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Habitus of Deafhood: Compiling a Corpus-Based Academic ASL Dictionary Using the Sociolinguistic Practices of Deaf Individuals

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HABITUS OF DEAFHOOD: COMPILING A CORPUS-BASED ACADEMIC ASL DICTIONARY USING THE SOCIOLINGUISTIC PRACTICES OF DEAF INDIVIDUALS

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The creation of an academic American Sign Language (ASL) dictionary to inform signers of ways to approach an academic style of written English is an important tool to help deaf students enter into the First-Year Composition (FYC) community within postsecondary education programs and institutions.

While the Deaf community is in need of a dictionary specifically for its ASL users, the difficulty of compiling a dictionary in ASL is challenging because large corpora of written texts in ASL do not exist and copious recordings of conversations are not feasible. As a proficient user of ASL, I have noticed that students use signs in a conceptual way. While they fully understand the concept of each sign, they often only have one English word to use for translation. Using available English dictionaries and creating a corpus, I have compiled a dictionary to assist Deaf students and their teachers in developing vocabulary, extending usage, and enhancing style.

The dictionary provides Deaf students with a tool to improve their academic writing and build their self-esteem. Additionally, the dictionary will help Deaf students to participate more fully in the FYC milieu, which will bring about an awareness of Deaf culture and improvements in writing pedagogy. The Academic ASL Dictionary is designed for an already competent user of ASL. While other sign language dictionaries have been compiled for translation purposes only, the creation of a dictionary for ASL users is valuable to the field of composition because it

will not only teach students the deeper and more academic meaning of words and signs but also provide them with specific phrasing to use while composing papers.

ACKNOWLEDGEMENTS

I could write pages here to acknowledge every person that helped me through this journey, but only one sentence to thank the person who has been with me every step of the way.

Thank you, Kenny.

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DEFINITION OF ACRONYMS

AAD=Academic ASL Dictionary coalesces the habitus, the unique composing practices of Deaf English Language Learners, and their cultural experience in Deafhood into a selection of corpus-driven entries for a dictionary.

ASL=American Sign Language is the predominant language of Deaf individuals in the United States. ASL has several descriptors including L1, primary language, and heritage language. Additionally, the phrase "ASL users" generally refers to Deaf people; however, in some cases, it encompasses hearing people as well.

Bi-Bi=Bicultural-Bilingual is an educational approach that separates English and mainstream cultural practices from ASL and Deaf cultural practices. In praxis, teachers teach English only in the print mode that is through reading and writing, while ASL is taught through reception and production. A central tenant of this approach embraces the pride of the Deaf culture and the hearing mainstream.

CoP=Community of Practice is formed by a group of like-minded individuals who come together to communicate in a shared language, or style of language, and to work toward a common goal. There are many types of CoPs such as religious or sporting groups, different ethnicities, or educational groups.

CODA=Child of a Deaf Adult is a term that refers only to hearing children born to, adopted by, or raised by Deaf adults.

COCA=Corpus of Contemporary American English. The COCA is several corpora collected and maintained by Mark Davies at Brigham Young University in Utah.

DSL=Dominant Spoken Language refers to the most common language spoken in the same regional areas where Deaf individuals live, work, and go to school.

DoD=Deaf-of-Deaf refers only to Deaf children born to, adopted by, or raised by Deaf individuals.

DoH=Deaf-of-Hearing refers only to Deaf children born to, adopted by, or raised by hearing individuals.

DWC=Deaf Writers Corpus is the corpus that I compiled from the academic writings of Deaf authors to complete my lexicographical analysis.

ELL=English Language Learner is an individual, regardless of age or background, who is attempting to learn English in addition to their primary language or languages.

FYC=First-Year Composition is a term that indicates students enrolled in basic writing, first or second-semester composition, or any other entry level composition courses that universities in the United States offer.

GDEX=A good dictionary example is a snippet of authentic text found in corpora, usually by a computer program or lexicographer.

HoH=Hard-of-Hearing is a term that refers to a person who has some ability to hear or speak or both. The individual may or may not use ASL as a primary means of communication. Additionally, some HoH people belong to the Deaf community of practice.

L1/L2=L1 indicates a person's first language, and L2 indicates a person's second language. Since many Deaf children do not learn either language before they enter school, the term primary language is also used in this dissertation.

MCE=Manually Coded English is not a complete language. It is a system that uses some ASL signs and structure to produce English manually.

SEE=Signing Exact English, also not a language, uses no ASL sign and its structure is totally English based.

SWE=Standard Written English is the form of written English that is generally accepted and promoted by most high school and university composition programs in the United States.

VL2=Visual Language and Visual Learning is the concept that promotes using the visual properties of language and learning to teach Deaf students.

WPA OS=Writing Program Administration Outcome Statement outlines the writing objectives that students in first-year composition courses should learn.

CHAPTER ONE

INTERSECTIONS

Even though we have over seven billion people on the planet, our world is shrinking every day. By shrinking, I mean that continuing advancements in technology have fostered the spread of diversity into the smallest of communities. One place that harbors such diversity is first-year composition (FYC) classrooms in US post-secondary colleges and universities. The classroom is the place where individuals learn about, and often struggle with, cultural plurality. The diverse milieu of FYC classrooms calls for educators and students from a variety of communities to search for strategies to understand the differences in individuals without trying to flatten diversity into presupposed definitions. The "flattening effect," as defined by Jonathan Alexander and Jacqueline Rhodes, occurs when, "Multicultural pedagogies frequently rely on narratives of inclusion, which often seek to contain difference in order to make it legible, identifiable, and thus acceptable to normative readership. In the process, the 'other' is tamed as a knowable entity" (431).

One such group that grapples with the prospect of being flattened into the constraints of mainstream society is the Deaf[1] community. Deaf students use a variety of strategies when interpreting their primary language of American Sign Language (ASL) into a prescriptive style

[1] The use of the capital "D" in my dissertation indicates individuals who are either born Deaf or became Deaf during childhood and use ASL as their primary language; they "perceive their experience as essentially akin to other language minorities" (Ladd xvii). Additionally, the capital "D" encompasses Deafhood, a term coined by Paddy Ladd to replace the word "deafness." Deafhood does not embody the audiological condition of a hearing ability, as represented by the lower case "d," but, instead, represents the process of entering and maintaining membership in the Deaf community (3). Many members of the Deaf community view their existence in the world as a gain, not a loss. Arron Williamson's term, Deaf Gain, forwards the idea of being Deaf as a positive influence on the perspectives and beliefs of Deaf individuals interacting in their environment (qtd. in Bauman and Murray, "Reframing" 3). Terms such as "hearing impairment," "hearing loss," and "deafness" are government and medical labels used to define individuals with pathological conditions. Therefore, I use the phrase "hearing ability" to avoid the negative connotations of "loss" and "impairment." Additionally, I use the word "Deaf" to refer to those individuals as part of Deafhood, and the lower case "deaf" is used to denote all other individuals with a variety of hearing abilities.

of writing that is the preferred standard in most high school and college classrooms, called Standard Written English (SWE). Peter Elbow claims that SWE is a hybrid of several languages and does not correspond to any form of written language, only spoken (135). He adds that "standard" is "a word that does harm in our culture by silently implying that other varieties of English are inferior or bad or lacking–substandard or 'vulgar'" (214). While linguists consider ASL to be a formal language with rules that are independent of English, many members of the general population mistakenly view it as a variety of English.

As in any group that is othered, the pressure to fit the standard usage profile of English speakers has harmed the Deaf community[2] Not fitting cleanly into the second-language learner category and misconceptions about their cognitive abilities, have led speakers of English to define the Deaf community only as a disability group, not as a minority group. For members of the Deaf community, their language is paramount to their identity. Although many educational institutions recognize ASL as a *foreign* language, an often-overlooked cultural issue is the native development of ASL. Unlike other foreign languages, ASL developed in the same geographical spaces where English was the dominant spoken language, so some of its properties mirror those of English. It is common knowledge among ASL users that the language differs somewhat from the linear structure of English, ASL has a unique multi-layered, multi-dimensional aspect that cannot be easily translated into a written format. However, many properties of ASL convey a strong connection to English causing many people think of the language as a version of "English using the hands" and, therefore, easy to produce in a written format. The impact of this

[2] Most of the Deaf individuals that I have encountered do not view themselves as disabled. They identify themselves as part of a community with their own language, traditions, stories, and history. Many of my Deaf colleagues and friends say that "Deaf people can do anything except hear." With these perspectives in mind, I have decided to place a cultural perspective on the Deaf community rather than a disability standpoint.

correlation causes educators to believe that Deaf students follow the typical progressions of second language (L2) learners, which is not always the circumstance.

Adopting the term visual language learners (VL2) is a better way to categorize Deaf students who are learning the English language. VL2 is a concept that separates the visual modes of English, reading and writing, to assist educators and researchers in understanding the theory that many Deaf students only learn the visual modes of English not the speaking or listening modes. Currently, Gallaudet University houses a VL2 laboratory that seeks "to determine the effects of visual processes, visual language, and social experience on the development of cognition, language, reading and literacy for the benefit of all humans," with a specific "point of studying deaf individuals and sign language as a window into the flexibility and structure of the human mind" ("VL2"). Because the composition patterns of Deaf students reflect the structure of ASL, many educators and researchers focus on the cognitive abilities of Deaf students, instead of the visual properties of language and learning. For Deaf student-writers, the difference between the visual perspective of their primary language (ASL) and the visual perspective of the target language (only the reading and written modalities of English), can be expressed by the term "bilingual," rather than L2 learners. Bilingual, according to one of the principal investigators on the VL2 project, is a term attributed to "those individuals with dual language exposure, dual language education (in language, reading, social studies, etc.) and, crucially, dual language maintenance over the life span" (Petitto 188). Educators who realize the potential gain that Deaf individuals can contribute to the classroom and society often focus on the bilingual patterns. However, practices are often limited to multicultural pedagogies that merely include cultural pluralities by attempting to define and categorize students. The complex linguistic identities of Deaf writers are not so easily understood.

Part of their struggle occurs because Deaf children do not process the visual modalities of English language in the same way their hearing peers do. For example, when hearing children begin to recognize environmental print, such as the popular store name Wal-Mart, they have heard the word associated with that visual representation, so they can add that spoken English word to their lexicon. Deaf children, although they see environmental print, do not receive auditory reinforcement of the words in print. Additionally, most Deaf children are born to hearing parents (Mitchell and Karchmer 142), who, unfortunately, do not learn ASL with a level of proficiency to model the language at appropriate developmental stages, such as learning environmental print. Therefore, Deaf children do not acquire vocabulary from environmental print in English or ASL.

Not processing environmental print and having parents who are not proficient in ASL or use Home Signs, signs invented at home with the immediate family for ease of communication, are factors that cause a delay in learning either English or ASL. Consequently, Deaf children acquire proficiency in any language much later than their hearing peers do (Mitchell and Karchmer 139). For many Deaf-of-Hearing (DoH) children, their first exposure to ASL occurs either through an interpreter in the public school setting or attendance at a school for the Deaf. While many DoH children experience some delays in language development, Deaf-of-Deaf (DoD) children can achieve success with language development earlier in life. DoH and DoD children demonstrate the diversity of Deaf children ranging from early linguistic development to delayed language development due to little or no use of linguistic structures. By the time they reach adulthood, members of the Deaf community have experienced a variety of linguistic interactions and have diverse perceptions of language. These interactions and perceptions are internalized and transferred to other venues in their lives. Interacting within one's social

environment and transferring ideas from one arena to another is what makes up, in part, the *habitus.*

Pierre Bourdieu defines habitus as a "set of *dispositions* which incline agents to act and react in certain ways" (Thompson qtd. Bourdieu 12). In his discussion of habitus, Bourdieu argues that while agents have the capability to "generate an infinite number of grammatically correct discourses," individuals also "impose [upon] themselves . . . a system of specific sanctions and censorships" (Bourdieu 37). He explains that censorship is a way of reacting with appropriate responses in a variety of fields. "Symbolic interactions," based on prestige and honor, that occur within these fields give individual speakers linguistic power (Bourdieu 37). Linguistic symbolic power is based on an individual's ability to filter through the infinite number of grammatically correct responses and choose one that accommodates the situation. Bourdieu comments, "One cannot understand the symbolic effects of language without making allowance for the fact, frequently attested, that language is the exemplary formal mechanism whose generative capacities are without limits. There is nothing that cannot be said and it is possible to say nothing" (sic; 41). For Deaf individuals, the relationship among agents or individuals, the fields of social and cultural exchange, and their habitus is a complex one that researcher, Paddy Ladd, connects clearly to Bourdieu's theories.

In his discussion of habitus, Ladd promotes Bourdieu's approach regarding the interaction of agents, fields, and the range of dispositions that are formed over a lifetime. Furthermore, he describes fields "as relatively autonomous spheres of play with their own values, rules, and centres [sic] of gravity, where each contains *social and cultural capital* which reflects and is reflected by the social power and prestige of each field" (220). Cultural capital is an individual's knowledge and skills that are acquired through education, either technical or

academic, and symbolic capital is derived from one's prestige, fame, or some other type of honor (Bourdieu 14). Developing a wide array of strategies about when and where to exchange cultural capital is the crux of one's habitus. Rather than passively interacting in society, individuals express their values, motivations, and mind sets to manifest a 'range of dispositions' that either constrain or permit an individual to exchange cultural capital. "One is disposed towards beliefs and behaviour [sic], but there may be numerous possibilities within that disposition" (Ladd 220). Thus, it is the set of dispositions that teach individuals the rules of engagement in society. The relationship among themselves, fields, and habitus is markedly different for Deaf individuals as compared to hearing individuals. While both groups exist alongside each other, their sociolinguistic interactions create different conceptual frameworks for understanding language and communication.

Ladd acknowledges that "Bourdieu's conceptual framework offers a means by which to explore . . . issues, suggesting that the range of Deaf individual and collective dispositions may offer an important explanatory mechanism" of Deaf culture and Deafhood (221). He explains that while many of the cultural practices of the Deaf community resemble the majority culture, their dispositions are different and need further examination (221). By extending Bourdieu's definition of habitus, one can further examine the similarities and differences of the Deaf culture and the majority culture. A central difference is the limited types of fields that members of the Deaf community can interact in to gain cultural capital. Deaf individuals have restricted access to spheres of play that only permit hearing agents. However, they are permitted into fields that do not permit hearing individuals. Because there is a continuum of hearing capability and there are many hearing individuals who work within the Deaf community, some of these agents can interact in selective fields that are otherwise closed to mainstream society. Ladd notes,

"traditional Deaf communities have to a degree developed separately from majority cultures via Deaf residential schools" (223). The development of Deaf culture at a residential school provides a sphere of play for agents to exchange capital in their primary language. Ladd argues that when Deaf children learn sign language as their first language, "their primary view of the world is then shaped by this lens" (223). Additionally, they gain social power and prestige within these selective fields that are otherwise denied to the majority culture.

An important feature of habitus is the variety of fields that agents can interact in and transfer information from one field to another. For Ladd, like many other Deaf individuals, he was born to a hearing family and placed in mainstream education. While interacting in the hearing sphere, he felt isolated from his Deaf peers. He writes, "Having grown up in isolation from other Deaf people, I found it an immense challenge to confront and shed aspects of my personal oralist conditioning, even as I intellectually rejected its *raison d'être*" (277; emphasis added). Overcoming his challenges, Ladd continued to interact in a variety of fields, including social work and attending a university during the 'hippie' movement. He writes, "Thus my habitus has been formed not only by three sets of subaltern experience: Deaf, working class, and hippie, but also by many of the 'opposing' middle-class values embodied in the fields of grammar school and university education" (278-79). The development and maintenance of one's habitus are dependent upon contributions from society, family, and cultural practices, such as language choices, which create a sociocultural perspective that influences many facets of an individual's interactions within a community. Specifically, among Deaf individuals, visual learning experiences drives their sociocultural perspective and contributes to habitus.

Linguistic competition also plays a role in habitus development. A prevailing spoken language in a geographical region, which is the dominant spoken language (DSL), often causes

other languages or cultures to assimilate into the mainstream. Alternatively, the non-dominant language often appropriates the conventions of the DSL. Either way, the dominant language of a region plays a significant role in the development of non-dominant languages. The process of assimilation or appropriation of linguistic culture is, in part, the reason that Deaf students often mesh or switch the structures of English and ASL and engage in code-meshing, a term that I will discuss in further detail in Chapter Two. Because of the unique habitus and code-meshing environments of Deaf students, a word definitions based on the structure of ASL usage for Deaf writers would be a valuable tool to enhance writing by adopting an academic style often used in the college setting.

I have compiled a sample word list to demonstrate a way to assist Deaf writers in transitioning to a more academic style of writing in the university setting. Using corpus-based analysis, the process of collecting a body of work and examining individual word meanings within the collection, I provide data to compose a list of words with definitions to assist Deaf writers. The list I have compiled is a small section of the dictionary, which differs from the prevailing translation dictionaries that only explain how to produce the sign.

To conceptualize this study, focusing on my values, opinions, and beliefs is important because as I endeavor to unite the fields of Composition and Deaf Studies, I cannot ignore my own habitus and my own perspective on the sociocultural aspects of Deaf Studies. With my background knowledge, I posit these questions: What are my motivations for creating a dictionary? How can traditional lexicographical methods of corpus-based analysis be employed to create a sustainable dictionary? How can a collection of academic writings from Deaf authors impart authenticity to the dictionary? The answers to these questions lie within my geographical and philosophical position.

Geographical and Pedagogical Positionality

Little Rock, Arkansas, where I live and work, houses a sizable Deaf community because the state school for the Deaf is located there. Typically, wherever a state school for the Deaf is, other members of the Deaf community live and work in the same city. Therefore, cities or towns with state schools for the Deaf attract adult members of the community and create pockets of people for their members to interact with and share cultural practices.

As a teacher of writing to both Deaf high school English students and hearing FYC students, I see a need for multicultural pedagogical approaches that provide an empathetic consideration of the needs of students as writers. I also see the need to boost the motivations of Deaf students to write about their own struggles with language and education, and, more importantly, have their own language respected and honored in the classroom. In support of students' right to their own language, a position statement of College Composition and Communication states:

> Language scholars long ago denied that the myth of a standard American dialect has any validity. The claim that any one dialect is unacceptable amounts to an attempt of one social group to exert its dominance over another. Such a claim leads to false advice for speakers and writers, and immoral advice for humans. A nation proud of its diverse heritage and its cultural and racial variety will preserve its heritage of dialects. We affirm strongly that teachers must have the experiences and training that will enable them to respect diversity and uphold the right of students to their own language. ("Students' Right to Their Own Language")

Following the claim of CCC, and like Elbow, I try to avoid using the term "standard" because I respect students whose primary or first language is not English. All students have the right to use

their own languages as tools for learning. Whatever their cultural background, I try to create a "shift from teaching 'English,' the very idea of which implies the simply inaccurate supposition that there is only one 'real,' grammatically and syntactically organized variety of English" (M. Lee 3). Students learning English, and especially those in composition classes, should be encouraged, in a positive way, to speak or write, without imposing the ideologies of a "standard form." While I realize that at some point in their college coursework or careers, students should conform to the conventions of SWE, allowing some latitude in the structure of writing in those first composition courses can boost attitudes about writing and foster positive identities for student-writers.

Typically, speakers of other languages come from or can trace their origins to other countries or regions. Because the Deaf Community shares the same cultural space as those in the US, many individuals in the mainstream community misunderstand the strong connection Deaf people have with their language. I will discuss the connection between ASL and the Deaf community of practice (CoP) at length in Chapter Two. However, as a way of introducing the concept here, I will say that ASL is the most important attribute of the Deaf community of practice. Because the syntax of ASL so closely mirrors English, many hearing people often misunderstand the completeness of ASL and dismiss it as merely the English language produced using one's hands. The misunderstanding of ASL as a complete and legitimate language becomes more complicated when Deaf students write. Like other English Language Learners (ELLs), Deaf students struggle with many of the grammatical structures in English, such as using prepositions correctly and subject-verb agreement. However, unlike other ELLs, the visual properties of the language cause Deaf writers to construct sentences with broad to narrowing comments. While this broad to narrow syntax closely mirrors English word order, it often creates

uncommon sentence patterns and is rejected in a setting where writing is expected to be in an academic style. A common example of an uncommon sentence pattern that I have noticed occurs when ASL users attempt to write in past tense. Instead of writing, "The researchers studied the data," a Deaf student might write, "The researchers data was studying." Typically, the sentence patterns and grammatical structures of Deaf writers are dominated by the visual components of ASL. Simply put, many Deaf children, unlike other ELLs, never learn to speak English, so it is difficult for them to learn to write in English. Often the domination of the visual structure remains unresolved per SWE practices, and, therefore, teachers interpret Deaf students as having a delay in cognitive ability.

In many cases, cognitive abilities are a not the reason for struggles with SWE. First, some individuals are not aware of the syntactical differences in ASL and English. Second, unlike other ELLs, Deaf students do not have consistent and full sensory exposure to the L2. The dichotomous view of ASL versus English structures causes some tension between Deaf and hearing people. Unfortunately, ASL is not always considered a legitimate language and some people believe that learning English structure through sign language is the only way to learn English properly. Proponents of ASL believe that children should learn ASL as their primary language, then learn to translate into English. These opposing views lead to a lack of respect for languages. Critical pedagogy is a way to provide inclusivity and respect to all learners, regardless of language choices.

In *Pedagogy of the Oppressed*, Paulo Freire examines ways in which opposing groups can critically investigate their situations with mutual respect. He defines a pedagogy of the oppressed as "a pedagogy which must be forged *with*, not *for*, the oppressed" (48). He explains that his pedagogical theory, later termed critical pedagogy by Henry Giroux, is not based on a

predetermined set of rules (181) and continues to "be made and remade" (48). I have embraced wholeheartedly the concepts of avoiding pre-established rules for what "standard form" should look like in the composition classroom (for my college and high school Deaf students) to create a level of mutuality with my students. A common thread in the concepts of Freire, Elbow, and Giroux is the avoidance of the phrase "standard form" because critical pedagogy and mutuality allow students and teachers to understand that differences exist among us, and it is unnecessary to place all people into neat and clear categories. To forward these ideas, encouraging students to view themselves as writers in the composition classroom promotes authenticity and avoids attempts of "taming" them into knowable entities.

With that said, I follow the Writing Program Administrator Outcome Statement (WPA OS) ("Council") guidelines of what students should learn in the first two semesters of college writing. However, I try to discover ways to allow the students to understand that academic writing simply means good ideas clearly communicated. Also, I begin each semester by telling them I am more interested in them as *writers* than in the products they produce. Because I place a substantial focus on process-driven writing, I feel it is important for students to situate themselves rhetorically first. For most FYC students, a *process* of writing and situating oneself rhetorically are novel ideas, but for Deaf student-writers, there are additional components when learning about process-driven writing and rhetorical situations.

An important component of classroom learning is having an interpreter. The role of an ASL interpreter is to translate an instructor's words into signs. But, because ASL does not have passive voice, sometimes interpreters are not able to follow teachers' communication style and deny Deaf students teachable moments. For example, teachers frequently use a passive style of speaking to lead students into critical thinking situations, such as Socratic questioning, when the

teacher knows the answer but uses indirect phrasing to check students' understanding. While the linguistic structure of ASL relies heavily on rhetorical questions, it does not provide for passive voice. Therefore, interpreters must express teachers' comments in an active voice and use direct statements. To counteract the potential breakdown in communications, visual modeling is one method to show students the desired outcome. For example, when I ask students to share their own processes of writing, I also share my work to demonstrate my struggles and triumphs. My epistemological beliefs lie at the heart of critical pedagogy, which embraces the concept of modeling and mutuality.

Philosophical Assumptions

As a critical pedagogue, who ascribes to mutuality and practices modeling, I strive to avoid flattening any student into a knowable entity because I enjoy the novelty of each new semester and each new student. I do not use lecture notes from classes I have taught before. My only pre-planning before the semester consists of reading (or re-reading) the course textbooks or studying theoretical applications. I do not have a generic PowerPoint representation ready to go at the first meeting. I wait until I meet each new group of student-writers before I begin to develop lectures, PowerPoints, and other teaching materials. Instead of recycling previous material, every semester I develop new pedagogical insights and epistemologies within the symbiotic relationship that I establish with each new group.

Uniformity does not create unity among students, but, rather, diversity creates knowledge through mutual respect and avoidance of identity labels. The principle of critical pedagogy has shaped my axiological beliefs, which stems from many years of teaching with the egalitarian idea that if some groups in society—such as the Deaf Community—are oppressed, then we all suffer from lack of experiencing the richness of cultural plurality. We fall victim to the flattening

effect. Experience in the classroom has demonstrated to me that the values of my students are equally as important as any values I might embrace. I try to attain the greatest amount of mutuality with my students as possible; I want them to be a viable part of their own education. As a teacher-scholar, I consider myself pragmatic about researching problems and finding solutions that work in a variety of situations. Students should be allowed to struggle for authenticity and individuality to create new perspectives on society, rather than merely accepting traditional societal paradigms. Diversity in the classroom is like a crystal with the shards reflecting light in every direction for a plethora of unique perspectives.

An example of one unique perspective is the visuospatial aspect of ASL, which allows Deaf individuals to interpret their environs from a visual perspective with little or no input from the auditory sense. To study a variety of perspectives, a pragmatic paradigm allows me as a teacher and researcher to look at the shards of reflecting light, see new perspectives, then discover what works, what is practical, and what can be used as a tool during fieldwork (Creswell 37). Building on this ontological perspective, I have developed an epistemological stance that places importance on background knowledge. Students enter classrooms with their own background knowledge based on their previous learning experiences. Knowledge is built upon existing knowledge. When examining phenomena, I see myself unrestricted as a researcher, free to study what I am interested in, as long as others can see the positive consequences of my research (Tashakkori and Teddlie 30). Building upon previous knowledge to bring about positive consequences helps Deaf students recognize connections between their individual language struggles and community experiences in the social contexts in which they are embedded.

An important transition in the life of many students is the transfer from high school to college. In thinking about ways to help Deaf students bridge the gap between the Common Core

Standards and the WPA OS, I find myself in both worlds—high school English for Deaf students and college composition—trying to overlay each field onto a lens that will land its focus on the students. Awareness of Deaf culture and language is an important first step for any teacher who wants to reduce the flattening effect. However, to strengthen the identity of Deaf students as writers, there are some myths of their culture that need to be dispelled.

