there are very few, or no, deaf students.

Conclusion

The literature review provides some relevant information pertaining to the problem of practice. First, there are numerous studies reporting that deaf students encountered internal and external barriers during their academic and social interactions despite the provision of sign language interpreters. Some faced internal barriers in both academic and social systems when they had to cope with communication struggles, communication skills, prior educational experiences, and deaf identity/group identification. Some encountered external barriers when participating in ongoing classroom dynamics with hearing peers and instructors and sign language interpreters. The external barriers included cultural and linguistic differences, sign language interpreters’ language fluency and interpreting skills, the interpreting process, and the use of space. In the social system of the institution, deaf students experienced external barriers as a result of hearing students’ negative perceptions and social prejudices against them. The internal and external barriers deaf students endured in both academic and social systems of the institution may explain the problem of practice. However, most studies did not explicitly indicate whether or not these barriers led deaf students to withdraw from college.
It is also clear that there is very little known about the academic and social experiences of ASL-using Deaf students. All study samples included deaf students with a wide range of communication modes and preferences. Saur et al. (1995) made it clear that each communication mode and communication preference produces a different and incomparable experience. Also, all studies did not sample a single group of deaf students who shared a similar identity such as hard of hearing, deaf, Deaf, or even no identity. While some studies identified sign language interpreters or deaf students who use sign language, it is not clear what “sign language” is. It is a broad term that could refer to ASL, or signing systems like SEE. Some studies indicated that sign language interpreters were one of the obstacles affecting deaf students’ academic interactions, but they did not examine how or why sign language interpreters could be problematic. These gaps are the reason the researcher wants to conduct a study on how ASL-using Deaf students experience academic and social interactions in mainstream settings.
Chapter 3: Methodology

Research Questions

This research was guided by the following questions:

1. How do Deaf students working with ASL interpreters experience academic participation in mainstream college settings?
   a. What are the academic experiences Deaf students have?
   b. How do Deaf students describe their academic experiences, specifically while working with ASL interpreters?
   c. How do Deaf students make sense of their academic experiences?

2. How do Deaf students working with ASL interpreters experience social participation in mainstream college settings?
   a. What are the social experiences Deaf students have?
   b. How do Deaf students describe their social experiences, specifically while working with ASL interpreters?
   c. How do Deaf students make sense of their social experiences?

These questions sought an understanding of how a particular phenomenon shaped the experiences of Deaf students in college. This phenomenon is that Deaf students participated in all academic and social interactions working with ASL interpreters within a mainstream college where the majority of students spoke English. For the purpose of this study, academic and social interactions consist of, but are not limited to, receiving instruction, asking questions, offering input, interacting with peers and instructors (such as labs, group discussions, meetings, and side conversations), socializing with peers outside the classroom, and participating in social clubs, events, and activities. In this study, the research questions not only sought a description of Deaf
students’ lived experiences of the particular phenomenon, but also meanings that the phenomenon held for them.

**Research Design**

In order to capture an understanding of Deaf students’ lived experiences, qualitative research methods are appropriate. Qualitative research methods use an inductive approach, focus on specific situations or people, and are centered on words rather than numbers (Maxwell, 2005). These characteristics are relevant to the goals of this study. By using an inductive approach, the researcher empowered Deaf students to have a voice by allowing them to express their own experiences and then identifying what significant themes emerged from their experiences (Creswell, 2012). This study needed a holistic account of students’ lived experiences of a particular phenomenon, because this was a suitable approach to obtaining a deep level of understanding of the participants’ experiences (Creswell, 2012). This study focused on a specific groups of people (Deaf students working with ASL interpreters) and a specific situation (Deaf students working with ASL interpreters for participation in academic and social interactions in mainstream settings).

**Methodology.** The researcher chose the Interpretative Phenomenological Analysis (IPA) methodology for this study. An IPA study is centered on the meanings that particular experiences hold for participants. The primary function of IPA is interpretation, and this permits researchers to have active roles in the inquiry process. The researchers can then use their experiences as a lens to identify and interpret what meanings the participants’ experiences hold for them. IPA utilizes a double hermeneutic approach, which means both the participants and the researcher participate in the sense-making process (Smith & Osborn, 2008). IPA is ideal for this study for several reasons: the researcher and the participants share similar key characteristics such as being
Deaf, having a similar cultural identity, using ASL as a primary language, and having lived experiences of a particular phenomenon. The researcher was able to interact with the participants using ASL without needing to bring in an interpreter. The participants therefore likely felt more comfortable in offering more authentic information since the researcher was fluent in their native language. As a native ASL user, the researcher recognized nuances in their shared experiences and meanings those experiences held. In regards to the double hermeneutic approach, the researcher used his cultural knowledge and experience to help the participants make sense of what they said about their experiences and the meanings. This is particularly crucial because it is difficult to capture that knowledge without knowing their culture or possessing language fluency. Using IPA helped achieve the research goal by building an in-depth understanding of Deaf students’ lived experiences and the meanings the particular phenomenon held for them.

**Site and participants.** Given that this study needed specific participants who experienced a particular phenomenon, it was difficult to locate a single site where at least five Deaf students who had worked with ASL interpreters for their academic and social participation in college life. Creswell (2012) explained that a single site could be useful, but, more importantly, the researcher should look for individuals who have all experienced the particular phenomenon and can describe their lived experiences.

The researcher chose purposeful and homogeneous sampling as a strategy. This strategy allowed the researcher to select certain individuals who shared similar experiences in a particular phenomenon (Mapp, 2008). These individuals “can purposefully inform an understanding of the research problem and central phenomenon in the study” (Creswell, 2012, p. 156). In this study, Deaf students who experienced a phenomenon where they worked with ASL interpreters for participation in academic and social interactions within mainstream settings were sampled.
Furthermore, certain individuals who shared attributes were selected in order to minimize variation, allowing for homogeneous sampling. In this study, certain students who were Deaf, used ASL as a primary language, and shared a cultural identity were chosen. Sampling these Deaf students, who shared similar experiences of a phenomenon and similar attributes, provided rich descriptions of their lived experiences of a particular phenomenon and a valuable understanding of the meanings the phenomenon held for them.

This study recruited five participants, and this small number was acceptable because eliciting a rich account of lived experiences requires concentration, time, and effort, in order to interpret the meanings the phenomenon holds for each participant (Smith, Flowers, & Larkin, 2009). Moreover, IPA is idiographic in that it puts an emphasis on individuals rather than groups. All participants were to be profoundly Deaf, self-identify as being culturally Deaf, and use ASL as a primary language. Those who were hard of hearing or did not use ASL as their primary language were not included. All participants had to have attended a mainstream college/university where 10 or fewer Deaf students were enrolled, and had graduated with a degree within the past 10 years. This 10-year criteria was in place because this allowed the recruitment of participants who likely had more experience with the particular phenomenon than those who were current students. The participants also had to have primarily worked with ASL interpreters for all academic and social interactions within the institution, because this was the crucial phenomenon that the researcher wanted to explore. However, it was possible that some students requested different accommodations for a particular class, meeting, or event, such as Communication Access Realtime Translation (CART). CART is a speech-to-text service and a CART provider is often in the classroom with a Deaf student and uses a stenographic machine to translate from spoken English to text in English (Marschark, Leigh, Sapere, Durnham,
Convertino, Stinson, Knoors, Vervloed, & Noble, 2006). Other Deaf students who primarily used CART, oral transliteration, interpreters other than ASL interpreters, and/or assistive listening devices were not sampled.

Given that this study targeted Deaf students using ASL, a recruitment video in ASL was produced, accompanied by a recruitment letter in English, and disseminated to the following sources:

1. Mass_Deaf-Terps: A Yahoo! group with over 1,200 subscribers, mostly Deaf.
2. Massachusetts State Association of the Deaf: A nonprofit organization with more than 300 Deaf members.
3. National Technical Institute for the Deaf: A college with over 1,300 Deaf students located on the campus of Rochester Institute of Technology.
4. Gallaudet University: A university with over 3,000 Deaf students.

These sources allowed the identification of ideal subjects for the study.

**Participant profiles.** The researcher successfully recruited and interviewed five participants. All participants were Deaf, used ASL as a first language, had attended a mainstream college where 10 or fewer deaf students were enrolled, and graduated with a degree, and primarily worked with ASL interpreters for all academic and social interactions. Of the five participants, three participants were male and two participants were female.

Adam is a white Deaf male in his early 30s. His parents are hearing and communicate in sign language. He went to a deaf school from kindergarten through 12th grades. In high school, he took several classes at a nearby mainstream school where he first worked with ASL interpreters. He then attended a prestigious university in the northeast region where he was the only deaf student, and received a bachelor’s degree in engineering. He chose this university
because he was offered a baseball scholarship.

Sam is a white Deaf male in his early 30s. All of his family members are Deaf and use ASL. He went to a mainstream school for preschool, then to a deaf school when he was five years old. In high school, he took several classes at a nearby mainstream school for half the day. This is where he first experienced working with ASL interpreters in the classroom. He attended a private, liberal arts university in the northeast region, where there was only one other student using ASL; this student enrolled when Sam was a junior. He chose to attend this university because he believed that it afforded him with more concentration choices and a rigorous academic program. He received a bachelor’s degree in business administration.

Scott is a white Deaf male in his 30s. His parents are hearing and do not use sign language. He went to a deaf school from kindergarten through eighth grade, then was mainstreamed until graduation. He did not have an interpreter until his last year. His first encounter with ASL interpreters was at a church that he regularly attended as a child. He first attended a public university in the west region, but was not happy with their interpreting services, then transferred to another public university, this time in the northeast region. The university had one deaf student who did not use ASL. He chose to attend a mainstream university because he was repeatedly told that Gallaudet University and National Technical Institute of the Deaf were for deaf students who were academically poor. He received a bachelor’s degree in human services.

Mary is a white Deaf female in her early 50s. All of her family members are Deaf and use ASL. She went to a deaf school from kindergarten through high school, and never attended or took classes at a mainstream school. The first time she worked with ASL interpreters was when she was 16 and took a private one-to-one training in driver education. She first attended
Gallaudet University, but departed for personal reasons. A few years later, she decided to attend a public university in the Midwest because it was close to where she lived at that time. The university had several deaf students, but she did not interact with any of them due to scheduling conflicts. She received a bachelor’s degree in humanities.

Sara is a white Deaf female in her late 20s. Her parents are hearing and use ASL, but not fluently. She attended a mainstream school from kindergarten through high school, although the school had a large number of deaf students. The school also had several courses taught in ASL. Her first encounter with ASL interpreters was in elementary school when she participated in elective or school-wide activities outside of the classroom. Sixth grade was her first time working with ASL interpreters on a full-time basis for all classes. She attended a public university in the west, and the university did not have any other deaf students. She chose the university because she wanted some privacy. In other words, she wanted some space from the Deaf community, which is generally a very close-knit community. She received a bachelor’s degree in art.

Data Collection

This study sought a detailed, subjective account of one’s lived experiences, accomplished by conducting in-depth interviews with deaf students. In-depth interviews can offer what IPA requires—rich data—because they allow participants to provide a rich, detailed, first-person account of their lived experiences (Smith, Flowers, & Larkin, 2009). Also, in-depth interviews are an opportunity for participants “to tell their stories, to speak freely and reflectively, and to develop their ideas and express their concerns at some length” (Smith, Flowers, & Larkin, 2009, p. 57). Empowering Deaf students to use their native language, ASL, to share their lived experiences through in-depth interviews was the best opportunity to gather rich data.
Two separate interviews were conducted with each participant. The first interview had two separate sessions and, based on Seidman’s (2010) recommendations, the first session started with the participant’s life background and the second session focused on the participant’s experiences with the phenomenon being explored. The second interview focused on meanings that the phenomenon held for the participant. Five participants were interviewed over five weeks. The second interview was conducted approximately two weeks after the first interview. The two-week period allowed the researcher to review each participant’s account of their life background and lived experiences in order to build a deeper understanding and to develop follow-up questions for the second interview. The first interview, comprising two sessions was between 60 and 90 minutes in length and the second interview was between 30 and 45 minutes long. Interviews with each of four participants were conducted through Skype and one in person. All interviews were videotaped with the participants’ permission.

All interviews were semi-structured in order to achieve this study’s phenomenological goals. Semi-structured interviews offer flexibility in the process of interviewing for the purpose of eliciting relevant information concerning the participant’s lived experiences (Smith & Osborn, 2008). The researcher’s initial questions can be modified in light of the participant’s responses, and the researcher can further explore interesting and important areas that arise during the dialogue (Smith & Osborn, 2008). The researcher considered the following suggestions by Smith and Osborn (2008) regarding semi-structured interviews:

1. There is an attempt to establish rapport with the respondent.
2. The ordering of questions is less important.
3. The interviewer is freer to probe interesting areas that arise.
4. The interview can follow the respondent’s interests or concerns. (p. 58)
The researcher developed and used an interview protocol as a guide for the interviews. The protocol was a tool to check if all of the questions were covered (Smith & Osborn, 2008). The protocol also served as a consultation when the researcher was uncertain about what questions came next or whether a topic was covered (Weiss, 2008).

