



University of Kentucky
UKnowledge

Theses and Dissertations--Community &
Leadership Development

Community & Leadership Development


2019

DeaFFA: An Exploration of Agricultural Education in Schools for the Deaf and Hard of Hearing

Sarah Danielle Warren

University of Kentucky, sdwa234@g.uky.edu

Author ORCID Identifier:

 <https://orcid.org/0000-0002-9793-6109>

Digital Object Identifier: <https://doi.org/10.13023/etd.2019.111>

[Right click to open a feedback form in a new tab to let us know how this document benefits you.](#)

Recommended Citation

Warren, Sarah Danielle, "DeaFFA: An Exploration of Agricultural Education in Schools for the Deaf and Hard of Hearing" (2019). *Theses and Dissertations--Community & Leadership Development*. 47.
https://uknowledge.uky.edu/cl_d_etds/47

This Master's Thesis is brought to you for free and open access by the Community & Leadership Development at UKnowledge. It has been accepted for inclusion in Theses and Dissertations--Community & Leadership Development by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

STUDENT AGREEMENT:

I represent that my thesis or dissertation and abstract are my original work. Proper attribution has been given to all outside sources. I understand that I am solely responsible for obtaining any needed copyright permissions. I have obtained needed written permission statement(s) from the owner(s) of each third-party copyrighted matter to be included in my work, allowing electronic distribution (if such use is not permitted by the fair use doctrine) which will be submitted to UKnowledge as Additional File.

I hereby grant to The University of Kentucky and its agents the irrevocable, non-exclusive, and royalty-free license to archive and make accessible my work in whole or in part in all forms of media, now or hereafter known. I agree that the document mentioned above may be made available immediately for worldwide access unless an embargo applies.

I retain all other ownership rights to the copyright of my work. I also retain the right to use in future works (such as articles or books) all or part of my work. I understand that I am free to register the copyright to my work.

REVIEW, APPROVAL AND ACCEPTANCE

The document mentioned above has been reviewed and accepted by the student's advisor, on behalf of the advisory committee, and by the Director of Graduate Studies (DGS), on behalf of the program; we verify that this is the final, approved version of the student's thesis including all changes required by the advisory committee. The undersigned agree to abide by the statements above.

Sarah Danielle Warren, Student

Dr. Rebekah Epps, Major Professor

Dr. Patricia Dyk, Director of Graduate Studies

DEAFFA: AN EXPLORATION OF AGRICULTURAL EDUCATION IN SCHOOLS
FOR THE DEAF AND HARD OF HEARING

THESIS

A thesis submitted in partial fulfillment of the
requirements for the degree of Master of Science in Community and Leadership
Development in the
College of Agriculture, Food and Environment
at the University of Kentucky

By

Sarah Danielle Warren

Lexington, Kentucky

Director: Dr. Rebekah Epps, Associate Professor of Agricultural Education

Lexington, Kentucky

2019

Copyright © Sarah Danielle Warren, 2019
<https://orcid.org/0000-0002-9793-6109>

ABSTRACT OF THESIS

DEAFFA: AN EXPLORATION OF AGRICULTURAL EDUCATION IN SCHOOLS FOR THE DEAF AND HARD OF HEARING

The Kentucky School for the Deaf agriculture program and FFA chapter is the second Deaf FFA chapter in the nation and has proven itself to be unique, successful, and worthy of investigation. This exploratory, collective/intrinsic Case Study examines the historical evidence of agriculture on the school's campus, collects observations and interviews regarding agricultural education at the school, and provides insight to advise other educational institutions and organizations on the nature of agricultural education in a school for deaf and hard of hearing students.

KEYWORDS: Deaf, Hard of Hearing, Education, Agriculture, Community

Sarah Danielle Warren

(Name of Student)

3/29/2019

Date

DEAFFA: AN EXPLORATION OF AGRICULTURAL EDUCATION IN SCHOOLS
FOR THE DEAF AND HARD OF HEARING

By
Sarah Danielle Warren

Dr. Rebekah Epps

Director of Thesis

Dr. Patricia Dyk

Director of Graduate Studies

3/29/2019

Date

DEDICATION

To the students and staff at the Kentucky School for the Deaf, the Deaf community, and students at deaf schools across the country. Every child, regardless of disabilities and barriers, deserves the opportunity to be engaged in agricultural pursuits.

Matthew 18:12-14

ACKNOWLEDGMENTS

This thesis would not have been possible without the support and participation of the Kentucky School for the Deaf. Particularly, I would like to thank the agriculture teacher and all of the students who had such a profound impact on my life, and have allowed me to record their stories here. Every staff member and administrator at KSD showed me unending support and kindness as I stepped into their community.

Every person who allowed me to interview them or their child deserves recognition. Your perspectives are invaluable and will have an incredible impact on students across the country. Thank you for your sacrifice of time and energy to this project. I hope this case study report makes you proud – of yourselves, of your community, and of the accomplishments of the KSD agriculture program.

I would like to thank the members of my thesis committee for supporting me fully throughout this project, and for allowing me the freedom to explore. Dr. Seburn Pense, thank you for all of the trailblazing you have done in your career; your works regarding Special Education in the context of Agricultural Education served as the starting point of this study. Dr. Stacy Vincent, thank you for providing structure and organization to my initial thoughts, along with your invaluable inclusion research experience which laid the foundations of this design. Also, thank you for allowing me to spend my student teaching semester at KSD – look where it has led! Dr. Rebekah Epps, thank you for being fiercely supportive of what KSD FFA stands for and championing this cause alongside me. You have loved these students and this program the same as I have and have always done what you could to provide them opportunities at any cost.

Outside of my committee I want to give a special thanks to Dr. Laura Rice, who was a face of encouragement and a source of qualitative research knowledge. Thank you, Dr. Rice, Miriam Hilmer, and all other department support staff, for a collaborative effort of transcribing interviews – Your great kindness was the saving grace of this thesis in my eleventh hour.

Finally, I must acknowledge everyone who has a reckless love for those that the world often overlooks. Thank you for leaving a flock of ninety-nine sheep to search for a single one. Through my experiences alongside the supporters of the Kentucky School for the Deaf FFA, I've learned to never underestimate the impossible. "There's no shadow you won't light up, mountain you won't climb up, wall you won't kick down, lie you won't tear down" to give deaf students the same opportunities as their hearing peers.

(Reckless Love, Cory Asbury)

TABLE OF CONTENTS

ACKNOWLEDGMENTS	iii
TABLE OF CONTENTS.....	v
LIST OF FIGURES	vi
CHAPTER 1. Introduction.....	1
CHAPTER 2. Literature Review.....	11
CHAPTER 3. Methodology	35
CHAPTER 4. Findings.....	58
CHAPTER 5. Results and Conclusions	245
APPENDICES	278
<i>APPENDIX 1. IRB Approval Letter.....</i>	<i>279</i>
<i>APPENDIX 2. IRB Consent Form.....</i>	<i>280</i>
<i>APPENDIX 3. Kentucky School for the Deaf Approval Letter.....</i>	<i>283</i>
<i>APPENDIX 4. Parental Permission Form.....</i>	<i>284</i>
<i>APPENDIX 5: Interview Invitation</i>	<i>285</i>
<i>APPENDIX 6: Interview Guide – Students.....</i>	<i>288</i>
<i>APPENDIX 7: Interview Guide – Agriculture Teacher.....</i>	<i>291</i>
<i>APPENDIX 8: Interview Guide – Community Supporter.....</i>	<i>294</i>
<i>APPENDIX 9: Structural Coding of DeaFFA Interviews</i>	<i>296</i>
BIBLIOGRAPHY.....	321
VITA.....	328

LIST OF FIGURES

<i>Figure 1.1</i>	42
<i>Figure 1.2</i>	53
<i>Figure 2.1</i>	100
<i>Figure 2.2</i>	100
<i>Figure 2.3</i>	101
<i>Figure 2.4</i>	101
<i>Figure 2.5</i>	102
<i>Figure 2.6</i>	103
<i>Figure 2.7</i>	103
<i>Figure 2.8</i>	104
<i>Figure 2.9</i>	104
<i>Figure 2.10</i>	105
<i>Figure 2.11</i>	105
<i>Figure 2.12</i>	106
<i>Figure 2.13</i>	106
<i>Figure 2.14</i>	106
<i>Figure 3.1</i>	109
<i>Figure 3.2</i>	110
<i>Figure 3.3</i>	111
<i>Figure 3.4</i>	111
<i>Figure 3.5</i>	113
<i>Figure 3.6</i>	114
<i>Figure 3.7</i>	115
<i>Figure 3.8</i>	116
<i>Figure 3.9</i>	117
<i>Figure 3.10</i>	118
<i>Figure 3.11</i>	119
<i>Figure 3.12</i>	120
<i>Figure 3.13</i>	121
<i>Figure 3.14</i>	122
<i>Figure 3.15</i>	124
<i>Figure 3.16</i>	125
<i>Figure 3.17</i>	126
<i>Figure 3.18</i>	127
<i>Figure 3.19</i>	128
<i>Figure 3.20</i>	129
<i>Figure 3.21</i>	130
<i>Figure 3.22</i>	131
<i>Figure 3.23</i>	132
<i>Figure 3.24</i>	134
<i>Figure 3.25</i>	134

CHAPTER 1. INTRODUCTION

Career and Technical Education (CTE) programs have been established in numerous high schools nationwide in order to provide classes that prepare students for life after graduation in career fields. Agriculture is the oldest CTE program, dating back to the Smith-Hughes Act of 1917 which established educational programs for boys “who have entered upon or who are preparing to enter upon the work of the farm” (Steffes, 2014). As our country has progressed in the century since the Smith Hughes Act, education has evolved with it. CTE now incorporates areas other than agriculture. Women and African Americans are now allowed to participate, and most recently, special needs students have been given access to these courses.

The United States of America in recent history has adopted a more inclusive education system for all citizens. In 1975, under the Gerald Ford presidential administration, the Education for All Handicapped Children Act was signed into law. This law has been amended and revised over the past thirty years to become what we know today as the Individuals with Disabilities Education Act (IDEA). According to the Department of Education, the purpose of this law is “to ensure that all children with disabilities have available to them a free, appropriate education that emphasizes special education and related services designed to meet their unique needs and prepare them for further education, employment, and independent living” (Department of Education, 2017).

While students with special education needs have been increasingly welcomed in agriculture classrooms, modifying instruction to fit these needs is a continuing struggle for educators. Unless the educator has been specifically certified in special education, they are often not sufficiently trained in their certification program to deal with these students and

must rely heavily on certified professionals to aid them in preparing modified instruction for a mixed needs classroom. The IDEA encourages a “least restrictive environment” which would encourage students with special needs to be in a mainstream classroom as much as possible (Department of Education, 2017). When a student needs a higher level of attention, the student may spend more time in a special resource classroom, or may be removed from the school entirely to attend an institution that can cater more intensely to their specific needs. Such is the case with many young deaf students in the United States.

According to Gallaudet University, there are 108 schools for the deaf and hard of hearing in this country (Gallaudet University, 2018). An increasing number of these special population schools are incorporating Career and Technical Education programs, specifically agriculture, into their curriculum. Currently, there are five official agriculture programs in deaf schools: Alabama Institute for the Deaf and Blind, Kentucky School for the Deaf, North Carolina School for the Deaf, South Carolina School for the Deaf and Blind, and West Virginia School for the Deaf and Blind. These are “official” programs in that they are recognized as a chartered FFA chapter, according to the National FFA Chapter Locator feature on the organization’s website (National FFA: Chapter Locator, 2018). In addition, there is an established agriculture program at the Illinois School for the Visually Impaired, and two alternative schools in Chicago – Ray Graham Training Center High School, and Southside Occupational High School. This is a list of self-reported programs as reported in an email to all state staff in February of 2018. The executive director of the National Association for Agricultural Educators (NAAE), Dr. Jay Jackman, facilitated this email correspondence with state FFA staff persons on the national email listserv.

While the youth organization FFA is not required for the fundamentals of the agriculture industry to be taught, it is a key component of the nationally recognized model of Agricultural Education. FFA chapters not being chartered in deaf schools is a sign of a lack of inclusion for this special population of students. While there are no rules barring deaf students from participating in FFA programs, many aspects of the FFA organization, as well as the even broader agriculture and CTE models, are not inclusive or modified as of yet to meet the needs of special needs students. For example, the FFA creed is a very poetic and properly written English composition which does not translate easily to American Sign Language (ASL); similarly, many contests and activities involved with the organization are not feasible for deaf populations to perform equally in, as they are written and scored in a way that only those who speak a verbal language (as opposed to visual) can succeed. One disadvantage the deaf encounter within the school system is English language development. Deaf students cannot easily relate their own visual language to the reading and writing components of English. In agricultural content areas that rely heavily on written and verbal skills, deaf students will score lower. However, this does not correlate to an inability to perform within the content area, nor does it correlate to intelligence levels of deaf students. A modification of the content into ASL places the deaf student on a more equitable performance level as hearing students (Reese, 2004).