Myths of Deaf Culture

Teaching provides me direct access to many spheres of play–Deaf, hearing, secondary and post-secondary education–so I often hear or overhear comments about Deaf culture that reveal misunderstandings about their practices and beliefs. "Members of Deaf culture . . . view themselves as a minority group that has been misunderstood, even oppressed, by the dominant culture" (Tong 213). Many preconceived notions about Deaf culture center on characterizations of their cognitive abilities, sociocultural practices, lifestyles, and the values of their habitus. These characterizations often represent the Deaf community with a negative perspective on their "history, tradition, language, and unique ability to communicate with each other" (Tong 213). Many notions of Deaf culture are incorrect and cause marginalization of members of the Deaf community. Endeavors to diminish the flattening effect are more effective if educators become familiar with some aspects of the Deaf culture. Additionally, college composition teachers who develop a better understanding of ASL are able to construct more effective ways to help Deaf students write with a more academic style. The following is a list of five topics that continue to stigmatize Deaf individuals:

Topic 1: All Deaf People Can Easily Read Lips

While it may appear that many Deaf people can easily read lips, the truth is lip reading is demanding and requires optimal circumstances to occur. First, speakers cannot talk too quickly

or too slowly. They cannot over accentuate their words or mumble; talking louder does not help either. If speakers turn their heads away or put their hands in front of their mouths, lip reading is susceptible to misunderstandings. Additionally, the environment is crucial for a Deaf person to be successful in lip reading. Environmental factors, such as lighting, background and clothing colors or shapes, or groups of people talking or signing in the area, cause distractions that may lead to confusion. Deaf people can grasp the main idea of conversations by context mainly, but they also observe facial expressions, body language, or other contextual markers. To test the lip-reading skills of his students, Pete Wisher, a long-time family friend of mine and founder of the Gallaudet Dance Company, performed an informal *quiz* with his students. At the beginning of every year, he reviewed dance terms and moves to assess the skill levels of the first-year dancers. As he lectured, he talked and signed, but occasionally he only *spoke* a dance term, and all the students understood the term and performed the move. However, occasionally, he threw in a word that had nothing to do with dance, such as *a thermonuclear reactor*. The students nodded understandingly to the spoken word but were unable to perform the dance move correctly. Wisher correctly hypothesized that most Deaf people need the correct context to understand lip reading. In support of Wisher's hypothesis, James Lee, Speech-Language Pathologist from Gallaudet, notes, "it is important to conduct speechreading in context, not isolation" (7).

Some Deaf people, like any other members in the milieu of cultural plurality, want to assimilate with the mainstream, so they often try to make it appear that they understand hearing people. However, many members of the Deaf community characterize lip reading as another way of perpetuating the dominant culture's oppressive push for Deaf people to be flattened into the precepts of the hearing mainstream. Therefore, some Deaf people do not embrace the practice of lip reading and prefer to communicate using ASL only.

Topic 2: Deaf Individuals Have Low Cognitive Abilities

Historically, the perception of Deaf people's language has revealed a misunderstanding by hearing people that being Deaf causes lower levels of cognition. Because ASL does not have a sustainable written component, the English composition skills of Deaf students do not match their narrative and reasoning skills. These skills are demonstrated through the cognitively rich sense of storytelling and a multi-dimensional language that Deaf people use. Although many hearing people, specifically interpreters and deaf educators, learn sign language and can communicate with Deaf people, widespread understanding of the nuances of ASL is limited, which reinforces the idea that ASL is a substandard language. For most people, an important part of deep comprehension of another language happens during immersion. While small pockets of Deaf communities exist in the US, there are few opportunities for hearing professionals to experience immersion in Deaf culture. One place of immersion is Gallaudet University, the only liberal arts college for deaf students in the US. However, their program for hearing undergraduates is only "open to a select group of hearing undergraduate students who know American Sign Language and would like to study alongside deaf and hard of hearing individuals" ("First Year Hearing Applicants"). To counteract the lack of full-scale immersion, many professionals must rely heavily on textbook learning of ASL, which does not provide some of the multiple conceptual meanings or nuanced uses of signs.

Topic 3: All Sign Language Systems Are True Languages

In 1960, William Stokoe developed a systematic way of notating signs using specialized characters and co-compiled the first dictionary of ASL.[3] While his notation system never became popular for everyday usage, he made huge strides in gaining recognition for ASL as a formal

[3] A more complete discussion of Stokoe's system is presented in Chapter Three

language. It has been a slow process, but, currently, most states in the US recognize ASL as a "foreign" language, which can be taught for high school or college credit ("View State Report").

ASL as a foreign language is oxymoronic because it is a language native to the US. Additionally, unlike true language learners, many Deaf children do not learn the rules of their *own* language until later in life, if at all. Much like Paul Kei Matsuda's Myth of Linguistic Homogeneity, which is "The assumption that college students are by default native speakers of a privileged variety of English" (641), many hearing people think that Deaf individuals use only a standard variety of ASL. However, there are several different codes or signing systems, such as Signing Exact English (SEE) and Manually Coded English (MCE), which are systems that follow English syntactic rules. Unfortunately, many teachers view ASL as a code for English and ignore the syntactical structure of ASL. The word *code* connotes something to be deciphered, therefore, incomplete, which means a user cannot reach the same level of sophisticated communication as with a complete language. Codes and signing systems do not present a clear visual and conceptual understanding of language, which can lead to unclear communication and underdeveloped ideas in writing. Additionally, using codes or systems creates problems for Deaf students when learning English; if they do not have a true first "language," because they learn a "system" first, acquiring a second language is a much slower process. Using of certain parts of speech is one area where Deaf students struggle when learning to write. For example, English uses pronouns, such as *he*, *she*, and *it*. ASL uses a grammatical device called indexing to establish pronouns. To index a pronoun, signers establish their antecedent by pointing to one side of an imaginary picture frame in front of their face and upper body, then they fingerspell[4] or produce the sign of the noun. Once established, the pronoun can be referenced as often as

[4] Fingerspelling is the production of individual letters using one hand to spell a word. Fingerspelling is a viable component of ASL and is used often to clarify meaning or denote a proper noun.

needed. During conversations, signers never use the terms *he*, *she*, or *it*, so pronouns are difficult for Deaf students to translate. For example, if I want to tell a story about the vegetable lasagna I made last night, I would fingerspell L-A-S-A-G-N-A once and point to one side. If I want to mention that my family enjoyed the meal, I fingerspell their names once, then point to imaginary spots around the table.

An unfortunate result of using codes or sign systems over the complete language of ASL is the widespread belief that SEE or MCE can easily translate into written English. Deaf students who use sign systems may have difficulty when attempting to write because the students are not learning a true language first. The use of codes or sign systems is an ideology that reinforces the notion that all Deaf people automatically learn and know ASL when, just as in Matsuda's myth, an extreme diversity exists in sign language usage and not all of it reflects the legitimacy of ASL.

Topic 4: There is One Universal Sign Language around the World

Most linguistic nationalities have their own sign language. For example, England, whose spoken language is relatively the same as American English, has a unique sign language that is incomprehensible to ASL users. However, some of the visuospatial properties of sign languages lend themselves to effective cross-national communication. In the summer of 1989, I attended Gallaudet as a graduate student. During my stay, the university hosted a huge, week-long international conference called Deaf Way. Most of my communication during the week was with concrete ideas that could be transmitted effectively using Gestuno, or International Sign Language, a system based on gesturing. Gestuno, however, was not effective when I encountered a Bulgarian couple who could not read the English on a flier that advertised a theatrical performance scheduled for the upcoming Friday. The day the couple approached me was the Wednesday before the performance, so I attempted to communicate the abstract phrase of "the

day after tomorrow" to the couple. Using a variety of gestures, I attempted to communicate the ideas of the sun setting, going to sleep, and time passing. I am not sure that the couple understood what time the performance time would be, but the encounter was friendly and engaging because of the pantomime effect of Gestuno.

Topic 5: ASL Is Not Appropriate for Complex Explanations or Storytelling

An integral part of Deaf heritage is the rich and unique storytelling facet. Many Deaf people pride themselves on the elegant stories they express, and the vibrant structure makes a story told in ASL enriching. When telling stories (or even in everyday communication), signers employ turn-taking rules differently than speakers do. Since it is practically impossible to interrupt a signer, Deaf people use attention-getting signals, such as waving a hand in someone's face, a gentle tap on the arm or shoulder, or an audible sound that makes a vibration[5]. After using one or more of these methods to gain attention, ASL users follow a different storytelling structure than spoken English. The signer sometimes starts with the "Pah!"[6], the main idea or the climax of the story, which is usually at the end of English storytelling. For example, if a Deaf person tells a story about a car accident he or she had that morning, the story would begin with the crashing of the cars by using hand shapes of two cars colliding. The signer will work temporally from the main event that occurred, giving plenty of details, to the beginning of the story or to what was happening before the accident. Because of flexible temporal structure in

[5]The turn-taking system of Deaf individuals does not conform to typical politeness theory applications of Positive and Negative Face wants and desires. Penelope Brown and Steven Levinson's define the two side of the Politeness theory as "negative face: the want of every 'competent adult member' of a community that his actions be unimpeded by others" and "positive face: the want of every member that his wants be desirable to at least some others" (312). While these traits are found in the Deaf CoP, their wants of being unimpeded and desired by others are not hampered by acceptable practices such as a waving hand, a touch, or a loud yell. Additionally, these practices result in longer turns taken, with less back and forth. In the hearing community, these practices are unacceptable, and some hearing people who try to communicate or work with members of the Deaf community consider these practices rude and sometimes try to teach Deaf students to change their ways.

[6] The concept of Pah! is multilayered in Deaf culture. As an element of storytelling, the sign connotes that the storyteller has successfully expressed the climax or the main idea of a story.

ASL storytelling, Deaf students, like many other non-native English speakers, struggle with the structural conventions of academic English in their FYC classes.

The overarching problem with these myths is that they continue to disseminate and serve only to further marginalize members of the Deaf community. Deconstructing these myths and other misconceptions about the cognitive abilities and ASL linguistic patterns of Deaf students serves as a starting point for the rationale of my study.

Rationale for Improving Composing Practices of Deaf First-Year Composition Students

Myths about the Deaf community, my positionality, and my philosophical assumptions about learning to write academically allow me to illustrate my rationale for a tool to assist Deaf writers. The rationale for the development of the dictionary is two-fold. First, a dictionary for ASL users does not exist. Currently, the only dictionaries available to ASL users are sign production dictionaries and English dictionaries. The latter can only be used if a Deaf student already knows the word in English, which indicates English dictionaries are primarily consulted to verify spelling. The second part of my rationale considers the ways in which Deaf writers approach vocabulary, style, and usage of written language that can be strengthened with a dictionary for academic writing that focuses on the syntactical structure of ASL.

To address the first part of the rationale, I draw upon the work of sociolinguists Woll et al. They state:

> To a great extent, certainly in the past, the contents of dictionaries have been based on words used in written language. Languages that do not have a written form do not usually have dictionaries. Dictionaries of predominantly unwritten languages can be made, of course, for the purposes of language teaching or for "preservation" of the language, but

> the language communities using these unwritten languages do not have the same immediate need as literate communities for dictionaries. (19)

For writers in languages that have a written component, consulting a dictionary while they compose can be an integral part of their process. Consulting a dictionary provides a clearer meaning of or the proper usage of a word. Sometimes the writer is led to using a word in a new way or not at all. Additionally, most written languages have a usage dictionary, while unwritten languages do not have dictionaries other than for preserving or teaching the language. However, the only dictionaries available for ASL are for teaching *learners* of ASL how to *produce* the sign, with no definitions of the sign other than an English gloss[7] word. Compare this lack of definitions to an English dictionary for English students that only shows how to pronounce a word. Also, these dictionaries, unlike a German or French translating dictionary, are organized in only one direction: word to sign. When interpreters or Deaf educators want to know the sign for a word in English, they consult an ASL dictionary, print or digital, to learn how to produce the sign; there are no definitions given in these translation dictionaries other than the root word connection. Consequently, knowing only the sign will not assist a person in finding the meaning; the sign must be translated into English first. Imagine having a dictionary that only translates a word from Afrikaans into English, and not vice versa? One would need to know the word for something in Afrikaans first, before finding its English meaning.

The dictionary created through my data collection is designed for Deaf college students who already know a typical word-to-sign correlation, but they need words with a more academic

[7] A common practice when writing about signs in ASL is to place the English meaning of the word in all capital letters, which is called a gloss word. Often the gloss word is not an exact translation, and some signs may have more than one gloss word.

style to participate fully in the FYC experience. Deaf writers need a usage dictionary that integrates the visuospatial elements of their language structure with the linear structure of SWE.

Filling in gaps of process-driven writing for Deaf students is the driving force behind the second part of my rationale. Because there is no written form of ASL, Deaf children do not learn to write in their primary language. Being unable to write in ASL causes disorganization in process-driven composing, so, unfortunately, many Deaf students struggle or omit pre-writing and revising to generating text (Mayer 147). They become frustrated with a recursive process and attempt to finish writing assignments without any feedback from peers or teachers. Researcher Christine Yoshinaga-Itano writes that text generated by Deaf students often contains "a greater number of nouns, verbs, and determiners, but demonstrated less frequent use of adverbs, auxiliaries, and conjunctions" (qtd. in Mayer 146) than text generated by their hearing peers. Additionally, Deaf students, compared with hearing students, use shorter sentences with less flexible word order and "numerous grammatical errors and non-standard usages of English" (146). Traditionally, Deaf educators have examined how the features of the target language text differ from students' first language (L1), with the connection to the sentence-level features and the product produced being paramount. Recently, a shift in pedagogical strategies for L2 students has placed greater value on a recursive process of writing (Matsuda, *Second-Language Writing* 25). The problem with either product or process centered pedagogies is that Deaf students do not fit cleanly into the L2 mold because the L1 is not taught in residential or public[8] schools.

[8] Because ASL is taught as a foreign language in the public schools that offer it, the course is not appropriate for Deaf children. Teaching ASL to Deaf children in residential schools is not a common practice; instead, they are taught English reading and writing. The National Association of the Deaf (NAD) reaffirmed its 2008 position that the "acquisition of language from birth is a human right for every person, and . . . deaf infants and children should be given the opportunity to acquire and develop proficiency in American Sign Language (ASL) as early as possible" ("Position Statement"). While formal instruction of ASL to Deaf students is on the rise in residential schools, it is still not widespread.

To understand the L1/L2 mold of Deaf students, in 2002, Ross Mitchell and Michael Karchmer revisited Jerome Schein's "90 Percent Rule." The rule examines "the relationship between the hearing status of parents and their offspring" (qtd. in Mitchell and Karchmer 142). In 1989, Schein collected data from the "Annual Survey of Hearing Impaired Children and Youth" (also known as the "Annual Survey") to develop a rule that states, "90% of deaf children are said to have hearing parents and 90% of the children of deaf parents are hearing" (qtd. in Mitchell and Karchmer 142). Consequently, a majority of Deaf individuals, whether they are children or parents, live with hearing individuals. After collecting the data from the 2000 "Annual Survey," Mitchell and Karchmer found these percentages to be around 95 percent. They speculate that the difference in percentages is because the 1989 version of the survey did not allow for a clear delineation between Hard-of-Hearing (HoH) parents and Deaf parents (157-58). Regardless of the exact number, the 90 Percent Rule means that most deaf children are not receiving early exposure to their primary language because they are not being born into a culturally Deaf environment. Moreover, without immersion into their own culture, Deaf children remain isolated from their peers.

In addition to the 90 percent rule, until 2000, most deaf children were not diagnosed as Deaf or HoH until the age of three ("Early Intervention"). Fortunately, technological advancements have helped the identification process occur much earlier, so now about 95% of infants born deaf are diagnosed through newborn screening before they leave the hospital. However, lack of parental follow-up with medical professionals is still problematic ("Treatment and Intervention Services"). When a newborn is diagnosed as deaf, the Centers for Disease Control and Prevention recommends close monitoring and timely follow-up hearing tests during the first two and a half years of the baby's life to avoid delays in communication ("Hearing Loss

in Children"). The National Association of the Deaf (NAD) speculates that one reason parents fail to continually monitor their child's progress is due to the lack of resources and information about early hearing detection. After initially supporting the Early Hearing Detection and Intervention Act (EHDI) in 2000, the NAD is currently promoting the reauthorization of the Act to ensure that "families have the resources they need to help their children acquire language, spoken and/or visual, and achieve age-appropriate communicative, cognitive, academic, social, and emotional development" ("Early Intervention"). The Act focuses on ensuring that every family receives the care, information, and services they need to give their Deaf or HoH children the opportunities they need to acquire spoken and visual language. Infants of parents who do not follow screening protocols or children who become Deaf after two and a half years of age can have a serious language delay. In some cases, Deaf children enter school without a complete form of any language. Even with children who are diagnosed at birth, most are not exposed to the advanced structures of ASL because hearing parents of infants are not typically part of the Deaf community[9].

Simply put, all these statistics demonstrate that many Deaf students have difficulty in L2 learning, with both sentence-level features and the strategies of process-driven writing. A common thread in the statistics surrounding Deaf students is the need for an academic dictionary to enhance their vocabulary and improve their writing. Additionally, the dictionary is a tool for not only Deaf students but teachers and tutors as well. The dictionary will assist in translation from L1 to L2 during prewriting and revising. It is important to note that up to this point, I have

[9] Joining the Deaf community, like other CoPs, is not an easy process. The most important factor in negotiating entry is one's language proficiency. To become a member of the Deaf CoP, one must use ASL grammatical structure, not signed English structure, and support other norms of the culture, such as having a positive perspective that Deaf people can contribute to society in a meaningful way and avoid the perspective of hearing ability as a disability.

used the word “translate” to describe what happens between L1 and L2. A better referent to the translating process between ASL and English is “interpreting.” A skilled ASL interpreter is like a walking thesaurus. Interpreters must put the word or sign in the correct context before they can assign an English word or ASL sign to the translation. A good example of the interpreting process occurs with the word-to-sign correlation of RUN. Similar to English, the sign RUN has many meanings. However, English, they are all pronounced the same, whereas, in ASL, there are several ways to sign RUN. Considering the ideas of multiple word-sign correlations and no written version of ASL, Deaf students are forced to translate directly from their mind onto the paper. During the process, they often choose the most common gloss of the sign. Using the example of *run*, instead of writing that a machine “operates,” many Deaf students would write “run” because it is the most common gloss for that concept. Analyzing the contrast of choosing an appropriate English word or the ASL gloss is a significant factor in developing the dictionary.

Bilingual dictionaries are contrastive because they demonstrate “a systematic comparison of the mother tongue and the foreign language in order to describe similarities and differences, to identify points of difficulty which might lead to interference” (Johansson 10). Contrastive rhetoric, a term coined by Robert Kaplan in the 1960s, allows educators to analyze the similarities and differences between their students’ primary and target languages. Kaplan explains that this type of analysis is important because rhetoric is “not universal, but it varies from culture to culture and even from time to time within a given culture” (12). In his discussion on the development of paragraphs, Kaplan represents the “cultural aspects of logic which underlie the rhetorical structure” with graphs that include a straight line, a spiral, and zig-zagging patterns (21). The linear pattern of English starts a paragraph with a topic statement, then follows with details and examples that support the main idea. However, in Romance languages, a zig-zag

pattern permits a "greater freedom to digress or to introduce extraneous material" than English (18). Although Kaplan does not discuss sign language, many of the thought sequence patterns of ASL follow his theory.

Because ASL does not have a written component and "[p]aragraphing, like punctuation, is a feature only of the written language" (21), its rhetorical structure is better analyzed through storytelling. When Deaf individuals engage in storytelling, Kaplan's zig-zagging pattern for Romance languages emerges. While ASL follows a topic-comment structure, there is room for digression in Deaf storytelling (See Appendix A, Score Sheet for ASL Storytelling, page 128). Additionally, because the morphosyntax of ASL utilizes space, there is room for some circling structures. Kaplan's description of the spiraling pattern relies heavily on passive voice and different points of view. While ASL does not have the function of passive voice, it does clearly establish different points of view by zooming in or out in an arcing or semi-circling way. ASL users establish different points of view by using classifiers to describe an idea.

Classifiers are "the configuration the hand assumes when beginning to make a sign. The most frequently used handshapes are the letters of the American Manual Alphabet and the manual numbers; . . . however, linguists have identified a large number of discrete handshapes" (Tennant and Brown 12). When comparing the linear pattern of English to the circular zooming in and out pattern of ASL, consider describing the solar system. In English, without a model, a teacher compares the distance and size of planets by providing numbers. In ASL, however, a teacher can visually establish the planets in relationship to each other by size and distance. Then, using a variety of classifiers, the teacher can zoom in and out throughout the solar system. While the ASL version of the solar system is certainly not to scale, it does provide a more three-

dimensional effect to explanations. ASL is a three-dimensional combination of a linear, zig-zagging, and circling pattern of its own.

Unlike other ELLs, Deaf English learners never learn to write in their L1. Consider a student whose first language is Russian; he or she may perform some pre-writing activities in Russian, then translate into English to create a draft. In the same way, Deaf students can participate in process-driven writing by applying video technology to enhance visual properties. To "bolster student involvement, foster the engagement of reluctant or struggling writers, and support writing instruction," were the desired outcomes of a video technology study (Saulsburry et al. 30). The researchers observed classrooms that use Skype, a video communication program, to connect with an audience and share communication in ASL and English. The authors note, "Giving students the opportunity to share their writing via Skype allows them the chance to receive feedback on their work from other readers" (32). An authentic audience using one's primary language is one of the most effective ways to engage students in writing and fostering their identity as a writer.

While feedback from other writers is important, it is also helpful for writers to develop their own epistemologies about process-driven writing. After Deaf students petitioned to have end-of-course exams that were more user-friendly to the America Disabilities Act[10], Biser et al. decided to replace the traditional pen and paper test with a video response. Experimenting with two methods of mediation, one with several interpreters and translators and one with student-centered translating, the researchers found that when the students participated actively in their own translation process, they provided more fluent and focused responses to the exam. The

[10] An important focus of this dissertation is to avoid the disability lens on the Deaf community. However, while I realize the researchers in this translation study refer to the ADA, I feel the results directly connect to my support of students having the right to their own language.

researchers note, “Freed from the constraints of having to think in one language and write in another, students can express more complex and complete ideas when producing and then using the mediated text as a heuristic” (Biser et al. 69).

In line with digital composing research, I have experimented with different approaches to video composing and allowing students to use texts as a heuristic to compose in a way that mirrors the visual properties of their primary language. During a presentation at the Conference on College Composition and Communication (CCCC) in March of 2015, I explained some of the parameters of my research[11], “the students participated in both pen and paper and digital process-driven composing projects. During both methods, the students completed teacher-selected elements, such as brainstorming, listing, outlining, diagramming, drafting, and revising, either on paper or in a video” (Cobb). Over the course of a school year, English Language Arts students from grade seven to twelve attending Arkansas School for the Deaf attempted a variety of approaches to video composing. “The students used a variety of methods to transcribe—split screen or from a laptop, PC, camera, or phone to paper” (Cobb). Sometimes they were asked to brainstorm on paper and video a first draft. Other times they recorded first and then transcribed onto paper. As in the Biser et al. study, I also found that “when the students transcribed their own video recordings onto paper, they were given the autonomy to interpret their own meanings of ASL into written English” (Cobb). In my survey results (see Appendix B, page 129, for full results), I, too, found that when the students mediated their own work, they enjoyed the video responding and produced more fluent compositions than when they worked in the traditional pen and paper method.

[11] Although my study on the composing practices of Deaf students was not conducted as part of my dissertation, I did receive proper IRB approval.

An important aspect of researching the uses of technology in the field of composition is that "original compositions … [can be] recorded by Deaf students in their primary language—granting them full access to their own language" (Cobb). Allowing Deaf students to translate their own work and compose using video supports the CCC position statement that affirms "the students' right to their own patterns and varieties of language—the dialects of their nurture or whatever dialects in which they find their own identity and style" ("Students' Right to Their Own Language"). A dictionary created using ASL patterns that reflect the identities of the diverse Deaf community provides a way to assist students during process-driven writing.

Theoretical Framework

Mike Rose says that "human beings are theory-makers" (356). With each new phenomenon I observe, I develop a mini-theory about why things work a certain way. I usually ask myself, *why is this phenomenon interesting to me? What is problematic with the phenomenon?* Preparing for this study, I have analyzed composition, deaf education, second-language, sociolinguistic, and hemispheric specialization theories. These theories all lead me to ask, define, and attempt to solve a problem. The problem that I have observed is in the struggles that Deaf FYC students have with both sentence-level construction and a process for writing in SWE. While considering four categories in this chapter, my positionality and philosophical assumptions, myths of the Deaf culture, and the rationale, I attempted to draw connections among three concepts vital to my theoretical framework–central tenets, connections to the problem or solution, and questions for analysis. Using the intersection of these concepts to create a table that analyses my theoretical framework (see table 1), I posit the following research question: Using corpus-based linguistics as a method of collecting and analyzing a small, highly

specialized corpus to create a dictionary for Deaf students, can specific word meanings integrate with the sociolinguistic proclivities of Deaf FYC students?

Table 1

Table of Analysis for Theoretical Framework

	Central Tenet	Connection to problem or solution	Questions for Analysis
Positionality	The best of both worlds – I interact daily with Deaf students and teach college composition.	I have, and continue to observe, students who struggle with academic language.	How can my observations contribute to a methodology for the proposed dictionary?
Philosophical Assumptions	Critical and Pragmatic	I want to encourage Deaf students to empower themselves through writing.	Can an appropriate format for a small dictionary be developed to enhance the academic writing of Deaf FYC students?
Myths of Deaf Culture	Myths of Deaf culture are still widespread among the hearing population.	These myths need to be continually dispelled by the actions of members of the Deaf community to bring about independence.	In what ways can a corpus, compiled solely of the academic writings of Deaf scholars, demonstrate the equality of ASL as compared to English?
Rationale	An academic ASL user dictionary does not exist.	The proposed dictionary will be a useful to for Deaf writers in strengthening their vocabulary, style, usage, and process-driven writing.	Can traditional lexicography be used to create an academic dictionary that addresses the learning styles of ASL users?

After analyzing the intersection of the tenets and concepts, I determined that the pragmatic paradigm, where my "goal is to search for useful points of connection" (Mertens 36) and multicultural feminism, "a movement that embraces a variety of marginalized cultures"

(Tong 214), creates a platform for Deaf students to empower themselves. An important part of empowerment is through writing; Deaf student-writers have voices that need to be heard in the field of composition. As a theory-maker, I posit this theory: if there is a gap in the research and development of dictionaries for academic ASL usage, then I can use traditional methods of lexicography, such as corpus-based linguistics, to create a selection of a dictionary to assist Deaf college students because it will increase their understanding of the features of writing and revising. Corpus-based linguistics is a form of analysis that relies on a corpus. "A corpus is a collection of documents, and instances of words come from a variety of documents representing different types of text" (Killgarriff and Kosem 32). Using a corpus-based methodology is helpful in the field of lexicography because the analysis describes the behavior and usage of words as they appear in context.