The interview protocol included four parts. In the first part, the participant filled out a short form to indicate his/her name, interview date and location, and other background information. The second part contained the study description and a consent form review. This part ensured that the researcher did not skip anything when he explained the study. The third part included introductory questions concerning the interviewee’s background and eight questions with follow-up questions designed to capture the participant’s lived experiences. The fourth part contained three questions seeking meanings the phenomenon held for the participant. The first three parts took place during the first two-session interview and the fourth part was included in the second interview.

**Data Analysis**

After data collection, the researcher stored, organized, and coded videotaped data in his personal computer. Before the coding process began, the researcher watched and re-watched videotaped interviews to build a better sense of the participants’ lived experiences; this is known as an iterative process (Smith, Flowers, & Larkin, 2009). After the researcher completed the coding process, all coded data was transcribed from ASL to English for analysis. The sequencing of completing the coding prior to translating the data is important because there were key nuances evident only in ASL. In order to develop a rich description of Deaf students’ lived experiences, the researcher analyzed the data using the following analysis strategies based on recommendations by Smith, Flowers, & Larkin (2009):
1. The close line-by-line analysis of the experiential claims, concerns, and perceptions of each participant.

2. The identification of emergent patterns from the collected data, emphasizing convergence and divergence, commonality and nuance.

3. The development of a “dialogue” between the researcher, the coded data, and his knowledge about the participant’s experiences and meanings.

4. The organization of the data in a format that allows for analyzed data to be traced right through the entire process, from initial comments on the video, through initial clustering and thematic development, into the final structure of themes.

5. The development of a full narrative evidenced by a detailed commentary on data extracts, which takes the reader through this interpretation, usually theme-by-theme, and is often supported by some form of visual guide.

6. Reflection on one’s own perception, conceptions and process. (pp. 79-80)

Validity and Credibility

Limitations. One limitation of this study is that five participants do not represent the whole Deaf population. The participants in this study were Deaf and use ASL; this is significant because the Deaf community consists of Deaf, hard of hearing, and late-deafened people whose communication modes vary. Also, those who use a communication mode other than ASL often do not work with ASL interpreters and may have different experiences from Deaf students using ASL.

A second limitation is ASL/English translation. All interviews were conducted in ASL, the participants’ native language. The researcher then translated their responses from ASL to
English. While the researcher has done some ASL-to-English translation work in the past, he has never been formally trained. It is possible that formal training or hiring professional ASL-to-English translators would provide more accurate translations.

**Biases.** Given that IPA permits the researcher to actively participate in the data collection and analysis process, the researcher’s perceptions and biases could potentially influence the findings. In order to increase credibility, the researcher openly disclosed his biases and how they may influence his data interpretation. This is known as reflexivity (Smith & Osborn, 2008). The researcher is Deaf, uses ASL, and has experienced the particular phenomenon being investigated. His personal experience with this particular phenomenon may have influenced his attempt at understanding what the participants stated as they made sense of the phenomenon. In order to minimize any influence, the researcher maintained a reflective journal to document his thoughts, feelings, and perceptions throughout the research process (Hamill & Sinclair, 2010). The researcher compared his reflective journal with the analysis to gauge the level of influence on the analysis process.

**Member-checking.** In order to validate the findings, the researcher conducted member-checking, which included two levels. First, after the interview, the researcher reviewed the transcript and highlighted all key phrases for possible analysis. The highlighted phrases were then shared with the participant for verification of accuracy. Second, once the analysis was completed, the researcher shared and discussed the analysis with each participant through email and videophone. This was to ensure that the findings accurately reflected what the participant stated.

**Protection of Human Subjects**

The researcher took every step to ensure that this study fully adhered to the three ethical principles: beneficence, respect, and justice (Merterns, 2006). Beneficence occurs when the
researcher maximizes positive outcomes for science, humanity, and the individual participants
and minimizes unnecessary risk, harm, or wrong (Merterns, 2006). The researcher made it clear
during the recruitment and interviewing processes that the primary goal of this study was to build
an in-depth understanding of Deaf students’ lived experiences and to use that understanding to
make policy recommendations for retention and engagement. The researcher further made sure
that the participants had time to ask questions about the intentions of the study.

The second ethical principle is respect, and its aim is to treat people, including those who
are not autonomous, with respect and courtesy (Merterns, 2006). The researcher explained to the
participants in person and in writing that they could stop anytime during the interview process or
they could withdraw from the study at any time before the study was officially published. The
participants were informed that their choices would be treated with respect and there would be no
consequence if this was their choice. The researcher also notified the participants in person and
in writing that they could ask questions anytime about the process and the intention of the study.

The third ethical principle is justice, which ensures that “those who bear the risk in the
research are the ones who benefit from it; ensuring that the procedures are reasonable, non-
exploitative, carefully considered, and fairly administrated” (Merterns, 2006, p. 33). Because the
Deaf community was small, most Deaf people knew each other and it was possible that the
participant(s) knew the researcher from other situations. Understandably, the participants might
have had the perception that their identity would be exposed in this study. This risk was
minimized by including information in the consent form and explaining during the interview that
all identifying information would be masked by pseudonyms in all documents (transcripts, notes,
and dissertation) in a manner that made it difficult for people to identify. The researcher also
explained his role in ensuring that all information would be kept confidential.
Chapter Four: Summary of Findings

This study focused on a group of five Deaf students each attending colleges/universities with populations of thousands of hearing students and 10 or fewer deaf students. Their colleges conducted all academic and social activities in spoken English, inaccessible to the Deaf students, who only knew ASL and written English. As a result of the Americans with Disabilities Act (ADA), the Deaf students had ASL interpreters for their academic and social activities. However, after the participant interviews, it became clear that even with ASL interpreters, the Deaf students struggled to participate academically and socially for various reasons.

The lived experiences of five Deaf students who used ASL interpreters for all academic and social college activities were explored. The findings provided a clear picture of these experiences and are described below. There were two research questions that guided the interviews:

1. How do Deaf students working with ASL interpreters experience academic participation in mainstream college settings?
2. How do Deaf students working with ASL interpreters experience social participation in mainstream college settings?

The researcher held two one-hour interviews with each participant, coded and interpreted the findings, and identified three superordinate themes in the context of academic participation and two superordinate themes in the context of social participation. In the context of academic participation, the themes were interpreters, interactions with the office of interpreting services, and classroom environment/dynamics. In the context of social participation, the two themes were cultural and linguistic incongruences, and the availability of interpreters. After coding/interpretation, some findings were anticipated and other findings were notable.
Academic Participation

Academic participation consists of, but is not limited to, receiving instruction, asking questions, offering input, and interacting with peers and instructors (such as laboratories, group discussions, meetings, and side conversations). After the interviews, there were three emergent themes that captured the essence of the lived experiences of the participants: interpreters, the office of interpreting services, and classroom environment/dynamics. Interpreters appeared to be the most influential factor because they had a range of characteristics and qualities that had effects on the Deaf participants.

Interpreters. During participant interviews focusing on their academic experiences, interpreters were the most common topic. Sign language interpreters are responsible for facilitating two languages: spoken English and ASL. The ADA requires colleges/universities to provide reasonable accommodations to Deaf students who request it. All five participants requested ASL interpreters for their academic participation. The analysis of the interviews identified two themes describing how interpreters influenced the interviewees’ academic participation: ASL and cultural competencies and professionalism.

ASL and cultural competencies. All participants pointed to the interpreters’ ASL and cultural competencies when discussing what facilitated and hindered their academic involvement. The interviews clearly established that interpreters with strong ASL skills empowered participation while those with weak ASL skills stalled participation. When asked what “strong ASL skills” included, the most frequent recurring words the participants used were vocabulary, grammar, facial expression, fluency, and space. The participants offered several examples of how each of these qualities played a role in their participation. Three participants expressed frustration when some of their interpreters invented signs that were not part of the ASL vocabulary, or used
signs that did not match the semantics. One of the participants, Scott, recounted a situation where his interpreter utilized the incorrect signs:

When my teacher used the words, “basketball court,” my interpreter used the incorrect sign for “court”—meaning the courtroom, not a playing field. That kind of mistake occurred many times and I had to figure out the meaning every time I saw one like this.

Adam had a similar situation where his interpreters failed to capture nuances, which affected their sign choices. He said, “For example, history, historicism, and historicity. Each word has a different meaning, but most interpreters used the same sign for all three words. So, I missed the nuances that gave each word a different meaning.” Using incorrect signs interfered with the participants’ learning process because they needed to make sense of what their instructors and peers were trying to convey. Sam had an interpreter who invented signs that were not actual ASL words. He recalled an instance, saying, “Like the interpreter created a sign for weapon and the sign was similar to another sign in ASL meaning storage. Her signs were distracting.” Sam, Scott, and Adam expressed annoyance at this because they could not sit back and learn in a manner like their peers as a result of their interpreters’ lack of fluency. They instead participated in a guessing game.

The second key quality the participants identified in their interpreters was the use of ASL grammar. Three participants stated that some of their interpreters did not have strong command of ASL grammar, and/or used English grammar instead. Sam had several interpreters who used English grammar in their ASL interpreting work and he described how that affected his learning process:
I became tired and it took so much energy and effort to process information in English.

Without any learning gained in class, I had to spend more time on reading books trying to understand what my teacher shared with the class.

Mary described a similar experience, saying that using English affected her “thought processing and how I conceptualized information I receive. English-based signs are like black and white and no color.” Mary would process her thoughts naturally and easily conceptualize her academic work only if the information was provided in ASL. When her interpreters used English, this was more challenging. Her use of the phrase “black and white and no color” may help explain why it took so much energy and effort for Sam to process information in English. He had to “colorize” information presented to him black and white before he could see the clear picture.

The accounts from Mary and Scott raised another consideration: processing information takes time, time that increases if one has to use a second language to decode information. If this is accomplished in a timely manner, learning occurs more effectively. On the other hand, if an interpreter struggles with interpretation or lags in delivering information, there may be a delay in learning new material. Such delays can have serious ramifications: more work for the student, frustration, a loss of motivation, and a lack of engagement. However, one participant, Adam, saw something valuable in the use of English and liked an interpreter who used pidgin ASL (a mix of ASL and English) because he “could capture every word, every concept, and all nuances.” He added that his other interpreter who used ASL, “sometimes missed some key nuances.” Given that not all ASL signs have a direct English translation, the interpreter using pidgin ASL knew when to fingerspell an English word that would be useful for Adam’s assignments and exams.

Scott raised another issue he observed when his interpreters did not use ASL grammar correctly; he reported that several of his interpreters mouthed English words frequently, which
distracted him. ASL has its own mouth morphemes, as evident in words like *tall*. When one wants to use *tall* to indicate the height of a person, the mouth morpheme CHA is used. The same mouth morpheme, CHA, used to show the size of a house would mean huge. In Scott’s situation, his interpreters’ lack of ASL mouth morphemes affected the semantics and clarity of the messages and he struggled to understand as a consequence.

According to participants’ accounts, interpreters failed to use space, another key aspect of ASL grammar. In ASL, space has many functions such as indicating distance, time concepts, and location of people, places, and things, contrasting two people, places, things, or ideas, and showing subject-verb agreements. Sara shared an example that showed a difference between an interpreter who used space and another who did not,

For example, [the interpreter] pointed to one location, “That [was] 1965” and provided information about that particular time, and then pointed to a different location to indicate “before 1965” and provided information about what happened before 1965. This helped me see a clearer picture. The interpreters who did not use space would interpret, “In 1965, before that, we only had 50 years of oppression…” without using space to indicate time.

In ASL, in order to indicate time, the signer must set up a spatial location by using an index finger to point to a location, and then signing a year to indicate time. Once the location/time is established, the signer can use the spatial location to indicate before or after, rather than signing either “before” or “after.” ASL uses three-dimensional space while English uses linear space, something that is a difficult skill to master in ASL. It is clear that using space facilitated Sara’s participation; in other words, her learning was facilitated by the use of space in ASL.
Facial expression is yet another vital function of ASL and ASL grammar, tone, and emotion. Three participants’ narratives revealed that they became distracted and lost interest when their interpreters did not use facial expressions. Sam said that some interpreters incorrectly thought that knowing ASL vocabulary was sufficient. He felt no connection to his teachers and peers when his interpreters did not use facial expressions. Scott disclosed that he got bored, fell asleep easily, and lost focus quickly when his interpreter’s face was totally blank with no tone and no emotion that should have been conveyed through facial expressions.

Based on all participants’ narratives, the researcher recognized a pattern: some interpreters filtered and/or simplified information during their interpreting work. Several participants found this to be disrespectful, unprofessional, and incompetent. Mary shared an experience she had:

Sometimes I could tell the interpreter did not interpret everything I said. I could sense that my interpreter skipped a lot of information because I noticed that my teacher gave a long lecture while my interpreter gave me a couple of sentences. Sometimes my interpreter told me, “They’re talking about nothing…” and I asked him to tell me more. He said, “Well, it was a silly rumor.” I felt frustrated because he filtered what information was to be shared.

Similarly, Sara faced a situation where her interpreter filtered a message she wanted to convey to her peers and teachers. Her interpreter chose not to convey Sara’s message because of a lack of understanding of Sara’s message, even if her peers and teachers could understand it. She described her exasperation:

The interpreter should have interpreted it even if she did not understand what it meant.