There is currently a gap in deaf inclusion within agricultural education, as evidenced by the relatively low amount of agriculture programs in schools for the deaf. This calls for action from the National FFA Organization, in conjunction with professional CTE and agricultural education organizations, to work together to modify components of the three-circle agriculture education model to become more accessible for deaf and hard

of hearing populations. This action aligns with recent trends and initiatives in the National FFA to create a more inclusive organization. In 2016, the National FFA created a committee for “Exploring Methods of Increasing Diversity & Inclusion in National FFA Programs” (FFA: Needs of the Committee, 2016). This committee released a report outlining the ways the organization was making efforts to include various cultural and ethnic groups, as well as methods of including special needs populations. Deaf and hard of hearing students were addressed only regarding the commitment to providing ASL interpreters during competitions, events, and speeches, which is required under the Americans with Disabilities Act (ADA, 2010).

Upon searching the *Journal of Agricultural Education* online database, one may find that there are only seven articles that result from a search of the term “special education” (Andreason, 2007; Dormody, 2006; Gordon, 2007; Pense, 2009; Pense, 2010; Pense, 2012). Of these articles, the areas of focus are on students with learning disabilities, a general study of all “special needs” students in a program, as well as predominately teacher-focused studies on preparedness for handling students with special needs. There are no articles published in this journal that specifically study deaf or hard of hearing students. Of the literature reviewed in these seven articles, the primary focus is on the educator’s preparedness for special needs students in an agriculture classroom rather than on the needs of these students.

There are countless articles from other fields of education that have examined special needs students in other areas of instruction, discovering how they learn best and what types of modifications should be made to accommodate students on an individual level, based on their particular disability and needs. An editorial in the *Agricultural*

Education Magazine (published by the professional organization NAAE, or National Association for Agricultural Educators) summed up the most important piece of information regarding special needs students in agriculture classrooms: “experiential learning is beneficial for special needs students” (Phillips, 2011, pp. 2). Research has proven special needs students learn well via an experience that they can connect to their learning. Deaf and hard of hearing students fall under this category, and studies have shown that the ability to connect a concrete, applicable, visual experience to an abstract concept is crucial to the concrete mindset a visual communicator is subjected to. The research found on the JAAE database provides statistical evidence that special needs students are easier to engage and maintain when they are being exposed to experiences related to the content matter. This collection of research also gave reason to believe that many postsecondary teacher preparatory programs do not do enough to prepare teachers entering the career field to deal with special populations. Agriculture teachers in these studies are not well aware of laws relating to disabilities, and feel they have little knowledge on modifying their instruction (Dormody, et al., 2006).

The deficiencies of the literature at hand are evident in regard to the subset population of deaf and hard of hearing students within special education. This deficiency could be a result of the “low-incidence disability status of deafness.” With modern advances in medicine and assistive hearing technology, the prevalence of deafness and hearing loss is on the decline; this means some people have never encountered a deaf person (Reese, 2004). Even so, there is still a significant population of deaf students in US schools. There are currently no publications circulating the *Agricultural Education Journal*, nor the umbrella *Career and Technical Education Journal*, that study the method

of teaching agriculture to deaf audiences. The articles regarding special needs populations as a single group do not account for the individual differences that come with various disabilities. Sample sizes are also very small in all studies, making the replication of this data difficult to assess and apply in other states or programs. In addition, there are no studies currently in publication which recognize deaf schools in their development of agriculture programs. The development of a deaf agriculture department requires heavy modification, navigation of funding, and intense planning to insure the program is meeting the needs of a hearing-impaired population, many issues which a regular agricultural education program may not face. If a prospective deaf educator researched how to start a program in their school, they would find little to no evidence backed by scientific research to build from.

Purpose of this Thesis

Researching the topic of agricultural education programs in schools for the deaf/hard of hearing (D/HH) would add understanding to the pool of knowledge already published about special education. The purpose of this study is to provide evidence which will serve as a guidepost and a standard for other educators wishing to modify their regular classrooms to meet the needs of deaf students, as well as deaf schools wishing to establish an effective agriculture program. At the national level, changes could result from the findings of this study by way of contests, events, rules and procedures, and other aspects of the National FFA Organization. From the highest level down to the lowest, this topic has the potential to expand boundaries and spark highly influential discussions amongst people from all areas of education and community development. State and national decision makers for the agriculture profession will be interested in knowing more about

this topic to influence practices and procedures which may need to be revised to become more universally inclusive in all areas of agricultural education. Local administrators, guidance counselors, resource teachers, and all others involved in ensuring the success of deaf students will find this research to be helpful in strategizing the trajectory of a student's academic career. Most importantly, the educators of deaf students, in deaf schools and deaf communities, will be given a voice to express ways in which we can accommodate their needs alongside the needs of others to create a harmonious system with which to advance the agriculture industry.

Due to the exploratory nature of this case study, the research objectives are the guiding goals of the research, with the research questions designed to meet these objectives. The researcher is not attempting to prove/disprove anything, and the nature of the case is still relatively unknown. The objectives outlined below are the driving ideas behind the thesis and the goals which the researcher has set to accomplish with the research. The research questions will be answered categorically under each objective.

Objective 1: Tell the story of the Kentucky School for the Deaf agriculture and FFA program. (What is the story of the Kentucky School for the Deaf agriculture and FFA program?)

- Guiding Questions for Objective 1: How was the program established? Who was involved with the establishment? What has happened within the program since establishment? Who does the program impact and how?

Objective 2: Analyze the KSD agriculture/FFA program through the lens of Vygotsky's Sociocultural Theory of Cognitive Development. (Is there evidence that Vygotsky's

Sociocultural Theory of Cognitive Development is occurring in the KSD agriculture/FFA program?)

- Guiding Question for Objective 2: How do Human Capital Theory and Social Capital Theory apply in the deaf school community?

Objective 3: Provide insight into agricultural education in deaf schools by spotlighting a successful program with the intent of creating awareness that will lead to more opportunities for deaf students in the agriculture industry. (What do other deaf schools stand to learn from a successful agriculture program?)

- Guiding Questions for Objective 3: What are the challenges and barriers to creating agriculture programs in deaf schools? What are the perceived benefits and challenges students/teachers in these programs experience? How could these programs potentially affect deaf schools and postsecondary outcomes for students?

Definitions

Alternate School – Also called “special schools.” Utilized for students with varying needs which might not be fully met in the Mainstream classroom. Alternative education includes behavioral rehabilitation schools, home-schooling, and schools for specific disabilities, such as deaf and blind schools.

CTE – Career and Technical Education. The Smith-Hughes Act of 1917 established vocational education courses for high school students. The first subjects to be taught were agriculture and home economics. CTE has since grown to include Business, Health Sciences, Family and Consumer Science, Engineering and Technology, etc. (Steffes, 2014).

Deaf – Using a capital “D” represents the Deaf culture (just as we capitalize Spanish or Greek). The Deaf do not define themselves by their disability or hearing loss, but rather by their unique culture based around a shared language, American Sign Language, abbreviated ASL here in the United States. Deafness is the only disability to also be categorized as a linguistic minority. As with any culture, the individual can choose whether they identify as Deaf or not. All Deaf people are deaf, but not all deaf people are Deaf.

D/HH – Deaf/Hard of Hearing. Deafness is a scale of hearing loss, ranging from mildly deaf/hard of hearing (30-40 decibel loss) to profoundly deaf (90+ decibel loss). (WHO, 2018)

IDEA – Individuals with Disabilities Education Act. Originally implemented by President Gerald Ford in 1975 as the Education for All Handicapped Children Act (revised to IDEA in 1990) (Department of Education, 2014). A civil rights law that makes access to a free public education possible for all children, including those with disabilities. Previously, special needs children were mostly segregated into homes and institutions.

IEP – Individualized Education Plan. Legally binding document outlining a child’s learning needs, services to be provided by the school, learning goals and progress measurements. In order to obtain an IEP, a child must be diagnosed with one of the 14 official IDEA disabilities, show evidence that this disability is a hindrance to their learning, then become evaluated for their IEP strategy. All teachers and faculty involved in the child’s education for the year are included in the IEP process. Every year, 6.9 million children receive special education services as mandated by an IEP (Department of Education, 2017).

Inclusion – the proper method of educating special needs students. When a student is included, they are provided equal opportunities, with the right to participate alongside peers. The term has been used to help end discrimination against children with disabilities.

Integration – implies a forced assimilation; the nondisabled acting upon the disabled. In the context of Deaf education, often deaf students feel like their identity is not accepted or individuality encouraged when they are placed in the mainstreaming system.

KSD – Kentucky School for the Deaf. Established in 1823, this was the first state-sponsored school for the deaf in the United States (Jacobs Hall Museum, n.d.). KSD is the location of focus for this case study. It is one of only five schools for the deaf in the US with an established agriculture program and nationally recognized FFA chapter.

LRE – Least Restrictive Environment. According to the IDEA, students with disabilities must be educated in the general classroom to the maximum extent appropriate without causing delay in their own learning (meaning you can't just place a child in a resource room away from the general student body without due cause). 62% of special needs students spend 80% or more of their school day in the general classroom (Department of Education, 2017).

Mainstreaming – placing students with special needs into the general education setting. Even if a student cannot succeed in the general education classroom, they are still considered mainstreamed if they have access to a self-contained or resource classroom within the public-school setting.

CHAPTER 2. LITERATURE REVIEW

Career and Technical Education (CTE) programs have been established in numerous high schools nationwide in order to provide classes that prepare students for life after graduation in career fields. Agriculture is the oldest CTE program, dating back to the Smith-Hughes Act of 1917 which established educational programs for boys “who have entered upon or who are preparing to enter upon the work of the farm” (Steffes, 2014). As our country has progressed in the 100 years since the Smith Hughes Act, education has evolved with it. CTE now incorporates areas other than agriculture; women and African Americans are now allowed to participate; and most recently, special needs students have been given access to these courses. In this review we will focus predominantly on the Agricultural Education area of CTE.

The United States of America in recent history has adopted a more inclusive education system for all citizens. In 1975, under the Gerald Ford presidential administration, the Education for All Handicapped Children Act was signed into law (Department of Education, 2004). This law has been amended and revised in the thirty years after its original introduction to become what we know today as the Individuals with Disabilities Education Act (IDEA). The opening sentences of this law are the basis by which this research topic has come about, and serves as a guiding force for the rest of this literature review. According to the United States Department of Education,

Disability is a natural part of the human experience and in no way diminishes the right of individuals to participate in or contribute to society. Improving educational results for children with disabilities is an essential element of our national policy of ensuring equality of opportunity, full participation, independent living, and

economic self-sufficiency for individuals with disabilities (Department of Education, 2004).

Further, this law goes on to define the term “disability” as well. Under the Individuals with Disabilities Act of 2004, the term means a child:

with intellectual disabilities, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance (referred to in this chapter as "emotional disturbance"), orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities (Department of Education, 2004).

This law also provides further clarification on who can receive special education services as funded by the government. A child must demonstrate one of these disabilities hinders their learning process in order to receive special education and related services from birth through the age of 21 (IDEA, 2004). The Department of Education, functioning through the Office of Special Education and Rehabilitative Services (OSERS), posits that 6.9 million children receive early intervention, special education and related services each year (Department of Education, 2017). This accounts for nearly 13% of the school-age population, with 62% of these children spending the majority of their day in the general education classroom and not in a separate location.

The IDEA is not the only law in our nation calling for inclusion of special needs students in our public classrooms. The US Department of Education’s Office for Civil Rights also enforces laws such as the Rehabilitation Act of 1973, under which section 504 provides students with disabilities full access to federally funded programs. Further, the

Americans with Disabilities Act of 1990 extends full inclusion rights to students with disabilities in local and state public schools, regardless of whether they receive federal funding or not (Department of Education, 2017). All of these laws provide the most basic and fundamental provisions that children with disabilities are allowed equal access to public education. One may further analyze the laws to discover more specific provisions for particular areas of education, including Career and Technical Education. The Carl D. Perkins Vocational Act of 1998 requires equal access be provided to students with disabilities to all vocational education programs (Wonacott, 2001). The No Child Left Behind Act of 2001 further ushered in a push from the federal government, through the distribution of funds to public school systems, to encourage the education and preparation of special needs students in order to make them more fully incorporated into the workforce after high school (Gordon, Yocke, Maldonado, & Saddle, 2007).

These laws are presented in chronological order to represent the ever-increasing push for inclusion of special needs students into vocational preparation courses that has occurred over the past four decades. By law, agricultural education programs (which fall under Career and Technical Education) are required to be totally inclusive of special needs students. As mentioned previously, deaf and hard of hearing is a category of disability as determined by the IDEA and will be the primary category that is analyzed in relation to special education and inclusion in the agriculture classroom. In the following sections of this literature review, three areas of focus will be dissected. After an intensive review of the current literature available surrounding the inclusion of deaf and hard of hearing students in Career and Technical Education, and more specifically Agriculture Education, the themes to be discussed here are: Deaf and Special Education in CTE; Special Education

in the Agricultural Education Context; and Mainstreaming vs Alternate Schooling. Under this third theme are two further subthemes to provide greater clarity: Deaf Education, and Inclusive Education in the Mainstream Setting. This review will also provide context to the theoretical framework and lens through which this case study will be viewed.

Theoretical Framework

Vygotsky's Sociocultural Theory of Cognitive Development will be the framework for this thesis and will be supported by two secondary concepts: Human Capital Theory and Social Capital Theory. Vygotsky's theory places emphasis on how culture and social interactions influence cognitive development (Vygotsky, 1934/1978). By this theory, students first learn from interacting with others, and then the student integrates that knowledge into their own mental structure.