Points of Connection

To conclude this chapter, I would like to add one side-note about my positionality. After graduating with my Bachelor's degree in Deaf Education, I worked in the field for a few years, then left the Deaf community for over twenty years. During that time, I pursued a career and advanced degrees in the field of composition. During my twenty-year hiatus from Deaf Education, my sign language skills initially lapsed, but I never forgot my passion for teaching and working in the Deaf community. Now, fortunately, I can fuse these two ruling passions to create a tool that will not only help the students I am so fond of in the Deaf community but assist my colleagues in the field of composition as well.

CHAPTER TWO

KALEIDOSCOPE OF PERSPECTIVES

As I mentioned in Chapter One, habitus is an important factor in determining the rationale, function, and design of the dictionary. To understand the habitus of members of the Deaf community, one must have a working knowledge of some highlights of the history of Deaf culture in the US, including a focus on literary practices.

Historical Contextualization of the US Deaf Population

The field of Deaf Studies "emerged in the latter part of the 20th century" (Bauman and Murray 210), and a seminal work that covers the field is the book *Seeing Voices* by Oliver Sacks. Published in 1989, his historical account begins in the late 1600s and continues to some pivotal moments occurring in the late 1980s at Gallaudet. Starting in the late 1600s, for about two-hundred years, the European American population of Deaf people on Martha's Vineyard grew to large proportions. This vast growth was due to the influx of Deaf immigrants from France and the transmission of hereditary deafness to subsequent generations. On the island, sign language developed and was used extensively in the community. Eventually, the children were sent to Hartford, Connecticut, where Thomas Gallaudet and Laurent Clerc founded the first school for the Deaf, originally called the American Asylum for the Deaf. Along with the children came their island sign language, which later mixed with other sign language systems, and French Sign Language to become American Sign Language. Considering the variety of influences on ASL and its development in the same geographical space as English, some observers deem it as a *heritage* language. In her historical account of Martha's Vineyard, Sarah Compton writes, "[T]hese historical accounts illustrate that signed languages were heritage languages for deaf

people and codas as they were passed down within deaf families and communities from one generation to the next" (273).

During these years of diffusion to the mainland, many members of the hearing community labeled deaf people as "dumb" or "mute"[12] because their intelligence was linked to their hearing and speaking capabilities. Because of these erroneous attitudes, educational practices involved oralism, the use of oral communication exclusively. Many educators and policymakers thought that if Deaf children were exposed to the dominant spoken language, they would eventually learn to communicate in the hearing world, and, thus, appear to be more *normal* than those members of the Deaf community that used ASL.

The growing numbers of Deaf citizens on the mainland led to educational practices becoming a focal point for both the hearing mainstream and the Deaf community. As Deaf students continued to enter the Asylum, now known as the American School for the Deaf, the use of American Sign Language began to develop. In 1864, because of Gallaudet's work in the field of Deaf education, the first postsecondary school for Deaf students was opened and was aptly named after him. While Gallaudet University was in its infancy, the practice of oralism, fueled by the support of Alexander Graham Bell, gained a stronghold in the field of Deaf education and was enforced at the American School for the Deaf and Gallaudet. Although Bell eventually gave up some of his zeal for oralism in Deaf education to pursue the development of the telephone and other ideas, his rivalry with members of the Deaf community sparked a huge debate over oralism and ASL, which many observers claim still exists today.

[12] While Deaf people have historically used the term "mute" to denote people who never use speech, hearing people have used this term in connection to low intellectual ability. Unfortunately, these terms and other terms, such as "hearing impaired" and "hearing loss," continue to label Deaf individuals in a pathological perspective.

Over the last century and a half, the general public and government agencies have made some progress in understanding Deaf culture. Advocates of the Deaf community want mainstream society to accept ASL and other cultural practices as legitimate aspects of the Deaf CoP. Unfortunately, the fact remains that many people in mainstream society are acutely unaware of Deaf culture and the difficulty that Deaf people face in their efforts to gain access to mainstream society while maintaining their cultural identity. While many Deaf individuals struggle with reading and writing in English, they have a strong sense of identity, which embodies a unique history, vibrant storytelling practices, and a heritage language based on a visuospatial perspective. Deaf people are immensely proud their identity; many members of the community refuse to consider themselves disabled, only unable to hear.

Newfound Awareness of Deaf Culture in Modern Times

Sacks recounts a protest by the students at Gallaudet, which created one of the most significant revolutions, specifically over language policies, with the dominant culture in the history of the Deaf community. In 1988, when Jerry Lee, the last hearing president of Gallaudet resigned, the search for a new president began. During the search for a new president, the student body campaigned strongly for a Deaf president, calling the movement Deaf President Now. When the board chose Elizabeth Ann Zinser, a hearing person who could not sign and had minimal knowledge of the Deaf community (Lucas 2), the student body went on strike, refusing to go to classes for a week. The strike received national media attention and heightened the awareness among US citizens of the unbalanced power between the hearing mainstream and the Deaf community. An example of Zinser's lack of respect for ASL is noted in her public remarks as she reflected on the Deaf President Now movement. After commenting that "signing is important *symbolically* within the deaf community" (emphasis added), Zinser called for "the

board members to learn a little sign . . . [J]ust say a few basic phrases, some warm sentences when they meet people around the school" (Kastor). Her comments reflect an ill-informed perspective on the equality of ASL to English. The language that any community of practice uses to make direct contact with its members is not merely symbolically important; it is a vital function of communicating. Unfortunately, Zinser's ideology reflects the historical beliefs and boundaries established by hearing people about Deaf culture and language. These rigid boundaries were established to help, or what hearing people perceived as *help,* Deaf people by controlling their use of language. With only a six-day tenure, the strike caused Zinser to resign from her position quietly. After over a century of allowing only hearing, white men in the position of president, in 1988, Gallaudet finally appointed I. King Jordan as its first Deaf president.

The following year Deaf Way was held at Gallaudet. Sacks writes, "This [conference] was attended by more than 5,000 deaf people, coming from more than eighty countries across the world. As one entered the vast lobby of the conference hotel, one could see dozens of different sign languages being used; yet, by the end of a week communication among different nationalities was relatively easy—not the Babel which would surely have resulted with dozens of spoken languages" (sic; 195). While spoken languages have some overarching mutually intelligible components, signed languages have many iconic qualities—including gesturing—and, signers have a unique understanding of visual communication that makes cross-national communication relatively easy.[13]

[13] As a student in attendance at Gallaudet during the Deaf Way convention, I concur with Sacks' summation and comparison to the Tower of Babel. As I mentioned in the first chapter in the Myths of Deaf Culture section, I personally struggled in the vastness of sign languages; however, within the week, I could communicate crudely by using Gestuno.

Deaf Way was an ephemeral event that happened more than twenty-five years ago. Since then, the advent of email and text communication has had a powerful impact on the communication practices of most Deaf individuals. Smartphone texting and videoing have opened a world of communication opportunities to Deaf people. They are writing more often, to a wider variety of audiences, and with deeper and more profound purposes than ever before. A literature review of the connections among writing, Deaf studies, second-language learning, and code-meshing, demonstrates the value of tools, such as the Academic ASL Dictionary, to assist Deaf students in composition classrooms.

Connections Among Language, Discourses, and Writing

As the title of this chapter states a "kaleidoscope of perspectives," perhaps, the following theorist, researchers, and other observers from a variety of fields seems eclectic and not connected, but that is the nature of the Deaf CoP. As a scholar and teacher, I identify myself as pragmatic and eclectic. These approaches provide a platform to borrow and group ideas together in ways that differ from traditional groupings. My efforts to avoid focusing on the disability label for the creation of the dictionary have required me to think outside the usual constraints of viewing one individual as a cognitivist and another as pragmatic. Instead, in the following sections, I have grouped theorist together in ways that are reflective of the diversity of the Deaf CoP and their differentiated writing practices. In his *Course in General Linguistics,* Ferdinand de Saussure defines the study of linguistics, as an approach to language that can "describe and trace the history of all observable languages . . . to determine the forces that are permanently and universally at work in all languages" (6). His explanation of linguistic signs (not to be confused with ASL signs) reminds us of the arbitrary nature of words and the ideas they represent. Saussure explains that a *sign* is composed of two elements: a *signifier,* or a "sound-image,"

which is spoken (or signed in ASL) or written, and the *signified*, the concept that is being represented. Using Saussure's example, the *signifier* horse is completely arbitrary to the large, four-footed animal that is *signified* by the English word, whether it is spoken or written. Saussure himself extends his explanation to ASL when he writes, "Language is a system of signs that express ideas, and is, therefore, comparable to a system of writing, the alphabet of deaf-mutes, symbolic rites, polite formulas, military signals, etc." (16). While many signs in ASL may have a handshape or movement that appear to mirror the concepts being expressed, signs, like words, are arbitrary *signifiers* of the *signified*.

Connecting his definitions of linguistics and linguistic signs, Saussure also explains the significance of graphic representations of a language. He writes:

> Language and writing are two distinct systems of signs; the second exists for the sole purpose of representing the first. The linguistic object is not both the written and the spoken forms of words; the spoken forms alone constitute the object. But the spoken word is so intimately bound to its written image that the latter manages to usurp the main role (23-24).

Writing "wins out" against speaking because it is permanent, stable, and provides visual images that "are sharper and more lasting than aural impressions" (25). Writing, according to Saussure, has acquired a status of "undeserved importance" as evidenced by the creation and use of dictionaries and grammar books in education. Regarding the strict focus on the proper usage of written language and valuing it over spoken language, Saussure notes, "The result is that people forget that they learn to speak before they learn to write, and the natural sequence is reversed" (25). For Deaf students, it is not a reverse in sequence but an entirely different pattern that does not involve writing.

As I mentioned earlier, many Deaf students are visual language learners (VL2), which involves learning only the visual aspects of language—reading and writing. So, the natural order for Deaf students to learn ASL is the reception of signs, production of signs, then, in English, reading and writing. Considering Saussure's viewpoint, the importance of writing has led many observers to place Standard Written English in high esteem. Consider David Bartholomae's phrasing "privileged discourse;" he argues that when students enter a university, they should appropriate the discourse of academia. The writer must "see herself within a privileged discourse" to use or approximate the use of an academic discourse (628). Some student-writers, hearing and Deaf, struggle to envision themselves in discourses other than the "commonplace" discourse that they are comfortable using at home or with friends. Bartholomae claims the weakness in changing discourses is that students do not understand the power of audience awareness. To develop a sense of the privileged discourse audience, he posits that students should "write to an outsider, someone excluded from their privileged circle" (629). He offers the example of having students "Describe baseball to an Eskimo" (629). For many Deaf students, thinking of themselves in any discourse can be difficult because many do not have control over their own primary discourse of ASL.

Discourses, like the fields of one's habitus, are an integral part of an individual's socialization. James Paul Gee defines discourse as "a socially accepted association among ways of using language, of thinking, and of acting that can be used to identify oneself as a member of a socially meaningful group or 'social network'" (51). There are a variety of primary discourses that exist in the Deaf community of practice. As I mentioned earlier, ninety-five percent of deaf babies are born to hearing parents. Many of these Deaf-of-Hearing children acquire a primary discourse without the modeling and exposure from one complete language. While many hearing

parents attempt to learn ASL, they fail to provide a model of the complete language. Additionally, because DoH children do not learn aurally, they never learn the spoken mode of English. The lack of exposure results in many DoH children failing to have the type of control over a primary discourse that Gee believes is crucial for literacy development. Conversely, Deaf babies that are born to Deaf parents, Deaf-of-Deaf, do acquire a primary discourse based on a complete language. DoD students enter school prepared to begin controlling a "secondary discourse," or the dominant discourse of the mainstream society. Gee claims that secondary discourses are valuable for individuals to control because these discourses "lead to social goods . . . [and] have the fewest conflicts when using them as 'dominant groups'" (53). For Deaf individuals, negotiating the dominant discourse is often influenced by the limited control of their own primary discourse.

Helping Deaf students control their primary and secondary discourses is an important part of the dictionary. Providing a view of Deaf students' primary and secondary discourses side-by-side is one goal of my research. An example of helping students use their primary discourse to understand a secondary discourse comes from AMY Lin. Initially, Lin thought Gee's text, *Social Linguistics and Literacies* would be straightforward and easy for graduate students in her "Language, Culture, and Education" course to understand. However, after attempting to read the textbook, many students struggled with the concepts that Gee discussed. Lin created study questions that used a more commonplace discourse and were relevant to her students' daily situations, most of them were teachers in secondary schools. When the students understood the text, Lin realizes that her critical pedagogy reflected Gee's idea of using one's primary discourse to understand a secondary discourse.

Composition Theories about Text Generation

For many students, hearing and Deaf, entering academic discourse is largely dependent upon one's primary discourse. When a student's primary discourse is either another language entirely or even a vernacular of the DSL, educators and researchers try to find ways to assist in the transference of ideas, beliefs, and language patterns from one sphere to another. Janet Emig, whose vital work has influenced the pedagogy of many composition teachers and scholars, addresses how "writing uniquely corresponds to certain powerful learning strategies" (122). Although Emig does not specifically mention Deaf students, several of her precepts connect to their modes of learning. She argues, "Writing is stark, barren, even naked as a medium; talking is rich, luxuriant, inherently redundant" (124). While this comparison of writing and talking is true for hearing students, it also works well with Deaf students. Members of the Deaf community learn concepts of storytelling from a young age; they enjoy a luxuriant atmosphere of uninterrupted narratives and compete with pride to be great communicators.

Drawing on the ideas of Saussure, Peter Elbow explains the benefits of focusing on the natural order of learning to speak before we learn to write. Specifically, he supports the idea of using spoken or signed language as a springboard to written language. The requirement, in both secondary and post-secondary educational settings, to write in an expository format demands adherence to certain rules that create a set of norms for writing. Elbow claims, however, that speaking produces "something more lively and less noun-heavy" than nominalized expository writing (82). Members of the Deaf community embody a sense of storytelling that is unique to their culture, but it is difficult, as with any student, to reinforce the idea that speaking (signing) a story or idea first is a great way to prewrite. The difficulty in prewriting arises because many students do not fully understand that there are various strategies for prewriting. In addition to the

lack of prewriting knowledge, many Deaf students are resistant to the idea of process writing because they often find composing stressful and difficult to master, and, therefore, quickly finish assignments so as not to prolong the drudgery of writing. Encouraging students to use their everyday spoken or signed language on paper is one way to teach prewriting and close the gap between talking and writing.

Conversely, Elbow objects to some of Emig's notions of the dichotomy in writing versus speaking. He calls this separation a "'two-gear approach:' using one mental gear for speaking and another mental gear for writing" (186). When teaching in "the writing gear," many teachers tell their "students not to confuse speech and writing" (186). As a result, when students attempt to write in a way different from their everyday language, their writing is "often stiff, awkward, and unclear" (187). Contextualizing the arguments of Emig and Elbow for Deaf students means that, while writing is often a mode of learning, many students need to be encouraged to view some of the components of process-driven writing as a way to write in their signed or spoken language style. Using their own language, ASL, to help prewrite, draft, and revise will help Deaf students focus on what they are *actually* trying to say. A tool to help Deaf students gain focus on their precise meanings is a dictionary based on their primary language, not on sign production but on meaning.

Unlike Bartholomae's stance that students develop an academic style of writing by appropriating or being appropriated by "a specialized discourse" (624), Elbow supports the cultural plurality of Englishes in the classroom through free writing. During free writing, students are not bound by the rules of SWE (147). Additionally, students can read their writing aloud to hear what they are trying to say. Reading aloud for hearing students is a great way to focus their writing. However, for Deaf students, it does that and more. When ASL users read

aloud, not only are they focusing on their writing but they are interpreting their ideas as well. As I mentioned earlier, Deaf students prefer to interpret their own writing. Interpreting free writing is an authentic way they can practice translating from written English to their primary language of ASL. Free writing can change students' attitudes about writing and changing their attitude about themselves as writers are the first steps to teaching the more meaningful features of writing, such as content, voice, and style. Once Deaf students discover that they can clearly communicate ideas in writing, the motivation to use more academic style will increase, and an academic dictionary will facilitate their progress.

The Organic Nature of Hemispheric Specialization

Now, if Mike Rose were to jump into this conversation, he might bring up the theory of hemisphericity, the specialized functions of each side of the brain. While investigating the cognitive abilities of writers, he concludes, "unsuccessful writers think in fundamentally different ways from successful writers" (345). To analyze the differences in thought patterns further, he explores different theories of neurology in connection to literacy. Of hemisphericity, he notes that some neurologists "suggest that people tend toward reliance on one hemisphere or the other as they process information" (356). Elbow concurs with this reliance on one hemisphere of the other. He forwards Frances Christensen's idea of "right-branching syntax," which starts with the main idea and then adds detail, which is much like everyday spoken or signed language (314). "Left-branching" syntax compares to writing in that written language often uses introductory clauses or complex sentences to demonstrate a more formal or academic style of writing. Teachers often consider left-branching writing as the ideal model for students to learn. Whereas, right-branching syntax is easier to process because "It is dynamic rather than static, representing the mind thinking" (Christensen qtd. in Elbow 314). If the mind relies on

right-branching syntax to make language easier to understand, then allowing students to use their speaking or signing language encourages them to prioritize their main ideas first, then follow with details and examples. Because right-branching syntax is similar to the storytelling practices of the Deaf community, they, like mainstream hearing students, should be encouraged to use their own vernacular to participate in all stages of process-driven composition.

Emig also supports hemisphericity when she writes, "[T]he right hemisphere seems to be the source of intuition, of sudden gestalts, of flashes of images, of abstraction occurring as visual or spatial wholes, as the initiating metaphors of the creative process" (126). ASL users live in the world that Emig describes; their language is processed visuospatially and intuitively. Drawing upon the work of Jerome Brunner and Jean Piaget, Emig recounts the three ways that people produce schema: enactive, iconic, and representational (or symbolic). Considering the iconic mode, she explains, "We learn by depiction in image" (124). Emig explains that the iconic part of the cycle employs an image in the mind of a reader or writer to understand or produce graphemes on the page. However, ASL requires the use of "handshape, palm orientation, movement, and location," which are called parameters, to construct the English equivalent of graphemes (Baker-Shenk and Cokely 79). Because these parameters occur in the signing space, an area approximately an arm's-length in diameter from the top of the head to mid-chest of a signer (Coker and Baker-Shenk 78), ASL relies heavily on the iconic part of the cycle of learning. This is not to say that sign language is iconic, as in depicting a clear visual image or representation of a thing or idea using signs. If ASL were an iconic language, then people who do not know sign language could understand all signs (Cokely and Baker-Shenk 10). While Deaf students learn using the enactive, iconic, and representational parts of the cycle, unlike hearing people, their language is processed using "spatial grammar," a term conceived by Poziner et al.

(16). Spatial grammar is demonstrated when signers use the signing space to construct an imaginary frame. Within the frame, signers can establish objects (people, places, or things) by pointing to a specific section in the frame; they can then show movement or location of the objects.

Spatial grammar, and its connection to hemisphericity in Deaf individuals, is markedly different from spoken language. For over a decade, beginning in the early 1970s, the investigations of Poziner et al. sought to clarify these differences. An important contribution of their work demonstrates that, while spoken languages use word order to indicate grammatical relations, ASL "specifies relations among signs primarily through the manipulation of sign forms in space" (16). Additionally, as noted by Sacks:

> Signers tend to improvise, to play with signs, to bring all their humor, their imaginativeness, their personality, into their signing, so that signing is not just the manipulation of symbols according to grammatical rules, but, irreducibly, the voice of the signer–a voice given special force, because it utters itself, so immediately, with the body. One can have or imagine disembodied speech, but one cannot have disembodied Sign. The body and soul of a signer, his unique human identity, are continually expressed in the art of signing (119).

Many of my Deaf students play with the formation of signs in a creative or humorous way; they are continually trying to articulate ideas in organic and innovative ways. Like spoken English, the rules of ASL follow a topic-comment structure, which means that signers establish main ideas and provide detail. However, unlike the straight linear properties of English, ASL allows users to work temporally forward, backward, or circling around to provide details.

The investigations of Poziner et al. on the hemispheric specialization of Deaf individuals who suffered from various forms of brain damage show how the manipulation of signs formed in space influence language processing. They posit that the left side of the brain is predisposed for processing the syntactic components of language, regardless of modality–signed or spoken, while the right side interprets semantic meaning. It seems possible that ASL users process some of the visuospatial syntax on the right side of their brain. Poziner et al. caution that the oversimplification of hemispheric specialization brings about the false assumption of "a dichotomy of language and visuospatial functioning" (212). They conclude, "[I]n sign language there is interplay between visuospatial and linguistic relations within one and the same system" (212). Simply put, Deaf individuals are using both sides of their brains in different ways than their hearing peers, which is another contributing factor to the diversity that Deaf students bring to the classroom. The implications of hemisphericity indicate that, by allowing Deaf students to process writing in a more organic way, that is, through the intuitive flashes of visual inspiration that happen, teachers can attempt to expand Deaf students' self-esteem instead of flattening them into the hearing mainstream.

Revision Practices of Deaf Student-Writers

When considering the function of revision during process-driven writing, one way to understand the specialized characteristics of language and the brain of Deaf students is to allow for a more holistic focus on composing. In a comparison of her students to experienced writers, Nancy Sommers notes the holistic and linear practices of each group. While both groups revise their work using holistic and linear practices, student-writers tend to become obsessed with sentence-level modifications by subscribing to the "thesaurus philosophy of writing." Sommers explains, "[S]tudents consider the thesaurus a harvest of lexical substitutions and believe most

problems in their essay can be solved by rewording" (47). The unfortunate significance of this philosophy is that, while Deaf writers engage in thesaurus writing, they must think of the word-to-sign correlation first, then they can consult a thesaurus. To complicate matters, often the word-to-sign relationship is not as luxuriant as the sign concept. While I support Sommers' argument that linear revising practices are often employed over holistic revisions, I do recognize that many novice writers consult a dictionary or thesaurus. An essential part of my rationale for creating the dictionary is based on the "thesaurus philosophy of writing." Because I have observed my students use a dictionary or thesaurus to revise their papers, I hypothesized that I could create an ASL dictionary that not only displayed synonyms for words but examples of an academic style. Although the dictionary does not completely address holistic revisions, it does provide for more than merely rewording. By demonstrating usage and stylistic examples, the dictionary provides a comparison of ASL syntax and sentence structure with SWE phrases, which can be used by teachers and tutors to teach Deaf students to work with chunks of writing instead of sentence level editing only.

Additionally, Deaf writers should be able to consult a dictionary in their own language. As I have already discussed, the processes involved in text generation of Deaf writers are complex. However, it is during the revision process where Deaf writers can unpack some of the complexities of composing by using a dictionary in their own language. Many Deaf students use the thesaurus philosophy exclusively because the dictionaries they use offer only one gloss word and the sign production of words, not a definition based on ASL-type syntax. Alternatively, Deaf students rely on SWE forms of dictionaries, which do not conform to the spatial grammar features of ASL.

One reason that Deaf writers gravitate to the sole use of the thesaurus philosophy is not due to cognition, but rather, the natural redundant elements of ASL because they are taught, like their hearing counterparts, that word repetition without a purpose is not a desirable trait in SWE. So, Deaf students attempt to reword using a thesaurus. However, the overarching struggle with word repetition of Deaf writers is the lack of cohesion in their texts. A relationship between two elements is called a cohesive tie. M. A. K. Halliday and Ruqaiya Hasan write:

> The concept of cohesion is a semantic one; it refers to relations of meaning that exist within the text. . . Cohesion occurs where the INTERPRETATION of some element in the discourse is dependent on that of another. The one presupposes the other, in the sense that it cannot be effectively decoded except by recourse to it. When this happens, a relation of cohesion is set up, and the two elements, the presupposing and the presupposed, are thereby at least potentially integrated into a text. (1.1.4; emphasis original).

During revision, Deaf students typically struggle with clarity while attempting to establish cohesive ties, resulting in texts that reflect lower writing abilities than their hearing peers possess.

When reporting the research regarding the texts of Deaf students, Marschark et al. note, "Words are frequently omitted, and sentences generally are less syntactically complex and less well interconnected in compositions than those of hearing peers" (172). They conclude, "Findings of this sort have been replicated in a variety of different contexts and across the school years, leading to the general conclusion (similar to that in the reading literature) that the average deaf 18 year old writes at a grammatical level comparable to that of a hearing 8 to 10 year old" (172). Creating more complexity in texts with deeper connections requires both global and

sentence-level revisions. Collocation, the tendency of two lexical items occur in the same lexical environment (Halliday and Hasan 6.4), is one component in examining cohesion. Repetition can be reduced if students are taught to look for words that co-occur and attempt to expand or define an idea.

Stephen P. Witte and Lester Faigley study the collocation features of global revising in hearing college students. To perform their analysis, the researchers used the work of Halliday and Hasan on cohesion. To determine the level of cohesion, "ninety essays were rated holistically by two readers on a four-point scale," then ten essays, the five highest and the five lowest, were analyzed by Witte and Faigley for categories of error and syntactic features (242). Witte and Faigley note that the low-level essays contain rather significant instances of repetitive words with a lack of elaboration on details. The high-level essays writers "have a better command of invention skills that allow them to elaborate and extend the concepts they introduce" (244). Conversely, "the high percentage of lexical redundancy and the low frequency of lexical collocation in the low-rated essays" indicate that these students struggle with elaboration and extension (245). Although they do not specifically mention Deaf students, many would most likely fall into the low-rated category because of their struggle with translations from ASL to English. Moreover, ASL structure has a requirement for redundancy that is not used in written English. The repetitive structure of certain ASL rules complicates the problem of attaining cohesion because signers use the same sign to mean different concepts, and many Deaf students often only know one gloss word for each sign (Cokely and Baker-Shenk 124). Because of the lack of more than one gloss word, Deaf writers often repeat the same word several times in a sentence or a section of text. While many researchers debate over the methods of teaching composition, Witte and Faigley's argument focuses on the global aspects of writing, which

endorses the idea that Deaf students should learn to revise holistically along with sentence-level corrections.

