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American Sign Language in Hybrid/Fully Remote Learning: Impact on Student Presence and  
Presentation

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## ABSTRACT

This teacher inquiry explores two particular challenges in my online/hybrid student teaching practice that I wanted to explore further from a multimodal and multilingual perspective. These two remote teaching challenges include students having minimal video-on presence in a remote classroom and students' presentation skills lacking in effective non-verbal communication. To explore these challenges and how American Sign Language linguistic and cultural awareness activities could impact hearing students' video-on presence and presentations skills (while producing a more linguistically equitable and inclusive learning space), I designed, collected data, and analyzed student results of preliminary surveys, video-on record sheets, predetermined ASL linguistic and cultural awareness activities, and assessments. Results from this research show some benefits to incorporating ASL linguistic and cultural awareness activities to improve video-on presence and non-verbal presentation skills. Other results show a need for continued research using heightened application of research methods.

*Keywords:* multilingualism, multiculturalism, linguistic equity, inclusion, culturally sustaining pedagogy, American Sign Language, Deaf and Hard of Hearing, video-on presence, presentation, mainstreaming

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## Chapter 1

### Inspiration of Study

My fascination for language started as a young child while traveling with my family. As I discovered the striking beauty of various languages throughout my secondary educational career, I got hooked. In middle school - like so many of my peers - I started learning Spanish as an elective. Halfway through high school, I continued with Spanish and picked-up German. For the first year of my German language learning experience, I studied independently over the summer and was tested multiple times throughout the process to ensure I was meeting course standards. After that first course, I continued to take high school German classes and even participated in an exchange program where I attended school in Germany for a few weeks. In college, I continued to take one class of Spanish, one class of German, and I began learning American Sign Language (ASL). While in my second semester of ASL, I started to learn Chinese, though I was unable to continue formal study of these languages due to my student teaching program and the busy schedule that all teachers face. To this day, I continue my language learning experiences independently as best as I can.

I found one particular language especially intriguing. American Sign Language stood out to me above the rest in part because of its obvious beauty and visual mode of communication. Additionally, this language stood out to me due to its status at The Pennsylvania State University. This visual language is considered a language at my higher education institution but comes with many restrictions when taking ASL courses for credit. This became frustrating for me - as an English and Secondary English Education major - because this language course would

not count for any of my major-related or general education requirements despite my belief that the language has great importance in my future teaching career. This course was deemed worthless in regards to my transcript, yet the material, language, and culture were immensely important to me and the rest of the Penn State student body - made evident by the notorious difficulty students found in achieving course enrollment. Every semester proved a challenge for students, racing to get an open seat in the classroom. 2021 marked a transformative year for the Communication Sciences and Disorders (CSD) department. An additional ASL professor, who is a member of the Deaf and Hard of Hearing community, was hired. This faculty addition allowed space for more ASL courses to be opened at the university including the next language level: ASL 3. I was not able to take this new course, but thankfully, I am blessed with an opportunity to conduct an undergraduate inquiry and thesis project centered around my experiences learning ASL and student teaching. I eagerly seized the opportunity to connect my love of ASL, aspiration of earning an ASL interpreter certification, and ability to apply equity-driven and culturally sustaining activities to enhance students' learning experiences in remote secondary English classrooms. The bonus to doing this research is that I had an academic "excuse" to bring awareness of a marginalized community and a sense of linguistic equity into a classroom.

### *My Culturally Sustaining Pedagogical Philosophy*

This natural extension provided a clear path for me to introduce awareness of a marginalized community and linguistic equity while living out my culturally sustaining pedagogical philosophy in my student teaching classroom. Culturally sustaining pedagogy or CSP (Furlong & Mendoza, 2016) is a mode of teaching which emphasizes the existence and



importance of cultures within the classroom community, curricular content, and connections beyond the classroom. My practice of culturally sustaining pedagogy included more than just incorporating American Sign Language into the classroom; my mentor and I tackled topics of diversity, equity, and inclusion as well as incorporating students' funds of knowledge in order to live our beliefs and commitments to the tenets of CSP.

Understanding that this year is a pandemic year, I am teaching remotely, and I am doing action research specific to ASL, my methods are not as widespread or diverse as I would ideally intend them to be. The best way to describe my action research would be that I implemented some of my envisioned culturally sustaining pedagogies related to ASL. In the future, I hope to learn more about my students' cultures and act on their feedback to emphasize cultures specific to them as well as cultures they may have minimal to no awareness of. Including cultures specific to students as well as unfamiliar to students provides awareness of the "unknown" at an earlier age. When I began my collegiate learning experience, I was made aware of cultures I had a vague understanding of in addition to cultures I had no understanding of. I decided as a teacher that my students should not have to wait until higher education to learn about their own and others' histories and cultures. For this reason, I adopted a stance aligned with culturally sustaining pedagogies (Ferlazzo & Mendoza, 2016); however, I would like to be more intentional and active in the ways I realize this stance with my students. My student teaching program allowed me to begin developing culturally sustaining teaching practices in order to prepare for a more advanced implementation in my future classroom.

### *Positionality Statement*

As a 22-year-old undergraduate student at The Pennsylvania State University Schreyer Honors College, I am and have been interested in the linguistic equity and inclusion of the Deaf and Hard of Hearing (DHH) community in our university hearing community. Prior to taking any American Sign Language classes, I challenged my institution to incorporate more ASL interpreters at community-open events held by the university. I researched and wrote a letter to the PSU director of campus and community events to make positive change for this marginalized community. Please see Appendix A for reference to this letter. Unfortunately, no response was given; however, this lack of communication in response to a genuine community member's concern fueled my quest for linguistic equity. I took two one-semester courses of ASL - the only ASL classes available at Penn State at the time - to learn the language, culture, community, and means of being an ally to community members in my future classroom. My teacher inquiry attempts to enhance linguistic equity for Deaf and Hard of Hearing students in education through inclusive and culturally sustaining methods for online/hybrid/in-person learning environments.

To give additional background, I am a member of the hearing community, white majority, and identify as female – all identity markers of the US majority population of educators (National Center for Education Statistics, 2020). I have no relatives or friends who are Deaf or Hard of Hearing. In high school I had a teammate whose parents were Hard of Hearing and who frequently needed their children to sign at sporting/fundraising events which always caught my eye. I am presently in a student teaching internship practicum with no known Deaf students and one student with minor hearing loss. Because my classes do not have many DHH students, the focus of this research revolves around improving the video-on presence and English presentation skills of *hearing* learners with inclusion and linguistic equity techniques that can benefit a DHH

student if mainstreamed. In the future, I hope to earn a certification in ASL interpretation to provide support in my future secondary English classroom, school, and school district.

### *Student Teaching Context*

Over the course of my 2020-2021 academic year at Penn State, I was admitted into my College of Education's Professional Development School (PDS) program which allowed me to student teach for a full year with a mentor teacher in a rural central Pennsylvania school's 9<sup>th</sup>-grade English department. During my fall 2020 semester, I had the pleasure of observing and student-teaching three Advanced English 9 classes while in my spring 2021 semester I observed and student-taught one English 9 and one Advanced English 9 class. Naturally, the field of education is taking a toll this year due to the COVID-19 pandemic, and many safety precautions were instilled to prevent further spread of the virus in communities and schools. Because I was an external and unemployed staff member of the school district, I was not allowed to enter the high school campus as a safety precaution for the school's teachers, students, and staff. During the fall of 2020, I virtually attended synchronous classes every Monday, Wednesday, and Friday when students learned in a hybrid learning model *and* Monday and Friday when students learned in a fully-remote model with asynchronous Wednesdays. The learning model changed throughout the semester according to safety protocols. During the spring of 2021, I attended classes every day of the school week remotely while my students attended school in a hybrid learning model. Despite these challenges, I was able to engage in hands-on action research that is the topic of this thesis.

*Student Teaching Observations and Inspirations for Research*

My observations during my fall semester in my mentor teacher's 9th-grade Advanced English classes brought two specific challenges to my attention. One: students rarely turn on their cameras for peers and teachers to see their faces. Two: students seem uncomfortable when learning and participating in online education. This discomfort could stem from a variety of factors ranging anywhere from self-confidence to learning in an uncomfortable home environment to my mentor and I not engaging well enough... the factors are limitless. However, this second challenge was noticed mainly while grading a presentation-based assessment, highlighting one particular factor above the rest: lacking English speaking and presentation skills.

The first challenge was identified over the first couple of months in my practicum site. Over time, students turned their videos on less and less until there were moments when I did not see any of their faces for entire class periods. Occasionally, a miraculous experience would occur, and I would see a couple of faces for the first time. This experience seemed foreign to me in an online/hybrid model because education used to be in-person with all students in the classroom visible to the teacher(s). This lack of visibility caused difficulty in "reading" the class throughout lessons. If the cameras were not turned on, then the teachers could not see if students were paying attention, physically in the same room as their computer, engaged with the curriculum, understanding the curriculum, etc. In an attempt to better understand the weight and frequency of this visibility issue, I recorded which students turned their video cameras on at some point in our lessons. I recorded these observations every day that I attended class through March 26, 2021 to feed this constant question I had regarding my students' lack of visual presence in the classroom. By knowing specifically how many students used their web cameras

in class, I understood exactly the percentage of my class visible to teachers and peers. Those numbers validated my concerns and prompted action research in the spring semester that focused on using ASL to increase video-on presence and enhance presentation skills.

The second challenge was observed in grading the assessment from our fall 2020 research unit about Ancient Greece. Each student was asked to individually research and present about Ancient Greek history and culture from a list of topics. Each student took one topic, researched, and completed a recorded slide show presentation with their web cameras turned on. The informal observations I noted while grading these presentation videos were that students generally did not demonstrate the ideal presentation skills expected of them. These skills included (as stated in my mentor teacher's rubric): "using visual aids and presentation software deftly and masterfully, providing supplemental aids designed for greater audience understanding, being clearly heard and understood as a presenter, and being appropriate in appearance, attention, language, and non-verbal gestures as a presenter." Please see Appendix B for the original rubric.