Lev Vygotsky is an interesting name in psychological history, one that is often cited but about whom little is known. All of his known works were written in Russian prior to his death in 1934. In fact, Vygotsky died at a very young age, leaving his legacy relatively incomplete. The works we cite today were translated to English and collected posthumously in a book titled *Mind in Society: The Development of Higher Psychological Processes*, published in 1978 (Vygotsky, 1934/1978). According to Rodina (2007), much of Vygotsky's work still remains untranslated today. This article also reveals that Vygotsky spent much of his life's work researching special education in post-soviet Russia, which spurred several of his most prominent theories. Though the theory used in this thesis was not a direct result of Vygotsky's special education work, it was the theory on which he seems to have grounded all of his other works upon, and it fits quite nicely with the subject of this study. Vygotsky is considered by most to be of the Social Constructionist

worldview, meaning that he believed our psychological development as human beings to be contingent upon our social interactions. Learning, therefore, is a social process, and our knowledge is based upon the culture and society we interact with. The overarching term used to describe this phenomenon is Vygotsky's Sociocultural Theory of Cognitive Development.

According to this theory, Vygotsky postulates that children receive their skills and knowledge of the world around them by direct interaction from a "More Knowledgeable Other," or MKO (Vygotsky, 1934/1978). The MKO is a mentor of some type – a teacher, a parent, or any other more experienced, older person. Vygotsky was very interested in language and saw communication as the vector by which mentorship and subsequent learning occurred. When the child interacts with the MKO, the MKO will communicate a message either via words or actions, which the child will then process and internalize. This new information will inherently guide the child's decision making and perception of the world.

While Vygotsky's theory analyzes the impact education has on a person's cognitive development, the supplemental concepts used in this study views the impact of education on societal development. Human Capital Theory and Social Capital Theory are often found paired together as complementing concepts, and are considered to be economic theories that are applied within social science research.

Theodore Shultz was an American economist who published an article in 1961 titled "Investment in Human Capital." In this article he explains why we should not feel uncomfortable in seeing human life as something that has monetary value in an economy, as something to invest in for the sake of economic growth and development of a nation.

The resulting Human Capital Theory (HCT) views education as an investment in a person for the sake of progressing a nation, making that person more “valuable” and thus a more productive member of our society (Shultz, 1961). Productive members of society contribute to the workforce in some capacity, thus contributing to the overall economic growth of that society.

Social Capital Theory (SCT) can be summarized as the power of relationships in our society. SCT in a broader sense delves into the theme of community and its relevance to our human nature, but has been addressed more specifically as a structured theory from several angles by various researchers throughout the past thirty years. Two prominent theorists who have given shape to SCT are Pierre Bourdieu (1986) and James Coleman (1988); however, SCT was widely popularized in the mainstream media by Robert Putnam in his book, “Bowling Alone,” published in 2001 as a commentary on the deterioration of social interaction in the culture of the United States. In the context of this thesis, Social Capital refers to the “value” of social connections in our society (Coleman, 1988). Much as education increases the capital value of a human, so does the amount and quality of social connections that person has. Paired together in this context, HCT and SCT will refer to the benefits of providing students with education in the field of agriculture, as well as social and professional connections through that educational exposure, which will ultimately lead to a “valuable” and productive member of society. Without agricultural education programming, one could assume these students may never be made aware of potential career choices within the field, nor would they be introduced to peers and mentors in the field to form a professional network.

The researcher believes the argument could be made that allowing deaf students to interact with the agriculture industry and industry professionals, through the agriculture classroom and events coordinated by the agriculture educator, builds human and social capital. Additionally, participating in the community of the FFA organization/agriculture community on the school campus (if they are not a part of a chartered FFA chapter) builds upon the sociocultural development of knowledge and skills that a child might need as they enter their adult lives. The researcher further believes the HCT and SCT theories appeal to the audience of administration and stakeholders considering investing in this opportunity, while the Sociocultural Theory appeals to the educational and developmental reasoning for these agriculture programs. One theme of this study that was predicted to emerge throughout is the influence of Deaf culture and how it impacts the agriculture classroom – Vygotsky’s theory supports differences in cultural groups as a contributor to cognitive development. (It is important to note here that “Deaf” was capitalized; when referring to the Deaf as a culture, it is capitalized, and when referring to deafness in the context of a disability, it is not. See the Definitions section of Chapter 1 for reference.)

Deaf and Special Education in CTE

Approximately \$50 billion annually is budgeted by the federal government to the Department of Education for special education services (Theobald, Goldhaber, Gratz, & Holden, 2017). When the IDEA was reauthorized in 2004, a greater emphasis was placed on increasing positive postsecondary outcomes for students receiving special education services; therefore, a larger portion of this sum of money was allocated to strengthening Career and Technical Education with the intention of using these courses to better prepare students for life after high school. Postsecondary outcomes, as defined by Theobald et al,

include “training, education, employment, and where appropriate, independent living skills” (Theobald, Goldhaber, Gratz, & Holden, 2017, pp.3). Science, Technology, Engineering and Mathematics (STEM) courses also saw a greater influx of funds in order to provide more services to special needs students (Gottfried, Bozick, Rose, & Moore, 2016).

The literature surrounding CTE and STEM education for special needs students focuses on the challenges associated with meeting these students’ particular learning needs, and for providing the most beneficial education for them. The IDEA calls for special education students to be included in the Least Restrictive Environment (LRE), meaning the student spends as much time with their non-special education peers as possible (Department of Education, 2017). Gottfried, Bozick, Rose, and Moore report that many STEM and CTE teachers do not feel prepared to tailor their curriculum to meet the LRE requirement and meet the special learning needs of special education students (Gottfried, Bozick, Rose, & Moore, 2016). Further literature on the topic finds that deaf and hard of hearing students are frequently entering the workforce unprepared for success in math, science, and reading (Nagle et al, 2016). According to this study by Nagle, Newman, Shaver and Marschark (2016), these students present poor STEM skills, with evidence to suggest the science and math courses they are enrolled in are less rigorous than that of their hearing peers, and the vocational courses they are enrolled in do not provide adequate STEM skills.

Much research in special education shows that students with disabilities who receive no vocational intervention are less likely to attend college and be employed than their counterparts without disabilities (Theobald, Goldhaber, Gratz, & Holden, 2017).

However, there is evidence that students with disabilities who take clusters and concentrations of CTE courses (defined as at least 4 courses in a particular pathway, such as agriculture) are more likely to be employed than those students with disabilities who do not participate in CTE courses in high school (Theobald, Goldhaber, Gratz, & Holden, 2017). Students who spend a majority (80-100%) of their day in the LRE, regular classroom with their peers also have better postsecondary outcomes in college and career readiness. Wonacott cites in his article that students with disabilities in CTE courses are less likely to drop out of high school and more likely to be employed full time with competitive wages comparable to students without disabilities (Wonacott, 2001). Wonacott says special needs students coming out of CTE courses report feeling more prepared, and suggests that CTE teachers should be a crucial member of any intervention team for a special needs student. Although CTE teachers often do not feel prepared to provide adequate support for special needs students, statistics such as these are encouraging more and more special needs students to become enrolled in these vocational courses.

Some of the literature about CTE and special education shows there have been efforts in recent years to prepare teachers and students to accept and include students with special needs in their courses. Making students aware of the needs of their peers and educating teachers on strategies to meet the needs of students with disabilities are reported as beneficial and meaningful methods of inclusion. Students who are tasked with finding ways to meet the needs of their peers using the information they gain in class (such as a construction class building a wheelchair ramp) encourages many of the skills that are taught in CTE, such as innovation and interpersonal skills (White, 2015). Specifically relating to deaf and hard of hearing students, CTE teachers who are able to recognize the obstacles

presented for these students in their classroom can use these obstacles as learning opportunities for their students. Because deaf and hard of hearing students require a visual language and interpret their entire world visually, CTE teachers can use this to encourage strong verbal and nonverbal communication skills amongst all students, and allow all students to practice being intentional with their communication methods (Cawthon, 2001).

Laws are in place to enforce inclusion of special education students in the vocational classroom, and the federal government uses funding as a means of encouraging the enrollment of students with disabilities in vocational courses to improve postsecondary outcomes. The literature suggests CTE teachers can expect to see more and more students with special needs students in their classrooms, however they report feeling unprepared to fully include these students (Berry, 2010). Some of the literature about CTE in general suggests movements towards educating teachers and aiding them in including these students effectively. In the next section, this will be further discussed, as more work has been done in Agricultural Education literature about the preparation of educators.

Special Education in the Agricultural Education Context

The literature relating specifically to the narrower context of Agricultural Education and inclusion of special needs students can be categorized into two themes: the perceptions of agriculture teachers about special education/teacher preparation programs, and inclusion strategies in the agriculture classroom. Again, almost every article that falls into these themes mentions the laws and regulations associated with special needs students being encouraged to enroll in CTE courses. Therefore, due to federal funding for agriculture programs and the experiential nature of agriculture courses, agricultural

educators are increasingly likely to encounter students with disabilities (Andreasen, Seevers, Dormody & Vanleeuwen, 2007).

There are relatively few articles available in publication that address the narrow category of special education in agriculture education. Upon review, many articles found have overlapping authors, are follow up studies on previous works, and have recurring authors. The earliest article found that even slightly addresses the topic was published in 2004; perhaps a correlation could be drawn between the beginning of this discussion in this year to the renewal of the IDEA and the sudden push by the federal government for postsecondary outcomes. The articles predominantly address the issue of teacher perceptions and preparedness in teaching special needs students, as perhaps a sudden influx of these students into their courses occurred around the early 2000s. Although data is fairly limited, two studies gave statistics regarding special needs students in the agriculture classroom. In Illinois, 23% of students enrolled in agricultural education programs were classified as special needs (Pense, 2009) while 19% of students in agricultural programs in New Mexico were special needs accommodated (Dormody, Seevers, Andreason, & Vanleeuwen, 2006).

In 2004, the first article which hinted at special education in the agriculture classroom was written by Myers and Dyer in the *Journal of Agricultural Education*. This article states that teacher preparation programs (collegiate degree and certification programs) were “becoming dated and marginal” (Myers & Dyer, 2004, p. 44). The authors further go on to explain how demographics of agriculture classrooms are changing, and teachers must be prepared accordingly. Teacher preparatory programs were called upon to

adjust instructional requirements to meet the needs pre-service teachers had to allow them to be successful when they entered the career field.

Next, in 2006, a study was conducted in New Mexico to determine the challenges agriculture teachers experience in including special needs students. This study reported that students with “mental retardation” (a term that has since been deemed insensitive) and limited English proficiency, such as English as a Second Language (ESL) learners, were the most difficult to accommodate in the agriculture classroom-only format (Dormody, Seevers, Andreasen, & Vanleeuwen, 2006). In the laboratory/classroom setting, mental retardation, physical disabilities, and emotional/behavioral disorders were reported as being the most challenging. This study also found that older, more experienced teachers reported less challenges than younger, inexperienced teachers. This finding tells us as observers that more years in the classroom brings a teacher more contact with special needs students, thus giving them the ability to learn more about how to teach this child than a younger, inexperienced teacher would have the chance to learn.

A follow up study was completed in 2007 by the same research team in New Mexico to determine the training needs of agriculture teachers. This time, teachers were asked to rank their perception of the importance and their level of competence in inclusion competencies and skills related to teaching special needs students (Andreasen, Seevers, Dormody, & Vanleeuwen, 2007). The results of this study indicate that agriculture teachers want more training in the areas of understanding special education services and regulations, understanding different disabilities, and modifying lessons to accommodate student needs. The researchers also reported more training was needed for skill sets such as dealing with uncooperative special education students, keeping students on task, and working with

various types of disabilities. Other areas were identified, these were the highest ranking of the results.

The Kessel, Wingenbach, and Lawvey (2009) study examined relationships between teacher preparedness and demographics or outside factors. The results here show that student teachers who have spent time with a special needs person outside of the academic setting feel more prepared and more confident about teaching special needs students in their classroom (Kessel et al, 2009). This study supported the claim made by the Dormody et al. study of 2006 that an increase in age and experience with special needs students signified an increase in knowledge of disabilities and special education laws. Finally, the study posited that female student teachers statistically felt more prepared and reported more knowledge about special education concepts than male student teachers.

Finally, in 2009, Pense began to pose solutions and examine curricular redesign to accommodate specifically learning-disabled students in the agriculture classroom. This did not examine special needs as a whole, but rather focused on one area of disabilities. The 2009 study determined that agricultural educators in Illinois saw the state core agriculture curriculum as being inadequate, as were the resources available to teachers for including these students (Pense, 2009). This resulted in teachers feeling like learning disabled students fell behind in class and made it difficult for other students to move forward, causing inefficient education for both parties. Pense did a follow up study in 2010 in which he piloted a curriculum redesign to accommodate more students. Pense and his research team tailored curriculum to meet the needs of learning disabled students and then taught the curriculum to both disabled and non-disabled students; the results showed that when the needs of the special needs students were met, learning increased for both disabled and

non-disabled students (Pense, Watson, & Wakefield, 2010). Again in 2012 this study was modified to incorporate a newly discovered special education technique, Learning Objects (LO), which add more visual stimulation and clarity of instruction through interaction with technology that adds value to the curriculum (Pense, Calvin, Watson, & Wakefield, 2012). Once again, with more tailoring and redesign of agricultural curriculum to meet the needs of learning-disabled students, all learners were reported to have an increase in knowledge acquisition.