She should not filter what can be interpreted and what cannot be interpreted. It is not fair
to me because hearing students could say whatever they want while my comments had to be screened by my interpreter.

Sara’s and Mary’s interpreters committed an act of disempowerment by deciding what information to interpret and what to ignore. Disempowerment, as Suggs (2011) explains, is simply to take away power. Sara’s and Mary’s interpreters took away their power to make their presence during their academic interactions. This served as a serious obstacle to Deaf student participation, especially given that they did not get the same information as their peers.

In the same vein, two participants reported that they had interpreters who chose to simplify or summarize information. Adam thought that he understood clearly what his interpreter conveyed to him, but later realized that the interpreter had skipped information. This realization occurred when he read his class materials and teacher’s emails.

I realized that the concepts I read were not the same as what my interpreters shared with me. Also, I received emails from my teacher and they contained specific words and concepts that my interpreters did not mention during their interpreting work. I got a sense that my interpreters simplified what they conveyed to me. I felt like they treated their work like they would treat a middle school interpreting assignment and their language competency was inappropriate for the college level.

Scott experienced a similar frustration about his interpreters, saying, “I noticed that they always summarized information and some important information was missing. I felt like I did not learn much because they summarized information.” In one circumstance, he had an interpreter who repeatedly summarized information and the team interpreter had to intervene and fill in the gaps that the first interpreter created. As a result, Adam relied more on the second interpreter.
One takeaway from the accounts given by four of the participants is that their participation was limited by the work of interpreters, who were filtering and summarizing information. The participants observed that the interpreters who used this practice also had weak ASL competency. The consequences were so serious that all participants except Sara had to take extra time and effort to fill the gaps that their interpreters created. Sara struggled to get her message across to her peers and teacher while Mary struggled to get the message from her peers as a result of their interpreters’ disempowerment in the form of controlling the flow of information.

Some interpreters also struggled to speak fluently or comprehend ASL. Two participants stated that their interpreters misinterpreted their messages and struggled to understand what they tried to share with their peers and teachers. Sara recounted that she had an interpreter who had a hard time understanding her:

I get everyone else’s words to me via interpreters, but I could not get my words out to them because the interpreter’s receptive skills weren’t great. And the result is that people had this misguided idea or assumption of who I was as a Deaf person, who appeared to be a less capable person to carry on a conversation. This obstacle bled into my ability to ask questions during lectures because my questions in ASL could not be understood by interpreters and therefore I became reluctant to raise my hand for class participation.

Adam echoed Sara’s reluctance, because he stopped participating when he first learned that his interpreters could not convey his message as a result of not understanding his ASL. Adam and Mary felt that in order to enhance their participation, interpreters should earn their trust in their ability to understand ASL and to represent their voice. Sara added that if ASL interpreters misinterpret her message then they misrepresent who she is. She elaborated, “If an interpreter said something wrong then my teacher or students would think that it was me saying something
wrong, not the interpreter. Then they get a bad idea of who I am.” The inability to interpret accurately can take away Deaf students’ opportunities to interact with their peers and teachers, to get to know them better, and to build stronger relationships. In other words, Deaf students’ peers and teachers learn about them through their interpreters rather than direct interaction.

A lack of, or weak, competency in ASL was a burden for some students, according to two participants. The participants sometimes had to stop their student activities because they had to intervene to help the interpreters. Sara described three separate instances when her interpreters created a burden for her. “I had to raise my hand to let the teacher know that the interpreter didn’t understand and that we needed to go back to a point I missed. I felt like I had to do all the work for the interpreter.” The second instance was in Sara’s photography class. She was discussing her artwork with her teacher though an interpreter and she wanted to create a title for her artwork that had a theme of imperfection. The title was *Pus Pocket*; however, the interpreter could not understand the title and chose not to interpret it. Sara felt like she had to defend herself:

I fingerspelled, “Pus Pocket,” but my interpreter did not understand what I fingerspelled. I repeated myself, but the interpreter refused to voice and said to me, “Do you understand what you just said?” I said, “Yes,” and fingerspelled the words again. The interpreter fingerspelled back, “Pus???” I responded, “PUS, YES!” The interpreter said, “What does that mean?” I explained the meaning, and the interpreter responded, “Are you sure?” I felt so frustrated and my teacher saw my back-and-forth conversation with the interpreter. I wrote to my teacher explaining that my interpreter did not understand the words I fingerspelled. The teacher said, “Oh, that infection,” and the interpreter was silent. I felt like I did his work by helping him understand what I meant. I wonder why the interpreter
had to challenge me and his asking me questions made me wonder if I used the words incorrectly.

The third instance was in Sara’s history of sexuality class when she had to assist her interpreter in understanding a message to her peers and teacher. Sara raised her hand and shared a comment, but her interpreter struggled to understand her. Sara felt “foolish and I had to use English grammar in order to help my interpreter understand what I tried to say.” Sara had to change her language register to accommodate the interpreter’s lack of competency. This situation took a toll on her motivation to engage herself in class. She stated:

Every time my teacher asked if we had any questions, my interpreter looked at me with full attention and was ready to interpret, but I did not bother to ask again because of that experience. I would ask questions via email but never through an interpreter. I was afraid that my teacher might not understand me again. I worked hard to come up with a good question and then would find out that my question was not understood by my interpreter.

It was not worth my time and effort.

Sara’s experiences were not isolated incidents, as other participants shared similar experiences. They had to help their interpreters understand what signs were missed, or educate the interpreters on what they struggled to understand. Some participants had to change their language register to accommodate their interpreters’ lack of fluency. The interpreters’ lack of or weak skills created burdens for the Deaf students in their classes, burdens that were often excessive.

In addition to ASL competency, the participants’ accounts indicated that their interpreters’ cultural competency played a role in their academic participation. Those who demonstrated strong cultural competency typically had a common attribute: they were children of deaf adults, or CODA. CODA generally means a person who was raised by one or more Deaf parents (Lane,
Hoffmeister, & Bahan, 1996). Many CODAs first learn ASL upon birth, and are exposed to Deaf culture and experiences through their Deaf parent(s). Three participants provided examples of how their CODA interpreters were unique. Sam said, “A CODA interpreter, who came with high proficiency in ASL and cultural mediation skills, empowered me to participate in classes and to communicate effectively with my peers.” He stated that CODA interpreters facilitated his participation better than non-CODA interpreters:

The CODA interpreter was sensitive and aware about connecting me with the professors and other students before and after class when some non-CODA interpreters maintained overly-strict boundaries and only interpreted lectures and activities during class time. The CODA interpreter also checked in with me often to ensure I was following the classes, to solicit feedback, and also inquire into my general well-being as a student (such as being one of the few Deaf students at the university, which could take a toll). Non-CODA interpreters were not always as perceptive nor did they take an interest in how I was doing as a student.

The CODA interpreter was clearly more empathic and willing to do more work to ensure that Sam had access in his class. Sam’s description of his CODA interpreters may suggest that they either understood the importance of access because they grew up with Deaf parents or participated in interpreting training. Sara was similar in her observation that CODA interpreters performed better than non-CODA interpreters:

[CODAs] work with us to pull us into that dominant-English environment by making us normal, which we are, by utilizing the right cultural mediation tools. Some interpreters forget or do not even think about this so they approach as a “social change fighter” where they as interpreters assume that each interaction a Deaf person has with hearing people
must be a battle where the interpreters feel that hearing people need to be educated about Deaf people’s rights, Deaf people’s needs, and many more. This conflicts with a Deaf person’s preference to be discreet. Sara’s statement has important implications. First, Deaf students want the same experience as their peers when it comes to academic participation, and Sara’s CODA interpreters appear to have the ability to make this possible. Given that CODA interpreters typically grow up living with Deaf parents, they likely repeatedly witness their Deaf parents encountering cultural and linguistic barriers and therefore they acquire strong cultural mediation tools. Non-CODA interpreters generally lack this kind of experience. Second, some non-CODA interpreters assume that they should educate hearing people if hearing people do not cooperate, rather than mediating the cultural and linguistic differences. Sara suggested that such interpreters did not get involved and instead, let her dictate the situation on her own.

Mary shared her experience with a CODA interpreter she described as “phenomenal.” She added, “I could be myself when I was with the CODA interpreter. She would interpret everything I said without any issue. I did not have to monitor closely her work.” When asked what the difference between CODA interpreters and non-CODA interpreters was, Mary responded that non-CODA interpreters were, “Less fluent. Had less conceptualization, did not have cultural behaviors/norms, used more English grammar, did not use colorful interpretation, were over-strict with boundaries like leaving quickly without checking if they were needed for a few more minutes.” Her statement paralleled Sam’s description of his CODA interpreters, in that her CODA interpreter was highly competent and was willing to do more, like staying longer after class to interpret her interactions with classmates and the teacher.
All participants’ accounts revealed that ASL and cultural competencies had effects on their participation in academic interactions. There are several variables within ASL competency that play a role in the participants’ academic interactions. The narratives show that interpreters with strong ASL competency facilitated participation and those with weak ASL competency hindered participation. Some interpreters made up signs or chose wrong signs that did not match the semantics and, as a result, students had to figure out what their interpreters meant rather than learn in a fashion similar to their peers. Some participants felt lost in class because their interpreters used English grammar rather than ASL, and several stated a sense of disconnection and disempowerment when their interpreters lacked facial expression and space, or filtered information.

Interpreters who could not understand ASL caused several Deaf students to withdraw from participation because they did not trust that the interpreters were representing their voices. Weak ASL competency was an additional burden to some participants because they had to intervene by helping their interpreters understand what they missed, or educate them. Furthermore, most participants had to drop ASL and use English in order to accommodate their interpreters’ level of competency. On the other hand, the participants shared that they had interpreters who demonstrated strong cultural competency, which facilitated their participation—and the interpreters were mostly CODAs who understood the importance of access because of their having grown up with Deaf parents. In conclusion, an interpreter’s ASL and cultural competencies have a powerful impact on Deaf students, either facilitating or hindering their academic participation.

**Professionalism.** The second theme emerging from the Deaf students’ narratives is professionalism. The participants used the term *professionalism* to refer to how the interpreters
conducted their work. The participants experienced barriers when their interpreters did not maintain their professionalism, such as by making offensive comments, appearing leisurely during class, and discussing their personal life in front of the student. While the participants underscored the importance of professionalism, most participants stated that in certain circumstances, professionalism was an obstacle to their academic engagement. For example, some interpreters refused to engage in side conversations with the participants. Thus, what the participants wanted was a professional approach with some flexibility.

Sara described a situation where her interpreter crossed professional boundaries by making offensive comments:

I remember one class, Natural Disasters or something like that, and the interpreter signed, “BB.” I was puzzled and asked what BB meant. The interpreter said Big Bear and that it was a mountain in California. I responded, “Oh, I see. Okay.” However, the team interpreter, whom I disliked after what she did, said to me, “Oh, that is not Bragg or something.” I said, “What did you say?” The team interpreter said, “Not Bernard Bragg.” At that time I did not know who Bernard Bragg was and responded, “I don’t know.” The team interpreter responded, “Oh, very typical for someone like you who went to a mainstream school.” I was so angry and I said to myself, “Fuck her.” The team interpreter was so horrible and she was hearing. She exploited our culture and our language. And she looked down on me and I was like WHOA!

Sara clearly endured emotional and psychological impact and eventually lost interest in class participation as a result of this interpreter’s behavior.

Adam and Scott had interpreters who also crossed professional boundaries by doing leisurely activities during class. Both had two interpreters for a class, with interpreters switching
seats every 20 or 30 minutes, standard industry practice for interpreting jobs lasting longer than one hour. Adam had several interpreters who played games, checked email, and sent texts during their breaks. In one incident, his interpreter fell asleep in front of him, his peers, and the teacher. Unprofessional conduct by the interpreters made it difficult for Adam to concentrate on the lecture or group discussion. Scott faced a similar situation:

Sometimes interpreters who were on break would read a newspaper and did not offer any help to their team interpreters. I also noticed that my interpreter [who was working] tried to get his team interpreter’s attention but could not. The interpreter ended up telling me that he missed information and asked me to interrupt and ask my teacher for clarification. I felt frustrated that both interpreters did not use any teamwork.

Scott did not want to interrupt the teacher because it would interrupt the flow of the lecture. He also felt that it was not his duty because he was there as a student, not an assistant.

Sam recalled an interpreter who made a decision on when the team interpreter would interpret. The interpreter arrived late and asked the team interpreter, “I have a doctor’s appointment. Can you take over the whole morning assignment then I take over the whole afternoon assignment?” This conversation took place in front of Sam, who found this unacceptable and unprofessional, especially since he was not consulted. He said, “I felt that this was not right and both interpreters should work together as a team all day…not one interpreter all morning and another one all afternoon.”

These accounts emphasize the importance of professional behavior among interpreters who work with Deaf students. However, the majority of study participants felt that strict professionalism could have a negative impact. They did not believe that interpreters should not be professional; rather, interpreters should not be overly strict in professionalism. Sam explained:
I do not want to see an interpreter showing up and saying, “I am your interpreter, okay.” Then they completely focuses on their interpreting work and then says, “I have to leave for another assignment and goodbye.” I do not want that; I prefer a human connection along with a positive attitude and the ability to interact.