As I slowly noted and gathered evidence in my fall semester regarding the challenge of video-on presence and presentation in a virtual and hybrid learning model, I recognized from my own linguistic repertoire that these two concerns had potential to be remedied for hearing students through the incorporation of ASL linguistic and cultural awareness in-class activities through curriculum.

### *Rationale for Using ASL Linguistics and Cultural Awareness*

The incorporation of ASL linguistic and cultural awareness activities in the classroom taps into a previously stated personal teaching philosophy of mine: culturally sustaining

pedagogy. In an attempt to reach this culturally sustaining pedagogy and philosophy I have for my own classroom, I tried using ASL and DHH-related in-class activities to encourage linguistic equity, multimodality, and multilingualism in my online/hybrid classrooms. These three concepts are already known to improve education (Volterra & Taeschner, 1978; de Quadros et al., 2010; Swanwick, 2010; Yin & Tang, 2014) and can be applied to online/hybrid learning to enhance the mode of education before a normalized version of the learning model is established. As of now, online/hybrid learning is relatively new in most contexts. Using these linguistically equitable and culturally sustaining practices will allow for a normalization of a more inclusive learning environment. The inclusion discussed in this thesis revolves around ASL/DHH inclusion; therefore, using ASL linguistic and cultural awareness activities in class aim to promote linguistic equity, multimodality, and multilingualism while hoping to impact students' video-on presence through acknowledgment and practice of an alternative mode of communication. This inclusion can then be transferred back to the traditional learning models of fully in-person education. In other words, teachers and students can learn how to thrive in a different learning model using culturally sustaining practices already known to work and meant to foster equity in the classroom.

Using these researched topics to improve students' presentation skills works exactly the same. Presenting in an online learning model has its own challenges when compared with presenting in person. While presenting in person may require notecards, seeing a presenter entirely as opposed to only their profile, and the pressure to perfect a presentation the first go around are all challenging. With online learning, however, presenting with inconsistent internet connectivity, home backgrounds, background noises, and numerous other uncontrollable factors pose equally stressful challenges. Ultimately, having linguistic and cultural awareness of another

language and those who use that language can only add to students' linguistic repertoires. Enhancing those repertoires simply gives students additional skills to use and improve presentation despite those challenges. Again, linguistic equity, multimodality, and multilingualism are already known to work and foster equity; therefore, these three concepts can be acted upon through the use of ASL linguistic and cultural awareness activities to improve the overall quality of presenting to counteract the external and uncontrollable difficulties of presenting at home.

The action research, reported in this thesis, explores these two questions:

1. How does the use of explicit ASL linguistic and cultural awareness activities during curricular instruction time enhance hearing students' overall video-on presence in a hybrid/fully-remote learning environment?
2. How does the use of explicit ASL linguistic and cultural awareness activities enhance hearing students' presentation skills?

## **Chapter 2**

### **Literature Review**

To better understand these two inquiry and research questions, discussing information about ASL, linguistic equity, and multilingualism can guide the overall trajectory of this research: how ASL linguistic and cultural awareness impact students' virtual presence and presentation skills. Establishing this relevancy and validation for this research will allow progression into learning the history of supports and environments provided for Deaf and Hard of Hearing students. This history, though extensive, provides an understanding of what has already been done to aid DHH students' learning and how this research paper contributes to the conversation. The inquiry of this research - as mentioned prior - is to explore ASL supports for hearing students' presence and presentation skills because the students present for my research identify mainly as hearing students. However, an underlying goal for this research is to identify ways of including DHH students in mainstream classrooms by incorporating pieces of the ASL language and culture which encourages inclusion to DHH community members who use ASL. If inclusive and beneficial techniques are discovered, linguistic equity for ASL-using DHH students can be rationalized as a necessary component of mainstream education - a system designed and executed mainly for hearing students.

#### *Learning and Teaching Online During COVID-19*

Since the COVID-19 pandemic broke out, education has transformed from the standard in-person, three-dimensional learning model to a challenging, remote, and two-dimensional learning model (Kamenetz, 2020). Numerous teachers, schools, and academic blogs and websites



discuss the difficulty of teaching to black screens and even provide resources and creative suggestions to support educators in this challenge (McCormick, 2020; Heaton, 2020; Burk, 2020). While there are so many varying perspectives and practices occurring to help this lack of video-on presence in remote classrooms, one that I will be researching in this paper is inspired by a K-6 STEAM teacher named Jessica Hughes who started using American Sign Language in her classroom to “make messages clearer and attention easier and more meaningful” (Schroeder & Jane, 2020). Though Hughes’ story is more focused on “connecting” her students, she was able to incorporate another language and mode of communication into her learning space to better the educational experience of her students. This story and action research inspired me to conduct my own focused on improving hearing students’ video-on presence and non-verbal presentation skills in remote learning models.

### *What is American Sign Language (ASL)?*

American Sign Language is an individual and unique language, specifically for people who are Deaf and Hard of Hearing. The language gains particular attention due to its visual mode of communication. The language is composed of its own grammar system, sentence structure, signing space (the specific area around the torso of the body which is dedicated to the majority of signs), name distinction, and – of course – visual communication. The signs used in ASL are not the only components considered for proper communication, though.

ASL has multiple linguistic and cultural components of the language which foster proper and effective communication:

- Facial expressions are key to language comprehension; if the facial expression does not match the signs being delivered, the overall message will be misconstrued (Smith, Lentz, & Mikos, 2008).
- Spatial awareness of signs must be expertly communicated. If referring to one object on the left-hand side of the body and another on the right-hand side, maintenance of proper objects on proper sides of the body is crucial to full comprehension of the message. Poor spatial awareness will result in confusion of who is doing what in a sentence or story (Smith, Lentz, & Mikos, 2008).
- Level of mouthing may vary. Some individuals mouth words out in English as they sign in an attempt to be understood in mainstream hearing spaces (DiMarco, 2020). Others mouth sounds instead of words. For example, one sign or expression might require the mouthing of a “th” sound while another sign or expression might require the mouthing of an “s” sound. There are many other mouthing sounds to take into consideration.
- Eye contact in the DHH community is not deemed as rude rather a cue of active listening. If one does not maintain eye contact – sometimes considered staring in the hearing community – then that individual could be seen as inattentive and cause offense (Smith, Lentz, & Mikos, 2008).

There are many other components of American Sign Language and the culture which affect communication. The above components name only a few factors which make ASL its own distinct language. Additionally, some of these ASL intricacies are applicable to English speakers such as facial expressions, spatial awareness, and eye contact. These facets of ASL can be used (if not already) when listening to ensure the presenter/speaker is getting comprehension clues.

Likewise, these facets can be used (if not already) when presenting/speaking to make a message more impactful and natural. These parts of ASL are also parts of English and many other languages; however, because ASL is a visual mode of communication, these linguistic and cultural awareness components may draw more attention than in spoken languages. Nevertheless, sharing these language components, acknowledging their connection to a linguistically marginalized community, and encouraging the use of these components in a classroom can theoretically provide communication guidance and inclusion for all language users.

### *Necessity for ASL Linguistic Equity*

Why is ASL linguistic equity necessary in classrooms? Considering “86% of Deaf and hard of hearing students attend mainstream education in the United States” (Matlin, 2018), it is necessary to accommodate for ASL-using mainstreamed students’ educational needs especially considering the already stigmatized experience DHH students have in mainstream schools (Brice & Strauss, 2016). Long term effects must also be recognized regarding linguistic inequity for students who attend a post-secondary educational institution after being in mainstream primary/secondary schools.

In the documentary film “Deaf U” students at Gallaudet University are interviewed regarding a variety of topics ranging from everyday life of a DHH college student to specific challenges, struggles, biases, and community tension. One interviewee remarked how she was placed in a mainstream school prior to college (DiMarco, 2020). Her transition from a mainstream high school to an all-deaf university posed an issue and - as she worded it - “culture

shock” due to the linguistic inequity she had previously experienced during her secondary education. Mainstream schooling diminished the use of facial expressions and encouraged the mouthing of words as an accommodation to hearing peers/teachers/staff/faculty (DiMarco, 2020). The shocking transition from a primary/secondary educational system that socially pressured this student to adapt to the hearing community continued to socially pressure her at the collegiate level. This student became a target for gossip and bullying by other DHH university students when she chose to mouth her words on her virtual blogging site to support her hearing audience members’ comprehension of her videos (DiMarco, 2020). This social pressure to conform - yet again - to an educational system/institution shows a need to deconstruct the stigmas instilled by these systems/institutions to ensure the students’ unique and individual modes of communication are not diminished in the learning environment. Instead, these unique and individual modes of communication should be encouraged while implementing learning supports that enhance the preferred and standard language used within the system/institution. This process of deconstructing these stigmas will not only allow space for linguistic equity but the normalization of mainstreaming and improved social-emotional health of DHH students (Yin & Tang, 2014). Attending to linguistic equity, normalized mainstreaming, and positive social-emotional health all contribute to students’ general classroom experience. Once the general learning experience is positively constructed, academic interventions to facilitate learner growth can occur such as using ASL linguistic and cultural awareness to impact presence and presentation skills in online/hybrid learning.