Regrettably, many Deaf students are taught to revise only at the sentence level using grammar lessons. In his discussion of the different types of grammars, Patrick Hartwell explains that often the teaching of grammar can negate a student's ability to clearly communicate in writing (205). He offers James Britton's analogy "that grammar study would be like forcing starving people to master the use of a knife and fork before allowing them to eat" (qtd. in Hartwell 216) as a reminder that there is an artistic flow to writing that can only be accomplished by using writing as a mode of learning. However, many Deaf students still perform "numerous exercises [that] teach clause and sentence structure in isolation, ignoring the textual, and the situational, considerations for using that structure" (Witte and Faigley 250). One reason for the continued practice of teaching grammar in isolation with Deaf students is that there is little research in the area of linguistic decisions made by Deaf writers the process of text generation. "This generative process of text production is concerned with how it is that an individual writer makes linguistic decisions to create text that will make semantic and pragmatic sense" (Mayer 147). Unfortunately, as with *any* writer, the practice of teaching grammar in isolation does not accentuate students' ability to generate their own texts, it merely reinforces a systematic way of correcting sentences that have been created erroneously for the purpose of instruction. When Deaf students are encouraged to create their own text in the same structure as their primary language, their writing reflects a right-branching syntax style that starts with the main idea and branches out with details. Their writing is then more connected to their linguistic style and less restrictive in content. Additionally, focusing on the generation of content-specific early drafts of student texts versus grammar practice reduces frustration for the students and diminishes the

flattening effect in the classroom. Witte and Faigley conclude, "All discourse is context bound—to the demands of the subject matter, occasion, medium, and audience of the text" (251). Deaf writers can create cohesive ties and reduce redundancy, and a dictionary connecting the concepts of spatial grammar and right-branching syntax to the academic use of ASL will provide efficacy to the interpretation process.

Epistemology of Deaf Writers

Connecting the work of Connie Mayer to Elbow, Emig, Rose, Hartwell, Witte, and Faigley demonstrates how the unique demands placed upon Deaf writers, while similar to hearing writers, plays an important role in the awareness of Deaf students' abilities. Unfortunately, this lack of awareness is difficult to remedy because research on Deaf writing is lacking. Mayer explains, "The focus on reading over writing is typical of literacy research in general, with writing being the most neglected of the 'three Rs'" (145). Her observations and connections to the theories of compositionists elucidate many of the misconceptions of the demands on Deaf writers and encourage awareness of the Deaf culture.

Like other students in diverse classroom settings, Mayer notes, "deaf writers are . . . [a] group who find writing and learning to write especially challenging" (144). The challenge of learning to write is, in part, due to the perceptions of cognitive ability that others have of Deaf students. In line with the thinking of Elbow, Mayer explains that "writing requires more cognitive control that speaking or signing, incomplete utterances, false starts and the like are less well-tolerated in print than in a face-to-face modality" (144). Because writing requires more cognitive control than talking (or signing) and ASL does not follow the linear structure of English, Deaf students struggle with decisions about ways to turn their thoughts into words on the paper. For ASL users, these decisions are complicated because of the visuospatial grammar

structures present in their primary language. Because ASL has very little in common with spoken and written English and even though "deaf [individuals] are generally in constant contact with the DSL, they are rarely highly competent in reading and writing that language" (Hopkins 76). Competency in reading and writing are often the parameters to evaluate cognition. Many members of the hearing mainstream disregard the fact that ASL is not syntactically connected to English and opine that mere exposure to the DSL will create competency in composing.

Deaf students may struggle with expository writing; however, in narrative writing, they are often "able to convey content . . . [just] as well as their hearing peers" (Mayer 147). When compared to their hearing peers, Deaf writers have a unique set of complexities in their storytelling processes that use a sophisticated morphosyntax which can transfer successfully into written narratives. However, when attempting expository writing, Deaf students often focus on sentence patterns or word groupings. Echoing the findings of Marschark et al., Christine Yoshinaga-Itano outlines the sentence features of Deaf writers according to her study. She writes:

> [D]eaf writers tended to use a greater number of nouns, verbs, and determiners, but demonstrated less frequent use of adverbs, auxiliaries, and conjunctions. They relied on shorter, simpler sentences often employing subject-verb-complement sentence patterns. Word order was found to be less flexible, and the writing features numerous grammatical errors and non-standard usages for English (qtd. in Mayer 146).

In addition to these sentence-level issues, Deaf students lack coherence in expository writing. They demonstrate some cohesion in the narrative genre because storytelling in the Deaf culture is a strength. Mayer claims that lack of planning and organizing make the demands on Deaf writers appear to be like those on students with learning disabilities (149). However, gaps or deficiencies

in learning are not always a factor. One way to reduce the deficiencies is to provide Deaf writers with more opportunities to draft and revise in ways that reflect their natural ability. Regarding the flexibility in word order, the practice of allowing Deaf writers more leeway in using right-branching syntax in early drafts would provide a catalyst to changing student attitudes about writing and clear a path for teaching expository ways of writing.

Because much of the focus of literacy education is on reading instruction, many Deaf students do not have sufficient opportunities to generate their own texts. Limited exposure and management of self-generated texts lead to struggles during the process of revision. Mayer claims that revising requires one to "read like a writer," which is the practice of "reading the text as if its meaning were unknown (to the writers themselves), in order to assess its effect on the unknown reader" (147). However, to read like a writer, students must be able to identify themselves as writers. For Deaf students, reading like a writer can be a struggle because the syntactic structure of ASL does not correlate well with written English. Recalling Sacks' comment about the imaginativeness and playfulness of ASL, Deaf students may come closer to identifying themselves as storytellers rather than writers. Their passion for elaborate, playful storytelling is important to consider when attempting to create the idea that Deaf students are *writers*, which is an identity all students need help in realizing. To read their own writing as a writer, Deaf students translate their visuospatial syntax into written English. The only concept of writing that Deaf students possess is the visual mode of written English. Therefore, during the early stages of drafting Deaf students must first interpret their ASL into English before they can proceed to the revision stage.

One method of teaching young Deaf students to interpret ASL into written English is called Strategic and Interactive Writing Instruction (SIWI). During SIWI students can view both

languages at the same time on two different surfaces. The ASL side may have pictures, gloss words, or videos, while the English side is open for students to discuss options in translation and "determine how to change their ideas into English text. This is a time when principles of English and ASL are compared, contrasted, or highlighted" (Wolbers et al. 23). Progressing the side-by-side construct to the college level is an important part of my research. The dictionary will allow Deaf FYC students to view ASL signs and gloss on one side of the entry and academic style translations on the other side. Viewing the authentic examples in the dictionary will model ways for Deaf student-writers to generate text and demonstrate revisions techniques.

Identities of Deaf Students

Being a writer means one must make decisions regarding text generation, syntax, cohesion, revision techniques, word order, voice clarity, and style. Being a writer means cultivating all these characteristics and constructing an image of oneself—an identity. By its very nature, ASL provides a right-branching syntax that gives signers the flexibility to create unique styles of voice, which can be a powerful tool to foster positive associations to the writer identity. While the Deaf community grapples with a variety of identity groups, such as racial, ethnic, and LGBT+, none is more prominent than the effect of language use. By "use," I mean the choice to use and maintain a level of proficiency of ASL in all environs. Many have studied identity issues of Deaf students, but the work of Irene Leigh highlights important aspects of complex cognitive and social issues used to construct identity. Language, particularly in connection to the hearing mainstream, provides a construct that is critical for members of the Deaf community of practice to maintain their individualism (196). Maintaining individualism is often difficult in the Deaf community due to the competing identities on a continuum of ability in hearing. Considering the continuum of hearing ability, there are labels within the Deaf community that do not necessarily

correlate to their audiological conditions. One such label is "Hard-of-Hearing," which indicates a Deaf person who can hear or talk with enough clarity that they become part of the hearing world and the Deaf community. Often these individuals straddle both worlds and have difficulty in maintaining a strong identity in either community. Regarding identity, my research is focused on those who are culturally Deaf. Although these individuals do not view themselves as disabled, they do face challenges with learning a second language and being othered by the dominant culture, while striving to maintain their Deafhood.

A community of practice (CoP) is more than just a group of people making social contact; they also have common goals and unique behaviors. Miriam Meyerhoff names three characteristics of a CoP as mutual engagement, shared repertoire, and jointly negotiated enterprise (200). Members of a community coming into direct contact to build a social network characterize mutual engagement. CoP members have a shared repertoire that includes the sharing of speech styles, jargon, slang, and "in-jokes." Meyerhoff notes, "A 'jointly negotiated enterprise' is perhaps the most crucial criterion for defining a community of practice" (200). Jointly negotiated enterprise requires members of a CoP to go beyond direct contact and work toward a common goal. For Deaf individuals, one key goal is striving to have ASL accepted as a complete, legitimate, and equal language by the hearing mainstream.

Connecting these three areas to the Deaf CoP, Leigh notes that a "sociolinguistic approach to deaf identities . . . encapsulates a shared common language, common attitudes, social relationships, and unique lifestyle" (197). While culturally Deaf people completely capture these characteristics of a CoP, some people who are Hard-of-Hearing, and even a few Hearing people are accepted by the Deaf community; however, their entry is based largely upon proficiency in ASL. The most common hearing people who enter the Deaf community are

spouses and siblings of Deaf people and children of Deaf adults (CODAs) because they possess a command of ASL that not only encompasses the structure of the language but its nuances as well. The Deaf identity is so connected to language use that Barbara Kannapell, founder of Deafpride "a non-profit organization that advocate[s] for human rights among deaf persons and promote[s] bilingual education for deaf children" ("Manuscripts"), comments:

> It is important to understand that ASL is the only thing we have that belongs to deaf people completely. It is the only thing that has grown out of the deaf group. Maybe we are afraid to share our language with hearing people. Maybe our identity will disappear once hearing people know ASL (qtd. in Sacks 129).

The guarded connection that Deaf people have with their language is internalized and transfers to interactions that involve communication with hearing people. Observers of ASL users have noted that many members of the Deaf community rarely use the full complexities of ASL when communicating with a hearing person; instead, they use one of the English-based non-language systems such as SEE or MCE (Baker-Shenk and Cokely 59). Although some hearing people master a high level of ASL usage, it does not mean they are part of the Deaf CoP.[14] Therefore, the use of strict ASL structure among Deaf people is largely because of their attachment to their heritage language that was developed by Deaf people.

To develop a strong sense of identity, one would think that Deaf educators would promote the praxis of second-language theories to emphasize the use of ASL as a primary language and English as a second language. Many ASL users do not fit the mold of L2 students, so educators often have conflicting perceptions about the application of second-language

[14] An example of people who attain a high level of usage is ASL interpreters, especially those who are nationally certified, who are hired for their signing skills but do not have the opportunity to participate in any other CoP activities, such as, sports or club activities.

learning theories. Because Deaf students struggle when attempting to separate ASL from English, some members of the Deaf community strongly support a bilingual-bicultural (Bi-Bi) approach. The Bi-Bi approach asserts that ASL is taught as the L1 and English as the L2; additionally, only the visual modes of reading and writing in English should be taught (Moores 21). Along with the linguistic features, students learn about the history, ideas, stories, and customs of the Deaf CoP in the Bi-Bi approach.

A survey conducted in 2003, showed that 36% to 40% of the Deaf residential and day schools in the US identify themselves as Bi-Bi (LaSasso and Lollis 79). The results of this survey indicate that, regardless of the implementation procedures a school adopts, the Bi-Bi approach demonstrates that there is a correlation between promoting ASL as an L1 and learning English as an L2 via written text. The researchers note, "The external mode of each language can serve as a bridge between the mode of inner speech and that of written speech" (86). Bridging the gap between an L1 and L2 is important for any English language learners (ELL), but for Deaf students, differentiating the multiple layers of ASL as they connect to English is a valuable tool in changing cultural and educational attitudes.

Second-Language and Code-Meshing Definitions within the Deaf Community of Practice

The Bi-Bi approach is among many pedagogies that attempt to teach Deaf students within the defined parameters of typical ELLs. In second-language instruction, it is important to look at the needs of each individual. To that extent, Tony Silva explains, "those who deal with ESL writers need to recognize that these differences may call for special instructions" (161). The theories of Rose, Emig, Elbow, and Mayer embrace the idea that the differences in students should be viewed in a positive way to discover the strengths of students. Some writers are right-brain thinkers, some possess narrative skills, some operate linearly, and others recursively.

Educators need more resources to support the unique perspectives of Deaf students in FYC classrooms. One such perspective is that "many Deaf [students] do not feel the need for a writing system, either because they use video media or because they see writing as best done in the dominant language in their diglossic situation" (Hopkins 75). Because their diglossic situation consists of spoken English and ASL, Deaf students are rarely given an opportunity to express themselves in their L1. Many Deaf students are adept at digital video communication and can use a variety of media to express themselves clearly in their L1.

In most cases, when Deaf students enter a first-year composition course, they have an interpreter. Communication via interpreter is valuable, but it can create a sense of detachment for both the teacher and the Deaf student during classroom interactions. In some cases, teachers may not realize students' full potential in writing. Silva cautions that students should be treated "as human beings and unique individuals with their own views . . . and their own interesting stories to tell, not as blank slates for teachers to inscribe their opinions on nor as buckets to be filled with their teachers' worldly wisdom" (162). One way to respect the rights of students who do not use English—spoken or written—is to subscribe to a code-meshing pedagogy that promotes a blending or merging of all varieties of English. Allowing Deaf students to use the right-branching syntax of ASL to translate into an academic style can be accomplished through code-meshing; however, teachers need to be flexible in approaching language structure issues. Teaching students to realize there are many varieties of English, and each variety plays a role in the vitality of the English language, is one approach to code-meshing pedagogy.

While the Bi-Bi approach may seem like a way to provide Deaf students with the best of both worlds, it is much like code-switching. When educators use the term code-switching, they are often referring to "situational code-switching, which is a "pattern of alternation where one

language is used in one context and another language is used in another context" (Barett 31). An example of situational code-switching is when a Deaf individual uses ASL with another Deaf person and, conversely, using a sign system that mirrors English syntax with a hearing person. Switching between ASL and sign systems further complicates the learning of SWE because code-switching devalues ASL as a language that should be switched away from when communicating with hearing people. A way to avoid hierarchizing English over ASL is to examine the practice of code-meshing as a platform for both ASL and English to merge, or "mesh," in the writing of Deaf students.

Vershawn Young writes, "[C]ode-meshing challenges the belief that English is a national, prescriptively narrow language, unable to accommodate linguistic influences from other cultures and nations. Indeed, code-meshing is all around us and should be widely adopted in classrooms" (78). Additionally, Young claims that code-switching further separates and flattens the othered group. He writes,

> Over the past decade or so, I have argued code-switching tends to prevent African Americans from viewing Standard English as expansive and inclusive, as being able to accommodate and include their culture and dialect. Thus code-switching in my opinion promotes a segregationist rather than an integrationist model of literacy instruction (3).

In support of Young's stance, Suresh Canagarajah calls for teachers to treat their students' "first language and culture as a resource, not a problem" (603). For Deaf students, the idea of code-meshing during composing would enhance the visuospatial nature of their writing by adding some multimodal composing, such as digital recordings. Additionally, a broader understanding by teachers of the conceptual nature of ASL can happen by allowing Deaf students to use gloss words that have multiple meanings that can be found in the Academic ASL Dictionary. Because

code-meshing allows speakers or signers of a variety of Englishes to blend the ideas of their primary language into SWE, the dictionary provides a model to construct or deconstruct the natural blending that occurs between ASL and English.

In his discussion of code-switching versus code-meshing, Elbow notes that the arguments of Canagarajah and Young require students to, first, have "control over language" and "some authority" as a writer (331). And, secondly, Elbow argues that Canagarajah and Young are promoting an "in your face" type of code-meshing, "but writers at this very cultural moment will have a much easier time writing for conventional readers, especially teachers and employers, if they learn how to 'fix' the few features of their vernacular that set off error alarms" (332). While garnering authority as a writer requires publication or academic recognition, gaining control over language can be accomplished by allowing all students, Deaf included, to value their own "colorful language, local idioms, and techno-lingo from their own heritages" (Young 77) and use these elements in their writing. In response to Elbow, Young writes, "I see code-meshing as being fully able to help students and anyone else produce expressive, persuasive, effective prose for academic, creative, and professional purposes" (7). Code-meshing for Deaf FYC students can bring about a deeper understanding from teachers and peers on the complexities of ASL and increase the self-esteem of Deaf students by placing their primary language on equal ground with English.

Habitus of Deafhood

The sociohistorical influences on the Deaf CoP, including characterizations of their identities, linguistic use of right-branching syntax, and code-meshing practices, provide a platform for the development of internalized knowledge about the practices of their community. While a major identifier for entry into the Deaf culture is an individual's proficiency in the use of

ASL, there are other factors involved such as "family communication and environmental influence," along with a positive or negative association to interactions with the hearing mainstream based on reactions to communication styles (Leigh 201). When these interactions and environmental influences are internalized and sustainable, they transfer from one context to another to become part of the habitus of a Deaf person. Merging a variety of cultural and linguistic features such as code-meshing, syntactical styles, and identities allow individuals to sustain and modify their own Deafhood habitus.

For Deaf individuals, the generative principles that follow them as they interact in different fields of play can expand their habitus to create a stronger bond within the Deaf community of practice. In the Deaf CoP, an important aspect of jointly negotiated enterprise is to develop their language continually. During language development, Deaf individuals tend to be innovative and interactive with each other when creating connections with signs. The reproduction of these principles in various social settings provides for the mutual engagement among members of the Deaf community to sustain the transference of the thoughts and ideas of agents interacting in a variety of spheres. A closer look at Kannapell's comment about ASL, "It is the only thing that has grown out of the deaf group" (qtd. in Sacks 129), reveals that this "only thing" has evolved because the members of their community come together in direct face-to-face contact to communicate more often than the spoken community does due to the visual requirements of ASL. During their face-to-face connection (now enhanced by technology such as video phones and Skype), Deaf people engage in a wide repertoire of social and linguistic practices that demonstrate an individual's cognitive abilities and clarify their motivations. Additionally, their social practices are dictated by their language interface at any given moment.

If they are among hearing people, they use a sign system. If they are among other culturally Deaf people, they use ASL.

In their book, *Habitus of the Hood,* authors Chris Richardson and Hans Skott-Myhre extend the definition of habitus further. They write, "Habitus is a way of seeing and acting that links certain groups in society. While all individuals form a habitus, this acquired skillset in not always the same" (11). For members of the Deaf community, acquired skillsets range from having little or no sign language exposure, making L2 learning and code-meshing difficult, to the luxuriant ASL linguistic environment, which includes the rich storytelling practices that are passed on by Deaf parents and other family members. Many Deaf children learn to use residual hearing[15] at a young age, so they can talk and hear certain speech sounds, which open a channel of communication with hearing people. Some Deaf children attend public school for some or all of their secondary education. In a public school, some Deaf children are labeled "hearing impaired" and in need of special services. They are placed in a special education classroom for instruction or given an interpreter or communication device. While in the special education classroom, they are often the only Deaf student, which isolates them and creates a sense of detachment from the Deaf community. The feeling of detachment can be intensified at home; often, Deaf-of-Hearing children have family members who know little or no sign language. If this is the case, Deaf children may have limited communication during evening hours and on weekends, which increases their sense of detachment. On the other hand, Deaf children who attend residential schools have opportunities to sign with other students and teachers. They can also participate in Deaf cultural activities, such as sport and academic competitions. However,

[15] Residual hearing is any hearing ability that a deaf individual sustains. A hearing aid or other audiological amplification devices can enhance residual hearing of deaf individuals regardless of their audiogram results.

because state-run residential schools usually only have one school per state, students must live away from home for extended periods. Many parents struggle with the pros and cons of the isolation of being the only Deaf student in a public school or living miles away from the family, only to come home on weekends and holidays where children are, again, potentially isolated due to lack of exposure to ASL. Both environments have a strong influence on habitus.

The reflective nature of the Deaf community continually evolves through the interactive, and sometimes playful, efforts of ASL users to explore intrinsic linguistic generative principles of the Deaf CoP. When describing the habitus of the Deaf community, Ladd writes:

> Deafhood is not, however, a 'static' medical condition like 'deafness.' Instead, it represents a process—the struggle by each Deaf child, Deaf family, and Deaf adult to explain to themselves and each other their own existence in the world. In sharing their lives with each other as a community, and enacting those explanations rather than writing books about them, Deaf people are engaged in a daily praxis, a continuing internal and external dialogue. This dialogue not only acknowledges that existence as a Deaf person is actually a process of *becoming* and maintaining 'Deaf,' but also reflects different interpretations of Deafhood, of what being a Deaf person in a Deaf community might mean. (sic; 3)

The unique outlook of Deafhood on the community promotes the cognitive abilities, as well as the reflective skills, of members of the Deaf community that will continue to impact the rest of society.

Considering the Native American term "peoplehood" and its four pillars—language, history, religion, and place (Cushman 6), Deafhood can be constructed in much the same way. Language is the most important factor. Also, as in any culture, history plays an important role in

the preservation of language, stories, and traditions. The sociolinguistic practices and beliefs of Deaf people reflect ways in which the dictionary should be structured and the purposes it should serve. Dictionaries are much more than a collection of words; the role that sociolinguistics plays in lexicography is vital to making a resource material appropriate for the Deaf CoP.

Creating a dictionary that coalesces the history, traditions, and cultural identities of Deaf individuals requires an in-depth consideration of the sociolinguistic practices that are couched within the Deaf CoP. Additionally, research should consist of exploring Deafhood and how Deaf people interact in within their own community and mainstream society. Theories about text generation and revision are important ideas to understand during any type of lexicographical analysis that is based on the rhetoric of a cross-cultural group. Creating a dictionary for Deaf FYC students should be based on authentic examples and presented in a way that is understandable and sustainable. The Academic ASL Dictionary should be a tool that, through its real-life examples, teaches ways to revise and use language, not just to validate spelling or how to produce a word without any definition.

CHAPTER THREE

SPECIALIZED LEXICOGRAPHY FOR THE ACADEMIC ASL DICTIONARY

Dictionaries are diverse and serve a variety of users. Some focus on the monolingual usage of a word from one language and other bilingual dictionaries translate words from one language to another. Some subscribe to prescriptive grammar usage, while others attend to the descriptive nature of grammar. "Looking at definitions by lexicographers of the term *lexicography* it is more than evident how diverse the interpretations of this term are and how many conflicting ideas are put forward when trying to define the word *lexicography*" (sic; Gouws 456). The challenge in defining the word *lexicography* mirrors its diverse nature.

A central part of my research for the Academic ASL Dictionary (AAD) is to coalesce the concepts of habitus, theories of composition, and the nature of Deafhood to create a dictionary for Deaf writers by observing their language in its diverse social contexts. Going beyond that, Roger Fowler notes that it is essential to look "at language, not as a system on its own but as something that 'intervenes' in the social world, largely by perpetuating the assumptions and values of that world" (qtd. in Hunston 109). Therefore, just as in spoken language, the interplay of ASL in Deaf culture reflects the values of the Deaf world. Thinking about the sociohistorical contextualization of the Deaf community put forth in Chapter Two, writing the AAD requires critical inquiry into the methods and designs of compiling a selection for the dictionary.

Few individuals have worked more diligently to compile a dictionary than William Stokoe and his colleagues in 1965 when they compiled the *Dictionary of American Sign Language* (*DASL*). Its mere three thousand one-word-to-one-sign translations may pale in comparison to the over 600,000 words in the *Oxford English Dictionary* (*OED*). However, unlike the *OED*, for the *DASL* Stokoe invented a notation system to demonstrate how to produce the

signs. His notations do not include the modern-day pictures, videos, or online content. So, for example, to learn how to sign the word JUDGE, one could look it up in the *DASL* and find these seemingly arbitrary symbols: ∅F> F< N~. These symbols represent the parameters of ASL structure: handshape (the classifier or letter shape each hand makes), palm orientation (the direction the palm faces), movement (the direction the hands move), and location (where the hands at located in relationship to the body) (see table 2).

Table 2

Stokoe's Notation for the Sign JUDGE

∅	location	neutral signing space
F	handshape for left hand	"F" handshape=forefinger and thumb touching to make a circle; other fingers extended
>	orientation	palm facing to the right of the signer
F	handshape for the right hand	same as above
<	orientation	palm facing to the left of the signer
N	movement	up and down
~	movement	alternating

Source: Stokoe, William C. et al., *A Dictionary of American Sign Language on Linguistic Principles*. Linstok Press, 1965.

Stokoe's arduous task of notating thousands of signs for the *DASL* led to clear definitions of the original four parameters[16] and the recognition of ASL as a complete language by the field of linguistics. Because Stokoe's notations are difficult to construct digitally, or handwritten, the symbols did not develop into a written form of ASL. Regarding a written form of ASL, Stokoe told Sacks in a personal communication, "the Deaf may well sense that any effort to transcribe in two dimensions a language whose syntax uses three dimensions of space as well as time would

[16] When Stokoe was working on the *DASL*, only four parameters were recognized. Currently, Non-Manuals, a fifth parameter is recognized. Non-Manuals include facial expressions, mouth morphemes, head and body movements, and other types of gesturing.

far outweigh the result—if it could be achieved" (Sacks 78). Even in the new millennium, the technologies available are still unable to effectively interpret ASL's three-dimensional properties of time and space into writing to assist Deaf writers. While Stokoe and others acknowledge that ASL does not lend itself well to the written format, it is still possible to create a dictionary using corpus-based lexicography. A corpus collected solely of Deaf writers can be used to analyze and extract meanings of words in context. Fortunately, for my research, the computational functions of computers have revolutionized the efficacy of corpus collection and analysis.

Everyday Uses for Computational Linguistics

The 1755 subtitle of Samuel Johnson's *Dictionary of the English Language* reads: "In which words are deduced from their originals, and illustrated in their different significations by examples from the best writers" ("Page View"). Lexicographers still follow the same process of analyzing texts to determine the meaning of words. However, with the advent of computers, the amount of text one can now examine is much larger. Today, instead of selecting examples from only the best writers, lexicographers build corpora of many sizes, specializations, and purposes. Corpus-based methodology uses computerized methods to perform mathematical calculations on phenomena occurring in corpora.

One common example of corpus-based methodology can be found in the search engine Google, which accesses a large corpus of Web sites to find information connected to the keywords submitted by users. Many people access the Internet daily for a variety of information; however, most users do not realize the Web is a corpus. William Fletcher claims, "The Web corpus owes its popularity to its tremendous size; broad linguistic, geographic and social range; up-to-dateness; multimodality; and wide availability at minimal cost" (1). Because the goal of Google researchers is to make "the world's information available through a single platform"

(Hollis et al. 124), it houses an extremely large corpus comprised of millions of Web sites. When a user submits the keywords *Deaf Studies* to the Google search engine, it calculates every occurrence of the keywords in its corpus to produce a list of all instances of *Deaf Studies*. The user can then examine the textual information surrounding the keywords to decide if one of the resulting hits, usually out of millions, matches his or her specific criteria.