Following the progression of research in this area over the years, more researchers followed the trend of conducting qualitative/mixed methods studies that would examine: perceptions of agricultural educators, what training teachers felt they needed, and strategies of inclusion teachers use that they report are effective in the agricultural classroom. Faulkner and Baggett conducted a survey of pre-service teacher preparatory programs (such as colleges and certification programs) in 2010 that went back to address the issue presented by Myers and Dyer in 2004: how can we modify our teacher preparation programs to meet the changing needs of the profession? 73% of agriculture teacher preparatory programs reported that they now require students to take at least one special education course (Faulkner & Baggett, 2010).

The agricultural education model is unique in that it integrates three components into the learning process. Classroom Instruction, Supervised Agriculture Experiences (SAE), and Leadership Development (through the youth organization, FFA) are all integral parts of the agriculture classroom (called the 3-circle model), and a successful program will encourage students to participate in all three areas (FFA Statistics, 2017). A program

that equally incorporates all three areas is said to be a “balanced” program and is therefore providing optimal and maximum impact on students.

The defining factor of an agriculture program is the experiential learning that results from the 3-circle model. Philips and Myers claim in their work that experiential learning is beneficial for special needs students (Philips & Myers, 2012). Agricultural education allows for the development of both content knowledge and life skills through practical, real-world experiences and the opportunity for laboratory-based (“hands on”) learning. A study conducted by Easterly and Myers find that inquiry-based instruction is an effective method for instructing students with special needs and should be used when possible (Easterly & Myers, 2011). Inquiry-based instruction as a teaching method can be defined as a method which stresses the development of the learning process as opposed to the understanding and rote memorization of specific concepts. For special needs students, inquiry-based learning is beneficial because it teaches the student how to think and process information on their own terms, according to their own interpretations and experiences. Easterly and Myers found there was no difference in content knowledge acquisition between students with and without disabilities when an inquiry-based method was utilized to teach a concept in a school-based agriculture program (Easterly & Myers, 2011). This is compared in the study to the differences in content knowledge acquisition without inquiry-based methods, in which non-disabled students obtain more knowledge than their disabled peers. Philips and Myers cite the Easterly/Myers study in their own article, expanding on inquiry-based methods and their benefit in the agriculture classroom. Inquiry-based instruction encourages more collaboration between special needs students

and their counterparts, while allowing for more flexibility in accommodations for various learning styles (Philips & Myers, 2012).

Other researchers in the field worked to identify strategies for including special needs students as well. Stair is the leading researcher in this area, according to the literature that is available. She wrote three articles from 2010 through 2016 that identify areas of inclusion. Practical, hands-on education is stressed throughout, as was the case in the inquiry-based methods focus. Emphasizing hands-on skills, spending more time with the student one on one, strategically assigning partners, and modifying assessment were ranked by teachers in a 2010 study as being the most effective ways to educate special needs students in the agriculture classroom (Stair & Moore, 2010). In 2013, strategies were recommended in an article to specifically address inclusion of students in youth organizations, such as FFA and 4H. Some strategies recommended here were: working closely with parents, preferential seating, modification of curriculum, modification of facilities, and special programs tailored to meet the specific needs of the disabled student (Stair, 2013). Finally, in the most recent article of literature relating to inclusion of special needs students in agricultural classrooms, teachers were once more surveyed, this time in Louisiana, to determine their perceptions of preparedness for inclusion and education of special needs students in the agriculture classroom. As other teachers had a decade prior, these teachers felt as though they were not receiving adequate in-service opportunities and support related to special education, although a higher percentage did feel more confident in working with students with disabilities (Stair, et al., 2016). This study also asked teachers to rank the effectiveness of previously determined strategies of inclusion (Richardson, 2005), finding that once more emphasizing “hands on” learning was most

effective in the agriculture classroom, while asking for help from a special needs teacher was ranked the next highest (Stair et al., 2016).

While students with special education needs have been increasingly welcomed in agriculture classrooms, modifying instruction to fit these needs is a continuing struggle for educators (Buford & Baylot-Casey, 2012). Unless the educator has been specifically certified in special education, they are often not sufficiently trained in their certification program to deal with these students and must rely heavily on certified professionals to aid them in preparing modified instruction for a mixed needs classroom. The IDEA encourages a “least restrictive environment” which would encourage students with special needs to be in a mainstream classroom as much as possible (Department of Education, 2017). When a student needs a higher level of attention, the student may spend more time in a special resource classroom, or may be removed from the school entirely to attend an institution which can cater more intensely to their specific needs.

Such is the case with many young Deaf students in the United States. In every state there is at least one school for the deaf and hard of hearing, and an increasing number of these special population schools are incorporating Career and Technical Education programs, specifically agriculture. Currently, although there are several agriculture programs in deaf schools, there are only two chartered FFA programs – Kentucky School for the Deaf FFA, and West Virginia School for the Deaf and Blind FFA. While FFA is not required for the fundamentals of the agriculture industry to be taught, it is a key component of the nationally recognized model of Agricultural Education. If FFA is not being included, the agriculture program is most likely not an exemplar of a balanced, 3-

circle modeled program. FFA chapters not being chartered in deaf schools is one of the first signs of a lack of inclusion for this special population of students.

While there are no rules barring Deaf students from participating in FFA programs, many aspects of the FFA organization, as well as the even broader agriculture and CTE models, are not inclusive or modified as of yet to meet the needs of special needs students. For example, the wildly popular Parliamentary Procedure competition contains many technical terms and phrases for running an official decision-making meeting which do not translate easily to American Sign Language (ASL); similarly, many contests and activities involved with the organization are not feasible for Deaf populations to perform equally in, as they are written and scored in a way that only those who speak a verbal language (as opposed to visual) can succeed. One disadvantage the Deaf encounter within the school system is English language development. Deaf students cannot easily relate their own visual language to the reading and writing components of English. In agricultural content areas that rely heavily on written and verbal skills, deaf students will score lower; this does not, however, correlate to an inability to perform within the content area, nor does it correlate to intelligence levels of deaf students. A modification of the content into ASL places the deaf student on a more equitable performance level as hearing students (Reese, 2004). This leads into our final theme for this literature review.

Mainstream vs. Alternate Schooling

Deaf Education, and Inclusive Education in the Mainstream Setting

In this section it is imperative the more in depth and specific special education terms be addressed and defined. Mainstreaming is the process of placing students with special needs into the general education setting. Even if a student cannot succeed in the general

education classroom, they are still considered mainstreamed if they have access to a self-contained or resource classroom within the public school setting (Adekemi-Ayantoye & Luckner, 2016). Alternative schooling (also called a “special school”) is utilized for students with varying needs that might not be fully met in the mainstream classroom. Alternative education includes behavioral rehabilitation schools, home-schooling, and schools for specific disabilities, such as deaf and blind schools (Lara, 2013). The common abbreviation “D/HH” refers to the IDEA disability category, Deaf/Hard of Hearing. Deafness is a scale of hearing loss, ranging from mildly deaf/hard of hearing (30-40 decibel loss) to profoundly deaf (90+ decibel loss) (Pagliaro, 2001). Using a capital “D” when spelling “deaf” represents the Deaf culture (just as we capitalize Spanish or Greek). The Deaf do not define themselves by their disability or hearing loss, but rather by their unique culture based around a shared language (American Sign Language (ASL) here in the United States). Deafness is the only disability to also be categorized as a linguistic minority. As with any culture, the individual can choose whether they identify as Deaf or not. All Deaf people are deaf, but not all deaf people are Deaf (Pagliaro, 2001).

The literature surrounding this topic remains virtually unexplored, as was found in previous sections. Little research has been done on the placement of students in alternative schools (such as schools for the deaf), and one study posited that students in alternative settings were experiencing gaps in service that were causing them to receive inadequate instruction despite a plethora of resources available to them (Wasburn-Moses, 2011). This study also calls for more data collection and increased advocacy for students who are placed in alternative settings. A comparative study conducted in Cyprus analyzes the trade-offs that deaf or hard of hearing students must accept depending on where they choose to

attend school. On one hand, students can become mainstreamed and receive equal education as their hearing counterparts, in which case they have greater academic achievement with more opportunities for learning and diversity of experience; on the other hand, students can choose to go to a special deaf school, where they will be accepted and included by people who are “like them,” and receive the rewards of social satisfaction and cultural comfort (Angelides & Aravi, 2007). On the reverse, a mainstreamed deaf student may feel excluded by hearing peers, and suffer emotionally, or an alternative setting deaf student may experience social benefits at the cost of being prepared for the “real world” and receiving academic rigor (Hintermair, 2010). According to Angelides and Aravi, deaf students typically view the mainstream classroom as the more beneficial, possessing greater opportunity which they crave (Angelides & Aravi, 2007).

These results may provide clarity as to why more than 85% of deaf students spend their school day in the mainstream classroom (Shaver, Marschark, Newman, & Marder, 2013). Prior to 1975 and the IDEA of 1978, the opposite was occurring: 80% of deaf students were found in deaf schools. Trends in deaf education also show that students with more complex needs, such as profound hearing loss and multiple disabilities, are typically educated in the alternative setting where they can receive more attention, while those with more moderate hearing loss are often in the mainstream classroom (Shaver, Marschark, Newman, & Marder, 2013). Researchers have contemplated the various complexities of teaching at-risk D/HH students, or those with multiple disabilities who would benefit from a mainstream classroom but instead are placed in alternative settings where little is known of the effect. Intervention techniques are suggested in these articles, including more interaction with the family and at-home intervention, as well as more frequent IEP

meetings (Kretschmer, 1997). An IEP is an individualized education plan, as mandated under the IDEA, that allows teachers and families to create a plan of action for the D/HH student. This may include intervention techniques, as discussed by Kretschmer, as well as a course of action for the amount of time the student will spend in mainstream or alternative setting classrooms. These plans allow the student to receive intervention where needed and set learning goals that will allow them to have their particular learning needs met, regardless of setting. The overwhelming majority of research done in this area focuses more on the impact of the mainstream school on deaf children, as opposed to the focus being placed on the effects of residential/special schools. Many researchers have approached the topic by interviewing deaf adults about their experiences in both mainstream and alternative schooling, with the majority of results speaking of the social and academic trade-offs mentioned at the onset of this section (Foster, 1988; Foster, 1989; Nunes, Pretzlik, & Olsson, 2001; Powers, 2003).

While teachers in the agriculture classroom are reporting training needs, so are deaf educators. Deaf educators are reporting stress due to a lack of clarity on the correct method of communicating with students in the classroom (McNeill & Jordan, 1993). A study conducted by Cawthon in 2001 shows that D/HH students learn best when only one mode of communication is utilized. For instance, students showed greater levels of retention when their educator, be it in the mainstream or alternative setting, used either completely sign language with no voice, or used only their voice while an ASL interpreter translated the message to the D/HH student (Cawthon, 2001). A method of educating the deaf child is to use the Total Communication technique, in which the educator voices and signs at the same time; this can encourage the student to learn oral/lip reading skills that may be helpful

in the future when they will not have access to a general public that can communicate via sign (Luft, 2017). When Total Communication is used, both in the home and in the classroom, both D/HH and hearing counterparts are included by the speaker in the conversation (Luft, 2017). However, Cawthon's results show that the message is not as accurate, therefore diminishing everyone's understanding, when both modes of communication are used. This is because the human brain finds it difficult to essentially process and speak two languages at once, meaning one or the other language will suffer in its delivery. Even so, some schools require total communication when deaf educators do not feel comfortable with it, while others require the use of one or the other, in which case the educator may feel underprepared linguistically; this causes stress on the educator (McNeill & Jordan, 1993).

Further, parallels can be drawn between concerns of deaf educators and agricultural educators according to the literature available. Educators of the deaf are held to the same standard of passion and attention to students as any other teaching profession, as is evidenced by the expectations surveyed by Scheetz and Martin. They found that deaf education professionals in this study determined that the most important qualities of educators of the deaf were strong communication skills, passion for teaching, collaboration, staying up to date on techniques, and employing cognitive strategies to encourage independent learning in their D/HH students (Scheetz & Martin, 2008). Educators coming from pre-service programs that have taught them the strategies for teaching D/HH students report similar levels of unpreparedness as agriculture pre-service teachers felt; in fact, one study suggests that there is a significant stagnation of innovation in deaf education due to the lack of professional literature being dispersed by prominent

deaf educator programs (Schirmer, 2008). This suggests that the deaf educators need to broaden the conversation to address many issues in deaf education that have not been addressed of recent, in order to not only provide clarity for deaf educators, but also for educators in other fields attempting to understand how to better server these students (Lenihan, 2010). Finally, educators of the deaf perceive animosity and misunderstanding from their administrators, and one study suggests that more work and training needs to be done with school administrators at all levels (Luckner, Goodwin, Johnson, Sebald, & Young, 2005).