### *Benefits to Multilingualism*

Promoting linguistic equity subsequently promotes multilingualism in the classroom. Linguistic equity and multilingualism provide a learning environment that doesn't remove critical components of identity. Instead, this linguistically equitable and multilingual space fosters inclusion of students' linguistic repertoires. In order to better understand multilingualism, we must first acknowledge that ASL is another *mode* of communication. If an individual understands and can communicate in ASL as well as a spoken language(s), that individual is (bi)multimodal. Two benefits to multimodality include but are not limited to the intentional mixing of languages and grammar systems for more accurate message meaning and relief of cognitive load on a bimodal mind (de Quadros et al., 2010). The mastering and mixing of two languages and grammar systems proves to be "systematic, principled" (Petitto et al., 2001), and intentional, defying any assumptions that the speaker/signer misunderstands the functionality of one language because they use two (de Quadros et al., 2010). The ability to incorporate two modes of communication allows the speaker/signer to specifically select the language/modality which best communicates the meaning of the message instead of limiting themselves to only one language/mode and being deprived of the most accurate representation. Additionally, the use and incorporation of two or more known languages instead of one relieves the cognitive load of the language user. The use of only one language - despite knowledge and use of more than one language - burdens the language user to ignore alternate/more accurate language versions of the desired message (de Quadros et al., 2010). One disadvantage to multimodality is the extra time it takes to learn more than one language *and* more than one mode of communication. Unimodal bilinguals can learn two languages using the same mode of communication (de Quadros et al., 2010), making the overall language learning process easier than for a bimodal bilingual. The

difference between these two language learning experiences is how many foundations/modes of communication are being learnt prior to or while learning the language itself.

In addition to the benefits and consequences of *multimodality*, it is worth considering the benefits of *multilingualism*. ASL is considered another mode of communication, but it is also deemed a language in and of itself (Spencer, 2010). We can deduce that knowledge and use of ASL in addition to another language will make the language user bimodal as well as bilingual. While many researchers have brought to light benefits of multilingualism, the list below provides just a few that are most relevant to this research.

1. The incorporation of multiple languages in a linguistic repertoire provides “two distinct but interacting grammars” (Volterra & Taeschner, 1978), allowing for continued and intentional distinction between the two grammar systems as noted for multimodality (de Quadros et al., 2010).
2. The development of vocabulary (Swanwick, 2010) - as well as the sheer quantity of vocabulary (de Quadros et al., 2010) - is enhanced for multilinguals. Like multimodals, multilinguals are able to incorporate words/phrases from other languages to better support the main language in use (de Quadros et al., 2010). In some cases, a word or phrase in one language is non-existent in another, giving multilinguals a wider range of non-translatable words/phrases that can be used for the most accurate message no matter what language in which a conversation is being held.
3. Multilingualism allows for more linguistic flexibility in learning environments (Swanwick, 2010).
4. These multilingual learning environments provide safe spaces for students to discover, enhance, and use their specifically individual language repertoires (Swanwick, 2010).

5. Multilingualism in the learning environment is applicable to more than just the English content area as is the focus of this paper and conducted research (Swanwick, 2010).
6. Multilingualism acknowledges the need for additional language development and curriculum in the school's predetermined language of choice (Swanwick, 2010).

All of these benefits show how multilingualism in learning environments can benefit students' overall language skills as well as presence in their classroom community. If we combine the benefits of multimodality and multilingualism - since we deduced that multimodality and multilingualism specific to this research go hand-in-hand as we focus on ASL and spoken English - there is no doubt that the benefits surpass the consequences.

#### *Historical Supports and Environments for Deaf and Hard of Hearing Students*

Having identified the benefits and consequences of multimodality and multilingualism, let's turn our attention to the benefits and consequences of historical supports and environments actually implemented in education. Recognizing these historical supports and environments will shed light on the novelty of this research for hearing - and indirectly DHH students - based on previous academic interventions specific to DHH students.

The historical educational treatment of DHH students proved difficult in the journey of DHH educational progress. From the 1960s through at least 2012, the same concept has been researched and studied numerous times from numerous angles with the ultimate goal to identify DHH students' learning capabilities in comparison to hearing students (Spencer, 2010). Naturally, these studies focused on a variety of different factors including student learning environments, interventions, and supports with the end goal to understand how DHH students

learn best (Quigley & Frisina, 1961; Stuckless & Birch, 1966; Vernon & Koh, 1970; Meadow, 1967; Meadow, 1968; Schlesinger & Meadow, 1972; Goberis et al., 2012). Ultimately, all students are capable of learning if provided with the proper learning supports and environments. Some of those supports we have seen for DHH students over the years include a wide collection of communication systems that are not fully ASL, not fully English, but some unnatural and concocted combination of the two with variations among each. In many cases (if not arguably *all* cases), ASL has been morphed and forced into visual and structural adaptations of any given teacher's spoken English. If a system is bimodal, specifically using signed and spoken communication, then the system is recognized as "simultaneous communication," SimCom for short (Spencer, 2010). Some of these morphed systems inspired by but separate from ASL include the Rochester Method (Moores, 2010), Cued Speech (Cornett, 1967), Seeing Essential English/SEE1 (Anthony, 1971), Seeing Exact English/SEE2 (Gustason, Pfetzing, & Zawolkow, 1980) and Signed English (Bornstein, 1974; Bornstein & Saulnier, 1981). These linguistic supports were sometimes used to benefit the hearing and challenge the Deaf and Hard of Hearing, making the term "support" refer more to the majority group instead of the marginalized: an equity issue.

A physical support has progressed through technology in the form of hearing aids and cochlear implants (Spencer, 2010). During the 1970s, cochlear implants were developed, but multiple channels for those cochlear implants were only available by 1985 (Spencer, 2010). Cochlear implants - also referred to as CIs - are two-part devices with one part surgically implanted under the skin behind the ear and the other part in the same location outside the skin (U.S. Department of Health and Human Services, 2021). These devices differ from hearing aids in that they do not emit sound for the individual wearing them but a sense of sound through



impulses (U.S. Department of Health and Human Services, 2021). Cochlear implant surgery for children as young as two years old through the age of 17 was only available in 1990 (Spencer, 2010). This physical support is also a “hot topic” in the Deaf and Hard of Hearing community (Cooper, 2019). For some members of the DHH community, cochlear implants - like constructed language systems explained as the first historical support - “support” the hearing majority more than the DHH marginalized community (Cooper, 2019).

The third and final support involves legislative support. In 1975 the US Education for All Handicapped Children’s Act was approved (Spencer, 2010) and amended in 1997 as the Individuals with Disabilities Education Act, or IDEA (U.S. Department of Education, 2007). This act was designed and implemented “to support states and localities in protecting the rights of, meeting the individual needs of, and improving the results for... infants, toddlers, children, and youth with disabilities and their families” (U.S. Department of Education, 2007). This final support shows a step in the right direction, expressing the need for federal and local aid for minors with disabilities including hearing impairments. These three forms of support have allowed knowledge and research to widen regarding DHH students while promoting DHH students’ educational progress. However, these supports by no means diminish the concerns and challenges of DHH students in educational environments.

Educational institutions are still recognized as needing room for improvement based on the “use of language in classroom learning” (Spencer, 2010). 2012 proved to be a year of continued debate over which mode(s) of communication work(s) “best” for students’ educational growth in their learning environments (Knoors & Marschark, 2012; Spencer, 2010). These modes of communication in a learning environment - as stated previously - can be visual, auditory, or a combination of the two in a variety of different ways (Knoors & Marschark, 2012;

Spencer, 2010). Of course, the best mode of communication for DHH students would be their unique and individual communication systems which can vary depending on their family. For example, some students may be from families who are known as “elite” in the DHH community (DiMarco, 2020). These families are known for having multiple generations of members who go to all-deaf schools and likely consider ASL their first/primary/household language (DiMarco, 2020). Other students may be in hearing families, some may be from Deaf families who do not meet the “elite” status, some may be CODAs (Children of Deaf Adults), etc. With every family comes the possibility of different communication styles, but all-deaf schools that use ASL can normalize one mode of communication for all students, faculty, and staff, making communication within the learning environment equivalent in structure to that of a hearing learning environment. We can still see some communication variances among students (such as dialects or family-specific communication/SimCom), but the foundational communication will be standardized just as “academic” English is deemed standard English in hearing schools.

In 1817 the first school for DHH students that used ASL as their mode of communication was established, initiating in America an attempt to allow the DHH community to use their own language instead of accommodating the hearing community (Harvard University Linguistics Department, n.d.). In the years to come, ASL would be considered a seemingly “inaccessible” language that would inhibit mainstreaming and integration, preferring and accommodating the hearing population over the DHH population (Harvard University Linguistics Department, n.d.). My argument is not that ASL should be the one and only language and mode of communication to ensure the DHH community is not accommodating the hearing community. The reason for noting the first deaf school to use ASL is to highlight the later tension between the DHH and hearing communities due to linguistic oppression. Such linguistic oppression in learning

environments removes a layer of students' identities. Learning environments - as explained by researchers in 2014 - where sign language and SimCom were used improved social-emotional growth as well as communication (Yin & Tang, 2014; Greensberg, Calderon, & Kusché, 1984; Spencer, 2010). This humane teaching perspective and research allowed identity to be incorporated into education through linguistic funds of knowledge and diversity, showing communication benefits to students. This improvement of communication skills is hope for this paper's exploration of presentation skills and the benefits of these skills through the use of linguistically diverse activities. The benefits to social-emotional growth may indirectly bring hope for this paper's exploration of video-on presence, assuming social-emotional learning can lead to video-on comfort in an online learning model.

## **Chapter 3**

### **Methods**

The following sections describe the methods I used in this teacher inquiry action research (Buckelew & Ewing, 2019) and the reasons they were selected and conducted. The overall goals of these methods and this research are to explore:

1. the impact on hearing students' overall video-on presence in a hybrid/fully-remote learning environment if explicit ASL linguistic and cultural awareness activities during curricular instruction time are implemented and
2. the impact on hearing students' presentation skills if explicit ASL linguistic and cultural awareness activities during curricular instruction time are implemented.

I designed these goals when observing students during the fall 2020 semester. After looking at many blank screens during lessons as well as grading assessments that showed problematic presentation skills, my personal teaching philosophies of multilingualism, multiculturalism, as well as diversity, equity, and inclusion inspired these research questions.