The compilation of a dictionary follows a process similar to Google–creating a corpus, submitting keywords, and looking for meaning in the words surrounding the keywords. By analyzing corpora, dictionary writers create high levels of lexicographic standards for their investigations because "corpus linguistic methods are employed to enhance the analysis even if analyses include more qualitative approaches, and as a major benefit to research, corpora also provide the naturally occurring data for numerous intercultural studies" (Connor 10). While the corpus-based methodology is often used to study massive amounts of data over a long period of time, the purposes of corpus-based linguistics are wide-ranging.

The purpose of this study was to compile and statistically analyze a small, highly specialized corpus, collected from the published work of Deaf individuals, and to describe lexical items and categorize their usage for entries into a dictionary for Deaf students. The descriptive nature of my research required analyzing the corpus from the semasiological and onomasiological perspectives of lexicography. The alphabetical pattern of headwords in dictionaries is semasiological, knowing the word to look up the meaning (Paquot 172; Meyer and Gurevych 268). On the other hand, onomasiology is knowing the meaning and looking for the name of an idea or concept, much like a thesaurus (172; 268). During the onomasiological phase of my research, I studied the phrases and collocates of the targeted words to define a term. For the semasiological perspective, I examined how the words functioned semantically in different

situations. It is important to note that both approaches are commonly used in all types of dictionary-making, and I use both types in my dictionary.

Definition of Terms Specific to Corpus Analysis and Lexicography

Before I continue my method discussion, I feel it is necessary to define some terms that are specific to corpus analysis and lexicography. Tokens, lemmas, types, and hapaxes are all used to describe the results garnered from different analytical functions performed on corpora.

Every word or lexical item in the corpus is considered a token. In English, tokenization, the process of identifying lexical items, is relatively easy for most programs because white spaces separate the words. In other languages, however, tokenization is difficult because the words are not necessarily separated by white spaces (Kilgarriff and Kosem 33). After the words are counted, they are categorized and grouped. The grouping of words by their derivations is called lemmatization. So, the lemma of *eat, ate, eaten,* and *eating* would be counted as one type that occurs in the text. Hapaxes are words that occur only one time in a corpus.

Obtaining a frequency count list is a function of corpora analysis. When the frequency function is performed, the results are displayed in a list of tokens that are ranked in order of frequency, word (alphabetical), or statistical measures depending on the preferences set by the user. For example, when a frequency count is requested, the tokens are ranked in order of frequency occurrences in the entire corpus. However, when the preference is set for word ordering, the rank count is based on alphabetical occurrences.

A key factor in evaluating corpora is called concordancing. Google's search engine is an extremely large concordance program. When a word or phrase in typed in the search bar and submitted, the user can see every occurrence, also called hits, of that word or phrase in Google's gigantic corpus. John Sinclair defines concordance as, "a collection of the occurrences of a word-

form, each in its textual environment" (qtd. in Kilgarriff and Kosem 36). When using smaller concordancing programs, users can select a word from the frequency list, and the concordance function will display all occurrences of the node word. Concordance lines are the snippets of texts from the corpus that lexicographers read to find the meaning of node words. Node words "can be shown in the sentence format or the KWIC (Key Word in Context) format" (sic; Kilgarriff and Kosem 36). The KWIC feature displays the node word in bold and in the center of the line. Using the node word and concordance lines to define a word is called phraseology, which is the process of identifying patterns, distinctions, and semantic preferences in the snippets of the concordance lines (Hunston 9; Kübler and Pecman 188).

Collocates and clusters are two more components that can be analyzed to create dictionary entries. Collocation is the process of finding words that occur in relationship to the node word, but not necessarily directly next to the word. Collocates are helpful in discovering usage and behavior patterns of node words. For example, if a node word, which is typically used as a noun, is found in a corpus as an adjective or verb, it might indicate a new descriptive pattern for usage. Whatever the behavior, researchers should observe a wide variety of clusters on both the right and the left of the node word. Most collocation analyzers are "grammatically blind" in that they capture words close to the node word (Kilgarriff and Kosem 41), so lexicographers examine the clusters of words that are adjacent to the node word. Examining both collocates and cluster types are helpful in determining meaning, usage, and parts of speech. An important idea during phraseology is "Context clarifies meaning" (Hanks 70). Lexicographers use phraseology to clarify meanings of words by viewing tokens in their full contexts.

Within the last thirty years, corpus program developers have discovered new methods to clarify context for lexicographers. Word sketches and good dictionary examples (GDEX) are

available on programs for commercial lexicography. Sophisticated and expensive programs can now generate a 'word sketch,' which is a profile of a node word based on usage in the concordance lines and its collocates (Kilgarriff and Kosem 44). Because they contain information that is not pertinent to dictionary users, word sketches do not typically appear in dictionaries. Snippets from actual texts, however, do appear in the dictionary entry to serve as an aid in understanding the full meaning of a word. Some programs can ascertain snippets from the corpus that could serve as examples for the dictionary because they summarize the meaning and usage of the node word. The example-finding component of a corpus program is called a good dictionary example (GDEX) finder. While these tools are valuable for commercial lexicography, researchers must still analyze the results of the word sketches and GDEXes carefully before creating a dictionary entry. Commercial word-sketching and GDEXing programs are hard-coded, meaning they are confined to looking for code-specific text and do not allow users to change the functionality. Because of the expense and restrictiveness of these commercial programs, I opted to develop my own word sketches and GDEXes by analyzing the behavior of the words within my own corpus.

Parameters for the Deaf Writers Corpus

The corpus for my research is the first body of work composed exclusively from professional publications of members of the Deaf community. I created the Deaf Writers Corpus (DWC) as a collection to assist me in developing the AAD as a tool for Deaf writers, teachers, and tutors. While compiling the DWC, I maintained a focus on the language practices and social beliefs of the Deaf CoP. As with any culture, "the role of language in forming and transmitting assumptions about what the world is and should be like, and the role of language in maintaining (or challenging) existing power relations" is paramount to corpus analysis (Hunston 109).

Because of the 'real-life' nature of corpus-based methodology, researchers can deeply examine the rhetoric and significance of a group's ideologies about culture and power relations. Members of the Deaf community struggle with power relations, especially in the spoken-language context, because often they are outside of typical L2 settings. Often their cognitive abilities are questioned, while sociolinguistic factors such as habitus and syntactical structures of their primary language are overlooked. A prominent sociolinguistic factor for Deaf individuals is the strict guarding of ASL and using it as grounds for admittance to or exclusion from the Deaf CoP. In the DWC, an author's acceptance in the Deaf CoP is a requirement because, while the context of the publications varies, the authors are rhetorically situated in the Deaf culture through language, education, and background.

To create a balanced corpus, a linguist tries to "represent the diversity [of the collection] in a meaningful way" (Hunston 29). In the Deaf CoP, diversity exists in many facets. Even though I chose to collect only academic writing, there is great diversity among the habitus of the members of the DWC. The contributions to the corpus are from professional academic writers in the Deaf community who have mastered interpreting their visuospatial grammar into the linear formation of Standard Written English (SWE). By closely examining linguistic features of the keyword in a variety of contexts, I could derive meaning from the authors' word choices. Additionally, corpus builders should take "into account age, gender, . . . [and] social class . . . as well as settings or genres" to compile a balanced corpus (Hunston 29). I gathered work from authors with a variety of backgrounds for the DWC to demonstrate several types of lexical usage at the academic level. "For many minority languages, the establishment of a corpus serves to assert identity and importance . . . as writing a dictionary of the language has always done" (Hunston 31). The authors included in the DWC are members of the Deaf community of practice

because of their use of ASL as a primary language (I will discuss my vetting process in the Methodology Part I section in this chapter). Their identity as L2 learners acknowledges the importance of establishing a corpus to analyze the intercultural rhetoric of the Deaf CoP. For the DWC, I investigated only the academic register from Deaf writers to keep the corpus a manageable size. The entries limited themselves because I only collected the writings of Deaf individuals who published in academic journals, books, or other academic sources. Creating and maintaining a small, specialized corpus allowed me to dedicate more time to examine fewer words in greater depth. The specialization of the corpus also allows for authentic examples to apply when teaching Deaf students to write in academic settings.

The following criteria were used to create a list of writers to include in the DWC (all criteria must be met):

1. Authors are members of the Deaf CoP. While some authors may identify themselves as members of the Deaf CoP, the key determinant of membership is the authors' use of ASL as their L1. For the purposes of my current study, I excluded any person who is hearing, including spouses or siblings of Deaf individuals and CODAs, because the point of this compilation was to investigate ways of interpreting ASL into SWE. Additionally, any works translated from ASL to SWE by hearing persons were excluded because of the possible influence of English into ASL.

2. The texts must be non-fiction, which did not exclude memoir and other biographical work if it was classified in the non-fiction category. Any subject or discipline was considered. For example, if a researcher in the field of science published in a journal and the author is a member of the Deaf community, then the work was accepted. Accepting all disciplines fulfilled my choice to use only the academic register.

3. Work must be published and available to the public without copyright restriction[17] that precluded use in a corpus.

These writers embody Deafhood, and thusly, have already fused habitus and L2 abilities into composition practices that led to publication.

Methodology Part 1: Collecting the Deaf Writers Corpus

To create the selected entries for the AAD, I employed a four-part methodology. The first part of the method was collecting texts for the Deaf Writers Corpus (DWC). Gathering electronic text entries for the DWC presented several challenges. Perhaps the most arduous task was determining if the author was a member of the Deaf community of practice. Typically, albeit understandably, Deaf authors do not identify themselves as Deaf or that ASL is their first language in their publications. Initially, I conducted a Google or YouTube search to find information about the authors. Unfortunately, searching large platforms did not solve the problem; not all Deaf authors are accessible on the Web. To narrow my search, I studied the research methods that Shawn Wilson puts forth in his book *Research is Ceremony*. He posits that authentic research calls for "methods to be community driven" (110). Forwarding this idea, I turned to the local and national Deaf communities. The largest segment of the academic Deaf community is connected through Gallaudet. By searching the university Web site, I ascertained a few names of Deaf professors at Gallaudet. Additionally, I asked my own colleagues and

[17] During my research, a question arose about the copyright laws of using an individual's work. I accessed Davies' COCA Web site for the following quote:

> Access to actual portions of the original text is limited to very short "Keyword in Context" displays, where users see just a handful of words to the left and the right of the word(s) searched for. In addition, all access is logged, and users can only perform a limited number of searches per day. As a result, it would be difficult for end users to re-create even one paragraph from the original text, and it would be virtually impossible to re-create an entire page of text, much less the entire article. This "snippet defense" (which relies on limited access to the original text via small snippets from the web interface) is the same one used by Google Books for its use of millions of copyrighted materials . . . [W]e are clearly in accord with the provisions of the Fair Use statute. (*COCA*)

professors for names of Deaf authors. After forming a list of potential authors, I discovered that I could cross-reference my list of names with ProQuest to find dissertations of Deaf individuals. To that end, I collected not only dissertations, but published articles from the Gallaudet University Press; book reviews; pieces from journals such as Sign Language Studies, Library Trends, and the Linguistic Society. The authors are not only Deaf, but they come from a wide variety of racial, ethnic, and social backgrounds such as African American, Native American, Hispanic, and the LGBT+ community, along with European Americans. Their writings are on topics such as education, health, social science, and psychology. After collecting about thirty-five different pieces of work, I created a large zip file in Microsoft Word, which I named DWC. I attempted to load it in TextAnz—a program that is free to download and performs computational linguistic functions such as word frequency counts, searching for collocations, and other processes to assist researchers in analyzing the behavior of words in a corpus. Unfortunately, TextAnz would not work with my corpus.

While TextAnz works well with small corpora, my almost 700,000-word corpus was too large for the program to handle. When I selected my DWC zip file, TextAnz consumed forty-five minutes of loading time. Because TextAnz, like most text analyzers, does not save files, the waiting time was forty-five minutes or more *each time* I wanted to run an analysis. Frustrated, I reached out to an expert Mark Davies, who has built and maintains a Web site with several large corpora. He suggested either the AntConc program or CQWeb, an online analyzer. I decided to go with AntConc because it is free to download and can be used offline. When I uploaded my DWC zip file, the program took about a minute.

Methodology Part 2: Distilling a Slice of the Data

In the second phase of the methodology, I distilled the data into a usable set. The work of Ellen Cushman in *The Cherokee Syllabary* provided a model for my own work. One idea of Cushman's that resonates with me is the concept of the work being one "slice" of language interactions (xiv). To find an appropriate slice, I uploaded the DWC zip file into AntConc and ran a frequency count, which displayed my total word count for tokens at 691,575. To zoom in on some specific tokens, I eliminated all occurrences of *the* and all words with more than one-hundred hits. With large corpora analysis, individual researchers each work on one section to analyze an entire corpus. The size of the sections I eliminated were too large to fit the parameters of my current study. Next, I discarded 9,439 hapaxes and words with ten hits or fewer. Still left with 3,858 items, I reviewed the literature regarding electronic lexicography. Adam Kilgarriff and Iztok Kosem write, "Given fifty corpus occurrences of a word, the lexicographer can simply read them. If there are five hundred, reading them all is still a possibility but might take longer than an editorial schedule permits. Where there are five thousand, it is no longer viable. Having more data is good—but the data then needs summarizing" (40). To that end, I decided to examine how many words occurred fifty times in the corpus. Twenty-one words with fifty hits are in the DWC. Because two of the items were abbreviations, I eliminated them from the list. After an initial analysis of the list, I also discarded the word *sage* because in all occurrences, save one about burning the herb sage, the authors cited it as a publishing company. Also, I did not use the word *wood*. Only once did the word refer to the ease of "bending cherry wood;" every other occurrence was a citation of individuals with the name Wood. While I realize that these words, like many other words in the corpus, have meaning outside the context of the DWC,

I remained focused on my initial task of examining the words in the context of the current form of the corpus.

To extend my analysis of words in context and investigate the "cultural attitudes expressed through language" use (Hunston 14), I performed four queries on words of my own choosing based on my vocabulary lesson plans. Submitting four words into the DWC brought my list to twenty-one. While I followed the exact same methodology for analysis, these words did not have fifty occurrences, but they were all found in the DWC. With my list finalized, I began the second phase of my methodology, to study the phraseology from concordance lines, cluster results, and collocates to manually construct word sketches.

Methodology Part 3: Word Sketch Design

As mentioned earlier, word sketching programs are cost prohibitive and restricted by hard-coding. Because I wanted to add an area for ASL signs to the sketch, which is not available for purchase or download, I designed my own word sketch template. Using the Microsoft Excel program, I drew a figure with several t to enter information about each of the twenty-one words. I labeled the boxes according to the information I wanted to provide. First, I recorded the node word to be sketched; however, I did not add the part of speech (POS) information until later in the process because I wanted to see the word in several contexts before verifying its function. In the top left box of the template, I recorded the rank per frequency and indicated how many occurrences the token has in the corpus (fig. 1). Below the rank and occurrence information, I examined the collocates. I set the parameters of the collocate function in AntConc to display one word just before the node word, which I labeled NWR. Next, I set the parameters to display one word just after the node word, which I labeled NWL. Then, I recorded the number of collocates types (lemmas) one word to the right and left of the node word. Below that box, I recorded up to

ten collocates just before and just after the node word. I followed the same process for collocates within five words to the left and right (5L/5R) of the node word. In the boxes below the 5L/5R collocates, I again recorded up to ten words; however, to limit the size of the box and avoid redundancy, I did not repeat words from the 1L/1R collocate boxes. When finished with the collocate analysis, I recorded the parts of speech that I observed in the DWC.

<table>
<tr><td>Rank #</td><td rowspan="2"><u>word</u>
POS</td><td colspan="2" rowspan="2"><u>Possible Signs</u></td></tr>
<tr><td>Hits #</td></tr>
<tr><td colspan="2">1L/1R Collocates Types (#)</td><td colspan="2">5L/5R Collocates Types (#)</td></tr>
<tr><td>NWR</td><td>NWL</td><td>NWR</td><td>NWL</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td>GDEX</td><td colspan="3"></td></tr>
</table>

Fig. 1. Word Sketch Template.

The last portion of the word sketching involved looking for GDEXes and possible signs simultaneously. Using the concordancing function of AntConc, I read all the lines for each node word. After selecting one to three examples, I recorded the snippets, in italics, in the area beside the box labeled GDEX. In a box labeled "Possible Signs," I noted some signs using the standard gloss of all capital letters for ASL signs or signs pairs or the capital letters separated by a dash to indicate fingerspelling. Because ASL, like any other language, can have regional dialects, in some cases I consulted either the *ASL Pro* Website or *The American Sign Language Dictionary* to verify my choice of signs.

Methodology Part 4: Creating Entries for the Academic ASL Dictionary

The AAD is not comprehensive; my intention was to collect a corpus large enough to measure a slice of the data but small enough for me, as a sole researcher, to handle the analysis. Additionally, the parameters I designed are for creating a corpus-based dictionary that will teach Deaf students and their teachers ways to interpret from right-branching syntax to the linear style of academic writing.

To conceptualize this part of my methodology, I recalled some of Elbow's discussion on the properties of right-branching syntax. Naming the topic of a sentence, then commenting on the details became a guideline for constructing entries for the AAD. It is important to note here that Elbow does make it clear that while right-branching syntax is reflective of speaking, it can make writing sound repetitive. He writes, "Right-branching is a good *kind* of syntax for writing, but we don't want everything it gives us" (223; emphasis original). To avoid repetition, writers often edit their work into left-branching sentences for a more academic style. Right-branching syntax, called topic-comment structure in ASL, is structured like the following sentence:

The first assignment in my Composition I course is a literacy narrative about their writing experiences growing up. I do this because I want to gain some understanding of my students' background.

However, as Elbow reflects, there is a frequently false "assumption that good writing should avoid sounding like speech" (86). So, I revise my statement to read:

Because I want to understand my students' backgrounds, the first assignment in my Composition I course is a literacy narrative.

In the preceding example, the revision is clear and reflects an academic style. Editing from right- to left-branching sentence structure to create a more academic style is the focus of the dictionary entries.

Using information from the word sketches, reflecting on ASL and English syntax, while thinking about the idea of Deafhood, I designed a template for the dictionary entries. Careful sectioning of the entries allowed me to transfer the information from my word sketches using both the semasiological and onomasiological approaches. Organizing the words in an alpha-numeric way or semasiological, I provide the node word in a circle with its parts of speech indicated below. To satisfy the onomasiological perspective, on the right side of the design, I drew one to three connecting boxes to provide an ASL gloss word, sign pair, fingerspelling, or classifier and an italicized example (fig. 2).

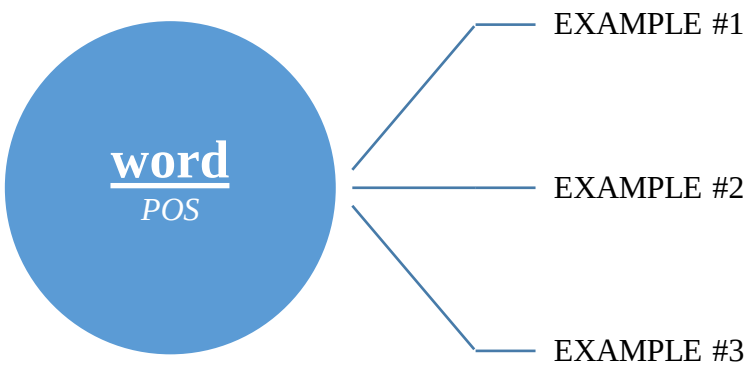

Fig. 2. Template for an Academic ASL Dictionary Entry.

Next to each entry is a Quick Response (QR) code, which can be accessed with a smartphone or QR code reader to display a video of the production of the ASL examples. The examples are constructed as sentences from the GDEXes. The GDEXes are the culmination of my research into the habitus and sociolinguistic practices of members of the Deaf community because the examples use words such as ASL, Deaf, Kendall School, and Gallaudet in phrases or

sentences that sustain the unifying nature of Deafhood. The entries reflect the natural flow of spoken or signed language and provide a tool to teach the translation of right-branching syntax into an academic style of writing.

An important component of the AAD is the deep analysis of words that challenges the one-word-to-one-word (or sign) correlation. The sign SECURE provides a demonstration of the one-word-one-sign correlation. Many students can understand the complexities of the gloss SECURE, such as the concepts of "strong," "collect," or "recruit." However, I have noticed some students use only the one gloss word SECURE repetitively, which represents the most common gloss of the sign making their writing seem repetitive and undeveloped. Fowler states that studying a specialized corpus "challenges common sense by pointing out that something could have been represented in some other way, with a very different significance" (qtd. in Hunston 109). Helping students move away from the typical one-word-to-one-sign correlation is an integral element of the AAD. When students have more choices on ways to express themselves, their writing is polished and clearly understood. Compiling the DWC and creating the AAD entries, brought together the habitus of Deaf culture with composition theories to create a dictionary that provides more than one-word-to-one-sign correlations by showing ASL users how to use basic gloss words with a more academic style.

Limitations of the Research(er)

The focus, and greatest challenge, of my research methodology was to collect the published writings of Deaf individuals to develop a corpus. When considering validity or reliability of the Academic ASL Dictionary, it exists as do many other dictionaries—solely upon the analysis of a corpus. The *OED*, which relies on a two-billion-word corpus (Kilgarriff and Kosem 38), and *Longman Dictionary of Contemporary English* use sentence examples from

large corpora as contextual for support entries and examples in their dictionaries. Commercial dictionary makers use sophisticated text analyzers that can be programmed to find detailed information on individual words in a corpus, which lexicographers study to create definitions and describe usage patterns. My limitations as a single lexicographer made it challenging to generate a large corpus and subsequently analyze the results to prepare a selection of terms for the dictionary. In a corporate setting, lexicographers often work in teams analyzing sections of a large corpus, then integrate the parts into a finished product. Additionally, corporately owned facilities often purchase software and hardware to expedite the lexicographical process. Time, money, and collaboration are important components of compiling a corpus and creating a dictionary.

In addition to the time and money constraints, the content of a narrow corpus presents limitations. During my analysis, I discovered that the corpus did not contain an example of all meanings of some words. However, for my current research, I only presented the data from the corpus at its current size because my goal is to demonstrate the ways in which corpus-based analysis can be used to create an academic dictionary for Deaf students.

CHAPTER FOUR

SELECTED ENTRIES FOR THE ACADEMIC ASL DICTIONARY

The results I offer here are meant to provide a selection of the entries for the dictionary. My word sketch and Academic ASL Dictionary (AAD) entry figures are, as Cushman writes, "neither exhaustive nor comprehensive. They should be understood as an initial attempt to explore meaning potentials" (50). My findings here represent a fraction of the potential of the AAD.

As outlined in Methodology Part 2, I used the frequency counts to distil the large corpus into a usable slice. Figure 3 (below) displays the words that occur fifty times in the corpus, as they appear in AntConc.

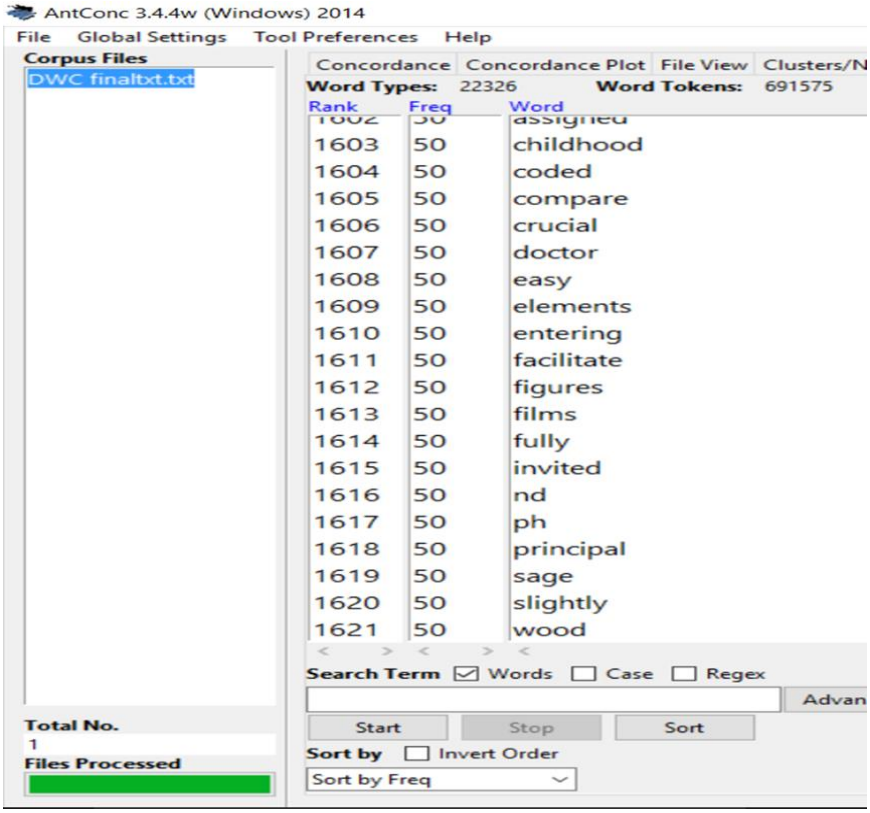

Fig. 3. Words with Fifty Occurrences in the DWC (AntConc Build 3.4.4).

Next, I deleted two abbreviations, *nd* and *ph*, and two words, *wood* and *sage*, from the AntConc list bringing that total to seventeen. After adding four words from my classroom vocabulary discussions, twenty-one is the final total for the selection (see table 3).

Table 3

Final List

Node Words Occurring 50 times
1. analyze
2. assigned
3. childhood
4. coded
5. compare
6. crucial
7. doctor
8. easy
9. elements
10. entering
11. facilitate
12. figures
13. films
14. fully
15. invited
16. principal
17. slightly
Words Submitted from Vocabulary Lessons
18. different
19. difficult
20. secure
21. remove

Grouping the Data by Usage

After completing twenty-one word sketches, which I used to create twenty-one AAD entries, I decided to group the words by parts of speech in this chapter to facilitate my discussion in the next chapter. In a full dictionary, however, the words would be ordered alphabetically.