Need for Further Research

As mentioned multiple times throughout this review, the literature surrounding the narrow topic of deaf inclusion in Agricultural Education and specifically the youth organization, FFA, are few and far between. Absolutes should not be used in research; however, I can positively state that there are no research articles dealing specifically with the Deaf FFA chapters that have been chartered in America. That alone is a starting point for further research on the topic. Upon perusal of the articles presented in this review, one may also find themes in further research to be explored. Many articles call for more experimental research in special education, while acknowledging the difficulty associated with this, as each special needs child is unique and is intervened upon differently (Theobald, Goldhaber, Gratz, & Holden, 2017). There is a need for more D/HH access to college and career readiness courses designed specifically to meet their needs as they enter the workforce, with strategies focused on breaking down communication barriers with the hearing community (Nagle, Newman, Shaver, & Marschark, 2016). Shaver repeatedly called for more research into the effects of alternative vs. mainstream schooling, as there

is virtually no data currently in that realm (Shaver, Marschark, Newman, & Marder, 2013). How trends in special education affect teacher confidence levels and more qualitative research into strategies for inclusion are a very common theme, as made evident by Stair (Stair et al., 2016). Finally, curriculum redesign and methods of accommodation are necessary to make agriculture classrooms more inclusive and beneficial for all (Pense & Wakefield, 2010; Dormody, Seevers, Andreasen, & Vanleeuwen, 2006).

Perhaps the most profound and relevant research need is quoted below. This suggestion gives lead to the study, “DeaFFA: An Exploration of Agricultural Education in Schools for the Deaf and Hard of Hearing.”

“It is also recommended that qualitative research be used to determine what practices the most successful teachers are implementing within their programs.”
(Stair, 2016)

CHAPTER 3. METHODOLOGY

An exploratory, collective/intrinsic Case Study approach was used for this research (Creswell, 2006). According to Creswell (2006), “case study research involves the study of an issue explored through one or more cases within a bounded system” (p. 73). The issue at hand was deaf and hard of hearing inclusion in agricultural education, and the bounded system (or the “case”) in this instance was agriculture programs in schools for the deaf; more specifically the focus was on the system (“case”) at the Kentucky School for the Deaf. The nature of the research was exploratory as opposed to explanatory, as this is a virtually unexplored territory and very little information was previously known on the school in relation to the research questions posed.

This research falls under the category of an intrinsic case study formatting because “the focus is on the case itself” which “presents an unusual or unique situation” (Creswell, 2006, p. 74). The site was purposefully selected due to the unique perspective of the school as well as constraints on the thesis (distance, time, funding, etc.). Creswell points to two references on case study research that have further contributed to the design of this study: *The Art of Case Study Research* (Stake, 1995) and *Case Study Research and Applications: Design and Methods* (Yin, 2003).

Yin establishes reasoning for a single-case design that provides validity to the single-site nature of this case study, knowing that other cases similar to KSD do exist. In chapter two of his book, Yin provides five potential rationales for single-case designs, of which KSD can be categorized as “critical, unusual, and revelatory” (Yin, 2003, p 49). KSD was a *critical* case in that the agriculture program has proven to be well-established and developed, with a large network of potential participants; *unusual* in that there are only

five known programs of the kind in the United States, and this one has proven to be worth documenting; and *revelatory* in that “the researcher has an opportunity to observe and analyze a phenomenon previously inaccessible to social science inquiry” (Yin, 2003, p. 50). This is due in part to the researcher’s relationship with the school and educators.

Procedures for conducting a case study were clarified by Stake (1995). First, the approach must be deemed appropriate to the problem – a case study method was the correct approach for this research due to the uniqueness of the school and the exploratory nature of the topic, as discussed extensively throughout the first two chapters of this thesis.

Next, the case must be identified and clarified, as will be done in the coming pages. Sampling should be purposeful, as KSD was – it was accessible to the researcher and unique to the research questions. Joseph Maxwell (2013) succinctly justifies the purposeful sampling of interviewees for qualitative designs such as this case study in his book *Qualitative Research Design: An Interactive Approach*. Here, Maxwell states that purposeful selection is preferred over random, representative sampling because “particular settings, persons, or activities are selected deliberately to provide information that is particularly relevant to your questions and goals, and that can’t be gotten as well from other choices” (Maxwell, 2013, p. 88).

Staff, students, and community supporters who were interviewed for this case study were selected because they have exhibited evidence of the theories being used in this study, and have directly impacted/have been directly impacted by the agriculture program at the Kentucky School for the Deaf.

Yin (2003) recommends that the following types of information be collected in a case study: documents, archival records, interviews, direct observations, participant-observations, and physical artifacts. All but the physical artifacts are outlined in this methodology and were planned for collection. Any relevant artifacts found during the data collection were added to the pool of evidence.

Finally, once data had been collected, a holistic analysis approach was utilized to compile and deduct meaning from the results. The researcher addressed multiple aspects of the site in order to create a whole picture of what was occurring. Then the researcher identified general themes found at the site. Once themes had been clarified, the researcher put forth assertions on what was deduced to be the meaning of what was occurring at this site.

Research Objectives and Questions

Due to the exploratory nature of this case study, the research objectives are the guiding goals of the research, with the research questions designed to meet these objectives. The researcher was not attempting to prove/disprove anything, and the nature of the case was still relatively unknown. The objectives outlined below were the driving ideas behind the thesis and the goals which the researcher had set to accomplish with the research. The research questions will be answered categorically under each objective, in Chapter 5.

Objective 1: Tell the story of the Kentucky School for the Deaf agriculture and FFA program. (What is the story of the Kentucky School for the Deaf agriculture and FFA program?)

- Guiding Questions for Objective 1: How was the program established? Who was

involved with the establishment? What has happened within the program since establishment? Who does the program impact and how?

Objective 2: Analyze the KSD agriculture/FFA program through the lens of Vygotsky's Sociocultural Theory of Cognitive Development. (Is there evidence that Vygotsky's Sociocultural Theory of Cognitive Development is occurring in the KSD agriculture/FFA program?)

- Guiding Question for Objective 2: How do Human Capital Theory and Social Capital Theory apply in the deaf school community?

Objective 3: Provide insight into agricultural education in deaf schools by spotlighting a successful program with the intent of creating awareness that will lead to more opportunities for deaf students in the agriculture industry. (What do other deaf schools stand to learn from a successful agriculture program?)

- Guiding Questions for Objective 3: What are the challenges and barriers to creating agriculture programs in deaf schools? What are the perceived benefits and challenges students/teachers in these programs experience? How could these programs potentially affect deaf schools and postsecondary outcomes for students?

Site and Participant Selection

Site Selection:

A program that is following the established model for Agricultural Education incorporates an FFA chapter into the curriculum, as defined by the Three Circle Model: classroom instruction, Supervised Agricultural Experience project (SAE), and leadership

development (FFA) (NAAE, 2017). Therefore, the presence of a nationally recognized FFA chapter was the basis for validation of a school-based agriculture program to be used in this study. According to statistics published by the National FFA Organization, there are “8,568 FFA chapters in all 50 states, Puerto Rico and the Virgin Islands” (FFA Statistics, 2017, para. 1). Of these, approximately five schools for the deaf house chartered FFA chapters; this can be validated by cross referencing a list of chapters published by the National FFA, in which you will find the Kentucky School for the Deaf FFA, West Virginia School for the Deaf and Blind FFA, North Carolina School for the Deaf FFA, South Carolina School for the Deaf FFA, and the Alabama Institute for the Deaf and Blind FFA (National FFA: Chapter Locator, 2018). There are other deaf schools across the country housing agriculture programs, however they may or may not have an FFA chapter in conjunction, which implied a lack of consistency with the nationally recognized Agriculture Education three circle model. One may argue that this was only applicable if one considers the FFA youth organization to be the only form of leadership development offered within an agriculture classroom. Due to the researcher’s own experience with KSD, the FFA chapter appears to be a critical component of social capital and inclusion in activities most aligned with public school agriculture programs; further, an ultimate goal of the research was to create heightened awareness of deaf members within the National FFA Organization. Thus, the researcher rationalized using the presence of a nationally chartered FFA chapter as a legitimate indicator of a successful agriculture program in a school for the deaf.

Further, one school was selected from this list: the Kentucky School for the Deaf in Danville, KY. This location is considered a residential school, meaning students live in

dormitories on the school campus for the week and are bussed home for weekends and holidays. Students come from all areas of Kentucky, often riding many hours on a bus to come to Danville. This is unique in comparison to public schools with agriculture programs, where students do not live on the campus, but may still live locally, such as within city/county boundaries. The Kentucky School for the Deaf services predominantly students with deafness/hearing loss, while other special schools may also service blind/visually impaired students. This makes KY unique in that they service a very specific population, which was the focus of this study. According to Strynick (2017) KSD is in possession of 23 acres of farmland, which could be a potential factor in the development of an agriculture program and makes this site unique for the topic. Also due to the knowledge the researcher obtained from personal experience at the school, it was known that the current agriculture teacher at KSD was the teacher who created the program from its beginnings. The age of the program is known (ten years) and the history can be gathered from the source that created the program. The Kentucky School for the Deaf presented itself as an obvious candidate as the primary source of design for the study, due to researcher experience and context, as well as uniqueness and location. Using knowledge of this program, the researcher believes other studies will be better able to frame a course of action for the other schools, of which there currently is no knowledge or experience of, other than that they simply exist. Here the researcher would like to clearly state that they recognize this prior knowledge of KSD as a bias in the research and will clearly define this bias in the validity section of this chapter. The researcher will be providing reasoning for the research design in this selection based upon biased knowledge of the KSD program.

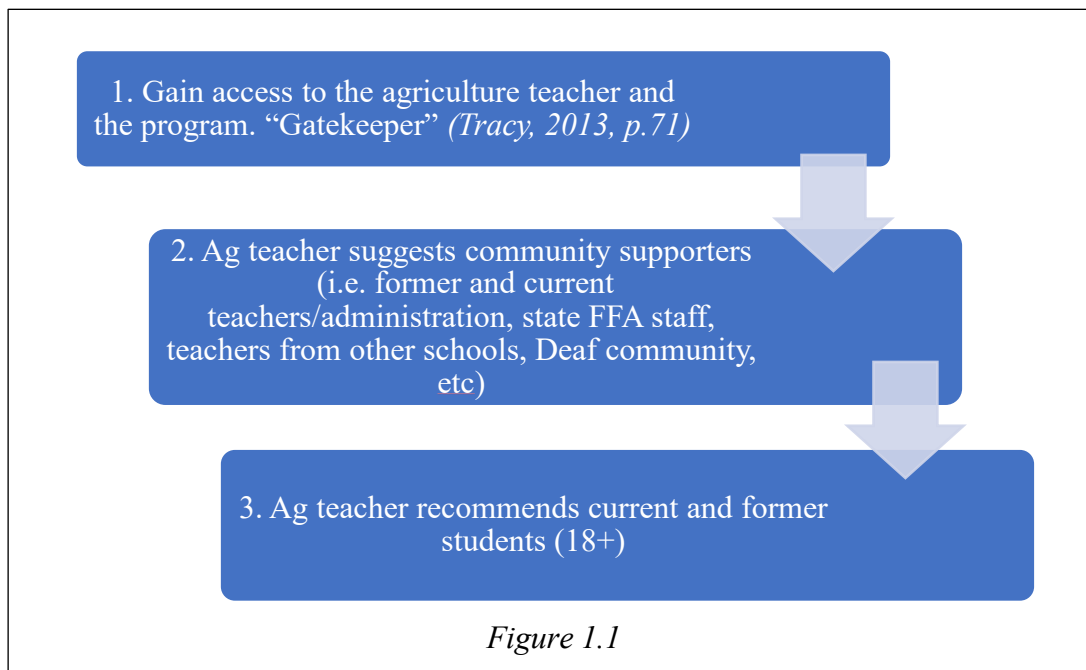
Site Context:

The site was an educational institution that follows a typical school schedule, in that classes are held during the day, from August through May. During this time, they have the usual break for holidays. A unique aspect for the site, as previously discussed, was the residential aspect; because students live on campus, the researcher would have theoretically had more access to current students living on campus, in that they are all in one central location for most of the school year. However, this could have proven to be a hindrance as well, considering students may be bussed in from various parts of the state, making them more unavailable if they are at home and not staying on campus or in the immediate community of the school.

Data collection was split between the physical campus of the school, as well as the locations preferred by participants for interviews. On campus the researcher spent most of the data collection period with the agriculture teacher in the agriculture classroom space, which was in a separate building from the main school building. Observations occurred during the school day and during evening programs on site. Interviews and secondary data collection of historical and web-based research occurred at Jacobs Hall, KSD's historical museum, as well as off campus virtually.

Participant Selection:

The participant selection should be viewed in a three-stage process: first, the researcher gained access and initial knowledge of the programs from the coordinator, the agriculture teacher. Next, inquiry was made of any other sources which may have aided in the creation or maintenance of the program. Finally, products of the program (i.e. current and former students) were sought out who could provide a perspective of the program as a participant. Figure 1.1 is a visual representation of the participant selection process.



The most obvious participant to be approached was the agriculture teacher of the school. Having worked alongside the Kentucky School for the Deaf agriculture teacher, the researcher felt as if they had gained access to this program. This teacher was the gatekeeper (Tracy, 2013, p.71) for the program, and theoretically provided the richest data, as the original founder of the program. The gatekeeper allowed access to the information of the program, however the approval of disclosure of this information needed to come from superiors, such as the principal of the school. Upon making initial contact with the teacher, the researcher was able to determine the teacher needed permission to share the story of their program with the researcher, and where permission was needed from a superior the correct authority was contacted to gain access. The researcher obtained a letter of approval from the assistant principal of KSD, stating the researcher was welcomed on the campus, and all materials must be viewed and approved prior to interaction with current students (See Appendix 3). Though no mention of current staff was found in the letter, the researcher also provided all materials concerning interviews with staff members to the

administration as well, in order to maintain professional courtesy and open communication. IRB approval was obtained upon completion of this contact process and facilitated access to the school once official documentation of the research project had been gained. The researcher was able to show permission forms to the administration of the school and gain adequate access via this documentation.