#### *Context*

I conducted this research in a central Pennsylvania rural high school that - like my own teaching philosophies - encourages diversity, equity, and inclusion. This school setting and my own long-term hopes for this research (better inclusion of DHH students in mainstreamed

schools and enhanced linguistic equity) paired nicely. I collected and analyzed data from five 9<sup>th</sup>-grade English classes. I taught and observed three Advanced English 9 classes in the fall of 2020, collecting preliminary research that inspired further research in the spring of 2021 when I collected and analyzed additional data in one English 9 class and one Advanced English 9 class. 51 students were involved in the fall semester data collection, and 47 students were involved in the spring semester. Prior to conducting research, I sent a permission form to all students and their guardians to ensure any student who did not wish to be a part of my research could remove themselves from my participant pool. Fortunately, no exclusions were made; hence, all 98 students participated in this research. I attended and collected data every Monday, Wednesday, and Friday in the fall when classes were hybrid, every Monday and Friday in the fall when classes were fully remote, and every day of the workweek in the spring semester while classes were hybrid.

### *Data Collection*

I used four total forms of data collection throughout the 2020-2021 academic year: an anonymous Google Form survey, a daily video-on record sheet, three in-class ASL linguistic and cultural awareness activities, and an assessment. All four of these data collections were meant to build off of one another. The anonymous Google Form survey recorded the ASL and DHH funds of knowledge of students which then provided me with demographic information prior to engaging students in activities or grading their assessments. This progression of data collection also involved repetition of the collection and analysis processes with video-on records and

assessment notes being made in the fall of 2020 to inspire continued research in the spring of 2021.

### **ASL Linguistic and Cultural Awareness Survey**

In an attempt to understand my spring 2021 student participants, I provided an optional and anonymous survey assessing students' awareness of American Sign Language and the Deaf and Hard of Hearing culture. I distributed this survey prior to any ASL linguistic and cultural awareness in-class activities were implemented, ensuring there was no activity-invoked bias when students completed the survey. Additionally, I explicitly provided background information regarding this research to my students to explain the relevancy of this research to their learning space. I recognized that not informing the students about the research and methods of research would result in confusion and an inability to connect the benefits of multilingualism and multimodality to their learning. For that reason, I gave them an overview of my work as a researcher and continued to bring up rationales for why we were doing ASL linguistic and cultural awareness activity when the activities were presented and practiced in class. After this research rationale was explained to the students, I made the survey available. The seven multiple choice questions asked of students are listed below.

1. Do you identify as a member of the Deaf and hard of Hearing community?
2. Do you use American Sign Language (ASL) as a primary or secondary language?
3. Do you know someone who identifies as a member of the Deaf and Hard of Hearing community?

4. Do you know someone who uses American Sign Language (ASL) as a primary or secondary language?
5. Have you ever been in a classroom with a Deaf and/or Hard of Hearing student/faculty member?
6. How would you describe your familiarity with American Sign Language (ASL)?
7. How would you describe your familiarity with the Deaf and Hard of Hearing culture?
8. Would you choose to take an American Sign Language (ASL) elective if offered in school?

I crafted this survey to distinguish students' first- and second-hand experiences with ASL and the DHH culture to discover just how many students could be impacted less or more by this research due to their prior funds of knowledge and interests. The three overall research objectives of this survey can be summarized by the following:

1. Identify student identities and familiarity with ASL and the DHH community
2. Identify student familiarity with other ASL-users and members of the DHH community
3. Identify student interest in American Sign Language.

Having this background information provided me with a better understanding of my students and how to subsequently adapt learning in a multimodal/lingual respect according to their funds of knowledge.

## **Video-On Presence Record Sheet**

In the fall of 2020 and the spring of 2021, students' video-on presence was recorded on a grid, marking which students had their web cameras turned on at some point during the classes I could attend to collect the data. To make sure I did not count one student as multiple video-on presences if they turned their web camera on and off throughout the lesson, I wrote the names of all my students in each class, aligned those names along the y-axis of a grid with the dates of the classes I attended on the x-axis. Each student had a box per class that I would either fill in if their web camera was turned on sometime during the lesson or would leave blank if they remained off camera the whole class. This data collection directly measures which students were visually present during each individual class.

## **ASL Linguistic and Cultural Awareness Activities**

To explore if ASL linguistic and cultural awareness impact spring 2021 hearing students' video-on presence in our hybrid/fully-remote learning model, I crafted three ASL linguistic and cultural awareness in-class activities. Student video-on presence was recorded throughout the activities as well as the remainder of class. The activities are explained below.

1. I made a slide presentation of Classroom ASL Signs for students to use non-verbal communication during their online/hybrid learning experiences.

I explained to my students our rationale for using these signs, providing a clear connection between the research and the desired effect: to enhance the students' learning experience. The signs were then presented and demonstrated in class for students to know and use non-verbal communicators if verbal communication was



uncomfortable or inaccessible in the online learning model. The signs made available to and modeled for students included:

1.1 “yes” and “no” if a yes/no question is asked in class and students would rather give a visual response as opposed to unmuting for a verbal response or typing in the classroom chat.

1.2 “Understand/I understand” was presented and demonstrated to allow students to use visual indicators when my mentor or I asked a check-in question. Check-in questions vary in form but basically ask if students are understanding the lesson. This sign could be used in various forms, as well, signifying the ultimate message of comprehension that my mentor and I looked for when asking check-in questions.

1.3 The final predetermined sign presented and demonstrated was “again/repeat.” This sign was explicitly explained to students as a visual indicator that something in class needed to be reiterated. This sign could be used to signify comprehension challenges, technology challenges, attention-challenges, and numerous other challenges that may require a student to hear/see information again in an online/hybrid class.

The final slide of the Classroom ASL Signs presentation allowed space for students to list other signs that they believe would help them communicate non-verbally with a teacher in their online/hybrid learning models. Students received an explanation that if they typed a sign they would like to know, the sign word and visual translation would be added to the Classroom ASL Sign presentation

slides and discussed in class for all students to benefit from the non-verbal communicator. No additional sign requests were written by students.

2. A facial expression circle question was used as the second ASL linguistic and cultural awareness in-class activity. This activity practiced the facial expressions used in ASL which are also applicable to English presence and presentation.

A circle question is a question asked at some point during the lesson to include student voices and participation. Each member of the classroom community is expected to contribute a response to this question. In my mentor and my classroom, a circle question is asked at the beginning of class every day. The facial expression circle question and intervention activity asked students to say and show their mood for the day to ensure their words and their facial expressions matched. Each community member contributed one word to describe their mood and most matched their word with a facial expression. Students who were in class for this activity were asked to show their expression through eye, eyebrow, and hand gestures since a mask obscured the rest of their facial expressions.

ASL requires facial expressions to match the signs and context being communicated to understand the tone, feelings, and overall message when conversing. Similarly, matching one's facial expressions with one's verbal words allows for the most accurate comprehension of a spoken message/presentation of information. This activity was selected for students to practice using facial expressions in preparation for effectively presenting information during their assessment. Additionally, students were shown how ASL and its culture can be

used in the classroom and daily when communicating to ensure a culturally sustaining learning space.

3. A virtual background circle question was used as the third ASL linguistic and cultural awareness in-class activity to prepare students for their assessments while subconsciously practicing a description tactic used when signing.

To reiterate: a circle question is a question asked at some point during the lesson to include student voices and participation. Each member of the classroom community is expected to contribute a response to this question. In my mentor and my classroom, a circle question is asked at the beginning of class every day. The virtual background circle question asked students to use their virtual background feature on their online learning platform. Students were asked to select a predetermined virtual background, turn their web cameras on when it was their turn, and explain their selected background in relation to the question. The students' assessment required a visual medium of presenting information: one-pagers (Potash, 2019). This visual presentation required students to include at least two visuals to represent their researched information. The presentation component of the assessment then asked students to verbally explain the inclusion of these visuals and their relevance to the students' research. This circle question also asked students to verbally explain their selected virtual background to prepare them to explain selected images for their assessment. Additionally, ASL requires the signer to identify visual features when describing a person, place, or thing. Giving students an activity where they are required to describe their surroundings and the meaning of those surroundings allows them to interpret and

communicate visuals even if their communication is a verbal and auditory mode instead of visual.

## **Assessments**

Both the fall 2020 and spring 2021 research and presentation assessment were assigned to a unit that required research to be conducted and presented prior to reading the unit literature. The fall 2020 assessment required students to research one of six topics, create a visual presentation of that research via a Google slideshow, and record a 3-5-minute video of the research using the slides as a visual aid, all while having a web camera turned on and focused on the presenter in the Screencastify platform.

The spring 2021 assessment took a slightly different format than the fall 2020 assessment. I created a new rubric to enhance clarity of the assignment and assessment points, and I adapted the medium of student presentation. In order to conduct a highly visual representation of information that mirrored ASL's visual mode of communication and enhanced the non-verbal language presentation skills lacking in the fall assessments, spring students presented their information in the form of a one-pager instead (Potash, 2019). Additionally, some spring 2021 students had difficulty accessing a functioning Screencastify platform. In those cases, some students recorded using alternative platforms, but the same recording criteria was assessed in the spring as in the fall. For more details about each assessment and the similarities and differences between them, see the fall 2020 assessment rubric in Appendix B and the revised spring 2021 assessment rubric in Appendix C.

## *Data Analysis*

### **ASL Linguistic and Cultural Awareness Survey**

The ASL linguistic and cultural awareness survey was analyzed through tables providing the numerical value of student responses to each multiple-choice question and a percent calculation comparing each response's quantity to the total number of student survey participants. I then identified which survey questions and responses related to which of the three survey objectives: student identities and familiarity with ASL and the DHH community, student familiarity with other ASL-users and members of the DHH community, and student interest in American Sign Language. Once those survey questions were sorted into the appropriate survey objective, those questions' responses were compared to assess whether the majority of student participants would benefit from ASL linguistic and cultural awareness information and practice during class. Analyzing whether ASL linguistic and cultural awareness activities would be beneficial to students was dependent on students' funds of knowledge and prior experiences. I analyzed the survey as a way to inform additional data collection strategies.