Sam clarified that professionalism was important, but that he wanted interpreters to have some room to establish a human connection, which would help him engage more and gain a positive learning experience.

The participants expressed that they wished that they could have side conversations with their interpreters, but they could not because the interpreters were strict in their professionalism. Sam offered an explicit explanation as to why interpreters should allow side conversations. He had an accounting class where there were several moments that he did not enjoy listening to the lecture. He understood that his interpreters weren’t allowed to have side conversations with him, but there was nobody else he could have a side conversation with. “I could not write back and forth with my classmates; that’s too obvious in front of the teacher. I could not whisper. I saw my interpreters and I thought it was perfect that I could converse with them but realized I couldn’t.” He elaborated:

Sometimes I wanted to say something funny or make a comment, but it would be awkward to do that with a classmate because I would have to call on an interpreter to participate in my side conversation with my classmate. So, having a side conversation with an interpreter made me feel engaged and, also, the interpreter better understood my language and culture. It was hard to do that with a hearing student because that would mean I had to accommodate their hearing way.
Unlike Sam, his peers could easily have whispered side conversations. A side conversation with interpreters would not interrupt or distract the class because ASL does not make any noise and has its own “whisper.” However, his interpreters felt this wasn’t professional.

While the participants praised their CODA interpreters for their ASL and cultural competencies, several of them were critical of the CODAs’ professional conduct:

Sam: “Sometimes he talked about sex interpreting, can you imagine that? He talked about his partner sometimes and it was so inappropriate.”

Sara: “I recall that she shared some personal issues with me about her parents like ‘my parents…we got into fight.” I felt awkward and I was like, ‘I’m here to learn and please pay attention to my teacher’s lecture’.”

Sara: “One tried to get involved with my paper but I told her I was fine. She apologized and thought I needed help. I told her I didn’t ask for help.”

Based on these accounts, there is an interesting difference between CODA and non-CODA interpreters (although this is not necessarily true for all) in the context of professional conduct/behavior. The former engaged in conversations with students about their personal lives while the latter did not. Sara’s last example has an underlying message that, like some CODAs growing up with parents not fluent in English, her CODA interpreter might have assumed that Deaf people needed help with English.

The participants revealed that a lack of professionalism or pure professionalism was problematic during their academic participation. Unprofessional conduct occurred when interpreters made offensive and oppressive comments, did something leisurely during class, or discussed with each other when to interpret in front of the student. Thus, a professional approach among interpreters was important to the participants. However, several participants cautioned that
pure professionalism could hurt their academic participation, such as refusing to engage in side
communications and refusing to create a human connection. The participants wanted
professionalism, but with some room for flexibility. However, they did point out that side
communications should not be overly personal in nature.

The participants’ narratives clearly show that academic engagement was strongly
influenced by their interpreters. The researcher further explored the aspects of the interpreters’
roles that facilitated or hindered academic participation and identified two themes: ASL/cultural
competencies and professionalism. Interpreters, who demonstrated strong ASL and cultural
competencies and were professional with some flexibility, facilitated academic participation. On
the other hand, interpreters who had weak competency (poor vocabulary, weak command of ASL
grammar, and poor speaking and listening skills) and were either poorly or overly professional
hindered academic participation.

Interactions with offices of interpreting services. While interpreters were identified as
the most influential factor in the academic participation of Deaf students, a second emergent
theme that had an effect on academic participation was identified. This theme was the
interactions with the university’s office of interpreting services (OIS). The ADA requires
colleges and universities to make all academic and social activities accessible to students with
disabilities. Therefore, many colleges and universities have established an office to coordinate
such services, including interpreting services. The Deaf students’ narratives showed that their
interactions with OIS had a bearing on their participation. One problem participants experienced
was that the individuals in charge of OIS seemed more concerned about fulfilling their legal
obligations than the students’ accessibility needs; they also disempowered Deaf students, implied
that Deaf students were a burden to them, and did not do more to ensure that Deaf students receive the highest quality in services.

Two participants experienced disempowerment when their OIS coordinators did not take them seriously. Based on the Deaf students’ accounts, their OIS coordinators had a pattern of refusal to do anything even if the participants were struggling with participation because of the interpreters they had. For example, Scott preferred one interpreter and wanted her to interpret for other classes:

I liked Allison. I asked her if she was available to interpret for my classes for the next semester and she said yes. I then informed the coordinator of interpreting services about her availability, but the coordinator said, “No, I already scheduled someone else for your classes.” We got into an argument and I said, “Wait, Allison is my preferred interpreter. I feel comfortable working with her.” The coordinator was stubborn and refused to honor my request. We had a long back-and-forth conversation and I ended up saying, “Who pays the tuition? It’s me who pays.” The coordinator said, “But I was complying with ADA and did my job by providing you with interpreters.” I gave up and told Allison that she couldn’t interpret for me.

This situation raises two issues: first, the coordinator disempowered Scott by taking away his power to choose his preferred interpreter. Scott seemed to find it important to have an interpreter he felt comfortable working with in order to facilitate his participation. Second, the coordinator did not show effort in honoring his request, being only interested in fulfilling the ADA requirements. On another occasion, Scott had a class in which he had two teachers with different teaching styles. He did not have two interpreters for the entire class; instead, the first interpreter
covered the first half of the class and then was replaced by his second interpreter for the second half. He did not like this system and complained to his OIS coordinator:

   The coordinator was not receptive to my complaint and said, “No, it’s all set and I can’t change that.” We had another long back-and-forth conversation. It did not work out and I did not do well in that class. I asked my university to remove my grade from my transcript and that was my worst experience.”

Scott was asked how he persisted after these situations and he responded, “It’s tough and I did lose some motivation. Hmm…frustrating…so frustrating. I had no choice and didn’t want to give up. If I did, I had to do everything all over again with a new school. I didn’t want that.”

Sam had similar disempowerment experiences as a result of his OIS coordinator promoting inappropriate practices despite his complaints being reported to the coordinator. He was in a class and his two interpreters were having a discussion in front of him. He recounted,

   …two interpreters negotiated and decided which classes fit their schedule best. They did not ask me what I needed and what my preference was. This was a problem because I might have preferred one interpreter for a particular class but not other classes. I ended up having an interpreter that I had to put up with and, as a result, I had to put a lot of effort in understanding the interpreting work before I could learn…It was exhausting for me…

Sam also had to deal with an interpreter he did not want and, as a result, he suffered mental and physical exhaustion.

The problems with OIS were also experienced by Sara, who reported three incidents where OIS refused to consider her requests. The first incident occurred when she tried to take an elective course but her OIS coordinator refused to provide an interpreter because the particular course was not a major-related requirement. She argued that it was unfair that she had to deal
with policies established by OIS while her hearing peers could take any course they want. Despite a lengthy and heated conversation, the OIS coordinator stood her ground. The second incident occurred when she could not get an interpreter for her trip to Turkey even though the trip was part of her course requirements. Her coordinator refused to provide an interpreter for the trip because the coordinator thought that it was not covered by ADA. Sara eventually applied for external grants on her own that successfully covered the costs of two interpreters for the trip. Sara recalled the third incident, saying, “I took a physical education course where I learned how to surf and my university refused to provide interpreting services because it was not conducted on campus.”

Two participants voiced frustration when their coordinators either could not find a substitute interpreter, or found a substitute who was less competent than the regular interpreter. The coordinators’ poor handling of these situations affected the participants’ academic performance. Mary recalled:

Sometimes when an interpreter was sick, I either had a substitute interpreter or none. That affected my learning experience. I ended up missing out on class due to no interpreting service or the substitute interpreter signing poorly. That made me feel so unmotivated. This is one con about interpreting services. The interpreting service was my only access to education. When I had an interpreter who was horrible, I had to work harder to figure out what they tried to convey to me and it was so exhausting for me.

Dealing with a less competent substitute interpreter as Mary did is not uncommon. Sam, had a similar experience that led him to become afraid to ask for a replacement because he knew that there was a strong probability that he would get a less competent interpreter. He also had two interpreters who did not get along with each other, which affected the quality of their interpreting

work. He wanted to raise concerns about their lack of teamwork, but he feared the possibility of losing one of the interpreters who had strong ASL skills. Instead, he put up with the conflict.

Another issue that the participants mentioned during their interviews was that OIS created a burden for the participants, because they had to fill out paperwork and were made to comply with OIS policies. Adam recounted that for the first year, he had a positive experience with the way his university handled interpreting services. In his second year, the university assigned the task of coordinating interpreting services to a new office. He said, “I was not comfortable because they required more paperwork for me to fill out and they seemed more bureaucratic. That bothered me.”

In addition to the paperwork and bureaucracy, Sam did not like the way that his OIS coordinator repeatedly lectured to him about their policies, which he found discouraging. The coordinator’s approach not only created an additional burden, on Sam but also gave him the perception that *he* was a burden. A perception like this can make students feel bad about submitting interpreter requests, and can eventually reduce their participation as an outcome.

Mary also sensed she was a burden to her OIS coordinator because she made numerous requests that often were met with visible annoyance. Given her awareness of how she was perceived by her coordinator, Mary decided not to report an incident where her interpreter missed information repeatedly or did not understand information, but went ahead and interpreted. She did not want to build a reputation as a student who always “complained.”

Based on the participants’ accounts, their interactions with OIS clearly created a serious obstacle in the way their coordinators operated and how the students handled various situations. Some participants felt that their coordinators did what they were required to simply because of the ADA, rather than accommodate their needs, and they subsequently experienced disempowerment.
Some participants thought that the OIS coordinators did a poor job of ensuring that all substitute interpreters had the same level of competence as the regular interpreters. They also did not like it when OIS required paperwork, reminded them about their policies, or implied that they were burdens. Simply providing ASL interpreters was not enough, based on the participants’ accounts, and their OIS coordinators needed to do more to ensure that they received full and equal access to their academic environments.

**Classroom environment and dynamics.** The third superordinate theme identified is classroom environment and dynamics. All participants thought that simply providing interpreting services was not sufficient to promote full and equal participation in all activities within the classroom. They had to deal with the synchrony of what their teacher lectured and what they wrote on the blackboard or pointed to on their PowerPoint slides, as well as the pace of teaching and discussion, the proximity of the teacher and the interpreter, and group assignments, discussions, and meetings. Several participants expressed frustration that their teachers and peers behaved in a “hearing” way that could sometimes be a barrier. Adam described one incident where he could not handle the pace of teaching:

… in my first semester, I took a calculus class and it was fast-paced unlike the one I took in high school. The pace of the class made it almost impossible for me to watch my interpreter, and my teacher wrote too fast on the blackboard. I was overwhelmed and had a bad experience with that class. I could barely make it and it was just horrible. I did take notes but did not have a chance to understand how it worked.

As a result of the teacher’s fast pace, the interpreter was not able to give Adam time to receive information and to read what his teacher wrote. It was extremely challenging for his interpreter to translate from English to ASL in such a short timeframe. To get all of the necessary information,
Adam had to fixate his eyes on his interpreter and, as a result, he missed the synchrony of what the teacher lectured and wrote on the blackboard.

On the other hand, Scott had a positive experience with an interpreter who understood the importance of seeing everything going on in the classroom. The interpreter stood next to his teacher and Scott found that helpful.

It helped me when my teacher wrote something on the blackboard and said something at the same time. I could read the blackboard and saw the interpreter next to the teacher instead of looking at the interpreter then turning my head around to see the blackboard. It was easier on my eyes. Without that, I would have missed a lot of what was going on in the classroom.

Another problem was how the teacher assigned students to different groups and how group discussion was and meetings were conducted. Sam faced several issues with groups and experienced barriers to his participation. The first issue he identified was that he was always last to know when it was time for him to find a group to join. He recounted,

When I had to find a group to participate in, I often found myself in a group with football players or students with whom I did not expect to work. I noticed that my groups tended not to be the best and that impacted my grade. My GPA should have been higher, but it was pulled down because of the groups I was forced to join.

Sam’s experience has two possible implications. First, his peers did not want to invite him because of the fact that he was deaf or used a different language. Second, his interpreter was still translating while all other peers already had received the information, and so by the time he stood up to find a group, everyone had already congregated. Additional issues that Sam encountered were the availability of interpreters for his group meetings and how his group perceived him:
My groups always met outside of the classroom and always asked, “Let’s meet tomorrow.” It was an issue for me because interpreters were not available and I had no choice but participated in group meetings with limited communication. My groups did not think that I made any quality contribution to the meetings and did not bother to consider me when they worked on a group project.

Without an interpreter present, Sam’s group was not able to see what contribution he could make to the group and, consequently did not view him as a valuable member. Mary described a similar experience:

Hearing people do not feel like it’s a natural conversation with me when an interpreter is involved. For example, when we had a study group, many people would jump in and make comments. The interpreter had to interrupt and ask that one person speak at a time. This was what hearing students disliked.