The next category of participants were people who have had an influence on the creation or maintenance of the agriculture program in the school. The idea for this category came from researcher knowledge that KSD's program was developed with the assistance of two Kentucky FFA employees, as well as a former principal of KSD. These potential participants were identified when the teacher was asked about their support system as they have developed their program. It could not be said exactly who these participants would be until the researcher was in the process of interviewing the teacher, and their participation was not crucial, though it had the potential to provide more perspectives in order to create a clearer picture of the program. These participants will further be categorized as "community supporters" and serves as the catch-all term for anyone who could provide rich data to meet the objectives of this case study.

Finally, the teacher was asked to identify students from the program who could provide the richest data about a student's perspective in the program. The ideal was to obtain student responses from both former and current students of the program. This was a category dependent on the availability of students and the time frame available to connect with them. Also, due to communication barriers, accurate data may not have been feasible if the researcher could not speak with the students in person or via video call, as it has been

experienced that writing out responses in English does not always accurately portray a deaf student's meaning.

The agriculture teacher at the school provided a list of potential candidates, including the category of community supporters and former/current students to be interviewed. Every potential interviewee on this list was contacted by the means that the agriculture teacher could provide (email, phone, word of mouth introduction at an event). Of this extensive potential list of the network of supporters and students that the teacher could provide, the 16 interviews, not including the agriculture teacher themselves, emerged. The people interviewed for this case study were hand selected by the agriculture teacher, however, they were a part of a larger list. The 16 respondents were the final pool of participants, simply by way of response rate to my initial blanket contact of interviewees.

Data Generation and Analysis Procedures

Data was collected for this case study in the spring of 2019, indicating that all information in this thesis is accurate and up to date as of May 2019, to the best of the researcher's knowledge. IRB approval was granted on January 31, 2019 (See Appendix 1). Interviews began on February 15th and were completed by March 8th. Observations of the school began February 6th and were completed by March 6th. Historical artifacts and information that is general public knowledge does not require IRB approval, thus the researcher began to accumulate historical information and evidence on the school in the spring of 2018 and completed this collection on February 6, 2019.

The observations and interviews were conducted on site when possible, in the agriculture classroom at the identified deaf school with agriculture programming:

Kentucky School for the Deaf in Danville, KY. Teachers were interviewed on site, with permission from KSD administration. Observations were made of the general school grounds, and in-depth observations were made of the agriculture facilities and the classroom in action. Students currently enrolled meeting the appropriate age limit for consent were interviewed on campus, with notification letters sent to their parents as a precaution and means for total open communication (Appendix 4). Former students and community supporters were invited to visit campus for their interview, though in the event that this was not possible the interview occurred virtually.

Current and former students from the Kentucky School for the Deaf, the current agriculture teacher, and community supporters were participants in the interviews. In total, there were 17 interviewees in this study: 1 current student, 4 former students, 4 current teachers/staff at the school, 1 current administrator at the school, 3 former KSD educators, and 4 other community supporters (including 2 Deaf farmers and 2 educators outside of the school).

The researcher, as is typical protocol in case study research, was also an essential participant in the process:

“Qualitative case study is highly personal research. Persons studied are studied in depth. Researchers are encouraged to include their own personal perspectives in interpretation. The way the case and the researcher interact is presumed unique and not necessarily reproducible for other cases and other researchers. The quality and utility of the research is not based on its reproducibility but on whether or not the meanings generated, by the researcher or the reader, are valued.” (Stake, 1995, p. 135)

The researcher conducted all observations and historical data collection for this study. She then analyzed all data via personally written memos and coding of interviews, as will be outlined in detail in coming paragraphs and can be seen in Chapter 4 of this report. The researcher also submits as evidence observations made during her time student teaching at the school, in the form of a memo.

12 interviews were conducted onsite at KSD's campus, 3 interviews were conducted virtually, and 2 interviews occurred at an offsite location (17 interviews in total). All participants were provided with both a verbal and written overview of the case study they were agreeing to participate in, as well as a consent form that they signed before their interview, if conducted in person (Appendix 2 and 5). Interviews conducted virtually were arranged with enough advanced preparation for participants to be emailed an overview of the case study, as well as the consent document. Prior to the virtual interview they were once again verbally explained the purpose of the study and allowed to ask questions. Verbal consent was obtained, according to IRB protocol, for all virtual interviews, with no physical signature or documentation required.

All participants were prompted to conduct their interviews in whatever communication style they felt most comfortable with (Spoken English, Signed English, American Sign Language, or a mixture of any of these). Where spoken English-only communication was used, the interview was recorded with only a voice recorder. Where a mixture of spoken English and Sign Language were used (as in the event of an interpreter voicing the signed interview), video recording was used. Virtual interviews occurred via the FaceTime phone platform and a screen recording of the conversation was utilized. All recordings were taken for transcription purposes only. Recordings will be stored securely

on UK's campus in the Community and Leadership Development department for a minimum of 6 years.

A Sign Language interpreter was to be present at any time when ASL was used. The researcher had some understanding of the language but was not confident enough to conduct this entire study without the interpreters. This understanding was beneficial for the study as the researcher could comprehend some of the language and the culture of ASL communication, nonetheless, and was able to get the effect of the interviewee's body language.

All transcriptions were analyzed and coded for emergent themes and patterns that could shed light on the research questions and objectives of the study. The researcher decided to utilize two methods discussed in *The Coding Manual for Qualitative Researchers* by Johnny Saldana (2009): Descriptive Coding and Structural Coding. In the first cycle of reading through the interviews, the researcher placed descriptive codes on relevant items of data that emerge from the interview. According to Saldana,

“Descriptive Coding assigns labels to data to summarize in a word or short phrase – most often as a noun – the basic topic of a passage of qualitative data. Provides an inventory of topics for indexing and categorizing.” (Saldana, p. 262, para. 3)

The second cycle of interview reading would involve organizing these descriptive codes into a structure that could be categorized and sorted by pre-determined themes, which came from research questions and the objectives of this case study. This is called structural coding:

“Structural Coding applies a content-based or conceptual phrase to a segment of data that relates to a specific research question to both code and categorize the data corpus. Similarly coded segments are then collected together for more detailed coding and analysis. Appropriate for virtually all qualitative studies, but particularly for...exploratory investigations to gather topics lists or indexes of major categories or themes.” (Saldana, p. 267, para. 3)

To perform the first cycle of descriptive coding, all transcribed interviews were printed and organized in a binder based upon the following participant categories:

- The Agriculture Teacher
- Teachers and staff currently employed at the school
- Teachers and staff formerly employed by the school
- Community supporters outside of the school community
- Community supporters from within the school community
- Students of the program (current and former)

Grouping interviews as such allowed the researcher to begin to broadly categorize the information to be interpreted, and to give context to the perceptions of the groups. For example, it is expected that current employees and students of the school may have the most accurate information about recent events within the agriculture program, while former students and staff could provide information from years past. Additionally, community supporters who exist outside of the KSD experience (such as teachers from other schools or people within the FFA realm) would be able to provide a perspective on misconceptions about the program or how it is externally perceived, while members of the KSD community

(deaf farmers, interpreters, parents of students) would have more insight on the real world struggles and benefits faced by the school's program.

The descriptive coding method was all manual and thus not recorded here in this thesis, though it can be found in the secured data that is stored on UK's campus for 6 years. Relevant quotes were highlighted and notes were made in the margins of the printed interview transcriptions. This was, as mentioned, the initial reading of the interviews. Being the sole person conducting all interviews, the researcher already knew the basic summary of what each of the participants said. Reading through the interviews in this manner allowed for to organization of thoughts and facilitated preliminary connections between participant comments. The researcher was able to sift through all comments made and find powerful quotes that could stand alone impactfully. These quotes would then be used in the second cycle of structural coding.

Recorded within Chapter 4 is the findings of the finished coding product from the interviews. The researcher began by creating categories that they could sort descriptive codes into. The researcher used summarizing words and phrases within the categories, as well as in vivo quotes that could stand alone as evidence for the category. According to Saldana,

“In Vivo Coding uses words or short phrases from the participant's own language in the data record as codes. May include folk or indigenous terms of a particular culture, subculture, or microculture to suggest the existence of the group's cultural categories. Appropriate for virtually all qualitative studies, but particularly for...studies that prioritize and honor the participant's voice.” (Saldana, p. 264, para. 5)

The in vivo codes were found to be the most relevant and powerful. The ultimate goal of this case study was to provide a voice for the members of the KSD Deaf community that have experienced the benefits and struggles of an agriculture program. Using direct quotes from interviews, while still keeping all participants anonymous, provides the audience of this report with the most accurate representation of the participants, aside from having a conversation with them for oneself.

Once organized, the categories were then sorted under the themes that are defined by the research questions. These themes are the focus of the final conclusions in Chapter 5. According to Saldana:

“Unlike a code, a theme is an extended phrase or sentence that identifies what a unit of data is about and/or what it means... The analytic goals are to develop an overarching theme from the data corpus, or an integrative theme that weaves various themes together into a coherent narrative.” (Saldana, p. 267, para. 5).

As opposed to *decoding* the data into themes, the researcher *encoded* it; Saldana says that “when we reflect on a passage of data to decipher its core meaning, we are *decoding*; when we determine its appropriate code and label it, we are *encoding*” (Saldana, p. 28, para. 3). The researcher utilized the research questions as initial themes; once the interviews were fully coded into categories the researcher then only had to sort them under their pre-determined, corresponding themes. An advising professor of the University of Kentucky suggested the researcher define themes for clarity:

Theme 1 – KSD’s Agriculture Story: describing agriculture on the campus from 1823 until the present day.

Theme 2 – Vygotsky’s Sociocultural Theory of Cognitive Development, Human and Social Capital: examining the data through the lens of theory.

Theme 3 – Social Change: creating awareness of the Deaf culture, deaf education, and agriculture programming for a deaf audience.

Nevertheless, the researcher must find it highly important for triangulation to state that these themes were not solely used to dissect my evidence. Though the researcher was looking specifically for evidence to fall into these categories, they also maintained an open mind to ensure one could find new, revelatory details that were unexpected and could provide new perspective and insight into the case. While the researcher was *encoding* the interviews for general themes and pre-determined labels, they remained vigilant for the opportunity to *decode* as well.

Coding the data using the structural method allowed the researcher to attach labels to the general themes which emerged from the questions asked in the interview; by having these initial labels, the researcher was able to hone the codes moving forward by going back through interviews and quickly finding these broad themes being identified (Namey, Guest, Thairu, & Johnson, 2008). After data collection and transcription was complete the researcher used these narratives to piece together a comprehensive story that examines the agriculture program. Significant, recurring patterns were spotlighted.

Observations of the site were coordinated by the researcher with the agriculture teacher and were approved by administration at KSD. The researcher discussed and established 7 days in which the classroom and school grounds were observed, in addition to conducting interviews while onsite. The researcher arrived onsite each observation time

near the start of the school day, taking extensive field notes until departing at the end of the school day. The researcher often took a participatory approach to observations, essentially shadowing the agriculture teacher during these days. The researcher communicated with students and staff as necessary (as opposed to an observer-only approach) which allowed for incidental and informal information gathering (Yin, 2003, p. 123). The researcher went in with the research questions and objectives in mind, specifically looking for evidence of: student interaction with the agriculture teacher and classroom, school culture, physical grounds of the agriculture classroom/school, and daily routines/habits of students and staff involved with the agriculture program. The researcher also kept an open mind to allow for further, unanticipated evidence to emerge. Observations were recorded as field notes, then analyzed via researcher memos. Memos can be found in Chapter 4. The use of memos in this thesis is based upon the technique of memo writing outlined in *Qualitative Research Design: An Interactive Approach* (Maxwell, 2013):

“You should regularly write memos while you are doing data analysis; memos not only capture your analytic thinking about your data, but also *facilitate* such thinking, stimulating analytic insights.” (Maxwell, 2013, p. 105)

Historical data was collected via books, credible internet sources, and researcher observation of the Jacobs Hall Museum on KSD’s campus. The researcher scheduled a tour with appropriate staff of the museum and took field notes during said tour. The fieldnotes from the tour and observations of artifacts in the museum were analyzed for relevancy to this case study and streamlined in a researcher memo. A book, *Images of America: Danville, KY* (Merritt, 2011), was analyzed regarding historical evidence of early forms of

agriculture education on KSD's campus; analysis of the excerpt from this book can be found in the form of a researcher memo in Chapter 4. News articles and relevant, credible internet sources were collected via a web search. The sources that were found relevant from these searches were recorded and analyzed. Website citations and analysis of pertinent information from said websites can be found in the form of a researcher memo, in Chapter 4.

Further, materials provided by the Jacobs Hall Museum are submitted as evidence and artifacts within Chapter 4 of this case study. Two books from the museum were provided: *A Centennial History of Kentucky School for the Deaf* (Fosdick, 1923) and *History of the Kentucky School for the Deaf: 1923-1973* (Beauchamp, 1973). The archives of the campus newspaper (taking three different names spanning its existence) were analyzed for historical evidence of agriculture on campus (The Kentucky Standard, 1875-2003). The two books and newspaper archives serve as reference for the historical timeline of agriculture on KSD's campus, the results of which can be viewed in the historical timeline memo found in Chapter 4. Numerous photos were scanned and analyzed and can be found in the same chapter; these are to be used as supplement to the historical timeline memo.