### **Video-On Presence**

Video-on presence was analyzed by counting the total number of individual students who turned their web cameras on each recorded day and calculating the percentage of those students in relation to the total number of students in the class. I inserted all of those days, numbers, and percentages on separate tables respective to each course and compared frequency and daily quantity of video-on presence.

## **ASL Linguistic and Cultural Awareness Activities**

ASL linguistic and cultural awareness activities were assessed based on the video-on presence recording grid mentioned before. The days when ASL linguistic and cultural awareness activities were implemented were marked with an asterisk and compared with the other non-activity days according to their percentages of students with web cameras turned on. If the asterisked percentages were higher than the non-asterisked percentages, then the activity managed to reach its objective of increasing video-on presence. If the asterisked percentages were lower or equivalent to the non-asterisked percentages, then the teaching pedagogies for those three activities were compared to assess presentation of the activity and possible causes for failure of increasing video-on presence. Additionally, the ASL linguistic and cultural awareness activities were assessed based on the quantity and type of growth skills noted and compared in fall 2020 and spring 2021 research presentation assessment videos.

## **Assessments**

The data for students' research presentation assessment was collected in the fall 2020 as written observations and feedback in the form of comments on the students' learning management system, Canvas. Specifically, in the spring 2021 students received written observations and feedback in the comments section of their non-verbal language presentation rubric criteria. Because non-verbal language gestures shared a rubric criterion in the fall and spring with multiple other criteria, rarely did students lose points for excluding non-verbal communication; however, they did receive feedback to improve for future presentations. Students who did not include a presentation video in their final submission were not included in

the final data collection and analysis. Comparisons regarding fall 2020 written observations and spring 2021 written observations of presentation skills that need improvement were made and explained in the following chapter.

## Chapter 4

### Data and Analysis

#### *Spring 2021 Survey*

The below survey questions were asked of voluntary student participants. Overall, 28 of the 47 spring 2021 students took this survey and subsequently provided me with an understanding of the following information:

1. Student identities and familiarity with ASL and the DHH community
2. Student familiarity with other ASL-users and members of the DHH community
3. Student interest in American Sign Language.

While these questions are indirectly related to the two research questions this thesis is exploring, the information this survey was designed to collect is valuable in understanding my students' ASL and DHH funds of knowledge. Responses from these preliminary survey questions can be found in the table below.

**Table 1: Spring 2021 Student Survey Questions 1-8 Results**

Question 1	Yes	No	Other
Do you identify as a member of the Deaf and Hard of Hearing community?	0%	96%	3%
	0	27	1

*Note. n=28*



Question 2	Yes	No	Other
Do you use American Sign Language (ASL) as a primary or secondary language?	3%	96%	0%
	1	27	0

*Note. n=28*

Question 3	Yes	No	Other
Do you know someone who identifies as a member of the Deaf and Hard of Hearing community?	25%	75%	0%
	7	21	0

*Note. n=28*

Question 4	Yes	No	Other
Do you know someone who uses American Sign Language (ASL) as a primary or secondary language?	25%	75%	0%
	7	21	0

*Note. n=28*

Question 5	Yes	No	I'm not sure
Have you ever been in a classroom with a Deaf and/or Hard of Hearing student/faculty member?	29%	46%	25%
	8	13	7

*Note. n=28*

Question 6	I am unfamiliar	I know of ASL	I'm learning ASL	I use ASL	I know a little but not very much
How would you describe your familiarity with American Sign Language (ASL)?	18%	71%	7%	0%	4%
	5	20	2	0	1

*Note. n=28*

Question 7	I am unfamiliar	I know of DHH culture	I'm learning about DHH culture	Part of my cultural identity is DHH
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How would you describe your familiarity with the Deaf and Hard of Hearing culture?	25%	57%	18%	0%
	7	16	5	0

*Note. n=28*

Question 8	Yes	No	Maybe
Would you choose to take an American Sign Language (ASL) elective if offered in school?	32%	4%	64%
	9	1	18

*Note. n=28*

Again, this data poses as preliminary research for the following data records which will look closely at two research questions exploring hearing students' video-on presence and presentation skills after in-class ASL linguistic and cultural awareness activities were implemented. Looking at the above data tables, the first objective of this survey was to identify student identities and familiarity with ASL and the DHH community. Looking specifically at results from survey questions one, two, six, and seven, I learned that 0% of my 28 student participants identify as members of the DHH community, yet I have one student who seems unsure of this identity component given that they answered "other" to the first survey question. The student left a comment identifying that they had "minor hearing loss" when they answered "other" to this question; however, I found that the student who marked having "minor hearing loss" in survey question one did not report that they used ASL as a primary or secondary language. In fact, a different student uses ASL as a primary or secondary language as indicated in the responses to survey question two. These two questions showed me that two members of my 28 student participants have first-hand experience with at least one ASL/DHH-related component of life: language or the physical impairment whether or not that impairment makes the student feel like they're a part of the DHH community. Results to survey questions six and

seven showed a majority of students knowing *of* ASL and DHH culture but far less are actively learning about the language and culture. This information shows me that my ASL linguistic and cultural awareness in-class activities will provide new information to students and give them space to actively engage with that information.

The second objective for this survey was to identify student familiarity with other ASL-users and members of the DHH community. Looking specifically at survey questions three, four, and five, I learned that I have more students who know ASL-users and members of the DHH community than I have students who identify as ASL-users and members of the DHH community. This information allowed me to see that 25% of my students have second-hand experiences with DHH-related components of life be that language or culture. This second-hand experience allowed me to see that in my overall research less than 10 of my 28 students have actual experience with the language and culture that I intend to implement into their curriculum. Thus, my ASL linguistic and cultural awareness in-class activities are bound to bring new information and experiences to my spring 2021 students.

The third and final objective for this survey was to identify student interest in American Sign Language. This objective served a personal inquiry I had regarding my students as well as a research inquiry. Personally, I was interested in knowing just how many students would want to learn this language that is not already offered in their school. I learned that 9 out of 28 students were interested and 18 of 28 were possibly interested. These results warmed my heart as I recognized that students may share my love of languages and be interested in languages that do not share their native mode of communication. These results from survey question eight also serve as supporting information for my research inquiry because the student interest in research can impact student engagement and response to the research. For example, a hypothetical student

who is interested in learning ASL may actively try using the techniques we discussed and practiced in our ASL linguistic and cultural awareness in-class activities for their video-on presence or presentation skills. However, a hypothetical student who is not interested in learning ASL (recorded as only one of the 28 student participants for this survey) will likely respond passively when learning about and encouraged to engage in ASL linguistic and cultural awareness in-class activities and skills.

These student participant responses to the survey provided me with an understanding of what these 28 students already knew about ASL and the DHH community. With this information, I determined that my ASL linguistic and cultural awareness activities would make an impact on the majority of my students considering so few had first-hand or even second-hand experience or involvement with the language and culture.

### *Fall 2020 Video-On Presence*

To assess preliminary video-on presence of students in all three fall 2020 Advanced English 9 classes, I recorded students who had their web cameras turned on at some point during the class period. The days recorded were the days that I attended class according to my Penn State student teaching schedule. Since these classes did not have ASL linguistic and cultural awareness activities implemented in class and are inspirations for these ASL activity interventions, the following tables will result in either low video-on frequency, low video-on quantity, or both. Below is a table of each class's results:

**Table 2: Video-On Presence Fall 2020 Advanced English 9 Block 1**

Date	Number of Students with Web Cameras On	Percentage of Students with Web Cameras On
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11/09/2020	0	0%
11/11/2020	0	0%
11/13/2020	0	0%
11/16/2020	8	42%
11/18/2020	4	21%
11/20/2020	0	0%
11/23/2020	0	0%
12/07/2020	0	0%
12/11/2020	0	0%
12/17/2020	9	47%
12/18/2020	0	0%
01/11/2021	0	0%
01/12/2021	1	5%
01/13/2021	0	0%
01/14/2021	17	89%
01/15/2021	0	0%

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*Note. n=19*

Table 1 depicts 11 of 16 days (67%) when zero students turned on their web cameras during class. This extremely high percentage marks the frequency of video-on absence and indicates a need for intervention. While there are five days with video-on presence occurring, the quantity of presence ranges anywhere from a mere 5% to 89%. This lack of consistency in video-on quantity could pertain to numerous factors impacting students' fluctuated video-on presence. I specifically recall that the one day 89% of students had their web cameras on was because the semester was almost over and students turned their web cameras on to thank my mentor teacher and I on the last few days of class. This one day of such a high percentage was particularly memorable to students (and to me!), but was a stand-alone day when video-on presence was high. Ideally, the spring 2021 ASL linguistic and cultural awareness activities would provide both a higher frequency and higher quantity of visual presence as opposed to just one day of high quantity presence like this class displayed.

**Table 3: Video-On Presence Fall 2020 Advanced English 9 Block 2**

Date	Number of Students with Web Cameras On	Percentage of Students with Web Cameras On
11/09/2020	0	0%
11/11/2020	0	0%
11/13/2020	2	17%
11/16/2020	0	0%
11/18/2020	0	0%
11/20/2020	0	0%
11/23/2020	0	0%
12/07/2020	0	0%
12/11/2020	0	0%
12/17/2020	0	0%
12/18/2020	1	8%
01/11/2021	1	8%
01/12/2021	1	8%
01/13/2021	0	0%
01/14/2021	0	0%
01/15/2021	5	42%

*Note. n=12*

Table 2 also depicts 11 out of 16 days (67%) when zero students turned on their web camera. This percentage is the exact same as table 1 and again indicates a high frequency of video-on absence. Unlike the first class, this class shows the highest percent of video-on presence being 42% - less than half of the class. The next highest video-on presence seen is a measly 17% followed by three days of only 8%. These extremely low quantities of video-on presence on the few days when any presence is visible show drastic need for frequent and higher quantity video-on presence. This particular class seems - in my opinion - in need of higher intervention given their especially low frequencies and quantities of visual presence in the class. Looking towards the spring of 2021 again, ASL linguistic and cultural awareness activities would provide days of higher quantity visual presence that would at least surpass 50% to show a majority of video-on presence on activity days.