The experience of how hearing people frequently jump in and make comments can be frustrating for Deaf students, as shown in Mary’s example. Sara reported how she tried to participate in a group discussion, but no one noticed her raising her hand because her group relied on sound:

When I raised my hand, I couldn’t get a word in because everyone else would just speak up without raising his or her hands. People respond to sounds rather than visual stimuli so my hand would go unnoticed. The hearing people have their way of interjecting at the right time whereas I would be always interjecting at the wrong time as a Deaf person. When she wanted to contribute something to the discussion, she was perceived as “a rude and snobby student” because her interpreter had to interrupt the fast-paced discussion in order to allow Sara to share her comment.
The participants’ accounts showed how they struggled to participate when the classroom environment and dynamics did not accommodate their visual needs. The main factors that stalled their participation were the pace of teaching and discussion, the lack of proximity between the teacher and the interpreter, the conduct of group discussions, and group assignments.

Social Participation

The Deaf students were asked about their experience with social participation. Social participation consists of, but is not limited to, socializing with peers outside the classroom, and taking part in social clubs, events, and activities. Based on the interviews, coding process, and narrative analysis, the amount of information the Deaf students shared about social participation was much less than the amount of information shared about their academic participation. There are two emergent themes that may explain this difference in the size of data: linguistic and cultural differences and availability of interpreters.

**Linguistic and cultural differences.** All five participants identified ASL as their native language, had a Deaf cultural identity, and attended a college where the majority of students spoke English and had a hearing identity. The participants therefore experienced linguistic and cultural incongruence when they encountered students with a different language and culture. Sara and Sam disclosed that they were not interested in participating in social activities because they knew that linguistic and cultural differences would occur even with their efforts to make it work. Sara told a story about receiving a party invitation from a hearing classmate. She declined the invitation, explaining,

> I don’t like to go to hearing parities because they talk, the room is dark, and it is hard for me to read [lips] of what they try to say to me. It’s not worth my time to go to parties.

Some classmates with whom I started to develop a good relationship asked if I wanted to
go to their party. I asked, “how I can interact with your people and would you be willing
to write back and forth all night?” They responded, “We could use a smartphone as a
means of communication.” Well, I did not feel like doing that.

Sara did not want to spend a lot of time on a basic, unnatural conversation (a linguistic
incongruence) in the dark (a cultural incongruence). She wanted to attend a party where she
could use her native language as a primary means of communication and interact with people who
shared her culture. Sam recalled how he tried to interact with his hearing peers but it did not
work well:

With a group…we went to the mall or a movie. I was with my friends but I noticed I felt
a bit frustrated and bothered being with them. Every time I was with them, I asked
myself, “Why? I could just leave them and go on my own.” I noticed that if we went to a
restaurant, go to a place with a lot of noise, or in a car, I would be completely lost in the
conversations.

Sam experienced a linguistic incongruence in that his peers used spoken English, which excluded
him. Mary and Scott experienced similar results when they encountered linguistic incongruence,
so they only socialized with their interpreters during academic hours. Scott disclosed, “My only
friends were my interpreters, unfortunately. I had a couple of friends who took the same classes
as me. But, today, I do not keep in touch with them at all.”

Sam revealed that he confronted a cultural incongruence and experienced oppression.

During his freshman year, several students made oppressive comments to him:

A hearing student said, “Some people should not go to college.” I asked, “What do you
mean by ‘some people’ and who are the people?” He did not give a direct answer but
implied that people with disabilities like me should not go to college. I thought he might
be talking about people in general but, from my own perspective, he might suggest that I, a Deaf person using ASL and working with ASL interpreters, shouldn’t go to college. That was rather disturbing to me. Another student made a comment, “I think that you got into this university because you are deaf.” I told him, “The application did not ask if I am deaf and I want you to show me where in the application that asks me to check off that I am deaf.” He did not respond. I asked again where in the application and we looked at the application. There’s none except one that asked if I needed support services but that’s it. I told him, “Your comment is not based on fact but your opinion. You need to be more careful with your comments.” He did not respond. These instances made me feel like I was not a part of the college community.

Such comments could have damaged Sam’s sense of connection with his college, and losing the sense of connection could lead to a student considering dropping out. Fortunately, he had an older brother who was a student at the same college and persisted with his studies. Sam’s example clearly shows that cultural incongruences can have harmful consequences. On the other hand, Adam had a positive experience with social participation, but for the first year only. He was on a baseball team and his teammates were friendly, open, and wanted to learn ASL. He described his experience:

I spent a lot of time with my team and we became close friends. We went out together, we ate together, and we travelled together. Some teammates learned ASL. One teammate decided to learn ASL by reading ASL books 15 minutes everyday. He always checked with me if his signs were correct or needed modification. I think that was awesome that he took the initiative to learn ASL.
This particular phenomenon is unique compared with other participants’ phenomena because Adam and his team were required to practice, play, and travel together. Adam added that many of his teammates were nice and friendly, but did not try to learn ASL. He did not want to teach them ASL because it was not his job. He was there to play just like his teammates. When he got injured, his social interaction changed dramatically because he was no longer on the team. “So, in my sophomore, junior, and senior years, I did not have the same experience as I had in my freshman year that I interacted a lot with my baseball team,” he recalled. “My social interactions declined after the injury.”

**Availability of interpreters.** Most of the interviewees tried to participate in social activities, but faced several problems because OIS could not find or provide interpreters due to budget constraints or short notice. Mary wanted to get involved with her sorority, but it did not work out well. She said,

> When I was in the sorority, we had general meetings, board meetings, and committee meetings, or social events like playing pool and bowling. Sometimes interpreters showed up and sometimes they did not. When they did, they did not interpret everything.

Asked why the interpreters did not show up at all times, Mary responded, “The college told me they did not have a budget.” Eventually, Mary quit the sorority.

Sam wanted to participate in social activities, but such events were often arranged on short notice and did not give him enough time to find an interpreter. He said:

> Sometimes I walked in the hallway and saw a flyer about a lecture. I really wanted to attend but realized that it would take tonight or the next day. I did not feel like making a request to the Disability Services and another challenge was that the event required me to register quickly before it was closed. It took time to get myself officially registered and
that means I did not have much time to make a request to the Disability Services. This was not the ideal procedure. I feel that the event should have an interpreter ready without having to wait and see if any Deaf student makes a request. This way all events would be fully accessible.

Scheduling was problematic for Sam because he needed at least two weeks to find an available interpreter. Sam shared how he did not want to bother OIS too much by making last-minute requests even if it was not his fault that those social events were announced at the last minute. He eventually went ahead and participated without an interpreter, but reported feeling disempowered because OIS did not send an explicit message that it welcomed his requests regardless of timing.

Adam had a similar problem when he participated in team meetings scheduled by the coach either a day before or the same day, and was not always provided with an interpreter. Adam recalled, “It affected my relationship with my coach. I did not feel like I had an open door where I could meet with my coach anytime. I didn’t have that relationship. That’s a disadvantage.”

From these responses it is apparent that social participation was not convenient for the participants as they coped with linguistic and cultural incongruences with their hearing peers and the availability of interpreters.

**Conclusion**

In this study, the experiences of five Deaf students at colleges/universities were investigated by interviews, focusing on their academic and social participation. The findings of the study revealed that the participants had both positive and negative experiences with academic and social participation. The researcher conducted, coded, and analyzed interviews with the two research questions as a guide. There were five superordinate themes in total for both academic and social participation. In the context of academic participation, the researcher identified three
superordinate themes: Interpreters, the interactions with office of interpreting services, and Classroom Environment/Dynamics. The theme, interpreters, had two subthemes: ASL and cultural competencies and professionalism. In the context of social participation, the researcher identified two themes: linguistic and cultural incongruences and the availability of interpreters.

The participants’ only positive experiences were when they had interpreters with strong ASL and cultural competencies and professionalism with some room for flexibility. Also, they had some interpreters who were able to accommodate the classroom environment such as standing next to the teacher. On the other hand, the participants shared a list of problems that limited their academic and social participation. In academic participation, it appears that both interpreters and the interactions with OIS had a powerful impact on the experiences of the Deaf students. The participants felt powerless, disengaged, and lost, when their interpreters performed poorly and conducted themselves unprofessionally. Additionally, the students took their issues with their interpreters to their OIS coordinators, but the coordinators often were not cooperative because they believed they had fulfilled their legal obligations. The coordinators also did not take the students’ requests into consideration, disempowered them by forcing them to deal with the available interpreters, and did not do a good job of finding them a substitute/replacement with strong ASL skills. In the context of social participation, the students did not participate in social activities much because they did not want to deal with cultural and linguistic conflicts or knew that they did not have a chance to find an interpreter for social events that were announced at the last minute. Despite the obstacles the participants experienced, they persisted in the college till they graduated because, as they reported, they wanted to earn degrees.
Chapter 5: Discussion of Research Findings

This study employed the IPA approach to explore the lived experiences of Deaf students who worked with ASL interpreters during their academic and social interactions in mainstream college settings. It is crucial to probe their experiences because, after the enactment of Americans with Disabilities Act (ADA), the enrollment of Deaf students in mainstream colleges and universities increased, yet the attrition rate was still high (Boutin, 2008; Lang, 2002; Richardson et al., 2010; Smith, 2004; Stinson & Walter, 1997). In 1999, 75% of Deaf students departed college without a degree. This study intended to explore their lived experiences to discover what facilitated and hindered their academic and social participation. With a new understanding of their lived experiences, recommendations have been developed to address their problems.

The literature offers various studies on deaf students and their college experiences, but little discourse exists on how ASL interpreters themselves affect deaf students’ academic and social participation in mainstream college colleges and universities. This study’s findings expand the discourse significantly and facilitate scholars’ and higher education administrators’ understanding of what contributes to the attrition rate.

This study focused on two research questions:

(a) How do Deaf students working with ASL interpreters experience academic participation in mainstream college settings?

(b) How do Deaf students working with ASL interpreters experience social participation in mainstream college settings?

In this study, three superordinate themes were identified concerning academic participation and two superordinate themes concerning social participation. In the context of academic participation, the three themes are ASL interpreters, the interactions with the office of
interpreting services, and classroom environment/dynamics. The first theme, ASL themes, has two subthemes: ASL and cultural competencies and professionalism. In the context of social participation, the two themes are cultural and linguistic incongruences and the availability of interpreters. These themes provide answers to the research questions.

In the following sections, the researcher introduces and discusses three major findings in the context of the literature and Tinto’s theory.

**American Sign Language Interpreters**

The ADA requires colleges and universities to provide services to make all academic and social activities accessible to students with disabilities. Deaf students, whose native language is ASL, primarily use ASL interpreters for their academic and social participation. This study interviewed five Deaf students about their lived experiences as Deaf students participating in all academic and social interactions working with ASL interpreters within a mainstream institution where the majority of students speak English. The study revealed that ASL interpreters themselves created obstacles to the interviewees’ academic participation. This is a familiar issue as there are six studies acknowledging sign language interpreters as a problem (Foster & Brown, 1989; Foster et al., 1999; Long, Stinson, & Braeges, 1991; Marschark et al., 2005; Smith, 2004; Stinson et al., 1987).

**ASL competency.** Based on the participants’ narratives, one of the obstacles with ASL interpreters was ASL competency. Barriers emerged when interpreters demonstrated weak ASL competency. The participants shared that those exhibiting limited knowledge of ASL vocabulary, weak command of grammar, and minimal use of facial expression and space reflected their weak ASL skills. Those with a partial knowledge of ASL vocabulary either used incorrect signs or chose signs that did not match the semantics. This setback interrupted the participants’ learning
processes as they tried to make sense of what their instructors and peers were saying. Those interpreters who did not have a strong command of ASL ended up using English grammar more often and mouthed English words instead of using ASL mouth morphemes. One participant felt that using English grammar was like “black and white and no color.” It took time and effort for the participants to process information not delivered through their native language. Interpreters who used facial expression minimally not only produced incorrect grammar, but also lacked tone and emotion. Consequently, the participants experienced distraction and lost enthusiasm in academic engagement. Interpreters who failed to use space missed crucial functions such as indicating distance, time concepts, and location of people, places, and things; contrasting two people, places, things, or ideas; and showing subject-verb agreements. One participant reported that an interpreter used space effectively, which facilitated her learning because space helped her process information quickly.

The qualities within ASL competency were clearly problematic. A small body of literature addresses the impact of the interpreter’s ASL competency on Deaf college students’ participation. This study has several parallels with Foster’s et al. (1999) study concerning ASL competency, attributing interpreters’ poor performance to limited signing skills. However, the researchers did not further probe what limited signing skills meant. Foster’s study noted that one interpreter chose English because s/he struggled to use ASL, saying, “The interpreter tries to sign ASL and do not understand the content then sign most in English” (Foster et al. 1999, p. 229). This implies that the interpreter had a weak command of ASL grammar so s/he changed to English with which s/he felt most comfortable. It appears that the study by Foster et al. (1999) represents one of the few studies recognizing the issue with ASL competency and its impact.
This study expands the discourse significantly by providing specific instances on how ASL competency could be an obstacle to Deaf students’ academic and social participations.