In the following sections, there are twenty-one word sketches and entries divided into seven groups; each group is in alphabetical order. The first group of words operates as verbs in

the DWC. The words in Group 1 are *analyze, assign, coded, compare,* and *facilitate* (see fig. 4-13, pages 82-86). The words in Group 2, *doctor* and *principal,* are tagged as common nouns in the corpus (see fig. 14-17, pages 87-88). While both words are used as a person, *principal* is also used a descriptor. Group 3 contains the nouns *elements, figures,* and *films* (see fig. 18-23, pages 89-91). The verbs *entering* and *invited* comprise Group 4 (see fig. 24-27, pages 92-93). There are four adverbs in Group 5—*crucial, easy, fully,* and *slightly* (see figs. 28-35, pages 94-97). Group 6 contains words that I submitted to the corpus. The additional words *different, difficult, secure,* and *remove* are not in the list of seventeen words that occurred fifty times in the DWC (see fig. 36-43, pages 98-101). I have separated one word, *childhood,* into Group 7 (see fig. 44-45, page 102) because it has a special significance that will be discussed in Chapter Five.

Group 1: Verbs Used in Academic Research

Rank 1601	**analyze** *verb*	Possible Signs ANALYZE	
Hits 50		EVALUATE	
1L/1R Collocate Types (28)		5L/5R Collocate Types (229)	
NWR	NWL	NWR	NWL
to, and, not	the, and, field, data, further, what	ability, used, did, study, how, intuition	portray, evaluate, provide, individual, notes, field, compare, critique
GDEX	*work with Stokoe to analyze the language; to analyze ASL poetry*		

Fig. 4. Word Sketch of Analyze.

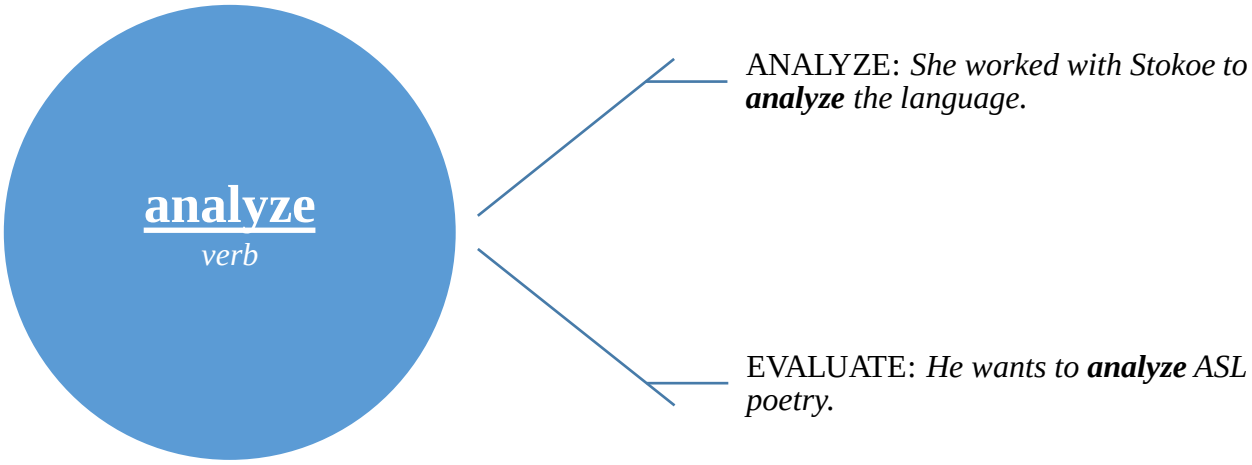

Fig. 5. AAD Entry of Analyze.

Rank 1602	**assigned** *verb*	Possible Signs APPOINT REQUIRE-FINISH	
Hits 50			
1L/1R Collocate Types (45)		5L/5R Collocate Types (238)	
NWR	NWL	NWR	NWL
randomly, been, were, was, and, subjects, are, be, by	mentors, to, her, deaf, meeting, faculty, codes, by, alternates, readings	interpreters, subjects, who, teachers, have, I, the, to	substitutions, treatment, raters, objective
GDEX	*the professional interpreter assigned to work with me; for my assigned meeting*		

Fig. 6. Word Sketch of Assigned.

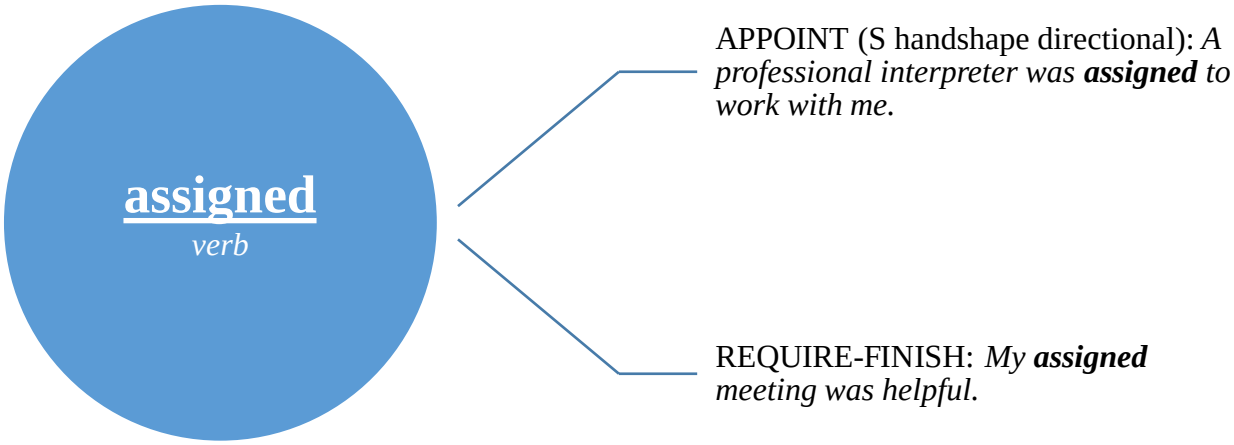

Fig. 7. AAD Entry of Assigned.

Rank 1604	**coded** *verb*	Possible Signs TRANSLITERATE LABEL-FINISH TRANSLATE-FINISH	
Hits 50			
1L/1R Collocate Types (38)		5L/5R Collocate Types (223)	
NWR	NWL	NWR	NWL
manually, were, was, a, and, the, were, be, retrieved, fully	English, data, and, as, for, response, before, score, source	transcribed, compared, interaction, journals, scrutinize, confidential	segments, analyzed, entered, talk, files, patterns
GDEX	*a cumbersome form of Manually Coded English was used in schools; journals were coded and analyzed for patterns; discourse was coded as narrative talk*		

Fig. 8. Word Sketch of Coded.

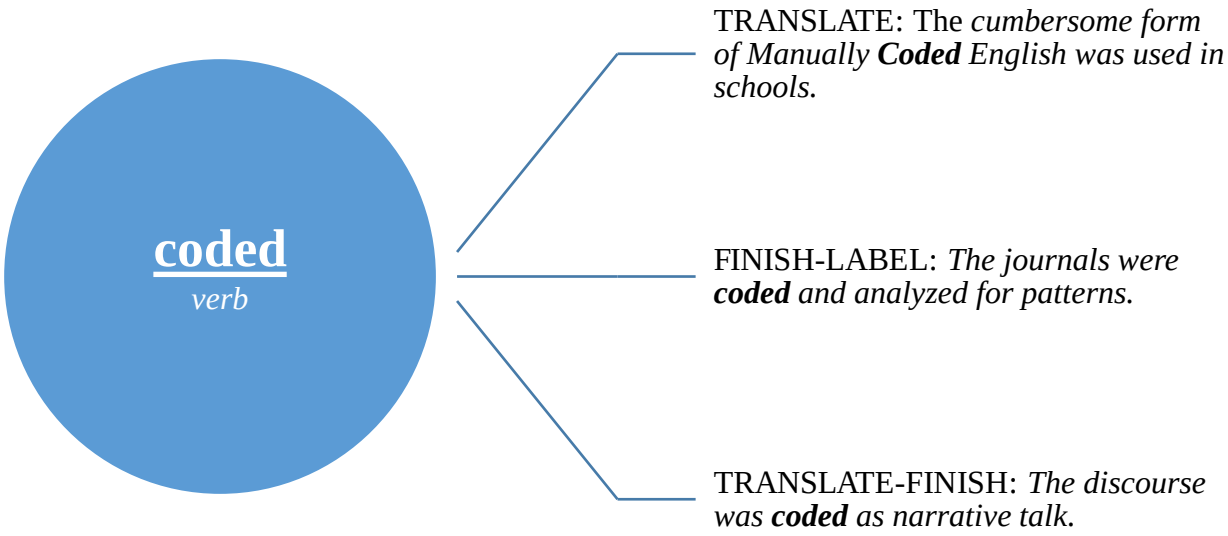

Fig. 9. AAD Entry of Coded.

Rank 1605 Hits 50	**compare** *verb*	Possible Signs COMPARE OBSERVE (indexing)	
1L/1R Collocate Types (42)		5L/5R Collocate Types (237)	
NWR	NWL	NWR	NWL
can, to, and, I, we, a, could	with, the, to, a, and, ASL, self, your	opportunity, order, allows, developed, dictionaries, evaluate	contrast, sample, each, other, experiences, ideas, across
GDEX	*natural language (ASL) to compare with parallel constructions of English, compare the three school groups*		

Fig. 10. Word Sketch of Compare.

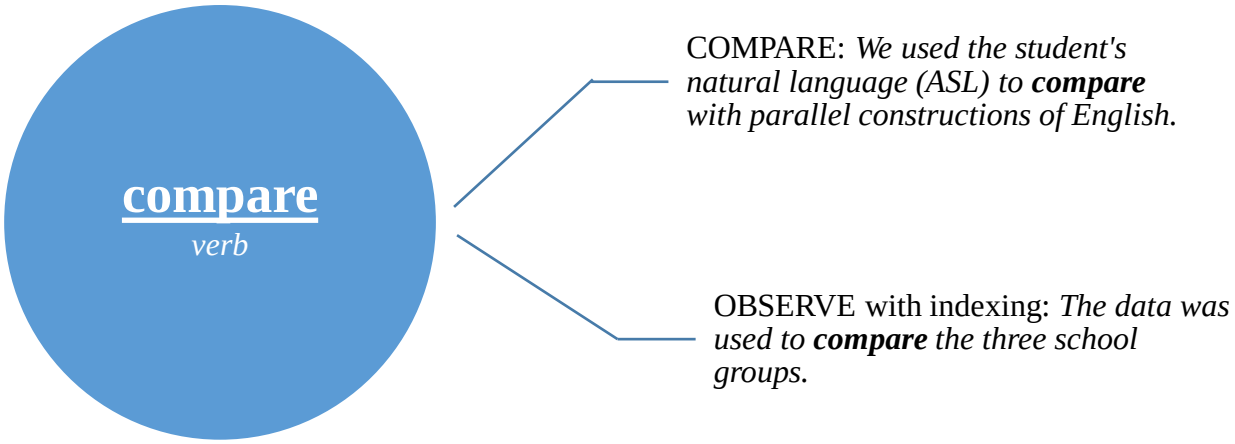

Fig. 11. AAD Entry of Compare.

Rank 1611 Hits 50	**facilitate** *verb*	Possible Signs ENCOURAGE SUPPORT PROVIDE	
1L/1R Collocate Types (45)		5L/5R Collocate Types (242)	
NWR	NWL	NWR	NWL
to, that, and, characteristics, may, help, can, could, might, not,	the, extended, teachers, their, communication, language, responses	deaf, culture, academically, strategies, conditions, learning, email	students, classrooms, discourse, outcomes, process, readers
GDEX	*Smaller classes would facilitate participation from Deaf students; ASL could facilitate literacy progress; ASL might facilitate the acquisition of English.*		

Fig. 12. Word Sketch of Facilitate.

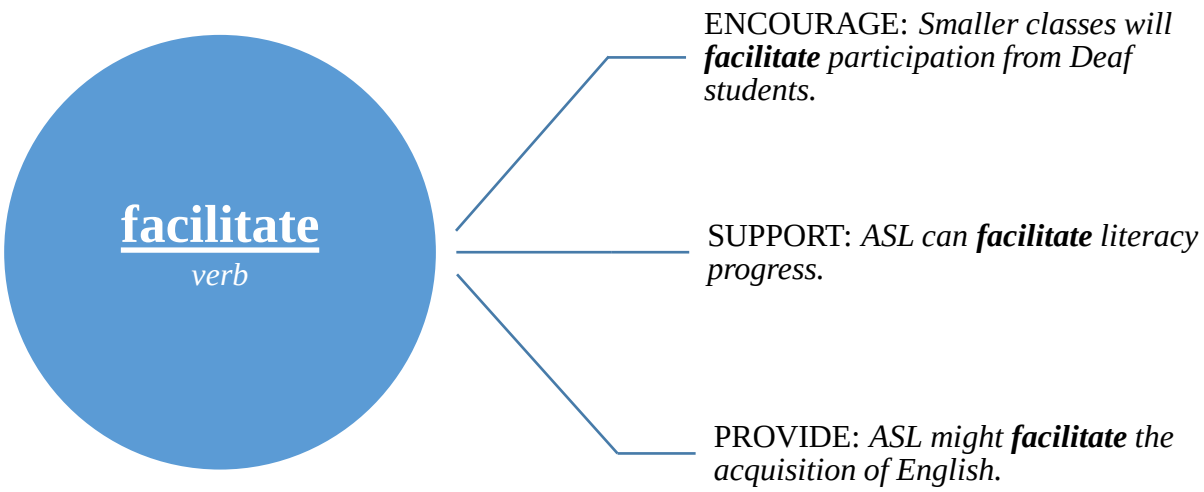

Fig. 13. AAD Entry of Facilitate.

Rank 1607	**doctor** *noun*	Possible Signs DOCTOR/MD PHD (fingerspell) DOCTORAL (fingerspell)	
Hits 50			
1L/1R Collocate Types (55)		5L/5R Collocate Types (252)	
NWR	NWL	NWR	NWL
the, a, medical, new, as	can, of, uses, and, asks, taps	were, photograph, visit, ability, lipread, actual, needle	things, reviews, confirmed, check-up
GDEX	*A visit to the doctor confirmed that she was deaf; Doctor of Philosophy; When I applied for the doctoral program at Gallaudet…*		

Fig. 14. Word Sketch of Doctor.

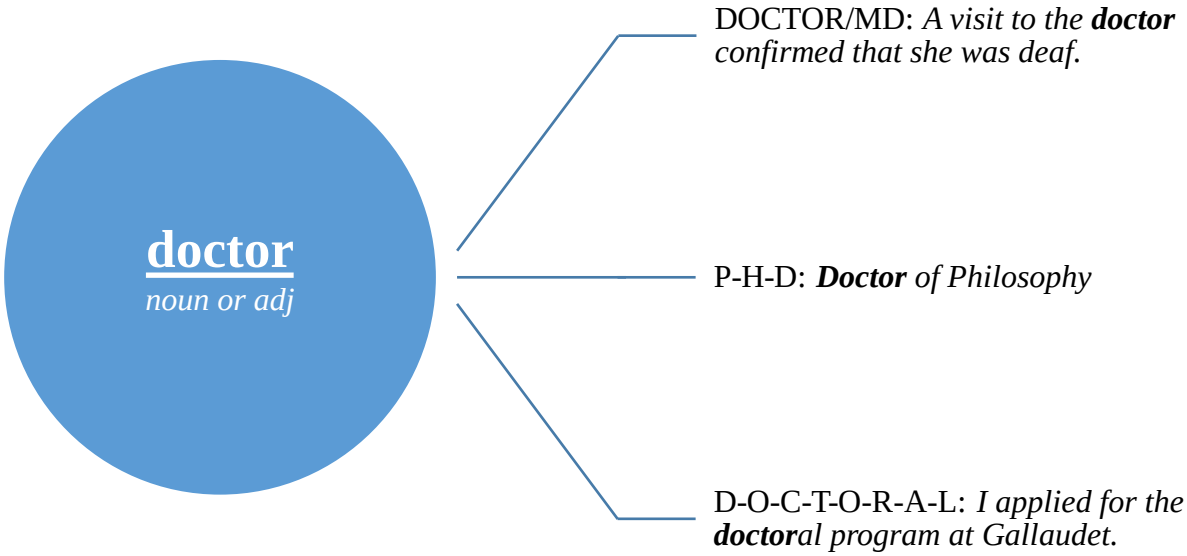

Fig. 15. AAD Entry of Doctor.

Rank 1618 Hits 50	**principal** *noun or adj*	Possible Signs PRINCIPAL PRIMARY COMMON	
1L/1R Collocate Types (47)		5L/5R Collocate Types (270)	
NWR	NWL	NWR	NWL
the, a, investigator, assistant, vice, hired, interim	investigator, or, and, online, at, my, told, to, supporting, means	information, access, restricted, actually, went, religious, life, interviewed, reviewed, competency, evaluation	research, human, participants, teachers, around, public, captioning, method, dismissed, interactions, evaluation
GDEX	*He met with the current principal of Kendall School; the principal investigator; the principal captioning method*		

Fig. 16. Word Sketch of Principal.

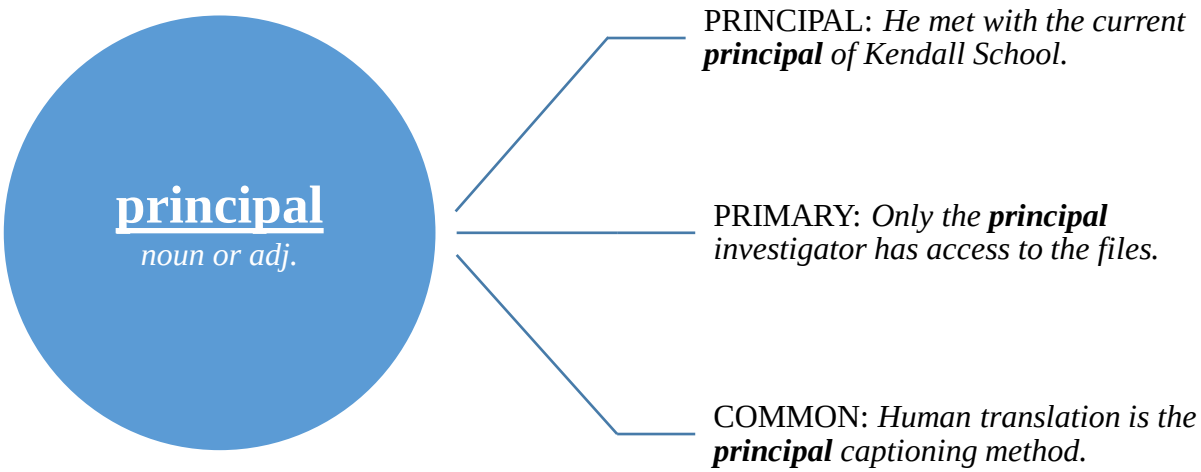

Fig. 17. AAD Entry of Principal.

Group 3: Common Non-Person Nouns

Rank 1609	**elements** *noun*	Possible Signs PART listing of elements	
Hits 50			
1L/1R Collocate Types (54)		5L/5R Collocate Types (267)	
NWR	NWL	NWR	NWL
the, four, pretend, poetic, which, and, are, be, ASL, critical	of, and, in, within, are, emerge, include, involved	picture, discourse, variety, analyzing, understanding	approach, science, process, grammatical, structure, replaced
GDEX	*a combination of English and ASL elements in her poem; including four elements, a picture, a sign, English caption, and fingerspelling*		

Fig. 18. Word Sketch of Elements.

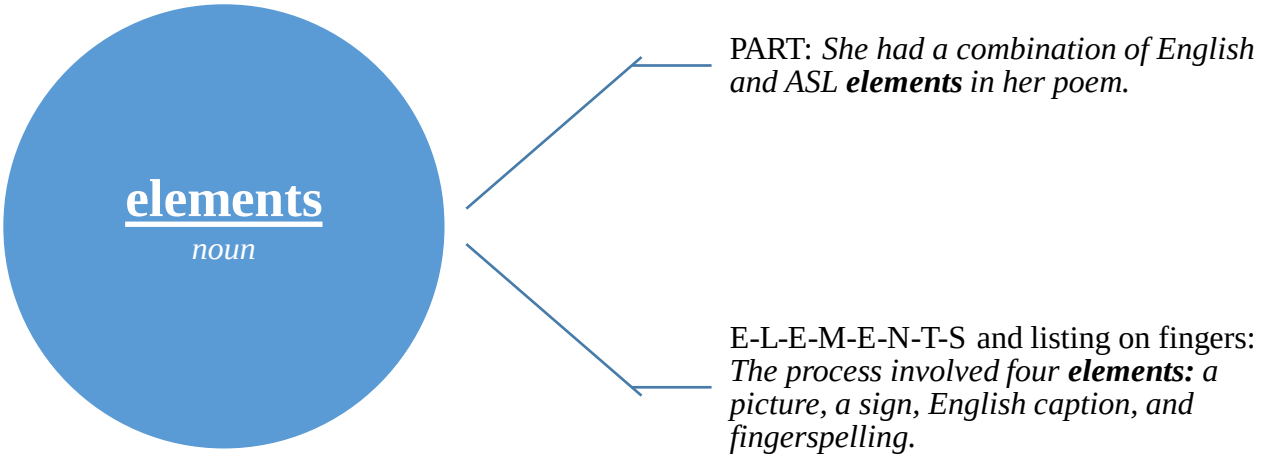

Fig. 19. AAD Entry of Elements.

Rank 1612	**figures** *noun*	Possible Signs NUMBERS DRAW/GRAPH/PICTURE	
Hits 50			
1L/1R Collocate Types (38)		5L/5R Collocate Types (229)	
NWR	NWL	NWR	NWL
of, the, national, in, incidence	for, in, and, of, across, combined, from, is, were, would	compared, higher, annual, survey, shown, between, differences, census	participants, sorted, responses, research, design, paradigms, responsibilities
GDEX	*the figures for the 1961 enrollment show an increase; List of Figures* (in an academic paper)		

Fig. 20. Word Sketch of Figures.

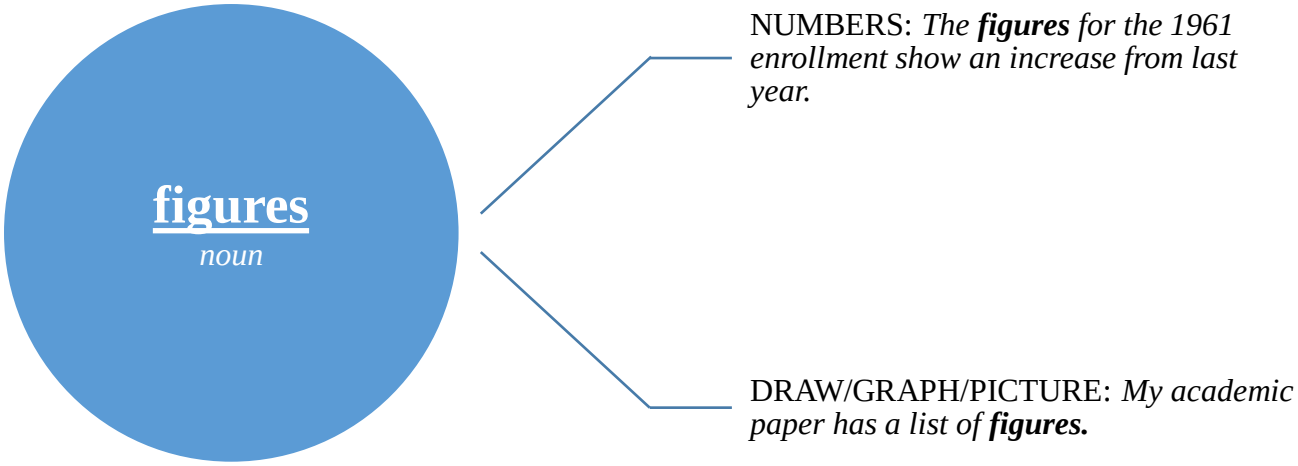

Fig. 21. AAD Entry of Figures.

Rank 1613 Hits 50	**films** *noun*	Possible Signs MOVIE and fingerspell F-I-L-M-S	
1L/1R Collocate Types (49)		5L/5R Collocate Types (249)	
NWR	NWL	NWR	NWL
captioned, the, and, in, our, these, distribute, feature	and, for, in, were, we, used, the, with, which, to, through	media, services, library, among, obtaining, exposed necessary, stereotyped	preserve, depository, sought, compare, ASL, poetry, correlated
GDEX	*we have our films to preserve our beautiful sign language*		

Fig. 22. Word Sketch of Films.

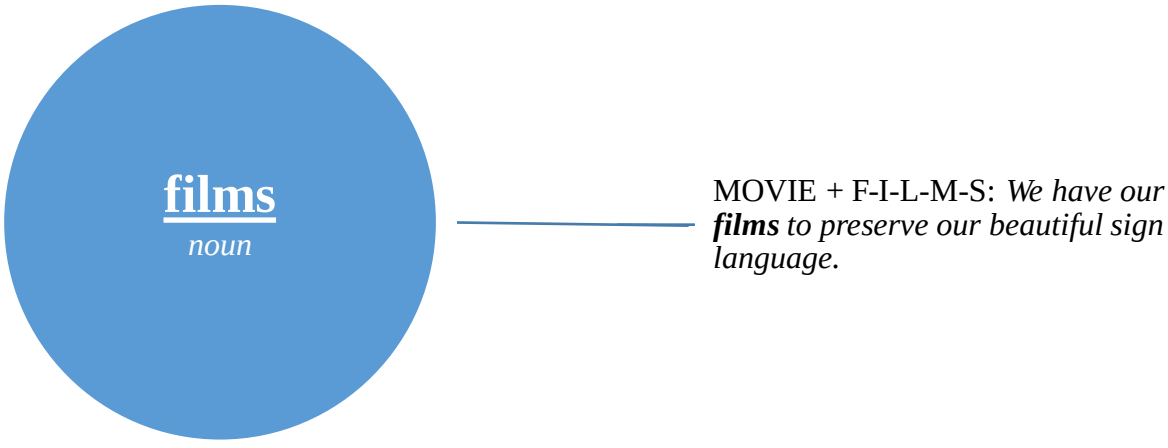

Fig. 23. AAD Entry of Films.

Group 4: Participle and Past-Tense Verbs

Rank 1610	**entering** *verb*	Possible Signs PUT-DOWN (as in register) ENROLL JOIN	
Hits 50			
1L/1R Collocate Types (44)		5L/5R Collocate Types (231)	
NWR	NWL	NWR	NWL
of, students, teachers, the, upon, by, for, that, about, among, and,	the, students, college, deaf, freshman, Gallaudet, school	about, reasons, profile, achievement, trained, help	first, formal, permission, university, cope, adjustment,
GDEX	*launch a study by entering her name; majority of the entering students at Gallaudet felt comfortable; matriculated at any other college prior to entering Gallaudet University*		

Fig. 24. Word Sketch of Entering.