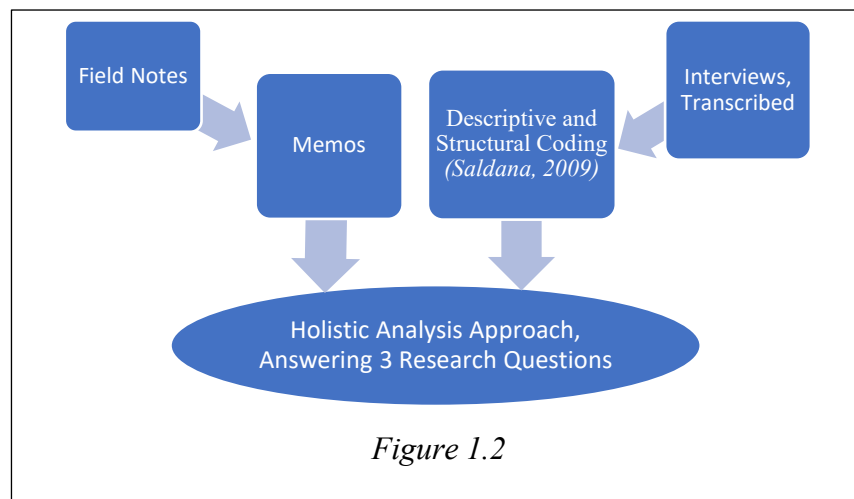


Figure 1.2

Triangulation

As defined in an article by Constance Fischer, “Bracketing typically refers to an investigator’s identification of vested interests, personal experience, cultural factors, assumptions, and hunches that could influence how he or she views the study’s data” (Fischer, 2009). In the paragraphs to follow, the researcher brackets their own experience in the agriculture classroom at the Kentucky School for the Deaf, as it is the motivation for this thesis, as well as their personal teaching philosophies as they relate to this study.

The researcher saw firsthand the impact that agricultural education had on deaf and hard of hearing students during their student teaching semester in the spring of 2017. During this time, the researcher formed strong professional connections within the school, and has kept in contact with staff from the school outside of the context of this case study for the past two years. The researcher has become emotionally attached to the students of the school, and it is no secret that this case study means far more to the researcher than a requirement for a Master’s degree. The most important bias that the researcher must address in regards to this study is the desire to spotlight this school as a leader amongst deaf schools, though the researcher has no experience with other deaf schools outside of Kentucky and cannot say with accuracy that this is the absolute “best” representation of a deaf agriculture program. Rather, the researcher is aware of the spirit of the students, the passion of the educators, and the pride this school gives those who have interacted with it. It would be impossible for the researcher to remove these emotions from this study, though the study will be conducted with the intent to collect only new information, not dwell on previously acquired information from the student teaching semester. The researcher has the primary goal of creating awareness of agriculture programming for deaf students in the

hopes of a national conversation amongst schools and the National FFA Organization; however, the biased researcher also acknowledges an unspoken secondary goal of spotlighting the accomplishments of the Kentucky School for the Deaf agriculture program.

The researcher believes agricultural education is a foundational area of instruction that all students in America should be able to access. Inclusion and special education have been researched extensively for this case study, further solidifying the researcher's belief that deaf and hard of hearing populations deserve the opportunity to be exposed to the agriculture industry just as most other American citizens have been granted access through agriculture education programs in public schools. The researcher's ultimate goal is to tell the stories of students and adults who have been impacted by agricultural education at KSD, knowing that the researcher has been previously informed of and involved with the presence the program. By telling their stories – triumphs, struggles, educational and personal journeys – light will be cast on the program in order to encourage the development of more agriculture courses in deaf schools. The researcher is aware that emphasis in this thesis must be placed on the growth and development of the student academically and professionally in order to appeal to higher level authorities in the National FFA Organization and deaf schools across America, and thus will be addressing this niche interest throughout the analysis of findings.

In the context of qualitative studies such as this, it is impossible to eliminate all researcher bias. However, to prevent threats to validity, the observations and interviews were conducted, to the best of the researcher's ability, with an open mind, disregarding anything seen or learned during the researcher's time student teaching at the school.

Interview questions were made broad enough to encompass the viewpoints of all potential participants, both previously known to the researcher and newly introduced for the study. The questions were determined based on prior knowledge and interaction the researcher had encountered with the case, and were created with the final research questions in mind. Interview questions were screened initially by both the researcher's committee chairperson, as well as the agriculture teacher, to assess the relevancy and ability for these questions to be easily understood.

Reactivity is another common validity threat in this line of research (Maxwell, 2013). In the context of this study, that would be the researcher's influence on the KSD program. As a semi-experienced young professional in the agricultural education field, the researcher had to control for their influence on the program, approaching it in an unbiased way so that the researcher could get participant stories, not what the researcher thinks their story should be or how the researcher thinks their program should look. Deaf agriculture programs are very individualized and unique, and must be studied as their own entity, not in the context of what is already known as a mainstream agricultural educator. To combat researcher reactivity, minimal researcher experience or knowledge will be inputted into observations and interviews.

Further, an at-length time commitment to the school must be made, meaning the researcher will be investing more than a "one and done" approach to interacting with the school. Taking an adequate amount of time to fully explore all angles of the story the program has to tell allows a more detailed, accurate representation to emerge. This was achieved through multiple visits to the campus, multiple interviews, and establishing a deeper professional and relational connection with the school than just a formal research

project. In this type of study, true relationship must be established to gain the trust of the people involved, to achieve the goal of getting a very real, very honest and open communication about the agriculture program.

CHAPTER 4. FINDINGS

Research Memo #1 – Book: “Images of America: Danville, KY”

I had stumbled upon a book called “Images of America: Danville (KY)” (Merritt, 2011) while I was preparing for my student teaching experience at the Kentucky School for the Deaf in the spring of 2017. I remember seeing a section in this book dedicated to the history of KSD, told through photographs obtained from the school’s records. When I began to mentally process what I already knew about the agricultural history of the school, my mind returned to what I had read almost two years prior, and I once again made my way to a local bookstore where I obtained a copy for this thesis. As the official first point of data collection for this case study, I went searching through this book in order to fully analyze that chapter with the intention of providing data for Research Question 1 (Telling the story of the Kentucky School for the Deaf agriculture and FFA program). The chapter is 20 pages in length, but each page contains 1 – 2 photos, black and white, dated anywhere between 1823 (school’s founding) up through the late 1950s.

While I was specifically targeting the section of the chapter briefly discussing agriculture at the school, I learned many intriguing facts along the way. The Kentucky School for the Deaf was the first state-sponsored school of its kind in the nation, and the first school for the deaf west of the Allegheny Mountains. Just as settlers were pushing westward, deaf education too was expanding. The first half of this document followed the rise and fall of buildings on the KSD campus. I am familiar enough with the campus to be able to synthesize a clear vision of the development of the school with the help of these photos showing where buildings used to be and how they were designed. According to the

author, even in the 1800s the school was aware of the needs of deaf learners and catered to them accordingly by creating open spaces that allowed for clear visual communication. My interpretation from this observation is that this school has deep roots in caring for deaf individuals and catering to the Deaf community.

Moving through the photos, not only did I view physical aspects of the campus, but also the social and educational. Locally famous and notable people that shaped the school were featured, along with everyday occurrences, such as classrooms and sports teams. I received from this document, again, the sense of community and fellowship that this school provided to the hearing impaired. In my knowledge of special education history, people with disabilities were not often given this sort of life and treatment. Often they were sent to asylums and medical institutions that acted more like holding cells than communities. This document showcased examples of KSD building community within these individuals through the use of holiday celebrations (students prepared a feast together and received presents), athletic events and rivalries (students travelled and played against local college intramural teams in sports such as basketball, baseball, and cheerleading), as well as my area of focus – vocational training.

From this document, it would appear that vocational training has always been a part of the Kentucky School for the Deaf culture – meaning, the school historically appears to place proactive focus on educating students in a trade, providing skills they will be able to use upon leaving the safe haven of the campus. Featured in the photos in this document was the KSD print shop, where students learned to run printing presses and even published their own school newspaper, which was distributed to the Deaf community even outside of the school campus. Shoemaking, home economics, agriculture and livestock handling are

all cited in the document as having been offered by the school. As a fun fact, the author tells us that vocational classes were the first to be integrated when KSD and the Kentucky School for the Negro Deaf were combined in 1954.

The most relevant photos from this document are located on pages 72 and 73. Here, we are introduced to a “Mr. Rankin,” identified as the KSD farm manager in 1957. The photos show students working in fields, planting onions and harvesting beans. Another photo shows this Mr. Rankin (no first name provided) discussing a beef cattle herd with another man, and the caption states the school also had a dairy. It excites me that the author informs us through this document that the farm land on campus provided food for the dining hall while simultaneously providing training for students. Although there is no direct mention of the agriculture education model here, I would like to explore this subject further to see if Mr. Rankin was not only the farm manager but also an agriculture teacher at the school. If so, was Mr. Rankin accredited and certified to teach agriculture education? These photos show me that agriculture education, in the formal model or otherwise, was offered at the school as early as the beginning of the 1900s.

This document shows that there is a gap in my personal knowledge of the KSD agriculture history, and I need to address this gap before moving forward with my research. I have many questions about the state of agriculture education and the school farm in its earliest days. I know from my experience working with KSD that there was a horticulture program briefly before the launch of the program they now have, which was started in 2009. This horticulture program was not run by the traditional Ag Ed model, and the teacher had an industry degree in horticulture, not an educational degree (all according to word of mouth knowledge gained during my time on campus). It was by this teacher that

the school obtained a greenhouse, which would be the start of the program as it stands today. Other gaps in my knowledge that need to be addressed include the physical location of Mr. Rankin's farm in the photos. I can make an experienced guess from the photo of the students planting onions that the farm has always been in the same location as it is now – the line of houses in the distance and the slope of the land look similar to the current farm location next to the campus, where I witnessed students raising corn and chickens in 2017. What happened between 1957 and 2017? Why are there no longer dairy or beef cattle on the farm? Was there always a continuous agriculture program that simply evolved into the FFA program in 2009, or were there gaps? Was Mr. Rankin a certified agriculture (ag) teacher, and did he have any fellow ag teachers? Who came before Mr. Rankin, and who were the educators between him and the current ag teacher?

I recognize limitations in this document, as this was found in a book produced for general public enjoyment, not an official historical record. The author cites Kentucky School for the Deaf on all photos and information, so I do believe it to be mostly accurate. I will be intrigued moving forward to find more photos and read deeper into the history to fill in the gaps not addressed by this short visual representation. I can use this document as an initial reference point that provides key information that I can use to stem further research. I now have a name for an early potential agriculture educator, and I have a better idea of what kinds of agriculture were taught on the campus. For my final product I want to locate these original photos and use them as evidence of the beginnings of ag on KSD campus. When I go to conduct my interviews with the current agriculture program and its supporters, I hope to ask them about the history of agriculture on the campus. Perhaps they will be able to

give me more information on Mr. Rankin, and may still have curriculum or documents that were used during the time of these photos to instruct students.

Research Memo #2 – Internet Searches

After perusing the *Images of America* book, I found myself turning to the internet to satisfy my newfound curiosity about KSD's history. While there is little to no information to be found about agriculture programs in deaf schools in research journals, I can sift through various news articles found online for information about the KSD program for evidence of what might be occurring. In the day and age we live in, when we want to know something about anything we immediately pull out our smart phones and start Googling phrases relating to the topic. Because KSD is so unique and relatively little is known about the program outside of local circles, the internet would be a logical first place someone may turn to if they are wondering about this school. I therefore believe it is important to do just this, and get the first perceptions that any standard web-searching citizen would get on this program.

My first web search was "Kentucky School for the Deaf history," which returned first a Wikipedia page, of course. Skipping past this, the next website I came across was entitled "Explore Kentucky History," though it only gave a very brief synopsis of KSD, much like that of the *Images* book, and returned no new information regarding agriculture at the school. The next few websites after this were the most appealing and set me further on my path. I came across the KSD official school site, which I had visited many times during my student teaching semester, but I had never really delved into the history section. What stood out most was the page about the Jacob's Hall Museum, which made me wonder why I had never walked across the street to take a look inside this conspicuously large icon on the school's campus. Reading through the page I was oriented to the history of Jacob's Hall, now the historical preservation effort for the campus but used throughout the last two

centuries for dormitories, classrooms, dining halls and more. At the bottom of this webpage one can see a section welcoming visitors to schedule a tour of the museum, and providing the emails to do so. Here my historical web search concluded, as I made quick contact with an employee of the school who agreed to gladly provide me a personal tour of Jacob's Hall. What I learned on that tour was far more valuable and accurate, in my opinion, than any website I could have stumbled upon. (Find the results of the museum tour in Research Memo #3)

My next web search would be "Kentucky School for the Deaf agriculture," which returned the name and contact information of the agriculture teacher for the school, as well as multiple news articles highlighting some events involving the agriculture program at KSD. Roughly the first 20 websites in the search were at least somewhat relevant to specifically the school, however the following select few provided me, within the context of this case study, the most interesting and pertinent information:

[Meadowbrook Welcomes Kentucky School For The Deaf FFA ...](https://farms.eku.edu/insidelook/meadowbrook-welcomes-kentucky-school-deaf-ffa)

<https://farms.eku.edu/insidelook/meadowbrook-welcomes-kentucky-school-deaf-ffa> ▼

Jun 14, 2017 - EKU's Meadowbrook Farm welcomed students from **Kentucky's School for the Deaf FFA** to "Ag Camp 2017". Campers toured the **farm** and ...