In addition to the qualities within ASL competency, ASL skills as a whole influenced how the interpreters performed their work and affected the Deaf students’ participation. First, the interpreters filtered or summarized information, struggled to speak fluently or comprehend ASL, and created a burden for the Deaf students. Two participants reported that their interpreters disempowered them by deciding what information to interpret and what information to ignore. The students were frustrated because they did not receive the same information as their peers did. Two other participants caught discrepancies between the information they received from their interpreters and the information they obtained from their teacher and materials. The discrepancies occurred because of the interpreters’ choice to summarize the information. Consequently, the participants eventually worked harder to fill the gaps their interpreters produced.

Second, two participants were discouraged when their interpreters struggled to understand them and ended up misinterpreting their messages intended for their teacher and peers. Consequently, the participants decided not to engage in class anymore because they did not want to embarrass themselves in front of their teacher and peers. Third, the interpreters’ poor ASL skills as a whole created burdens for deaf students. Two participants recounted that they had to intervene by raising their hand to obtain information on behalf of their interpreters who missed information. Sometimes they had to educate their interpreters in concepts the interpreters struggled to understand. Burdens like this stalled their learning process.

Weak ASL skills as a whole create a negative effect on deaf students’ academic participation. This finding parallels several studies (Foster & Brown, 1989; Foster et al., 1999;
These studies did not describe exactly how ASL skills themselves affected deaf students, but they recognized several actions undertaken by interpreters. Foster and Brown (1989) found some deaf students were reluctant to engage because they thought that their question might be off point, their answer might be wrong, or their comments could be misinterpreted. In Smith’s (2004) study, some students complained their interpreters often misinterpreted what they said. Both studies clearly show that misinterpretation is common. Foster’s et al. (1999) study also revealed that some interpreters had poor receptive skills and could not understand what deaf students signed to them. Foster et al. (1999) found some deaf students encumbered by this, with one saying, “The interpreter does not understand what I am saying, making me to repeat and forget what I wanted to say” (p. 229). While Foster’s study and others have some thematic commonalities, this study has one recurring theme, disempowerment, that is rarely addressed in the academic literature.

There is a widely-circulated presentation provided by Trudy Suggs on disempowerment in the context of the relationship between Deaf people and interpreters (Suggs, 2011). Suggs (2011) stated that there are two forms of disempowerment (situational and economic) and shared several instances of situational disempowerment that are similar to that of this study’s participants’ experiences. One instance of situational disempowerment Suggs (2011) recalled that, in her high school theatre class, one of her interpreters belittled her by vocally criticizing and mocking her native language and did not make any effort to interpret what Suggs tried to say. In this study, several participants experienced situational disempowerment when their interpreters chose not to interpret what they were supposed to interpret or made a decision on what information to skip. Suggs’ (2001) and the participants’ experiences with disempowerment suggest a need for expanding the academic discourse on disempowerment.
In addition to ASL competency, the participants shared that their interpreters with strong cultural competency facilitated their participation. Many of these interpreters shared a similar trait: they were children of deaf adults (CODA). According to the participants’ narratives, their CODA interpreters with cultural competency were more empathic and willing to do more work to enhance the participants’ academic interactions. These interpreters were also able to use their cultural meditation tools to minimize cultural conflicts in order to maximize the participants’ interactive experience in the mainstream classroom. Their empathy, willingness to do more, and cultural meditation tools root in their experience as a hearing child of Deaf parents. They grew up living with their Deaf parents, repeatedly witnessed their parents enduring cultural and linguistic oppression, and therefore they understood the importance of access and acquired tools for cultural meditation. Yet it appears that there is scant discourse on the role of CODA interpreters in Deaf students’ academic and social participations in mainstream settings.

**Professionalism.** Professionalism was another barrier that emerged during the participants’ academic interaction. Professionalism refers to how the interpreters conducted their work. Interpreters, who acted unprofessionally, made offensive comments, appeared to perform leisure activities, and created visual noise. One participant was offended when her interpreter judged her as a typical mainstream student who did not know anything about well-known deaf people. Two participants reported their interpreters engaged in leisurely activities such as reading the newspaper, checking emails, and sending texts during class. One participant became distracted when his interpreter tried to get the team interpreter’s attention by waving at him (visual noise) but the team interpreter didn’t respond.

Failing to maintain one’s professionalism had a bearing on deaf students’ participation. Four participants stated that ultra-professionalism was problematic, too. In certain circumstances,
they wanted to engage in side conversations with their interpreters, but the interpreters refused because they were overly strict in maintaining professional boundaries. The participants noted that practicing professionalism was important, but they wished that their interpreters had some room for flexibility.

The literature seems to contain no study directly addressing the role of professionalism in deaf students’ academic participation. Some studies capture performances that implicitly suggest unprofessional behaviors, but do not go further to examine the effects. For instance, Smith (2004) noted some deaf students reported that some interpreters were not willing to accommodate their language or sign systems, which implied unprofessional behavior. However, Smith did not examine how this behavior influenced the students’ academic experiences. Otherwise, the literature offers little information about professional conducts and their effects on Deaf students’ academic participation. One striking finding from this study is that all five participants wanted to engage in side conversations, but could not do so because their interpreters chose to maintain professional boundaries at all levels. This is relevant because, from the participants’ perspective, side conversations were an opportunity for them to make comments on a lecture/discussion just like their hearing peers. As a result, they felt disengaged and isolated. Their negative experiences could have led to consideration of college departure. This particular finding makes it clear that a discourse on professional conducts and their effects is needed.

Through the lens of Tinto’s theory, the particular obstacles—ASL competency and professionalism—support the theory and offer a new perspective that the theory fails to capture. The barriers fall into one of the components, institutional experience. Students develop institutional experience as they begin the process of interactions within academic and social systems of the institution (Tinto, 1993). In the academic system, the participants struggled with
their interactions because they were distracted by their interpreters’ lack of ASL competency and interpreters’ issues with professionalism. The students’ quality of interactions depended on the quality of their interpreters’ performance. As a result, they had negative institutional experiences. Having a negative institutional experience makes it difficult for one to integrate into the academic and social systems within the institution, and academic and social integrations are essential to one’s persistence (Tinto, 1993).

During the interviews, four participants did not have a sense of integration into the college community. Even though Tinto’s model predicts that those who fail to integrate will more likely depart, the participants persisted and graduated because they wanted a degree. Their persistence may be explained by one or two of the components of Tinto’s model: goal/commitment and pre-entry attributes. They wanted to obtain a degree, and that desire created a goal. They withstood obstacles during their process of interactions and that reflects the level of commitment they had towards their goal. Their strong commitment could be rooted in their pre-entry attributes that they hold a minority view that they reject the majority’s common assumption that deaf students cannot accomplish just because they are deaf. Tinto’s theory does not appear to capture that persistence can occur if one’s goal/commitment is strong enough to overcome their negative institutional experience and how one’s language/cultural identity plays a role in his/her persistence. However, this study helps explain what contributes to Deaf students’ negative institutional experiences and why deaf students departed or persisted even with their negative institutional experiences.

**Interactions with the Office of Interpreting Services**

Given that colleges and universities are legally required to provide services to students with disabilities, they typically establish offices to coordinate services, including interpreting. In
In this study, the participants’ experiences with their interactions with the office of interpreting services (OIS) were mostly negative. The participants reported that interacting with their OIS coordinators had harmful effects on their academic and social participation. The obstacles occurred when the OIS coordinators were more interested in fulfilling their legal obligations than the students’ accessibility needs, disempowering them and creating a perception that Deaf students were a burden, and not doing more to ensure that they received the highest quality of services. Several studies also presented the OIS as a problem for Deaf students (English, 1993; Smith, 2004).

The first problem was how the OIS coordinators handled situations such as processing requests and finding substitute interpreters. One participant had three situations where the OIS coordinator refused to provide an interpreter because, from the OIS perspective, ADA did not require this. The participant needed an interpreter for an elective physical education course and a trip to Ireland. However, her OIS coordinator argued that the elective course was not a requirement, the physical education course was not conducted on campus, and the trip to Ireland was not covered by ADA. The participant had to take time and effort to unsuccessfully persuade the OIS coordinator that she had a right to interpreting services for the courses and the trip. The participant felt that the coordinator was more interested in doing what they were legally required than accommodating her academic needs.

Another problem with OIS handling requests was substitutes. Two participants needed a substitute interpreter when their regular interpreter was absent or they were not satisfied with their regular interpreter’s quality of work. Based on their experience, their OIS coordinators’ conducts were ineffective; they either could not find an interpreter or found a substitute less competent than the regular interpreter. One participant decided not to ask for a substitute because
he did not want to risk the possibility of getting a less competent substitute. Another participant requested interpreting services for social interactions, but her OIS coordinator could not provide that due to budget constraints. This suggests that the coordinator did not consider her social participation as essential.

The second problem was disempowerment. One participant found a preferred interpreter available to interpret for his classes. He informed his OIS coordinator that he wanted this interpreter for his classes; however, the coordinator refused to honor his request because someone else had been assigned. This was not a first time he experienced disempowerment by his coordinator. Another participant endured indirect disempowerment from his coordinator. He had two interpreters in front of him and they discussed which classes fit their schedule best without asking him what he needed and what his preference was. The coordinator allowed this practice by doing nothing, thereby disempowering the participant.

The OIS coordinators’ treatment of Deaf students was the third problem the participants experienced. According to the participants, they felt burdened by their coordinators because they had to do all the necessary paperwork and comply with OIS policies. One participant was frustrated by how his OIS coordinator emphasized the importance of making requests in advance. He and another participant also sensed that their OIS coordinators were telling them they were burdensome for always submitting interpreter requests. Having that perception was so costly that one participant decided not to make a necessary request because she did not want to build a reputation as a student who always “complained.”

Despite the body of literature on support services in general, there is little mention about how one’s interactions with OIS could be problematic and what obstacles OIS and its interactions created for Deaf students during their academic and social participation. Most studies include a
section on support services to provide information on what services deaf students use and to explain how each service works. This implies that researchers may be framed to think that support services cannot be a barrier because the purpose is to help students with disabilities gain full access to academic and social activities. A few studies have recognized that there is a lack of analysis on support services themselves (Foster, Long, & Snell, 1999). Concerning the role of OIS in Deaf students’ academic and social participation, one study (Lang, 2002) made an important observation that deaf students had to rely on a third party (i.e., support services) for their access to information, but the study did not take a step further to explore that. It appears that only one study (English, 1993) identified an issue with OIS. English (1993) conducted a quantitative study determining that OIS did not accommodate deaf students when they requested interpreting services for social interactions. Yet, English did not probe why OIS lacked in support. Other than English’s study, it appears that there is no research on the themes identified in this study: handling requests/substitutes, disempowerment, and treatment. It is critical to create a discourse on the role of OIS and its interactions in Deaf students’ academic and social experiences. This study offers relevant information that OIS’s provision of services is not the only problem; it is also how OIS coordinators address Deaf students’ requests and complaints. The discourse on the role of OIS and its interactions will enhance an important understanding of the correlation between OIS and its interactions and Deaf students’ academic and social experiences. This understanding may lead to a new discovery about what has driven 75% of deaf students to depart.

In the context of Tinto’s theory, it is clear that the interactions with OIS play an important role in Deaf students’ institutional experiences and personal/normative integration. Also, it may offer a new dimension to Tinto’s theoretical model. Tinto (1993) explained that personal and
normative integration succeeds when one’s academic abilities and skills, interests, and values are congruent with the institution’s intellectual demands, interests, and values. This statement implies that all students interact directly with other members of the institution without relying on a third party. Deaf students are different in that they may need interpreting services (third party) to facilitate their interactions because they attend a college where the majority of students and teachers speak English. Thus, their institutional experience and personal/normative integration are not just about a match between their abilities and skills, interests, and values and the institution’s academic demands, interests, and values. It is also about congruence between Deaf students’ needs and the institution’s services. This means that double congruence needs to take place for Deaf students before they can produce a positive institutional experience and thereby gain integration into the college community. Moreover, the first congruence must occur when the institution meets Deaf students’ needs before Deaf students manifest their academic skills/intellectual abilities, interests, and values. This is a new dimension to the theoretical model. In addition to this new dimension, Tinto’s model suggests that it has to be students who match the institution’s demands and culture, not vice versa. This study found that the institution needs to be congruent with Deaf students’ needs. If the institution fails to accommodate, then a mismatch occurs which negatively affect Deaf students’ institutional experiences and integration.

**Cultural and Linguistic Conflicts**

All five participants attended a college where the majority of students spoke English and had a hearing identity. This was a different world for the participants who had ASL as their native language and a Deaf cultural identity. Being in the English-based, hearing-way world, the participants experienced cultural and linguistic conflicts during their academic and social participation. In the context of academic participation, several participants reported they
struggled to participate because of the class environment and dynamics conducted in a hearing way. In the context of social participation, the majority encountered cultural and linguistic conflicts and eventually stopped participating in social activities. Studies have identified cultural and linguistic challenges deaf students face (Foster & Brown, 1989; Foster & Brown, 1991; Saur et al., 1986;).