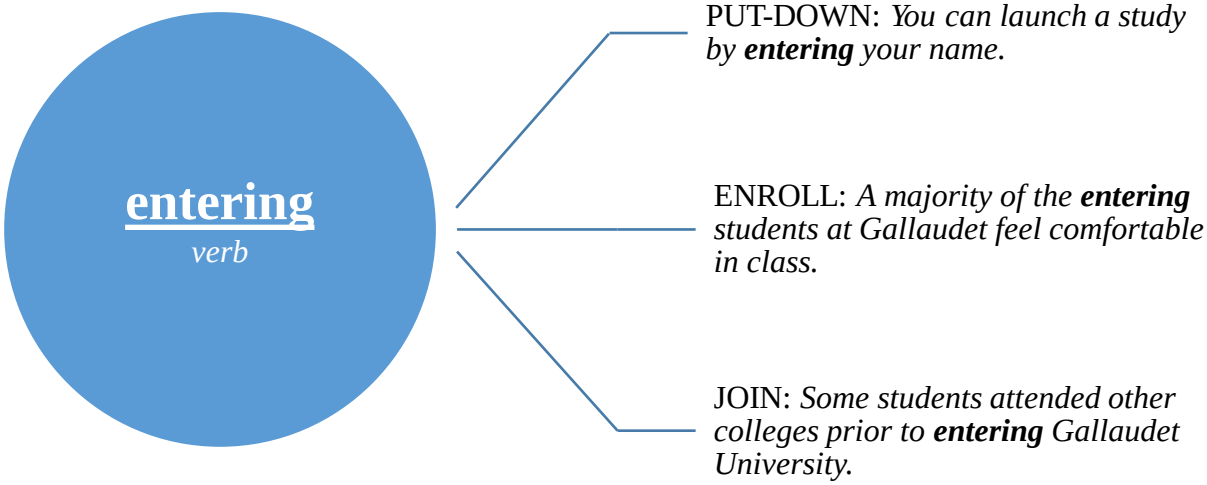

Fig. 25. AAD Entry of Entering.

Rank 1615	**invited** *verb*	Possible Signs INVITE-FINISH	
Hits 50			
1L/1R Collocate Types (61)		5L/5R Collocate Types (222)	
NWR	NWL	NWR	NWL
was, were, be, they, and, he, also, always	to, me, the, us, and, those, specific	teacher, board, member, professional, audience, every, time	participate, homes, black, deaf, administrator, presentations
GDEX	*It feels good to be invited and to be included and valued as a member.*		

Fig. 26. Word Sketch of Invited.

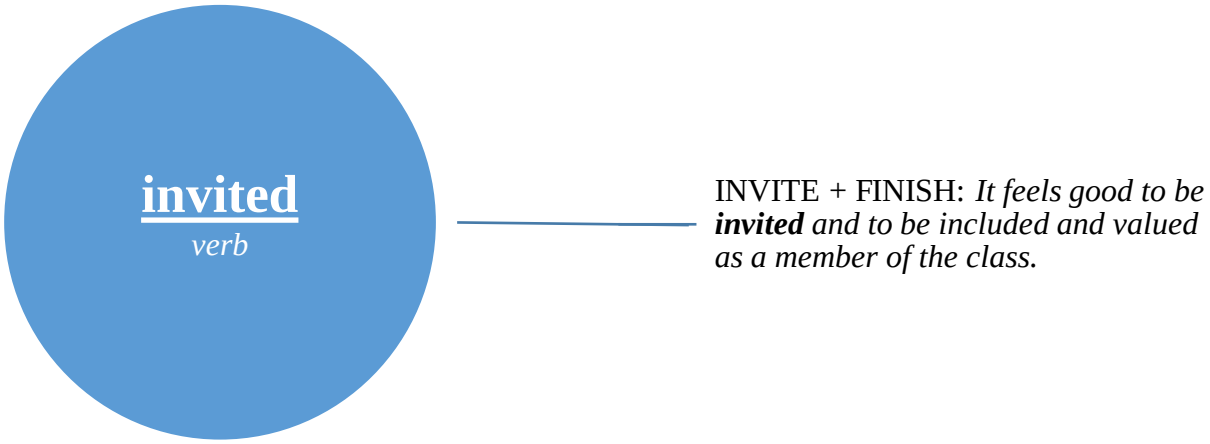

Fig. 27. AAD Entry of Invited.

Group 5: Quantitative and Qualitative Adverbs and Adjectives

Rank 1606	**crucial** *adj*	Possible Signs IMPORTANT PRIMARY	
Hits 50			
1L/1R Collocate Types (42)		5L/5R Collocate Types (235)	
NWR	NWL	NWR	NWL
is, are, a, the, not, one, were, was, also, carries	for, to, that, in, and, part, difference, enough, ingredient,	beliefs, community, although, educators, characteristic	positive, warrant, administrators, hiring, aspects, act, analysis, term
GDEX	*crucial ingredient for successful linguistic development; near-native or native signers is a characteristic crucial to administrators when hiring ASL teachers*		

Fig. 28. Word Sketch of Crucial.

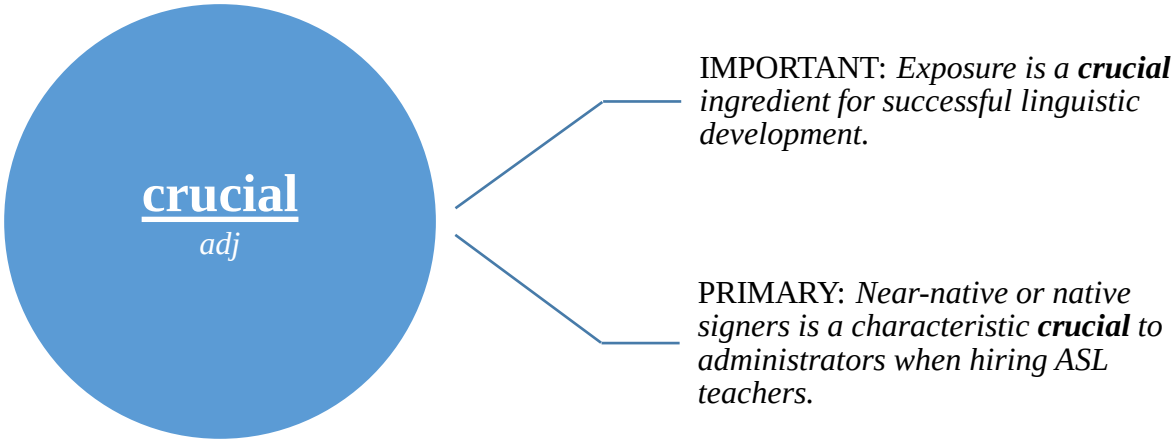

Fig. 29. AAD Entry of Crucial.

Rank 1608	**easy** *adj*	Possible Signs EASY SIMPLE CHILL (as in laid back)	
Hits 50			
1L/1R Collocate Types (39)		5L/5R Collocate Types (223)	
NWR	NWL	NWR	NWL
very, not, is, are, was, an, be, also, and, as	to, for, and, endeavor, enough, it, lose, out, references, task	communication, friendly, taking	learn, talk, between, define, administer
GDEX	*I created and easy-to-follow framework; an email system to facilitate easy communication; friendly and easy to talk to*		

Fig. 30. Word Sketch of Easy.

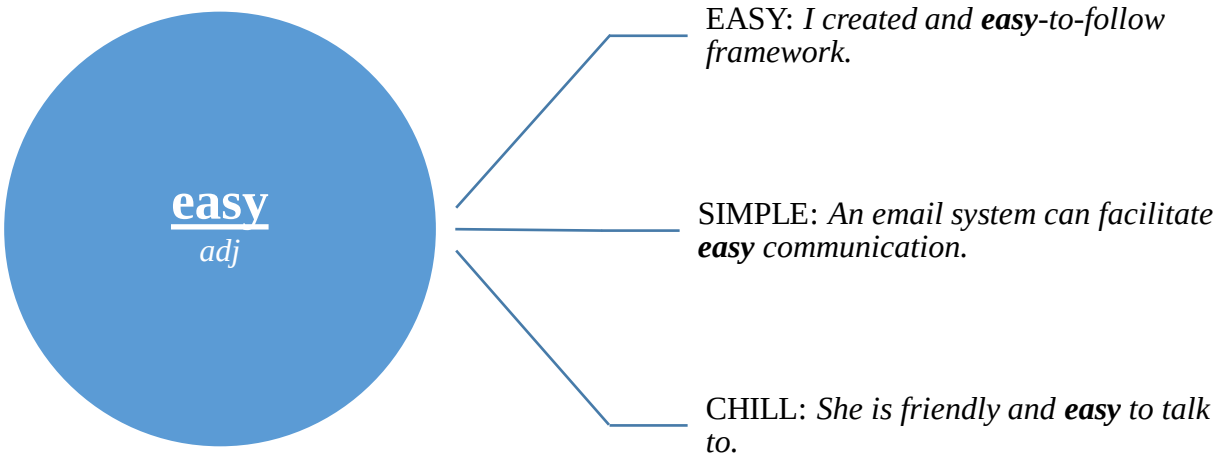

Fig. 31. AAD Entry of Easy.

Rank 1614 Hits 50	**fully** *adj*	Possible Signs MAXIMUM with negation OPEN SATISFY	
1L/1R Collocate Types (61)		5L/5R Collocate Types (256)	
NWR	NWL	NWR	NWL
not, be, was, is, been, and, participate, are, a	developed, aware, a, accessible, with, using, supported	came, from, literacy, some specialist, child, English, do, to	accessible, committed, capitalized, accredited, acquired
GDEX	*American Sign Language (ASL) is not yet fully respected as a language; web-based educational programming is fully accessible to deaf learners; to prepare them to participate fully and effectively in modern American life.*		

Fig. 32. Word Sketch of Fully.

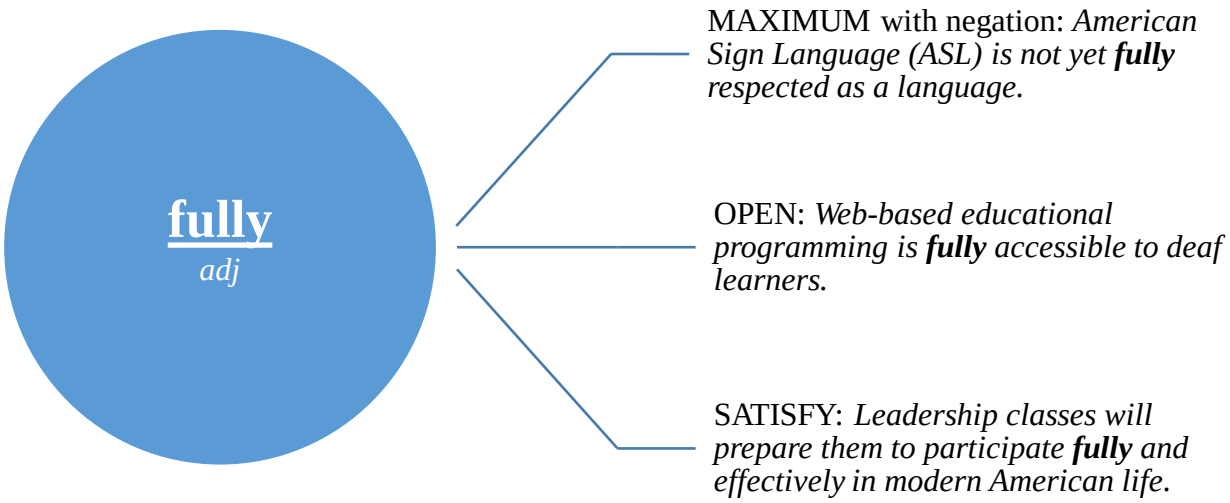

Fig. 33. AAD Entry of Fully.

Rank 1620	**slightly** *adj*	Possible Signs LEVEL with movement SO-SO SMALL AMOUNT or SIZE	
Hits 50			
1L/1R Collocate Types (61)		5L/5R Collocate Types (248)	
NWR	NWL	NWR	NWL
a, level, was, were, agreed, is, the, varied	more, above, squinted, higher, less, in, modified, open, or, different, above, altered	relaxed, mouth, divergence, observations, body, shift, eyebrows, setting	students, levels, problematic, fluency
GDEX	*By setting the level slightly above the students' levels; teacher educators considered creating materials slightly or moderately problematic; the late 1960's altered the situation slightly*		

Fig. 34. Word Sketch of Slightly.

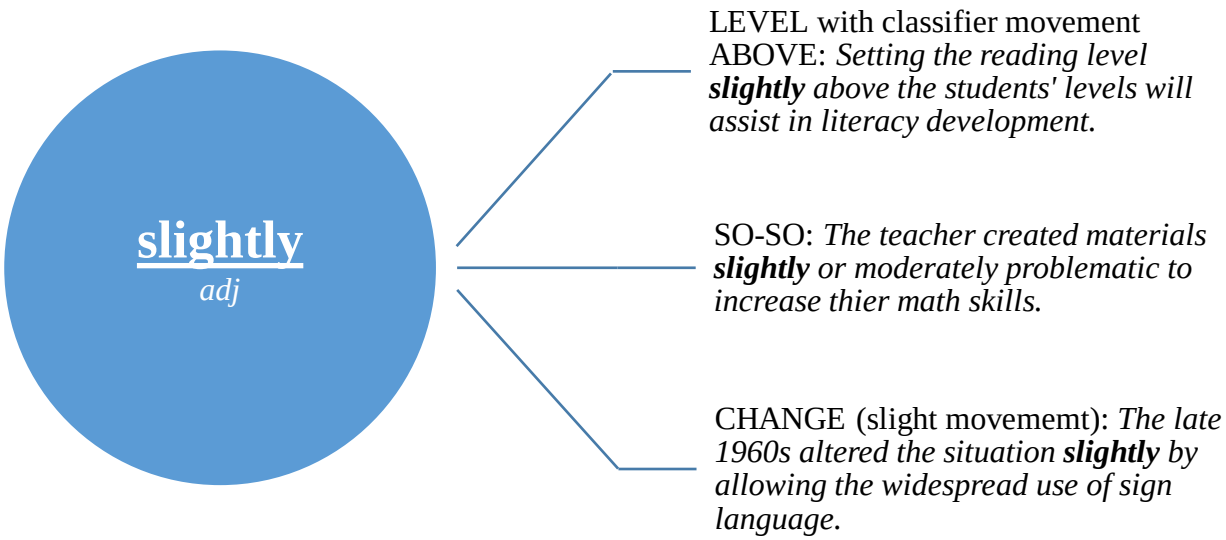

Fig. 35. AAD Entry of Slightly.

Group 6: Words Submitted into the Deaf Writers Corpus

Rank 151	**different** *adj*	Possible Signs DIFFERENT CHANGE/NEW	
Hits 628		listing items	
1L/1R Collocate Types (431)		5L/5R Collocate Types (1521)	
NWR	NWL	NWR	NWL
a, of, in, the, with, are, have, is, from, many, quite, to	from, ways, types, in, and, areas, ethnic, languages, schools, kinds	clients, America, deaf, ASL, believe, communication, describe, between	perspectives, classroom, teachers, bosses, content, style, project, services
GDEX	*The family migrated to different military bases; the letter is replaced with a different letter; I looked at three different groups;*		

Fig. 36. Word Sketch of Different.

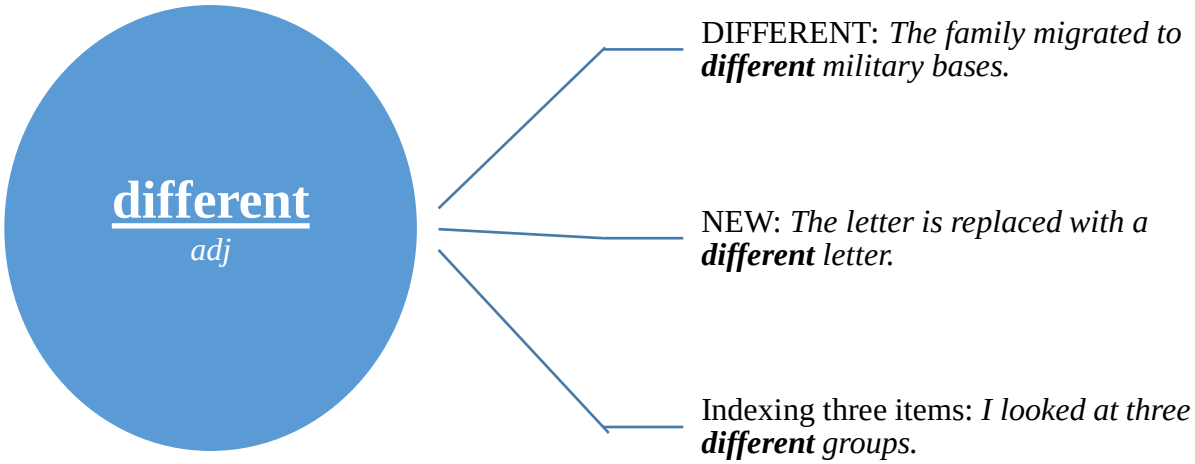

Fig. 37. AAD Entry of Different.

Rank 655 Hits 137	**difficult** *adj*	Possible Signs STRUGGLE HARD GIVE/TAKE negative non-manuals	
1L/1R Collocate Types (77)		5L/5R Collocate Types (481)	
NWR	NWL	NWR	NWL
is, more, was, most, it, very, a, too, the, therefore, are, as, be, or, so	to, for, situations, than, words, to, and, it, or, points	one, of, activities, admitted, saw, how, American, languages, society, interpreter	resolve, project, adjust, data, draw, valid, follow, conclusions, accepted
GDEX	*active engagement is a difficult goal to meet; these tasks are difficult; group situations where communication is difficult*		

Fig. 38. Word Sketch of Difficult.

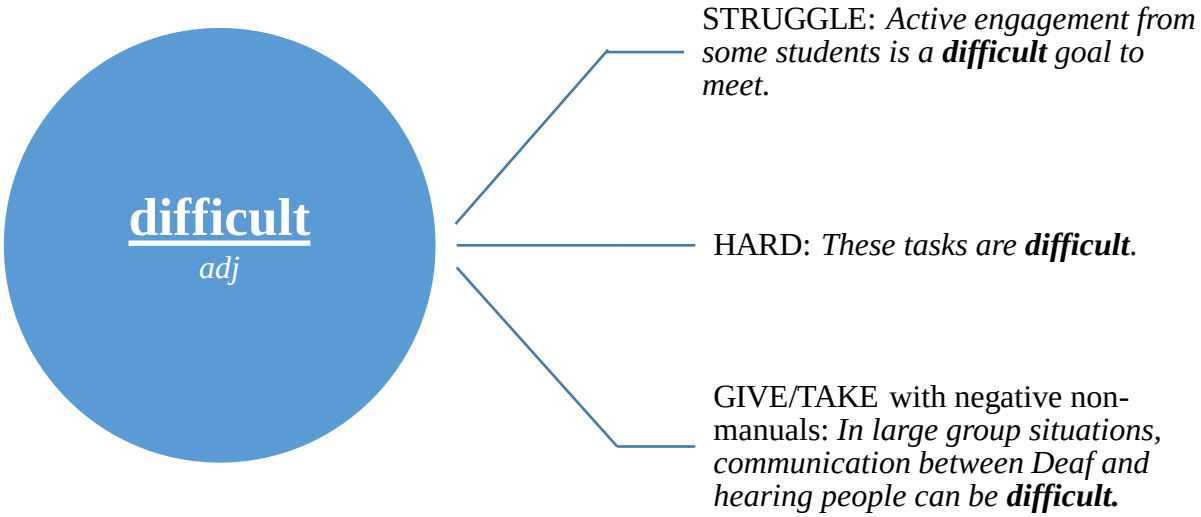

Fig. 39. AAD Entry of Difficult.

Rank 3525	**secure** *verb*	Possible Signs STRONG COLLECT/GET RECRUIT	
Hits 16			
1L/1R Collocate Types (18)		5L/5R Collocate Types (97)	
NWR	NWL	NWR	NWL
to, a, into, and, could, educators, is	computer, supervised, with, a, an, and, better, file, grants, language, place	be, kept, opportunity, deaf, children, nation, funds, not, able, entered, saw, her, hours, sheets	files, then, time, internship, mailbox, communication, scholarships, base, begin, observation
GDEX	*Deaf children with a secure language base; families were often not able to secure sufficient finances, call for the nation to secure better teachers*		

Fig. 40. Word Sketch of Secure.

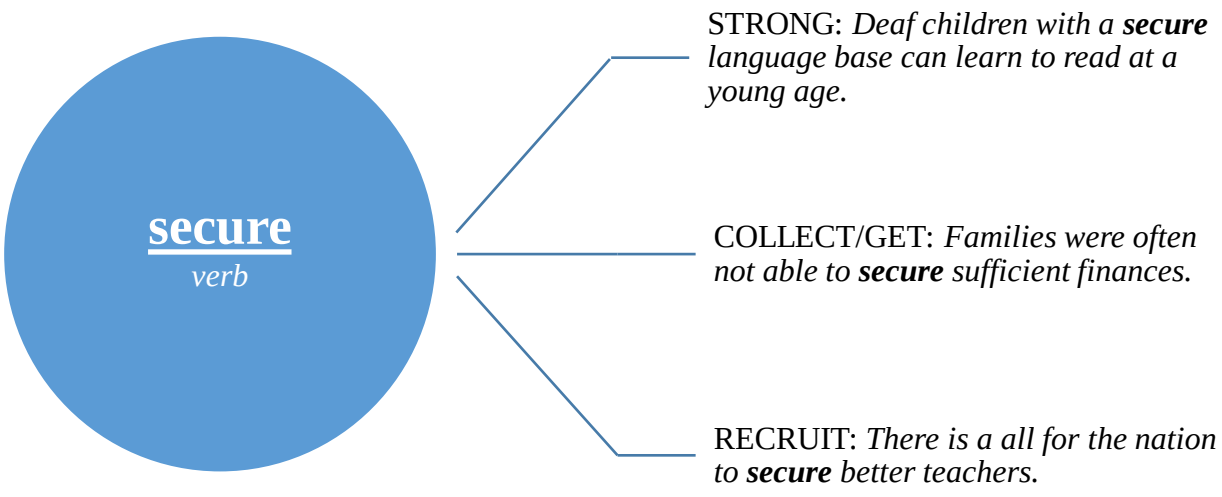

Fig. 41. AAD Entry of Secure.

Rank 6302	**remove** *verb*	Possible Signs REMOVE STOP-FINISH SEPARATE	
Hits 6			
1L/1R Collocate Types (9)		5L/5R Collocate Types (41)	
NWR	NWL	NWR	NWL
to, we, will, you	deaf, all, carbon, stigmatization, the	concerted, few, expressed, cochlear, implant, exhale	genes, human, confounding, noise, oppression
GDEX	*When you exhale, you remove carbon dioxide from your body; she expressed the need to remove stigmatization and oppression; to remove all of the confounding factors;*		

Fig. 42. Word Sketch of Remove.

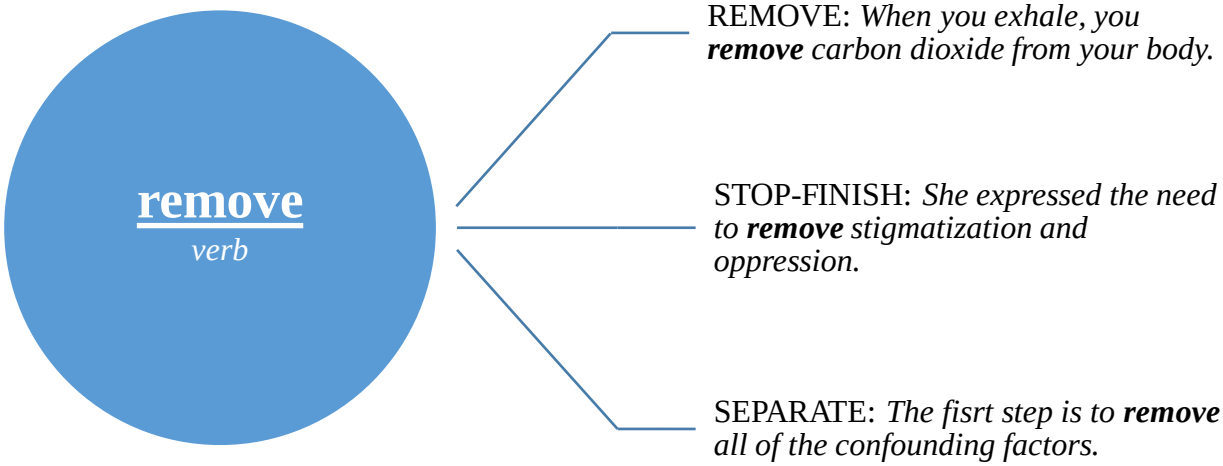

Fig. 43. AAD Entry of Remove.

Group 7: A Word with Significance

Rank 1603 Hits 50	**childhood** *noun*	Possible Signs GROW-UP/RAISE SINCE/RAISE	
1L/1R Collocate Types (51)		5L/5R Collocate Types (266)	
NWR	NWL	NWR	NWL
early, her, their, in, birth, by, during, entire	education, and, bilingualism, on, special, leadership, programs	abusive, dysfunctional, acquired, communication, environment	development, family, published, aspects, curricular
GDEX	*alone in childhood without siblings and parents who are deaf; attended the School for the Deaf his entire childhood*		

Fig. 44. Word Sketch of Childhood.

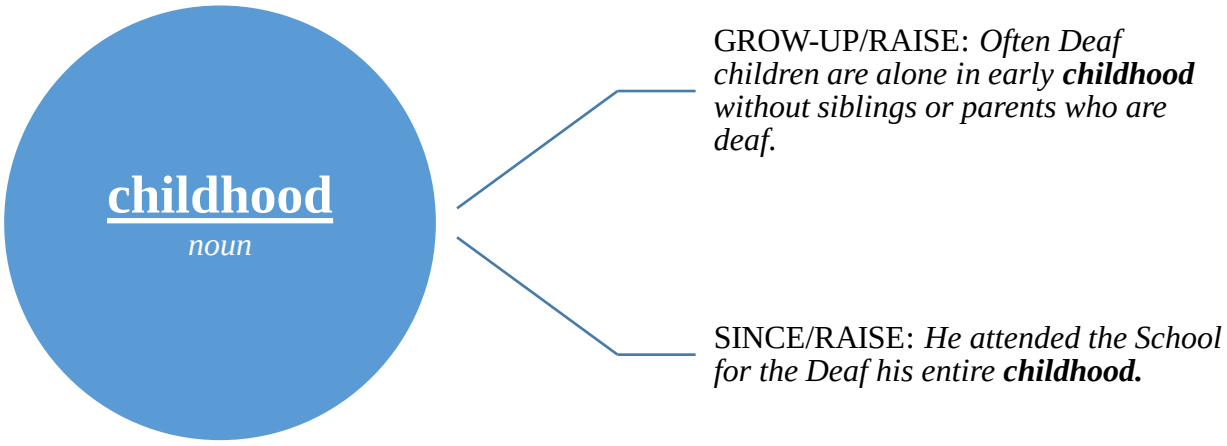

Fig. 45. AAD Entry of Childhood.