**Table 4: Video-On Presence Fall 2020 Advanced English 9 Block 3**

Date	Number of Students with Web Cameras On	Percentage of Students with Web Cameras On
11/09/2020	8	40%
11/11/2020	7	35%
11/13/2020	10	50%
11/16/2020	6	30%
11/18/2020	7	35%
11/20/2020	6	30%
11/23/2020	8	40%
12/07/2020	6	30%
12/11/2020	4	20%
12/17/2020	6	30%
12/18/2020	5	25%
01/11/2021	7	35%
01/12/2021	10	50%
01/13/2021	0	0%
01/14/2021	8	40%
01/15/2021	7	35%

*Note. n=20*

Table 3 depicts a completely different set of video-on presence results than the previous two tables. This class had only 1 day where zero students turned on their web cameras. In comparison with the other two tables, this class shows the highest frequency of video-on presence reaching a shocking 94% frequency. The remaining 15 days showed varying percentages of student participants who turned on their web cameras during class. Overall, the highest percentage of students turning on their web cameras was 50% occurring on two separate days. While there is a high frequency of presence obtained in this class, the quantity of web cameras turned on could be increased to show a true majority of video-on presence. I distinctly remember in this class that almost the same students turned on their web cameras every single day. This realization for me makes the high frequency of video-on presence less impressive because new faces were not being voluntarily presented each class. While I love to see students' faces, I do not want the same students to hide behind their computer screens and especially do

not want the same students who are turning their web cameras on to be subconsciously discouraging others from being visually present in class. Looking toward the spring of 2021, I intend for the ASL linguistic and cultural awareness activities to maintain this incredibly high and applaudable frequency of video-on presence while increasing the daily presence quantities well above 50% to ensure a high majority of students are being present instead of the same consistent few.

The fall 2020 semester concluded with all three classes showing a need for improved quantity in video-on presence as well as frequency in two of the three classes. The desired increase in frequency and quantity of video-on presence would result in teacher ease when “reading” an online classroom of students as opposed to staring at blank screens. Additionally, the habit of keeping one’s web camera on during online/hybrid learning models will maintain an equitable space for individuals who need to see students’ reactions for communication clues/indicators whether those individuals are Deaf and Hard of Hearing or hearing. Having higher frequency and higher quantity video-on presence will foster a space for non-verbal communication or learning non-verbal communication to more effectively and more inclusively engage all learners (hearing and possibly DHH) in remote classes.

The spring 2021 video-on presence data collection strategy remained the same from the fall. Since I attended every week day in the spring semester – besides every other Friday for the English 9 class – the data collection will be greater than that in the fall.



*Spring 2021 Video-On Presence*

The following tables display the video-on presence of students over the course of 24 days leading up to the assessment described and analyzed in the upcoming section. The three days marked by an asterisk are the three days where ASL linguistic and cultural awareness activities were implemented for both Block 1 English 9 and Block 3 Advanced English 9: 01/29/2021, 02/10/2021, and 02/17/2021. Seeing the poor frequency and quantity of video-on presence in most of the fall 2020 classes, the implementation of ASL activities in the spring will offer some success to students' video-on presence.

**Table 5: Video-On Presence Spring 2021 English 9 Block 1**

Date	Number of Students with Web Cameras On	Percentage of Students with Web Cameras On
01/19/2021	0	0%
01/20/2021	0	0%
01/21/2021	0	0%
01/22/2021	0	0%
01/25/2021	0	0%
01/27/2021	0	0%
01/28/2021	0	0%
*01/29/2021	0	0%
02/03/2021	0	0%
02/04/2021	N/A	N/A
02/05/2021	0	0%
02/08/2021	0	0%
02/09/2021	0	0%
*02/10/2021	22	96%
02/11/2021	0	0%
02/12/2021	0	0%
*02/17/2021	22	96%
02/18/2021	0	0%
02/19/2021	0	0%
02/22/2021	0	0%
02/23/2021	0	0%
02/24/2021	0	0%
02/25/2021	0	0%
02/26/2021	0	0%

*Note.*  $n=23$ , \* = intervention activity days

This table displays 0% of students' video-on presence for an astonishingly high 21 of the 24 recorded days while two days showed a remarkable 96% respectively of video-on presence. The two days of such high quantity video-on presence were the days the latter two ASL linguistic and cultural awareness activities were implemented. The high participation rates of these two days are due to one particular type of ASL activity: circle questions. On each of those days, two respective circle questions were asked and responses were highly encouraged but not forced. On 02/10/2021, the circle question asked students to turn on their web cameras when it was their turn to respond to the circle question, verbally share their mood for the day, then depict

that mood as a facial expression. Likewise, on 02/17/2021, a circle question at the beginning of class asked students to choose a virtual background that shared something about their weekend, turn their cameras on, and explain why they chose that background.

As stated earlier, a circle question is a question asked at some point during the lesson to include student voices and participation. Each member of the classroom community is expected to contribute a response to this question. This response, however, is not always the expected response. On numerous occasions in my student teaching practice, I have had students refuse to answer a circle question, provide an alternative question/response, or simply avoid/miss providing a response by staying muted when called on. No matter what the reasons are for these digressions/avoidances of a circle question, these examples have happened and are allowed in my mentor and my classroom, understanding that not all students want to share all information with us or with their peers. As a side note on the topic of voluntary participation, it is important to recognize that 02/04/2021 data results have been retracted because that particular day in class cameras were forced on by teachers. Because web cameras were forced on instead of voluntarily turned on, the numbers and percentages of video-on presence have been retracted, but the date is still recorded in the chart to maintain a consistent number of recording days for my English 9 class and Advanced English 9 class.

These high video-on quantities for these two activity days can be compared with the 0% of video-on presence for the initial activity day on 01/29/2021. On this day, the ASL activity consisted of presenting and displaying ASL classroom signs. After looking at these dramatically different results on activity days, it occurred to me that the 01/29/2021 activity did not involve any student engagement. Even though I told students they could turn their cameras on and perform the signs with me, students were not given the individual space to perform them,

discouraging them from being visually present for the activity whether or not they were engaged. The latter two ASL activities, however, made space for every student to participate if they chose to. This flaw in my activity selection might have led to a decreased video-on quantity for that activity day.

In summary, this table shows that for Block 1 English 9, using ASL linguistic and cultural intervention activities were extremely beneficial in improving the quantity of video-on presence in a fully remote/hybrid learning model. Unfortunately, video-on frequency was not achieved. After analyzing the two successful activity days and the high video-on presence those activities invoked, a critique to my action research would be that I did not implement enough activity days over the course of the 24-day data collection. Had I incorporated more ASL activity days - assuming they resulted in similarly high quantity presence - the frequency of video-on presence could have been improved from the fall of 2020 as hoped.

The following table displays the same data collection process for Block 3 Advanced English 9 and their respective video-on presence data.

**Table 6: Video-On Presence Spring 2021 Advanced English 9 Block 3**

Date	Number of Students with Web Cameras On	Percentage of Students with Web Cameras On
01/19/2021	15	63%
01/20/2021	2	8%
01/21/2021	8	33%
01/22/2021	2	8%
01/25/2021	16	67%
01/27/2021	12	50%
01/28/2021	0	0%
*01/29/2021	1	4%
02/03/2021	3	13%
02/04/2021	0	0%
02/05/2021	3	13%
02/08/2021	1	4%
02/09/2021	3	13%
*02/10/2021	21	88%
02/11/2021	3	13%
02/12/2021	0	0%
*02/17/2021	23	96%
02/18/2021	3	13%
02/19/2021	1	4%
02/22/2021	3	13%
02/23/2021	2	8%
02/24/2021	0	0%
02/25/2021	3	13%
02/26/2021	0	0%

*Note.*  $n=24$ , \* = intervention activity days

While this table shows quite a different video-on presence frequency from Block 1 English 9's table, there are still obvious impacts from intervention activities evident in this data. Just like the previous table for Block 1 English 9, this table has the same three dates asterisked (01/29/2021, 02/10/2021, and 02/17/2021) to signify the three days when ASL linguistic and culture awareness activities were implemented. Overall, only 5 days of the 24 days (21%) recorded had zero video-on presence from students. In comparison to the previous tables from fall and spring, this is a great improvement. Understanding the weaknesses and errors of my action research stated earlier (not having greater frequency intervention through ASL activities

and incorporating a non-engaging ASL activity that didn't promote video-on participation like the other ASL activities), this increase in video-on frequency could contribute to numerous uncontrollable factors be them of the students, the class culture, etc.

Either way, there were three non-activity days recorded with percentages higher than 50%, surpassing the goal set from Block 3 Advanced English 9 in the fall of 2020. All three of the days indicate that some usually hidden faces appeared in our remote classroom. Though there are only three non-activity days with higher than 50% video-on presence, this is still an improvement from the fall semester. Unfortunately, there are still 19 days recorded with less than 50% student video-on presence again indicating that my research strategy should have included more frequent ASL activity days to foster opportunities for engaging and individualized video-on presence.

Looking to the ASL activity days, one of those two successful intervention activity days (02/10/2021) displayed the second highest video-on presence percentage at 88%. This was the day a circle question was offered asking for students to contribute a verbal response and visual facial expression regarding their mood. The other intervention activity day (02/17/2021) invoked the highest video-on presence percentage at 96%. This intervention activity day started with a circle question asking students to share a virtual background describing their weekend and talk about the image's representation with their web cameras turned on. Similar to Block 1 English 9, these two ASL linguistic and cultural awareness circle questions encouraged and reported the highest quantity of video-on presence. These activities and their video-on presence results tell me that these types of activities are successful in promoting remote video-on presence. While this table does show an increased quantity of presence and slightly increased frequency for a few

days, the overall quantity of presence on individual non-activity days is low and can be attributed to my less-than frequent ASL-activity incorporation and inclusion of multilingualism and -culturalism.