In the context of academic participation, cultural and linguistic conflicts occur when two languages and cultures interact. Several participants shared they could not receive information in a timely manner and could not capture everything going on in the class because the pace was too fast and two or more actions took place simultaneously. However, if this had taken place in an ASL-centric environment, the pace would likely have not been too fast. One participant described his teacher giving a fast-paced lecture while writing on the blackboard at the same time. It did not give the interpreter enough time to process and convey all information and the participant could not capture what his teacher wrote because he had to fixate his eyes on his interpreter for information. Several other participants reported encountering other linguistic/cultural conflicts during their group discussion and meetings. For instance, three participants struggled to engage in group discussions because their hearing peers could jump in and make comments anytime while their interpreters struggled to capture and process all information in a timely manner. In one instance, one participant was called snobby and rude when she had her interpreter interrupt the group discussion. The teacher’s pace, multi-tasking, and group discussions were acceptable for hearing students who used an aural/oral modality, but they did not work for Deaf students who used a visual/gestural modality. The teacher and hearing students did not adjust the aural/oral-based environment to accommodate deaf students’ visual/gestural needs.
In the context of social participation, this study found that several participants tried to unsuccessfully participate in with social activities or chose not to get involved because of linguistic and cultural divergences. One participant declined to attend a hearing party because she did not want to spend a lot of time on a basic, unnatural conversation (a linguistic difference) in the dark (a cultural difference). Another participant tried to interact with his hearing friends but encountered conflicts where the use of spoken English excluded him and he received culturally offensive comments.

In the literature, there are studies exploring the experiences of Deaf students with linguistic and cultural separations. This study’s themes—hearing peers’ social prejudice/native perception, deaf students’ sense of separateness, and lack of linguistic/cultural understanding—are similar to that of other studies. However, there was one key difference between this study and other analyses in the literature: the site of study. This study interviewed all participants who attended a mainstream college with 10 or fewer deaf students while most other studies took place at RIT/NTID. This difference is significant because deaf students experience similar conflicts regardless of the size of population of deaf students at their institutions. It may suggest that the size of population does not affect hearing students’ level of cultural and linguistic understanding and sensitivity.

This study raised one theme that has very little discourse in the body of literature: synchrony. Synchrony refers to a situation, for example, where a teacher gives a lecture and writes on the board simultaneously and it affects a Deaf student’s ability to capture the interpreter’s message conveyance and the teacher’s writing on the board in a timely manner. In this study, the participants experienced frustration when they could not capture their teacher’s writings because they had to fixate their eyes on their interpreters who were not finished
delivering information. The quality of their participation was eventually affected. Synchrony and its effect need to be further explored.

Deaf students’ experiences with cultural and linguistic conflicts appear to have a new meaning for Tinto’s model. Tinto (1993) stated that congruence needs to occur when there is a match between the institution’s academic demands, interests, and values and the students’ skills, abilities, interests, and values. The model does not consider the cultural/linguistic match and the impact it has on the student’s institutional experience and personal/normative integration. In this study, the participants struggled to participate academically and socially because their hearing peers and members of the institution did not share a similar language and culture. Moreover, their institutions did not adjust their environment to recognize, embrace, and meditate linguistic and cultural differences. These issues are significant in that they shape the participants’ institutional experiences and affect their process of integration. If the model adds culture/language as a part of congruence, it may capture a problem that could explain the attrition rate of Deaf students.

**Conclusion**

ASL interpreters, the interactions with OIS, and cultural/linguistic conflicts are the major findings regarding Deaf students’ academic and social experiences. While this study has some parallels with the literature, it does not only expand the existing bodies of literature, but also create new discourses (for example, CODA, interactions with OIS, professionalism, and disempowerment). In Chapter 2, the researcher identified several gaps in the literature. Several studies identified sign language interpreting as a problem, but they did not examine the problems associated with sign language interpreting. This study successfully addressed this gap by providing specific instances on how sign language interpreting itself was a barrier.
Through the lens of Tinto’s theory, this study both supports and challenges the model. The participants had negative institutional experiences because their institutions failed to provide support, conduct quality assurance, and meditate cultural/linguistic differences. Their experiences may help researchers understand why other deaf students depart without a degree. On the other hand, this study challenges the model in that it does not consider another congruence that must take place—Deaf students’ needs and the institution’s services and cultural and linguistic congruence. If this congruence succeeds, deaf students will not only be able to manifest their abilities/skills, but also learn more about the institution’s interests and values. If the model incorporates the second congruence, it may capture a key problem that helps explain the attrition rate.

If this study has to conclude with one statement, it would be the one similar to that of Stinson et al. (1987) and Marschark et al. (2004). Both studies concluded that the provision of ASL interpreting services does not warrant full and equal access to communication. This study supports that conclusion, and that the participants’ academic and social participations were not affected by one factor, but rather numerous other factors that were not all related to the provision of ASL interpreting services. To achieve full and equal access may be almost next to impossible.

Implications for Practice

After the enactment of ADA, the enrollment of deaf students in mainstream colleges/universities increased, yet the attrition rate continued to be 75% (Stinson & Walter, 1997). The findings from this study offered some clues that may explain the problem. Deaf students who dropped out might have had interpreters who performed poorly, might have had an unsupportive OIS, or might have been overwhelmed by the amount of cultural and linguistic
incongruence. Experiencing these barriers can make it more challenging for them to succeed academically and socially, leading to early withdrawal from college.

The results of this study offer crucial information for higher education administration to mitigate the problem. Administrators need to understand several points. First, the provision of ASL interpreting services does not mean full and equal access. As a result, universities must closely monitor the quality of ASL interpreting services and cultural competency of the interpreters, the level of support provided by the OIS, and cultural or linguistic congruence in the academic and social systems within the institution. Second, when a Deaf student requests an ASL interpreter, the interpreter should be highly proficient in ASL and possess cultural competency. Both the literature and this study reveal that Deaf students received interpreters with various language and communication backgrounds (i.e. ASL, Pidgin Signed English, and other sign systems) and those who use ASL with different levels of proficiency. Third, the OIS may be knowledgeable about ADA, but that does not mean it understands what Deaf students need. This study indicates that the OIS was less receptive and respectful to deaf students when the students raised a concern or made a request for a replacement.

To correct the problem, several recommendations are available for higher education administration. First, the OIS needs to establish a system to screen all interpreters’ ASL skills to ensure a high level of ASL proficiency. They should consider a requirement for all interpreters to complete an American Sign Language Proficiency Interview (ASLPI) if they have not done so. ASLPI is “a holistic language evaluation used to determine global ASL proficiency” (Gallaudet University, 2014). After the completion of ASLPI, one will receive a rating between 0 and 5. The higher one gets, the more proficient s/he is. The rating is what helps OIS determine whether one’s proficiency is appropriate for college-level academic activities. In addition to
ASLPI, OIS should involve a Deaf person in the screening process and the person must be a native ASL user and has experience working with ASL interpreters in mainstream college environments. The Deaf person’s observation and input will help ensure that OIS has interpreters who are highly proficient in ASL.

Second, the OIS needs to change its approach to Deaf people and their requests. In this study, all five participants raised a similar concern that the OIS was not receptive and supportive when they needed an interpreter or a replacement. The OIS needs to recognize Deaf students as experts when it comes to interpreting services because they are the ones who work with ASL interpreters during their academic and social interactions. They can instantly recognize the quality of work produced by their ASL interpreters. Whenever a Deaf student raises a concern or makes a request, the OIS needs to be more responsive and encouraging.

Third, the OIS should evaluate ASL interpreters at the end of every semester. The evaluation can take place when the OIS asks Deaf students for feedback regarding ASL interpreters. After collecting the feedback, the OIS should meet with ASL interpreters to discuss their strengths and areas of improvement. This evaluation will help the OIS with quality control.

Fourth, all formal social events should arrange and provide ASL interpreting services even before requests are submitted. Formal social events refer to college-sponsored lectures, workshops, performances, student meetings, and fraternities or sororities. In this study, several participants struggled to participate in social activities because their OIS could not provide an interpreter due to budget constraints or last-minute requests. Also, some social events were organized at the last minute, which made it difficult for the OIS to find interpreters. Instead of tasking Deaf students with the responsibility to make a request, all social events should automatically provide ASL interpreting services, with the costs built into their budgets.
**Implications for Future Research**

This study’s findings have created opportunities for future research to build a deeper understanding of Deaf students’ academic and social experiences. Most recommendations are related to methodology. The first recommendation is a quantitative study to explore whether the themes identified in this study are similar to that of the larger population of Deaf students. This study used a qualitative method and interviewed five participants, so the results cannot generate a sweeping statement about the experiences of Deaf students as a whole.

The second recommendation is a new study focusing on Deaf students’ social experiences. This study’s results elicited more data on the participants’ academic experience than their social experience. The participants’ narratives offer important data on their social experience and they support the results of other studies. However, the researcher believes a further study could pay full attention to social participation. The researcher also recommends that a new study includes criteria for participants who have a considerable amount of social interaction with hearing peers. This specific requirement would elicit rich data on what facilitates and hinders Deaf students from participating in social activities and what could be done to enhance their social participation.

This study sampled five participants who successfully graduated despite their experiences with various obstacles. A new study should sample Deaf students who departed without a degree, but with specific criteria. It is suggested that those students have completed at least four consecutive semesters and their reason(s) for departure must be related to their experiences with obstacles during their academic/social interactions. This criteria makes it possible for the study to elicit rich data on their experience with a particular phenomenon, working with ASL interpreters during their academic and social interactions.
This study finds that professionalism, interactions with OIS, CODA, and the notion of disempowerment are rarely addressed in the academic literature. New studies are needed to further examine the effect of these factors on Deaf students’ academic and social interactions. A new study on professionalism should explore how often an interpreter’s unprofessional conduct occurs during his/her interpreting work, why it happens, and how a deaf student deals with it. Also, this study should survey interpreters who are willing and unwilling to engage in side conversations and inquire about their reasons. As for interactions with OIS, a new study should investigate the perspective of OIS and its coordinators on how they best support deaf students and their needs and explore the perspective of higher education administrators on the role of OIS in deaf students’ academic and social interactions. In respect to disempowerment, it is recommended that a new study interviews Deaf students to identify what phenomena that leads to disempowerment, how disempowerment affects them, and how they deal with disempowerment. Lastly, a study should take place of CODA to explore the lived experiences of Deaf college students with CODA interpreters and how they are different from non-CODA interpreters. These new studies are necessary to expand the literature in order to gain a better understanding of what role each factor plays in Deaf students’ academic and social participations.

Limitations

Although this study offers valuable data, it has several limitations. First, this study’s five participants are not sufficient to make a general statement about the whole population of deaf students. Second, this study primarily focused on the impact of ASL interpreters on deaf students’ experiences. This study chose not to include other support services such as note taking, CART, and tutoring services. Third, this study did not examine closely the impact of the
participants’ pre-entry attributes such as prior educational experience, family background, skills, and abilities.

**Conclusion**

This study took place in response to the problem that 75% of deaf students drop out of college despite having access and support services (Stinson & Walter, 1997). The problem is significant because those deaf students who dropped out suffered economically, struggled to obtain a job, earned less than their hearing counterparts, and turned to the government for financial assistance such as supplemental security income. The researcher chose Tinto’s theory as a theoretical lens to examine the process of academic and social interactions deaf students had with their hearing peers, teachers, and other members of the institution. In this case, deaf students used ASL interpreting services for their academic and social participation.

The literature does have studies with relevant findings that address the problem. However, there are several gaps. First, most studies were conducted at NTID/RIT. There are a few studies sampling deaf students who attended a mainstream program with small populations of deaf students. Second, no study sampled a single group of deaf students who shared a similar communication mode or preference; that is, ASL. When these studies used the term “sign language,” it was unclear if they were referring to ASL or other sign systems such as Signed Exact English and Pidgin Signed English. Also, all studies did not sample a single group of deaf students who shared a similar identity such as Deaf, deaf, or even had no identity. Third, some studies identified sign language interpreters as a barrier that affected deaf students’ academic interactions; however, they did not explain how or why sign language interpreters could be obstacles. These gaps led the researcher to create a study on how ASL-using deaf students experience academic and social interactions in mainstream settings.
The researcher created two research questions to guide this study:

1. How do Deaf students working with ASL interpreters experience academic participation in mainstream college settings?

2. How do Deaf students working with ASL interpreters experience social participation in mainstream college settings?

These questions sought an understanding of how a particular phenomenon shapes Deaf students’ experiences. Deaf students participate in all academic and social interactions working with ASL interpreters within a mainstream institution where the majority of students speak English. The researcher designed a qualitative study and used IPA for this study, which allowed an in-depth understanding of Deaf students’ lived experiences and the meanings the particular phenomenon held for them. Five participants were recruited who were profoundly deaf, self-identified as being culturally deaf, used ASL as their primary language; and attended a mainstream college or university where 10 or fewer students were enrolled.

After the interviews, three themes were identified concerning academic participation and two themes concerning social participation. In the context of academic participation, the themes were ASL interpreters, the Office of Interpreting Services (OIS), and classroom environment and dynamics. ASL interpreters had two sub themes: ASL and cultural competencies and Professionalism. In the context of social participation, the themes were cultural and linguistic congruence and availability of ASL interpreters. The results clearly showed that deaf students experienced obstacles during their academic and social interactions.