CHAPTER FIVE

PAH! THOUGHTS ON THE CONSTRUCTION AND FUTURE OF THE DICTIONARY

Bourdieu posits a theory that certain words can wreak havoc on social reality by transforming an individual's sense of linguistic power (128). The ways in which signs can shape the realities for the members of the Deaf community is no different; signs mirror the words of spoken languages in many ways. Educators and researchers talk about an ASL-English continuum. I would argue that they are more like the infinity symbol (∞) with languages continuously overlapping each other. While the three-dimensional syntax of ASL does not exactly follow the linear structure of English, it does embody the same elements of language. A colleague asked me to consider two cities: one with low lying buildings, flat and spread out, such as Phoenix, and the other with high rising skyscrapers in a compact area, such as New York City. Both cityscapes have the same contents: office buildings, places to eat and shop, houses and apartment buildings, and a variety of retail stores. However, each city uses its contents in a different layout. English has a linear patterned syntax, much like the layout of Phoenix, whereas, ASL, like New York City, tends to stack and layer its syntactical elements (Porter). Pointing out these differences helps educators and researchers understand the overlapping that happens in the minds of Deaf students when they attempt to write. The importance of the AAD is to allow users to see these overlaps side-by-side. It is important to note that along with the infinity symbol and cityscape analogies, ASL, like every other language, evolves and users find new ways to use signs, and different regions have unique colloquialisms.

Significance of the Word Sketches and the Academic ASL Dictionary

In the following sections, I will discuss the depth of significance as it relates to the development of the word sketches and the creation of the entries in connection with the composing practices of Deaf writers. My findings here represent a fraction of the potential

resource of a larger corpus and a full dictionary. I foresee the AAD becoming a useful tool for Deaf writers, and, with some adaptation, I believe that a right-branching to left-branching dictionary would be helpful to any FYC student, including hearing and English Language Learners.

Evolution of Design

Designing the templates for the word sketches and the entries was an evolving process. My initial designs for the word sketches and AAD entries were complicated and not user-friendly. The original layouts were difficult to follow because the amount of information I wanted to provide required several boxes of text and explanation, more than a typical dictionary would contain. Because I wanted to remain focused on the most significant part of my research, marrying the right-branching style of ASL to writing in English, I eliminated some of the text boxes and distilled it into a user-friendly design. Viewing a word sketch on the *Sketch Engine* Web site as inspiration to develop my own template ("Learn How Language Works"), I was able to create a new and reusable template.

Selecting the GDEXes was an organic process, and I was grateful to perform this process manually because I could pull examples that connect to the Deaf CoP. Using ideas about schools for the Deaf, important people, and places in the Deaf community are significant connections for students. I followed the contextual cues in the corpus to guide me as I recorded the data. Using the template allowed me to record the semasiological portion of the terms, and the onomasiological perspective by matching signs, sign pairs, classifiers, or fingerspelling that accurately described the node words. When I decided on the GDEXes for each word, I transferred the information from the word sketch and separated the examples for the dictionary entry.

Discussion of Group 1: Connecting to Deafhood

Interestingly, the first word I analyzed is arguably the most academic word on the list. One of the examples for the word *analyze* references the name *Stokoe*. Many experts in the field of Deaf Studies consider William Stokoe, whose contributions I discussed in Chapter Three, to be the father of ASL. His analytical work allowed linguists to take a closer look at the syntactical properties of ASL, which perpetuated a large-scale shift toward understanding ASL as a complete and legitimate language. Today, many Deaf college students would recognize his name and consider him a viable part of their CoP.

ASL poetry is also mentioned in the examples for *analyze*. Many members of the Deaf community pride themselves on their playful usage of ASL to create beautiful, three-dimensional poetry that does not translate readily into any spoken language. Part of the strict guarding of language that characterizes the Deaf CoP is creating hard-to-translate poetry, which is, as Kannapell says, "the only thing we have that belongs to deaf people completely" (qtd. in Sacks 129). Understanding and creating poetry is a veritable requirement to maintain status in Deafhood.

An important function of ASL syntax is present in the entry for the word *assigned*. The ASL gloss word FINISH is added to indicate past tense. In ASL, users add the sign FINISH either before or after the root sign to produce past tense, which is like adding "ed" to the end of a root word in English. Also, the *assigned* entry uses the word *interpreter* in the GDEX. Interpreters are vital to the Deaf community and having a "professional" interpreter is even more desirable. The guidelines that professional interpreters adhere to indicate a level of ethics that provide a sense of security and assurance to clear communication between Deaf and hearing people.

Along with the use of FINISH, the word *coded* revealed a point of connection to the Deaf CoP. As I mentioned in Chapter Two, there are other signing systems. MCE is one of these systems. MCE does not strictly adhere to a one-word-to-one-sign style, but it does follow English sentence patterns. Although some Deaf individuals may have a negative view of MCE, it is still a recognizable phrase in the community and an accepted mode of communication for some.

Indexing is another component of ASL syntax used in Group 1. Considering the phrase, "compare the three school groups," the ASL user signs OBSERVE, then points to three different spots in the neutral signing space to indicate comparing the groups. Using indexing demonstrates how the morphosyntax of ASL can clearly communicate observations made on three groups without using English pronouns or articles. Therefore, adding support to the idea that ASL is a complete and legitimate language independent of English structure.

The word *facilitate* brings some strong connections to the Deaf community. Considering all three GDEXes, the concept of Deaf students learning to read and write prevails in these examples. Literacy is an important part of establishing and maintaining Deafhood, and the examples connected to the entry *facilitate* all describe some level of support for the education of Deaf students. In addition to the literacy component, *facilitate* demonstrates the classic example of only knowing one gloss word for the sign, such as SUPPORT, and some Deaf students may not realize the word *facilitate* is a viable option. Using an academic word over the standard gloss word is an integral part of the assistance that the dictionary offers.

Discussion of Group 2: Important People in the Community

While analyzing the word *doctor* in the DWC, most of the hits for this word referred to a medical doctor. I could only find one instance of "Doctor of Philosophy." I also found an

example referring to the doctoral program at Gallaudet. Using the word *doctor* as MD is significant because medical doctors guide parents on decisions about hearing aids, cochlear implants, and education. Many members of the Deaf CoP feel that it is important for medical doctors to understand not only the audiological condition of hearing but their cultural beliefs about assisted hearing devices and educational placement as well. An example of a cultural belief is the consideration of the surgical procedure of a cochlear implant. Because of the invasiveness and permanence of a cochlear implant, many Deaf parents consider the procedure as a last resort and elect to use hearing aids only. Regarding educational placement, for some Deaf people, their own habitus guides them to maintain Deafhood by promoting residential schools and the strict use of ASL. Other parents opt for mainstream education in the public school system. Regardless of their decisions, Deaf parents want their cultural choices respected, and their beliefs acknowledged beyond a medical label.

Connected to the idea of authority is the use of the term *Gallaudet* in Group 2. The university embodies the "Mecca" of Deaf culture and is considered by most people in the field of Deaf Studies as the highest authority. Parents, teachers, interpreters, and others attempting to know more about the life of Deaf individuals often consult the Gallaudet Web site or contact a professional organization or people on the campus to gather information.

The word *principal* readily synthesized into two meanings. Both meanings provide a significant example about the importance of people in and connected to the Deaf community. "The principal of Kendall School" is an important phrase because it is part of the Gallaudet system. Kendall Demonstration Elementary School (KDES) is housed on the Gallaudet campus and serves as a model school for other US elementary schools that provide services for Deaf students. Another meaning for the word *principal* is in the example of *captioning*. Having

movies, videos, and other media captioned is an essential requirement for Deaf individuals to comprehend the content, especially in an educational setting. Media that is translated and typed by a human being is usually more accurate than any automated method of captioning.

Discussion of Group 3: Fingerspelling and Listing

Group 3 reveals a few characteristics of language that are unique to ASL. The concept of listing is used in combination with fingerspelling, signs, or sign pairs. One example refers to four different *elements*: "a picture, a sign, English caption, and fingerspelling." To sign *elements* in the context of more than one element, an ASL user points to each finger, then pairs a sign of each of the four words: PICTURE, SIGN, ENGLISH-CAPTION, and FINGERSPELL. The process of naming more than one idea or object is called listing and is often used in ASL.

Another component of ASL in Group 3 is the idea of expansion by using several signs paired together with slashes in between for a deeper understanding. For the entry *figures,* one example uses the signs DRAW/GRAPH/PICTURE as a way of explaining the possibilities of figures in an academic paper. By pairing these signs together, ASL provides a more comprehensive meaning to an idea than merely a one-word-to-one-sign structure. During my analysis of *figures,* I realized there was an absence of the concept of *figures* as shapes in the corpus. The realization of ideas not present in the corpus points out a limitation of a small and narrow corpus. For the purposes of my current research, I only used the meanings that I found within the concordance lines.

The final entry in Group 3, *movie*, combines fingerspelling and ASL expansion with an example that is vital to sustaining the artistic nature of Deafhood. MOVIE by itself could mean either movie or film. When thinking about the connotations of *movie* and *film*, a movie is generally produced commercially, whereas a film connotes something more artistic. In the

context of “films to preserve our beautiful sign language,” paring the sign MOVIE with the fingerspelled sign of F-I-L-M-S adds to the organic nature of ASL that can only be captured in three-dimensional media such as video recordings. In the Deaf community, films about sign language, like ASL poetry, are cherished for their potential historical and traditional value for future generations.

Discussion of Group 4: Managing Contact Zones

Both words in Group 4, *entering* and *invited*, include examples of Deaf individuals seeking membership in a variety of contact zones—Deaf and hearing. Entering the university life brings about a clash of cultures where students struggle with power relations (Pratt 34). While not all power relation struggles for Deaf students entering college are connected to the hearing mainstream, many struggles are connected to the general feeling of isolation. The GDEX for *invited* demonstrates a positive way in which contact zones are negotiated, by allowing Deaf individuals to be “invited and included as a valuable member.” Inclusivity is the crux of Deafhood and Deaf Gain, and communication is the key to promoting inclusivity. Many Deaf students are not concerned about hearing people having perfect ASL; they just want others to respect their language and try to open lines of communication. For Deaf students, contact zones are an important way to demonstrate their uniqueness and positive attributes that make up Deafhood and forward the idea of Deaf Gain.

Discussion of Group 5: Adverbs, Adjectives, and the Fifth Parameter

While *crucial, easy,* and *slightly* all have ASL signs and sign pairs, these signs also present an opportunity to discuss the fifth parameter of ASL—Non-Manuals. Facial expressions, including mouth morphemes and eyebrow movement, head shifts, and body posture, comprise the non-manual parameter of ASL. So, in the example of *crucial*, signers would add a closed

mouth and squinted eyes along with slower and bigger movements to indicate that they mean something of utmost importance. For the sign CHILL, in the example of *easy*, signers will lean back and relax their shoulders to indicate easy-going. When examining the word *fully*, non-manuals have a strong significance. When explaining that ASL "is not yet fully respected as a language," signers will add negative non-manuals such as shaking their heads back and forth, eyes squinted, and mouth closed. On the other hand, if a signer wants to communicate the idea of participating "fully and effectively in the modern American life," signers will shift their heads up and smile.

For the entry *slightly*, two interesting points arose during my analysis. First, when signing "altered the situation slightly," *slightly* is not signed separately; instead, singers will produce the sign CHANGE with a small movement to indicate a slight alteration. Another factor of the entry *slightly* is the use of the sign SO-SO, which has one connotation of something that is satisfactory or fair, much like the English term "sort of." The versatility of the sign SO-SO, like many other signs, is its ability to work well in several contexts. However, non-manuals are a must for this sign. In the GDEX, "the teacher created materials slightly or moderately problematic," the word "problematic" does not mean that teachers want students to struggle. The words "slightly or moderately" modify "problematic" to indicate that teachers want to challenge students. Using the sign SO-SO to modify problematic requires non-manuals such as a tilted head and pursed lips, help others to know that teachers are not trying to create problem situations for students.

Discussion of Group 6: Using the Corpus in a Different Way

To determine the words for Group 6, I looked back at my lesson plans, specifically my vocabulary lessons, and journal notes about words that presented some type of phenomena in my classroom. In the years since I began my research on the AAD, I have observed students attempt

to improve their reading and writing. Often, during independent reading, students will ask me to tell them a sign for a word they fingerspell. Conversely, during journal writing, they will often ask me to spell a word that they sign. It is easy to forget sometimes that both processes involve translation as well as comprehension. I often reflect on how translation and comprehension can work in tandem to bolster vocabulary development and promote clarity in writing. Two words that I have reflected upon are *different* and *difficult*. On one occasion a student spelled D-I-F-F-E-R-E-N-T, so I expressed the sign DIFFERENT. The student continued reading for a few minutes, then stopped to fingerspell D-I-F-F-I-C-U-L-T for verification that I had provided the correct sign. After thinking about the similarities of the words *different* and *difficult* in print and fingerspelled, I decided to submit the words to the corpus. Because d*ifferent* occurs six-hundred-twenty-eight times in the corpus, I struggled to analyze all the hits. However, I could find three separate signs to describe the concept of *different*. As for the term *difficult*, I found an interesting example that provided the opportunity to explain the property of the directionality in ASL.

Combining the directional signs GIVE and TAKE with head shaking for negation, describes the "communication" as difficult in a way that reflects ASL structure. The GIVE-TAKE combination of opposing movements with the same handshape reflects authentic communication struggles that sometimes happen between Deaf and hearing individuals. An example of a communication barrier occurs in large mixed groups of hearing and Deaf people. Hearing people often overlap their spoken comments without missing any information; however, Deaf people often miss these parts of the conversation because they can only attend to one person at a time. A give-and-take style of turn taking in conversations is necessary to maintain always for Deaf people to be included.

One reason the I submitted the word *secure* to the corpus comes from some everyday situations that I have observed, such as students and teachers talking about securing the building or a locker. So, I was curious to analyze its use in the academic register. With only sixteen hits, it was not time-consuming to read every occurrence. Initially, I entered STABLE as a possible sign; however, after considering and re-reading the concordance lines, I determined that STRONG was more appropriate to describe a child's "language base." I also paired GET with COLLECT to deepen the meaning of the word *secure* in the example of "not being able to secure sufficient finances." Again, I noticed a limitation of a small corpus because a larger dictionary would include the concept of affixing one object to another, like one might *secure* a poster on the wall with tape.

In my journal notes, I found an account in which a student asked me about having an arm cast removed. The student signed TAKE ARM C-A-S-T and then gestured its removal. Without much consideration, I signed OFF. The student responded, "NO. DIFFERENT WORD." So, I fingerspelled R-E-M-O-V-E. Encouraged by the fact that the student wanted a more advanced word, I submitted *remove* to the corpus. With only six hits, I was disappointed that I could not find the exact concept of "taking something off" in the concordance lines. Because of the low occurrences, I was able to analyze every instance of the word *remove.* I discovered an example that demonstrates the use of FINISH in a different way than past tense. The GDEX that expresses the "need to remove stigmatization and oppression" points out some strong feelings that many members of the Deaf CoP have regarding their historical treatment from the hearing mainstream. Using STOP-FINISH in this context mirrors strong feelings of oppression caused by some hearing people who want to help Deaf people but feel the best way to help is to take ASL away. They believe that ASL is inferior as a language and would like to replace it with English;

this concept is known as audism (Humphries 12). There are many facets to the practice of audism, which create negativity about the hearing mainstream. Much like racism, audism propagates the idea that English is superior to ASL, and Deaf people should learn to speak and write in the privileged discourse of Standard English. Audism is a form of oppression that promotes an "impaired" mentality and the negative aspect that Deaf people "can't" function as well as hearing people can. Forwarding the ideas of Deafhood and Deaf Gain, activists, such as Paddy Ladd and Arron Williamson, have tried to combat the use of terms such as "hearing impaired" or "loss" and ideas that promote an inferiority of ASL and Deaf people. Many Deaf individuals and those working within the Deaf CoP are trying to change the widespread attitudes of audism.

Discussion of Group 7: A Word with Significance

While analyzing the word *childhood*, I made a significant realization in the strength of using a corpus of Deaf writers and putting their words in the dictionary. The example I chose of children being alone during childhood may seem a little depressing, and I know it is—many of my students have told me this much. However, it is a statement that they can strongly identify with; it is, for many, part of their habitus, part of their sociolinguistic background and should not be underestimated as a viable part of their Deafhood. Deafhood is about inclusivity and sustainability for all its members. Deafhood is about bringing a positive perspective about being Deaf. Even though many Deaf children spend time alone and without direct communication in sign language, they find ways—at residential schools or with other Deaf adults—to feel the sense of belonging to the family-like ways of the Deaf CoP.

Some Final Thoughts

Ending my analysis of the data with the word *childhood* is significant because the explanation of my findings fuses together concepts, such as habitus and Deafhood, that I have studied and applied to make the AAD a viable and authentic tool for Deaf students. In the initial stages of my research, as I combed through the data, I was fascinated by the ways words are used and how words work with other words. I reflected on how I serendipitously stumbled upon the concept of oppression while looking for the concept of removing a cast. I would like to continue my exploration of the DWC to discover more pleasant surprises. The power of the voice of these Deaf authors showed me a glimpse of the successes and failures at maintaining their status with Deafhood.

Students can explore a variety of corpora to discover their own surprises. Providing opportunities for students to examine patterns in a variety of corpora assists them in discovering new patterns of usage and compare their usage to SWE. “Increasingly, language classroom teachers are encouraging students to explore corpora themselves, allowing them to observe nuances of usage” (Hunston 13). Making corpora tools available for students to submit their own work, allows them to perform frequency counts and concordancing functions on their own work. Once students develop a corpus of their own work, they can then compare their writing to a larger corpus, such as the COCA. When students compare their own work to the work of others, they develop critical thinking skills through self-analysis. Encouraging students to comment on their own writing will enhance their revisions and text generation abilities.

Phraseology, as defined in Chapter Three, is another aspect of corpus analysis that can assist students. During phraseology, lemmas, as in my previous example of *eat*, *ate*, *eaten*, and *eating*, can be analyzed by Deaf students. Analyzing lemmas for Deaf students is particularly

helpful because, similar to the word-one-to-one-sign correlation, they often struggle distinguishing the different usages of the derivations of words. Investigating these differences in corpora provides concrete examples of usage patterns.

The Academic ASL Dictionary is a tool that I plan to use to teach students about the differences in sentence structures. The AAD will allow me to adapt a side-by-side approach, similar to the Strategic and Interactive Writing Instruction, to demonstrate how right-branching syntax can be translated into a left-branching academic style. The semasiological and onomasiological portions of the dictionary entries also support a side-by-side approach. Using authentic examples from the dictionary and the students own writing, I can visually demonstrate ways to strengthen the process of text generation and revision techniques.

While organizing the data, I discovered that my word sketch design allows me to create sentence combining assignments for my students using the words or phrases in the boxes to create a complete sentence using the node word. So, for example, considering the word sketch for *analyze*, the collocates just before the node word are: *to, and, not*; the collocates just after the word are: *the, and, field, further, what*. Other collocates before the node word are: *ability, used, did, study, how, intuition,* and after the node word: *portray, evaluate, provide, individual, compare, critique*. Given these words and adding their own ideas, students can create sentences using standard English word order. Here is one possibility: "The ability to analyze and evaluate provides an appropriate critique." The creative matching and rearranging of sentence parts mirror the playfulness of ASL. Additionally, using the word sketch activity is a good way to support students with corpora analysis.

Creating the QR codes for the AAD was invaluable, and I realized that students could also use this technology to make the dictionary and the connected activities more interactive. To

enhance their understanding and recalling aptitudes, students can create note cards with their own examples. For example, on the front of a note card, the students write the word and its denotation. On the back of the note card, the students can copy and paste a QR code that connects to a video of themselves providing their own examples, connotations, and descriptions of the word. All the activities that I mentioned can accommodate the use of a QR code in similar ways.

Future Research and Development

As I mentioned earlier, one of the greatest limitations I have had during research is working alone. Commercial lexicographers rarely work alone, nor do they manually construct analytical items. With that said, the learning curve I have experienced has been tremendous. In the future, I intend to collaborate and build upon the slice I have selected here by widening the register and genres included in the corpus without changing the parameters for Deaf authors to be included. Additionally, I intend to make the DWC broader to include more types of writing Widening the scope of the corpus will not only provide a platform to collect the writings of Deaf authors, but it will become a tool for teachers and students to use when studying, researching, and writing. Moreover, by expanding the register and genres of the corpus, the AAD will provide additional authentic examples from published Deaf writers to motivate Deaf student-writers to continue to seek deeper meanings to their translations. When I decided to create a dictionary, the one-sign-to-one-word cycle was a chain I wanted to break. Because I have created a new tool for Deaf college students, the next step of my research is to garner the reactions and interactions of individuals who use the dictionary. I believe there is a need for data on the reactions from Deaf students. What are their perceptions? In what ways do they find use of the AAD helpful and beneficial? Discovering what works and what does not work in the practical application will

assist me in developing and enhancing the corpus and expanding the dictionary. More research is needed in the area of digital and multimodal composing practices of Deaf students, and how these practices can be enhanced through code-meshing, side-by-side writing instruction, and other bilingual strategies. My goal is that students have a richness of words and phrases to add to their writers' treasure chests. As a teacher and scholar, I would like to continue to add to that treasure chest.

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Appendix A

Score Sheet for ASL Storytelling

2015 KSD ASL Bowl Competition "Technologic"
Judges' Score Sheet: ASL STORYTELLING
Judge Number: _____Student Competitor Number: _____

Traits:	1	2	3	4	5	Subtotal:
Theme Incorporation	Does not use the theme in any way		Uses the theme somewhat		Uses the theme in a meaningful, creative, and comprehensive way	/5
Time Limit	Runs either well under two minutes or well over five minutes in length		Runs almost two minutes or just over five minutes in length		Runs between two and five minutes in length	/5
Introduction	Lacks many of the correct, required elements and is not in order		Lacks some of the elements, not fingerspelled, may not be in order		Includes student's first and last name, genre type, sequencing constraints, fingerspelled title, all in order	/5
Apparel	Wears no formality in outfit, top is not solid and provides very little contrast to skin		Wears somewhat semi-formal, top is mostly solid, provides a little contrast		Wears semi-formal outfit, solid top, adds contrast to skin color	/5
Story Originality	Appears to be a copy or a redone version of something already created		Has been used before, but has a uniquely different version		Is unique, one-of-a-kind, and singular in its content	/5
Narrative Structure	Does not follow traditional narrative structure		Follows loosely the "diamond" structure and/or has missing plot elements		Follows a "diamond" structure using characters, setting, problem/solution, and climax	/5
ASL Grammar	Includes many English constructs		Includes features from both ASL and English, English mouthing		Includes ASL syntactical structures, NMS, and prosody	/5
Genre Type	Does not follow a certain genre type		Follows, but mixes two or more of the required genre types, causing confusion		Follows one of four required: Original Fiction, Narrative of Personal Experience, Cinematographic Story, or Folk Tale	/5
Moral/ Lesson	Has no moral or lesson		Has a moral or lesson, but is somewhat unclear		Has a clear moral or lesson	/5
Overall Presentation	Lacks a point, lacks luster, and needs professionalism		Needs polishing on driving the point home, energy, and a professional look		Hits the nail on the head, very entertaining, extremely professional	/5
Total:						/30

Notes:

Appendix B

Results of Survey of Composing Practices

Q1 - When I completed a writing project entirely on paper, I felt confident that my ideas were clearly communicated.

Answer Count
1 Strongly Disagree 0
2 Disagree 2
3 Neither Agree nor Disagree 9
4 Agree 11
5 Strongly Agree 1
Total 23

Q2 - When I completed a writing project using video recordings for parts of the project, I felt confident that my ideas were clearly communicated.

Answer Count
1 Strongly Disagree 2
2 Disagree 5
3 Neither Agree nor Disagree 3
4 Agree 7
5 Strongly Agree 6
Total 23

Q3 - I would like to participate in writing assignments entirely on paper in the future.

Answer Count
1 Strongly Disagree 3
2 Disagree 5
3 Neither Agree nor Disagree 5
4 Agree 5
5 Strongly Agree 5
Total 23

Q4 - I would like to participate in writing assignments using video recordings for parts of projects in the future.

Answer Count
1 Strongly Disagree 3
2 Disagree 4
3 Neither Agree nor Disagree 8
4 Agree 8
5 Strongly Agree 0
Total 23

Q5 - Writing on paper helped me understand that writing involves a process of prewriting, drafting, revising, and producing a final product.

Answer Count
1 Strongly Disagree 1
2 Disagree 2
3 Neither Agree nor Disagree 7
4 Agree 9
5 Strongly Agree 4
Total 23

Q6 - Using video recordings for parts of the process helped me understand that writing involves a process of pre-writing, drafting, revising, and producing a final product.

Answer % Count
1 Strongly Disagree 0% 0
2 Disagree 17% 4
3 Neither Agree nor Disagree 22% 5
4 Agree 30% 7
5 Strongly Agree 30% 7
Total 100% 23

Q7 - I prefer using video recordings to sign my ideas, and then transcribe them into written words.

Answer Count
1 Strongly Disagree 1
2 Disagree 4
3 Neither Agree nor Disagree 9
4 Agree 5
5 Strongly Agree 4
Total 23

Q8 - I prefer to write my ideas directly from my head onto paper.

Answer Count
1 Strongly Disagree 1
2 Disagree 6
3 Neither Agree nor Disagree 9
4 Agree 2
5 Strongly Agree 5
Total 23

Q9 - My grade for a writing project on paper was:

#	Answer	Count
1	Better than I expected	9
2	What I expected	14
3	Lower than I expected	0
	Total	23

Q10 - My grade for a project using a video recording was:

#	Answer	Count
1	Better than I expected	9
2	What I expected	8
3	Lower than I expected	6
	Total	23