### *Fall 2020 Assessments*

In the fall of 2020, all three Advanced English 9 classes completed an assessment for their Ancient Greece research unit. This assessment included researching one of six research topics regarding Ancient Greece, answering predetermined guiding research questions, creating a slideshow to display research, and pre-recording a video presentation using the online recording platform Screencastify. Please see the assignment grading description in Appendix B. Of the 16 student presentations that I graded and provided written feedback for, 7 students (roughly 43%) showed presentation skills that required growth. I determined that these growth areas stemmed from a lack of non-verbal presentation skills which were practiced through ASL linguistic and cultural awareness activities for spring 2021 students to decrease the quantity of presentation skills needing improvement. The trend of fall growth areas varied from:

1. No visual presentation
2. Moved web camera box around presentation slides, blocking written/photographic information from audience
3. Read information off the slides – not engaging with the audience
4. Cut the video short while speaking.

These presentation skills – while seemingly insignificant to a hearing audience – can cause great confusion for someone who relies on visual communication. Not being able to see or

engage with the presenter or presented information are opportunities for miscommunication among all audience members no matter what mode of communication is relied upon. Improving on these skills would allow students to enhance their own presentation skills both for the assignment, for general communication, and to actively practice multilingualism.

### *Spring 2021 Assessments*

After viewing and recording observations of the spring 2021 research and one-pager presentations, I crafted a list of presentation skills needing improvement for each class. In addition to this list, the number of students that required growth in their non-verbal presentation skills were listed and compared to the overall number of students in each class via a percentage. The hope for the spring 2021 assessment data was to decrease the overall number of students with problematic non-verbal presentation skills from the fall semester.

In block 1 English 9, I graded 15 students out of 23 based on who submitted prior to March 17, 2021. Of those 15 student participants who submitted by this date, 10 of them (67%) displayed *one or more* of the following non-verbal presentation skills needing improvement:

1. Reading directly off of their screens and subsequently not engaging with the audience
2. Excluding non-verbal language indicators such as body language, hand gestures, or facial expressions
3. Laughing during a verbal presentation and subsequently making words inaudible and the message confusing
4. Including only audio and not a visual of the presenter during the presentation.



This percentage of student participants who showed a need for improved presentation skills that relate to the ASL language and culture is approximately 24% higher than the fall 2020 students. This increase in problematic presentation skills shows that my ASL linguistic and cultural awareness activities did not help decrease the overall quantity of students needing improved non-verbal presentation skills.

In addition to the drastically increased number of students who need to improve non-verbal presentation skills, the same number of improvements were listed as the fall of 2020. Two of those skills from the spring are the same as two from the fall: reading directly off the screen and not including a visual video of the presenter. Again, the quantity of presentation skills remained the same instead of decreasing; therefore, the ASL linguistic and cultural awareness activities were unsuccessful in decreasing the quantity of problematic presentation skills for this class.

In block 3 Advanced English 9, I graded 22 students out of 24 based on who submitted prior to March 17, 2021. Of those 22 students who submitted by this date, 9 of them (41%) displayed *one* of the following non-verbal presentation skills needing improvement:

1. Reading directly off of their screens and subsequently not engaging with the audience
2. Excluding any non-verbal language indicators such as body language, hand gestures, or facial expressions
3. Including only audio and not a visual of the presenter during the presentation.

This percentage of students is 2% lower than the fall 2021 class, showing an improvement no matter how small. This slight decrease in the percentage of students needing improvement in non-verbal presentation skills on one hand could mean that my ASL linguistic

and cultural awareness activities proved successful in preparing students for non-verbal presentation skills. On the other hand, because the percentage is slight, I cannot say for sure that the activities were the cause of this improvement.

As for the presentation skills needing improvement, one less skill on the improvement list indicates a slight improvement from fall 2020 and block 1 of spring 2021. The same two skills needing improvement from fall 2020, block 1 of spring 2021, and block 3 of spring 2021 are: reading off the screen and including audio but not a visual video of the presenter. These repeated presentation skills from the fall to the spring show that my ASL linguistic and cultural awareness activities were not properly prepared to improve those skills from the fall. Ideally, at least two more ASL activities would have been incorporated and focused specifically on not reading off of a screen and turning on a web camera when presenting information on a screen. This addition of two more ASL activities could subsequently support a desired greater frequency of video-on presence through ASL activities as described in the previous section.

Interestingly, the third skill needing improvement in block 3 is a previously mentioned skill in block 1 being that zero non-verbal language indicators were presented in some presentations. This skill shows particular interest given that non-verbal communication was a component on the assessment's grading rubric and was primed through the ASL linguistic and cultural awareness activities. What I gather from this continued problematic presentation skill is that the ASL linguistic and cultural awareness activities did not prime the students well enough to include non-verbal communication in their presentation videos.

Overall, my analysis of the spring 2021 research presentation assessments in comparison to the fall 2020 assessments sadly shows that the ASL linguistic and culture awareness activities did not decrease the quantity of students using problematic non-verbal presentation skills nor

decrease the number of problematic skills. Perhaps incorporating more focused and explicit activities based on the skills wanting to be improved would provide better preparation and practice for students in addition to a higher frequency of practice prior to the assessment.

Additionally, perhaps providing these supports for hearing students to improve those non-verbal presentation skills would also increase multilingualism, multiculturalism, and linguistic equity for DHH students if mainstreamed in a classroom that incorporates these practices.

## Chapter 5

### Conclusion

After observing, collecting, and analyzing data on preliminary student survey responses, video-on presence, and inclusion of non-verbal language in an assessment, I discovered the ASL linguistic and cultural awareness activities benefitted somewhat regarding video-on presence and almost nothing to improve problematic non-verbal presentation skills. I acknowledged that the incorporation of ASL linguistic and cultural awareness activities supported students' video-on presence by increasing the quantity of student video-on presence for individual days but did not increase the frequency of high-quantity video-on presence. This lack of frequency resulted from my own misconceptions about activity execution. From the fall 2020 video-on presence results, I already noted that an increase in quantity per day and frequency over the course of the data collection period was necessary for improvement. However, I did not plan enough ASL linguistic and cultural awareness activities over the course of the spring 2021 presence data collection period to effectively increase that frequency. Nevertheless, I believe these video-on presence results and ways for improvement show positive and promising teaching pedagogies for online (and transferrable to in-person) learning models.

Unfortunately, the incorporation of ASL linguistic and cultural awareness activities did not support the improvement of non-verbal presentation skills in the assessment. The quantity of students using problematic presentation skills and the quantity of skills barely decreased for one of the spring 2021 classes. If I were to repeat this particular teaching inquiry, I would definitely include additional ASL activities that are explicitly focused on the presentation skills students have shown need improvement. I would also include a higher frequency of those activities to ensure plenty of practice is given to students prior to the assessment.

One limitation to this thesis involves the two types of English classes and their data being analyzed. In the fall of 2020, the three classes that inspired this research were all Advanced English 9 courses. Thus, methods for this research were designed with only Advanced English 9 class experience in mind. The spring of 2021 included one Advanced English 9 class which followed the previous semester's experiences and inspirations; however, the second class was a non-advanced class. While the two classes almost mirror each other in curriculum, the overall English 9 student contribution is noticeably lower than that of an advanced course. This decrease in student contribution can be attributed to a multitude of variables including willingness to turn on a web camera in class, verbally participating in class, submission of work according to initial deadlines, submission of work according to assignment requirements and expectations, etc. Nevertheless, the same research methods were used for both classes with the following understanding and philosophy in mind: what benefits generally-tracked students can also benefit higher-tracked students and vice versa. I am a firm believer as a teacher and learner that students are fully capable of learning and growth no matter their educational or personal background and experiences. I deemed having the same goal for two separate class tracks as undoubtedly appropriate, beneficial to this research, and beneficial to the student participants involved.

Another limitation involves varying prior ASL-related experiences of student participants. Ideally for research purposes, 100% of student participants would have zero prior life experiences related to the spring 2021 ASL Linguistic and Culture survey questions. However, because I was not able to specifically select which students were a part of my research, I simply recorded the responses of my predetermined student participants, keeping their various funds of knowledge in mind as I continued researching and analyzing results. Action research in the classroom is somewhat confined by a specific context and the specific students who come to

contribute a different set of knowledge to the learning community. That being said, unless a classroom of students is manufactured to include only students with the same topic-specific funds of knowledge, there is no way to avoid the complexities that are a natural part of teacher inquiry.

Still, this research, while beneficial to me as a language enthusiast and advocate for multilingualism and multimodality in the classroom, might also provide insights to other educators. This research allows educators to see a pandemic-influenced online/hybrid learning experience that includes multilingualism and multimodality to enhance hearing students' English education. Future research could now be conducted with these lingering research questions in mind:

1. Will higher frequency of ASL linguistic and cultural awareness activities encourage more frequent video-on presence on non-intervention activity learning days?
2. Will higher frequency of ASL linguistic and cultural awareness activities encourage less frequent problematic non-verbal presentation skills?
3. Can these teaching methods be transferred to in-person learning and what are the impacts of that transfer in "standard" in-person learning?
4. Are these teaching methods beneficial (academically and social-emotionally) to Deaf and Hard of Hearing students who are mainstreamed?