This study has some parallels with several other studies in the literature. The competency and professionalism of ASL interpreters were obstacles that Deaf students encountered during their academic and social participation. Cultural and linguistic conflicts also played a part.
Chapter 2 identified how studies did not elaborate that sign language interpreting was a problem. This study’s findings offer rich data on the problems associated with sign language interpreting.

In the context of Tinto’s theory, this study shows that the participants encountered barriers during their academic and social interactions. The barriers were not about incongruence between the participants’ academic skills and abilities and their institutions’ academic demands. Rather, they were about their institutions’ failure to provide support, quality assurance, and sensitivity to cultural and linguistic differences. Even though all five participants in this study persisted until they graduated, their experiences with obstacles could help explain how other deaf students obtained negative institutional experiences and struggled to integrate into the college community.

Last, this study’s findings created answers for the research questions. The participants struggled when they participated academically and socially because they dealt with various obstacles. They had to deal with interpreters whose ASL competency was weak and/or whose professionalism was lacking or overly strict. They coped with OIS’ lack of support, lack of understanding, and poor attitudes/treatment. They endured cultural and linguistic differences/conflicts that were not mediated. These experiences provide important clues that help understand what causes the problem of practice as to why 75% of deaf students departed (Stinson & Walter, 1997).

References


English, K. M. (1993). *The role of support services in the integration and retention of college students who are hearing impaired* (Doctoral dissertation). Claremont Graduate University, Claremont, CA, and San Diego State University, San Diego, CA.


Walter, G. G. and DeCaro, J. J. (1986). Attrition among hearing-impaired college students in the U.S. (Author.)

Appendix A

Tinto’s Model
Appendix B

Northeastern University IRB Approval

NOTIFICATION OF IRB ACTION

Date: April 9, 2014  IRB #: CPS14-03-23
Principal Investigator(s): Ronald Brown
                       John Pirone
Department: Doctor of Education Program
            College of Professional Studies
Address: 20 Belvidere
        Northeastern University
Title of Project: Deaf Students Who Use American Sign Language and
                 Their Academic and Social Experiences in Mainstream
                 College Settings
Participating Sites: N/A
DHHS Review Category: Expedited #6, #7
Informed Consents: One (1) signed consent form
Monitoring Interval: 12 months

APPROVAL EXPIRATION DATE: APRIL 8, 2015

Investigator's Responsibilities:
1. The informed consent form bearing the IRB approval stamp must be used when
   recruiting participants into the study.
2. The investigator must notify IRB immediately of unexpected adverse reactions, or new
   information that may alter our perception of the benefit-risk ratio.
3. Study procedures and files are subject to audit any time.
4. Any modifications of the protocol or the informed consent as the study progresses must
   be reviewed and approved by this committee prior to being instituted.
5. Continuing Review Approval for the proposal should be requested at least one month
   prior to the expiration date above.
6. This approval applies to the protection of human subjects only. It does not apply to any
   other university approvals that may be necessary.

C. Randall Colvin, Ph.D., Chair
Northeastern University Institutional Review Board

Nan C. Regina, Director
Human Subject Research Protection

Northeastern University FWA #4630
Appendix C

Participant Recruitment Email

To Interested Participants:

My name is John Pirone and I am a doctoral student in the Doctor of Education program at Northeastern University. I would like to invite you to take part in my doctoral study. The purpose of the study is to gain insights into your college experience as a Deaf student working with American Sign Language (ASL) interpreters for your academic and social interactions in mainstream settings. I am inviting you because I am looking for someone like you who is profoundly deaf, self-identifies as being culturally Deaf, uses ASL as a first language, worked with ASL interpreters primarily for all academic and social interactions, attended a mainstream college/university where 10 or fewer deaf students were enrolled, and graduated with a Bachelor’s degree within the past 15 years.

If you fit the criteria and are interested, you will be asked to participate in two separate interviews. The first interview will be one hour and 30 minutes long and the second interview will be 45 minutes long. The second interview will be conducted approximately two weeks after the first interview. The first interview focuses on your life background and your lived experience as a Deaf college student and the second interview focuses on meanings your experience holds for you. All interviews will be videotaped with your permission.

The decision to participate in this study is up to you. You do not have to participate if you do not want to.

If you agree to participate, you may e-mail me at pirone.j@husky.neu.edu or call me at 617-994-5335 (VP). Thank you for your consideration to participate in this study.

Sincerely,

John Pirone

Note: John Pirone is profoundly deaf, self-identifies as being culturally Deaf, and ASL is his first language.
Appendix D

Unsigned Participant Consent Document – Northeastern University

Northeastern University: Doctor of Education Program
Principal Investigator: Dr. Ron Brown, Student Researcher: John Pirone
Deaf Students Who Use American Sign Language and Their Academic and Social Experiences In Mainstream College Settings.

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

We are inviting you to take part in a research study. This form will tell you about the study, but the researcher will explain it to you first. You may ask the researcher any questions you have. When you are ready to make a decision, you may tell the researcher if you want to participate or not. You do not have to participate if you do not want to. If you decide to participate, the research will ask you to sign this statement and will give you a copy to keep.

**Why am I being asked to take part in this research study?**

We are asking you to be in this study because you:

1. Are profoundly deaf;
2. Use American Sign Language as a first language;
3. Self-identify as being culturally Deaf;
4. Worked with American Sign Language interpreters primarily for all academic and social interactions;
5. Attended a mainstream college/university where 10 or fewer deaf students were enrolled;
6. Graduated with a Bachelor’s Degree within the past 15 years.

**Why is this research study being done?**

The purpose of this research is to gain insights into your college experience as a Deaf student working with American Sign Language interpreters for all academic and social interactions in mainstream settings.

**What will I be asked to do?**

If you decide to take part in this study, we ask you to participate in two separate interviews and answer questions about your lived experience as a college student. The first interview focuses on your life background and experience as a Deaf student. The second interview seeks to understand what meanings your experience holds for you.

**Where will this take place and how much of my time will it take?**

You will be interviewed at a time and place that is convenient for you. The first interview will take 1 hour and 30 minutes and the second interview will be 45 minutes long.

**Will there be any risks or discomfort to me?**

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

**Will I benefit by being in this research?**

There will be no direct benefit to you for taking part in the study. However, your answers may help us to learn more about colleges/universities’ retention/engagement efforts for Deaf students.

**Who will see this information about me?**

Northeastern University - Human Subject Research Protection
Rev. 09/2013
Your identity as a participant in this study will not be shared with anyone.

Your identity will be masked immediately when the researcher starts to transcribe the interview. The researcher will be the only person who has access to the data. Your contact information sheet, informed consent form, and videotape will be stored in a secured place to guard against your identity being revealed.

The video data collected from this study will be stored on the researcher’s password-protected personal computer. The video data will be destroyed when the data analysis is complete. The reason why the video data needs to be retained during the data analysis is that the researcher needs to verify that his translation from American Sign Language to English is accurate by checking the video data.

**What will happen if I suffer any harm from this research?**

The interview will be suspended immediately and you may inform the researcher that you do not want to continue your participation anymore.

**Can I stop my participation in this study?**

Your participation in this research is completely voluntary. You do not have to participate if you do not want to. Even if you begin the study, you may withdraw at any time. You do not participate or if you decide to withdraw, you will not lose any rights, benefits, or services that you would otherwise have received.

**Who can I contact if I have questions or problems?**

Please feel free to call John Pirone at 617-934-5335 (VP) or e-mail at pirone.j@husky.neu.edu. John Pirone is mainly responsible for the research. You can also contact the Principal Investigator Dr. Ron Brown at 617-435-8166 or ron.brown1@neu.edu.

**Who can I contact about my rights as a participant?**

If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, 960 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: n.regina@neu.edu. You may call anonymously if you wish.

**Will I be paid for my participation?**

There will be no payment.

**Will it cost me anything to participate?**

You may pay for your transportation and parking.

**Is there anything else I need to know?**

You must be at least 18 years old to participate.

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**APPROVED**

NURS 05-09-13
Valid 04-14-13

Northeastern University - Human Subject Research Protection
Rev. 02/2013
I agree to take part in this research.

Signature of person agreeing to take part  Date

Printed name of person above

Signature of person who explained the study to the participant above and obtained consent  Date

Printed name of person above
Appendix E

First Interview Protocol

The First Interview Protocol Form

Interview Protocol

Institution: _____________________________________________________

Interviewee (Title and Name): ______________________________________

Interviewer: _____________________________________________________

Date: _____________________________________

Location of Interview: ____________________________________

INTRODUCTION

Introductory Protocol

You have been selected for this interview today because you have been identified as someone who has a great deal to share about the experience of being a Deaf college student in a mainstream college/university where 10 or fewer deaf students were enrolled. This research project focuses on the lived experience of Deaf college students with a particular interest in understanding how they experience academic and social participation through American Sign Language interpreters. Through this study, I hope to gain more insights into the lived experiences of Deaf college students and what meanings their experiences hold for them. Hopefully this will allow me to identify ways in which I can better support Deaf students during their academic and social participations.

This interview is the first of the two interviews. The first interview focuses on your life background and your lived experience as a Deaf college student working with ASL interpreters in mainstream settings. The second interview will focus on meanings that your lived experience holds for you. The second interview will be conducted approximately two weeks after the first interview. The two-week period allows me to review your account of your life background and lived experience in order to build a deeper understanding and to develop follow-up questions for the second interview.

The first interview will be one hour and 30 minutes long and the second interview will be 45 minutes long.

After two interviews, I will review both videotapes and highlight all key statements for possible analysis. Those highlighted statements will then be shared with you for verification of accuracy through e-mail, videophone, or in person. Once the analysis is completed, I will meet with you again in person or through videophone and discuss the findings in order to ensure that the findings accurately reflect your experience and meanings.
Because your responses are important and I want to make sure to capture everything you say, I would like to video tape our conversation today. I can assure you that all responses will be confidential and only a pseudonym will be used when quoting from the transcripts. The videotapes will be transcribed. I will be the only one privy to the tapes which will be eventually destroyed after the data analysis is complete.

To meet our human subjects requirements at the university, you must sign the form I have with me (provide the form). Essentially, this document states that: (1) all information will be held confidential, (2) your participation is voluntary and you may stop at any time if you feel uncomfortable, and (3) I do not intend to inflict any harm (allow time to review form).

Do you have any questions about the interview process or this form? I have a consent form related to this as well (provide form).

1. Life Background

   1. Can you tell me about yourself?
   2. Can you tell me about your family?
   3. Can you tell me about your experience with K-12 education?
   4. Can you tell me about your first experience with sign language interpreters?
   5. Can you describe a decision that influenced you to attend a mainstream college/university where 10 or fewer deaf students were enrolled?
   6. Can you tell me about your goals/expectations you established before you attended a mainstream college/university?

2. The Details of the Lived Experience

   1. Can you tell me what it was like to be a Deaf student in a mainstream college/university where 10 or fewer students were enrolled?
      Possible Prompt: How did you feel about that?
   2. Can you tell me about your experience with sign language interpreters provided by the college?
      Possible prompt: Did sign language interpreters use ASL or sign systems?
      Possible probe: How did you recognize one’s language use or sign systems and language fluency?
      Possible prompt: What did you do when they used sign systems or were not fluent in ASL?
      Possible prompt: How did your college respond to your requests?
   3. In academic settings, can you tell me about how your interpreters facilitated your academic participation?
   4. In academic settings, can you tell me about how your interpreters hindered your academic participation?
      Possible prompt: How did you cope with the obstacle?
   5. In social settings, can you tell me about how your interpreters facilitated your social participation?
   6. In social settings, can you tell me about how your interpreters hindered your social participation?
      Possible prompt: How did you cope with the obstacle?
   7. Can you tell me about how you reached an important point where you felt an integral part of the college community?
   8. Have you ever thought about withdrawing from college?
      Possible prompt: What led to you to the thought?
Appendix F

Second Interview Protocol

The Second Interview Protocol Form

Interview Protocol

Institution: _____________________________________________________

Interviewee (Title and Name): ______________________________________

Interviewer: _____________________________________________________

Date: _____________________________________

Location of Interview: ____________________________________

INTRODUCTION

This is the second interview and it focuses on meanings that your lived experience holds for you. This interview will take 45 minutes.

Because your responses are important and I want to make sure to capture everything you say, I would like to video tape our conversation today. I can assure you that all responses will be confidential and only a pseudonym will be used when quoting from the transcripts. The videotapes will be transcribed. I will be the only one privy to the tapes which will be eventually destroyed after the data analysis is complete.

To meet our human subjects requirements at the university, you must sign the form I have with me (provide the form). Essentially, this document states that: (1) all information will be held confidential, (2) your participation is voluntary and you may stop at any time if you feel uncomfortable, and (3) I do not intend to inflict any harm (allow time to review form).

Do you have any questions about the interview process, this form, or the first interview we had?

1. Meanings

1. Given what you have said about your experience with ASL interpreters, how does ASL interpreting help integrate Deaf students like yourself into the college community?

2. Given what you have said about your experience with ASL interpreters, how does ASL interpreting potentially hinder Deaf students from integrating into the college community?

3. From your experience, what could have done better in order to best facilitate Deaf students’ academic and social participations?