Looking to the future, I hope to commit more ardently to culturally sustaining pedagogy and utilize more multilinguistic, multicultural, and equitable practices that align with this stance. These pedagogies revolve around the inclusion of multiple languages, modes of communication, and cultures in an attempt to not only promote diversity, equity, and inclusion, but to promote constant student and teacher awareness of others' experiences. While I focused mainly on

American Sign Language in this research, there are undoubtedly other languages and cultures that could share insight into presence, presentation, and surely many other beneficial academic and social skills. With that in mind, if I were to engage in a similar action research project, adjustments may involve:

1. introductory surveys that inquire about students' linguistic and cultural experiences to learn students' funds of knowledge prior to intervention research and data collection
2. more frequent in-class activities designed around more than just one language and culture to embrace and affirm all students' funds of knowledge
3. more focused and explicit in-class activities to foster growth of previously researched student challenges.

This inquiry provided me with an opportunity to share a small slice of my deep appreciation for ASL and the DHH community with the learners in my classroom. The lessons and knowledge learned from this research project are invaluable on my journey to becoming a culturally sustaining educator. This process further inspired me to continue learning American Sign Language - and possibly work towards an interpreter's certification - to effectively and fluently incorporate multimodality, multilingualism, and linguistic equity through ASL in my future classroom.

## Appendix A

### 2018 Letter to PSU Director of Campus and Community Events

Dear \_\_\_\_\_,

My name is Carly Snyder, and as a freshman finishing my first year at Penn State University, I have experienced such an incredible, inspiring, and familial atmosphere on campus as well as in the community. Considering your position on our university's administration team as director of campus and community events, I would like to extend my sincere gratitude for making my first year a wonderful, integrated, and memorable year as a Nittany Lion!

As I reflect on the many campus events I have attended during these past two semesters, most of which were open to the community of State College, I have discovered one particular detail I would like to discuss. After sitting in the audience for our 2018 Public Poetry Project ceremony and listening to a beautifully organized event filled with literature, I noticed that this was the first event I had personally been to that incorporated an American Sign Language interpreter. Understanding that the ceremony was to be televised as well as open to the public, my heart was warmed by the thought of our university - and your office - being so inclusive as to hire an interpreter for individuals needing ASL accommodations on our school grounds and in our neighboring community.

With my wheels turning, I did some further research regarding our university events and accommodations, which leads me to my main question: Is there any chance our university could expand our usage of ASL interpreters at university lectures specifically open to the public?

I understand this question coming from a freshman with big eyes searching for educational equality despite disabilities may seem a tad stereotypical. In reality, I am aware that our university budget has a



variety of expenses needing paid, resources needing arranged, and fine print needing read. On the other hand, I have looked over our university's budget, our colleges' allotted budgets, the number of open-to-the-public university-sponsored events, as well as expenses for sign language interpreters and was relieved to see – what seems to be – a possibility of furthering our mission:

“The Pennsylvania State University is committed to and accountable for advancing diversity, equity, and inclusion in all of its forms. We embrace individual uniqueness, foster a culture of inclusive excellence that supports both broad and specific diversity initiatives, leverage the educational and institutional benefits of diversity, and engage all individuals to help them thrive. We value inclusive excellence as a core strength and an essential element of our public service mission.”

I am immensely proud of our university, especially for our Educational Equity mission statement on diversity, equity, and inclusion which we have - and continue - to hold true in more aspects than one at our campus and community events. Knowing that our university is dedicated to all of our students, faculty, administration, and towns people no matter what their circumstances, I would love to hear your thoughts regarding our past, present, and prospective endeavors at incorporating sign language in our university-sponsored lectures. I currently have some researched ideas in mind regarding this topic and would be delighted to share my thoughts with the hopes of critique, feedback, and collaborative thinking. Seeing all that you and our administration have already done for this university, my heart is burning to be a part of something bigger in this school, to be the change that you have proven is capable on this campus.

If there is any chance you would be willing to pursue this battle to include the deaf community on our campus, I would be thrilled to listen and discuss in detail the measures we can take to propel equality be it in person or via email if it is more convenient for you. I appreciate all that you do for our family of blue!

Best regards,

Carly Snyder

## Appendix B

### Fall 2020 Ancient Greece Research Unit Presentation Rubric

*Additional letter grade presentation descriptions were provided to students but are omitted from this document for relevancy purposes.*

A Presentation:

#### **Content:**

Research is thorough, thoughtful and provoking, fully exploring the assigned topic

Information is always focused on topic and is well presented, clear, and correct throughout

Sources are varied, credible and scholarly

Sources are cited appropriately

#### **Presentation Tools and Skills:**

Visual aids and presentation software are used deftly and masterfully

Aids are supplemental and designed for greater audience understanding

Presenters can be clearly heard and understood

Presenters are appropriate in appearance, attention, language and non-verbal gestures

#### **Organization:**

Is meaningfully organized, clear and concise for ease of audience understanding

## Appendix C

### Spring 2021 Ancient Greece Research Unit Presentation Rubric

Presentation & Discussion <span style="float: right;">  </span>		
Criteria	Ratings	Pts
<b>Time frame</b> Video is at least 3 minutes but no more than 5 minutes long.	This area will be used by the assessor to leave comments related to this criterion.	1 pts
<b>Research Topic</b> Research topic is easily displayed/visible on one-pager and is stated at the beginning of the presentation.	This area will be used by the assessor to leave comments related to this criterion.	2 pts
<b>Content</b> All research questions are answered verbally.	This area will be used by the assessor to leave comments related to this criterion.	4 pts
<b>Organization</b> Presentation of research is organized and easy for audience to follow.	This area will be used by the assessor to leave comments related to this criterion.	1 pts
<b>Images</b> At least two research-related images are visible and explained (linking the verbal and visual learning components of the brain!).	This area will be used by the assessor to leave comments related to this criterion.	2 pts
<b>Connection/Epiphany/Inquiry</b> One connection, epiphany, or inquiry is displayed and mentioned.	This area will be used by the assessor to leave comments related to this criterion.	1 pts
<b>Presentation Software</b> Presentation software (Screencastify) is used deftly and masterfully.	This area will be used by the assessor to leave comments related to this criterion.	1 pts
<b>Camera and Audio</b> Presenter can be clearly heard, understood, and seen by the audience.	This area will be used by the assessor to leave comments related to this criterion.	2 pts
<b>Appearance &amp; Language</b> Presenter is appropriate in appearance, attention, verbal language, and non-verbal language.	This area will be used by the assessor to leave comments related to this criterion.	2 pts
<b>Replies to Peers</b> One thoughtful comment is posted to at least one video for each of the five remaining research topics.	This area will be used by the assessor to leave comments related to this criterion.	2 pts
<b>Total Points: 18</b>		

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## ACADEMIC VITA

# CARLY SNYDER

### EDUCATION

- Schreyer Honors College
- The Pennsylvania State University, University Park
- Paterno Fellow
- BS, Secondary Education – May 2021
- BA, English – May 2021
- Special Competencies: IIRP Intro to Restorative Practices and Circles Certification; conversational in Spanish, German, and American Sign Language; presently learning Chinese.

### AWARDS AND HONORS

- Schreyer International Study Scholarship: 2019
- R. Fife Paterno Fellows Scholarship: 2019
- Academic Excellence Scholar: 2018, 2019
- PD & DP Wentroble Scholarship: 2018, 2019
- Hedgebeth Honors Scholarship in Education: 2018
- Dean's List: Fall 2017 - present

### SERVICE

- Central PA Night to Shine (sponsored by the Tim Tebow Foundation) – Spring 2020
- THON canvassing – Spring 2019
- Schlow Library Back to School Event – Fall 2019
- Harvest Festival held at Penn State's Arboretum – Fall 2019
- Mt. Nittany Middle School Community Science Outreach – Spring 2018

### EDUCATIONAL EXPERIENCE

- **Professional Development School – August 2020 to May 2021**
  - co-taught for one full academic year with a State College Area High School mentor teacher in 9<sup>th</sup>-grade English and Advanced English classes
  - planned and taught one curricular unit lasting four weeks
  - completed an inquiry/thesis project based on student teaching experience
  - participated in Professional Learning Community meetings and multiple professional development events
- **“Literary London” Study Abroad in London, England – May 2019 to June 2019**
  - immersed in a six-credit, four-week course discussing and studying mysticism and applied rhetoric in society through academic writing
  - analyzed historical sites through literary review
  - dissected Shakespearean plays in original production methods
- **Philadelphia Urban Seminar Observation at Hardy Williams Mastery High School – May 2018 to June 2018**
  - observed and assisted a mentor teacher in an urban, 7<sup>th</sup>-grade English composition classroom
  - participated in daily high school classes, large group lectures by program organizers, and evening university-led discussions/assignments
  - examined urban teaching and application of unbiased teaching methods

### WORK EXPERIENCE

- **Research Associate to Dr. Rayne Sperling and Dr. Simon Hooper for AvenuePM Project – September 2020 to present**
  - AvenuePM is a collaborative project between The Pennsylvania State University and The University of Minnesota that uses progress monitoring software in the form of eight free applications to measure deaf, hard of hearing, and hearing students' literacy levels
  - enhanced the project's already present but inactive social media accounts
  - prepared and trained research team members for proper professional use of the project's online presence
- **Research Assistant to Mary Henderson in The Center for Language Science – September 2019 to February 2020**
  - statistically analyzed spoken responses to verbal fluency diagnostic tasks
  - assisted in the creation and distribution of Qualtrics surveys
  - recommended literature-supported procedures for study progression
- **Research Assistant to Evan Pugh Professor in Art History emeritus, Anthony Cutler – September 2018 to January 2020**
  - communicated between domestic and international arts- and architecture-affiliated scholars
  - assisted in research of art and architectural content
  - prepared research papers and presentations
  - U.S. counterpart for planning “Radiocarbon Dating and its Discontents” conference at The Courtauld Institute of Art on December 5 and 6, 2019

### UNIVERSITY INVOLVEMENT

- **Mentor for Schreyer New Student Orientation – Fall 2018**
  - guided new students through weekend orientation lectures, community building activities, dining hall meals, honors college involvement fair, and campus/downtown State College tours