This article comes from the website for Eastern Kentucky University's educational farm, Meadowbrook, in Richmond, KY. It is dated June 14, 2017. Here is the first internet mention (outside of KSD's own website) of the KSD Ag Camp, which I know to have been a two-week summer program designed by the agriculture teacher at this school for several years. This article shows pictures of the ag camp participants feeding dairy cows, touring the farm, and posing for a group photo in front of an EKU sign. This picture shows a fairly large crowd, 30+ students and adults, all clad in matching shirts. From the article, the focus

of the tour appears to have been on animals (dairy and beef cattle, sheep, goats, and piglets) and fruit/vegetable production. The end of the article includes a short paragraph that states that the agriculture program at KSD was founded in 2009 and is the second Deaf FFA chapter in the country.

I believe this article gives evidence that KSD students who are interested in agriculture are provided the opportunity to interact with the agriculture community through tours, and that they are provided this opportunity outside of the regular school year. The picture shows that the camp has a fair number of attendees, possibly indicating that this is a popular program considering the lower average class size at KSD.

[Kentucky School for the Deaf | Kentucky Teacher](https://www.kentuckyteacher.org)

<https://www.kentuckyteacher.org> › [Tags](#) › [Kentucky School for the Deaf](#) ▼

KSD's farm-fresh festival · Bobby Ellis - October 17, 2017. 0. As part of the harvest season, the **Kentucky School for the Deaf** hosted its second annual Sweet ...

The title of the article found at this address is “KSD’s Farm-Fresh Festival” and is dated for October 17, 2017. The author reveals that KSD hosted its second-annual Sweet Corn Festival on October 6th of that year. Activities included “bobbing for apples, hay bale rolling, corn shucking and a corn-eating contest,” and members of the community were invited to join the festival where they paid to pick corn to take home (Ellis, 2017, para. 2). The principal of KSD is quoted in the article saying that this is the first time in 42 years that sweet corn has been grown on this school’s farm, that the farm has 23 acres, and that students planned everything for the festival. This article states that KSD is one of only two deaf FFA chapters. The author suggests that this is a student-led, community-focused event that recognized two students for their particular hard work (dubbing them Sweet Corn King and Queen). The article concludes with a dialogue between two students: a younger student

asks the “Corn King” how he obtained this honor, and the younger student was told that it was a result of hard work in planning. The younger student expresses interest in also becoming Corn King. Pictures of the event portray students, staff, and community members participating in and enjoying the festival.

I find that this article captures the essence of the Kentucky School for the Deaf, especially the agriculture program. There is evidence present that students are encouraged to develop leadership skills in the context of planning a community event. There is a heavy emphasis placed on the fact that students (assumed within the ag class/FFA chapter) planned and executed this event and all corresponding activities. Staff and students from all other classes in the school seem to have been invited to contribute and enjoy the festival, and the school made a concerted effort to welcome members of the surrounding community in Danville. It must be noted that the agriculture students are portraying leadership to be admired by their peers and acting as role models, as the younger student asked the Corn King (who is wearing an FFA t-shirt, apparently designed by the chapter) how he could one day be like him.

[\[PDF\] kentucky school for the deaf - University of Kentucky](#)

nyx.uky.edu/dips/xt78gt5fc423/data/04_70102_A4Fri0217.pdf ▼

Feb 17, 2012 - by the school for **agricultural** purposes in many years and is currently ... to Deaf & Hard of Hearing students at **Kentucky School for the Deaf**.

This is a PDF document that appears to be a newspaper insert for The Advocate-Messenger (a local newspaper for Danville, KY) dated February 17, 2012. The title of the insert is “Blue Jackets, Bright Futures” and highlights National FFA Week as February 18-25, 2012. The focus of the entire insert is on the Kentucky School for the Deaf FFA chapter.

There are pictures with captions along with five short articles about events, and a thank you note listing supporters of the FFA Chapter. Pictures show evidence of the following:

- Students in FFA official dress attending the Bluegrass Region Competition day with the agriculture teacher.
- Students attending Regional FFA Awards Banquet at Western Hills High School in Frankfort, KY
- Students attending the 2011 Kentucky State FFA Convention
- A KSD Senior with his beef cattle SAE project
- A KSD student with his swine SAE
- KSD FFA Community Service event, with students in FFA official dress presenting the KSD cafeteria with new drink coolers
- FFA members making food for a Livestock Expo
- The 2011-2012 KSD FFA Executive Committee (consisting of a Reporter, President, Historian, Sentinel, Treasurer, Vice-President, Community Service Chair, Alumni Chair, and Communication Chair)
- Teacher Ag Games and Teacher Appreciation Day, with students and staff interacting in both pictures
- Students in FFA official dress having fun outside of a boot store and wearing cowboy hats
- Students learning in a greenhouse and koi fish tank.

The short articles detail very noteworthy happenings for the chapter in the year prior to the newspaper insert. The agriculture program started a new agriscience project installing a fish pond on KSD's 23 acres of land. The article discusses that the land could

be used for row crops or pasture and contains a wetland and stream. The farm's intended use appears to be educational in nature and provides students with environmental stewardship and technical agricultural skills. This article also stated that the school was looking for community partnerships to assist in developing the green space. It seems that the school did not have possession of the tractor and the equipment it is known to have today, as the author says that without equipment the farm will not become a reality and is nothing but a green space at the time of this article in 2012. I would like to know if any good community partnerships came of this plea in the local newspaper insert.

Another portion of the article states that three FFA members from KSD attended National FFA Convention in 2011. The theme for this conference was "Embrace the Challenge," and the author believes this was representative of what these three students experienced as they acclimated to unfamiliar territory. The names of the students who attended this convention are listed, and I would like to reach out to them, as they appeared to be highly active that year and could provide insight into the important changes that were occurring for the program at the time. Again, it was stated that KSD has the second Deaf FFA chapter in the country behind West Virginia. The next section of articles discussed a \$3,000 grant KSD received to further develop the polyculture system they had previously received the same grant for, supported by the Kentucky FFA Foundation and the Kentucky Department of Agriculture. According to the article the agriculture teacher co-taught a course with a secondary science teacher in the school to provide students real world experience with the system, which was claimed to grow lettuce, herbs, and water plants.

Finally, this newspaper insert showcases the KSD FFA "2nd Annual Livestock Expo and Picnic," which boasted 180 people in attendance in 2011. Members of the KSD

community (students, staff, teachers) as well as the local community were in attendance, and activities included interaction with livestock, fundraising through greenhouse sales, as well as typical community events like food and games. This document is packed with a lot of information and clearly highlights some of the best moments for KSD FFA as of February 2012. This provides me with names of former students who may be of interest for interviews, as well as a clearer picture of recent history for the program. I find it evident in this insert that the program makes efforts to collaborate within the school, as well as within the local community in Danville. The community must be interested and invested enough in the program to want a full newspaper spread on the current happenings of the program.

[Lexington camp teaches hearing impaired students about cooking ...](https://www.kentucky.com/news/local/education/article44494170.html)

<https://www.kentucky.com/news/local/education/article44494170.html>

Jun 19, 2014 - The encounter was part of an **agriculture** camp hosted by the **Kentucky School for the Deaf** in Danville, a K-12 school for those who are hearing ...

This is an article about an event that occurred as part of the 2014 KSD Agriculture Camp. This article confirms that the agriculture teacher at the school is the camp creator and director, and her vision for the camp is to educate students about all aspects of agriculture because it is important to all areas of their lives. The author lists 13 students in attendance on the trip to a restaurant to be taught food processing and hygienic handling practices by a professional chef. The site visited was unique in that the chef used fresh ingredients grown on a farm, which the restaurant is located on. Students were encouraged to participate and truly got to experience all aspects of the farm, from handling animals to cooking food. The chef encouraged students to cook more and become self-sufficient at home, and students were quoted in the article as seeing the experience as very empowering

and exciting. One student said they learned more on this field trip than they could have in the confines of a classroom environment.

Perhaps the most enlightening and informational component of this article is the following quote:

“[Teacher] said the challenge with teaching deaf kids is overcoming the language barrier, especially with special terminology. She overcomes this by giving the students background information and connecting the topics to something they already know. In order to help with the learning experience, [Chef] allowed the students to use their hands as much as possible as he emphasized his visual demonstration.” (Crumbie, 2014, para. 9)

These are the kind of insights that I find fascinating and crucial for other educators to understand, right from the perspective of the agriculture teacher at a deaf program. This article to me is evidence that experiential education is effective and necessary for D/HH students. The program at KSD is collaborating within the community to provide these experiences for the students, and the students are receptive to the knowledge.

[Fillable Online Kentucky School for the Deaf Statewide 9-12 High ...](https://www.pdfFiller.com/447815236-Kentucky-School-for-the-Deaf-Statewide-9-12-High-...)

<https://www.pdfFiller.com/447815236-Kentucky-School-for-the-Deaf-Statewide-9-12-High-...> ▼

★★★★★ Rating: 4.7 - 39 reviews

Kentucky School for the Deaf Statewide 912 High School **AGRICULTURE CAMP 2018** For Deaf/HH Students & Hearing Students June 10 June 22, 2018 ...

This is an online registration form for KSD Agriculture Camp 2018. From this form can be drawn evidence about the camp itself. In 2018 the camp was held for two weeks, from June 10 – June 22. The title of the form claims that the camp is statewide, for high school students in grades 9-12, and both D/HH and hearing students are welcomed. The

medical section asks for the parent to identify the student's level of hearing (deaf, hard of hearing, or non-hearing impaired), their preferred mode of communication (ASL, Signed English, Oral, or other), whether the student wears hearing aids and if so how many, and to identify any other assistive listening technologies they use. These are items that you wouldn't see specified in such detail on your average agriculture/FFA-related camp registration form and speaks to the level of consideration to be given for this audience.

Further, evidence about some logistics of the camp can be drawn from the form. The parent is asked to specify if the student will be a "day student" or a "dorm student," and whether or not their student would be staying over the weekend between the two consecutive weeks. The weekend consisted of a camping trip from the 16th to the 18th of June. This gives us more context into the most recent camp happenings, as well as the perspective of a coordinator for a camp with predominantly D/HH participants. I hypothesize that more extensive planning must be in place to accommodate a variety of hearing levels and resulting accommodations.

As we wrap up National FFA Organization... - UK Agricultural Education

<https://www.facebook.com/...kentucky-school-for-the-deaf.../10155510720279779/>

As we wrap up National FFA Organization Week, the **Kentucky School for the Deaf** FFA officers planned a sweet surprise for UK Ag Ed. The members of this...

My personal favorite link found on this search was a Facebook post by my department at the University of Kentucky, and though it is highly personal and must be bracketed as such, this post also provides evidence of the KSD agriculture program that should be included in this case study. Because I am so close to this situation, I can speak to the backstory behind the post. The KSD FFA has a social event one night during FFA week, which serves as a fun celebration for the FFA and as a recruitment tool for the rest

of the high school. I was invited back for this event one year after my student teaching experience, and I of course obliged. Upon arriving at the school, I was met with my very excited former students, and signs that read “KSD Loves UK Ag-Ed!” and “We love you Sarah.” I am also quoted on this post about the impact the program had on me.

Along with being a touching moment for me as their student teacher, this is further evidence of the KSD program’s willingness to collaborate with others, their outreach within the school, and the social influence that this program has on both the students and adults that interact with them. It is a testament to the sense of community instilled in the students and the school, and the inclusivity of the community to those who are willing to immerse in the culture.

Looking Back: Kentucky School for the Deaf - The Advocate-Messenger

<https://www.amnews.com/2018/02/03/looking-back-kentucky-school-for-the-deaf/> ▼

Feb 3, 2018 - In 1874 **Kentucky School for the Deaf** began publishing a weekly in-house ... This trade and garden and **farm** work constitutes the only manual ...

The Advocate-Messenger is the local newspaper for Danville, KY. Periodically they will run blast from the past articles, written by the director of the Jacob’s Hall Museum, featuring snippets of the newspaper produced weekly on KSD campus as part of vocational training for the students. According to this article, the newspaper began being published under the name “The Kentucky Deaf-Mute” in 1874 and later changed to the “Kentucky Standard” in 1896. The author writes:

“From 1883 until 1942 George M. McClure was the editor of the paper. His relationships with students and wide connections with schools for the deaf

throughout the country give a glimpse of the life students and staff had in a residential deaf school and show how the community touched the lives of students and staff at the school.” (Hamm, 2018, para. 1)

This quote speaks to the value the school has historically placed on community and collaborating with other schools for the deaf. The paper itself is a testament to the value placed on training students for trades.

This particular article was returned on the website search due to the agricultural keywords, and I find it to be an interesting look at the history of occupational training on the campus. Tucked away in this article from 1943, there is a small part about the “School for the colored deaf” and their opportunities for vocational training:

“As formerly, a few of the older boys have been given instruction in shoe-making. This trade and garden and farm work constitutes the only manual training given them. The girls are taught sewing and dress-making, do all of their own ironing, and have the care of their dormitories and the dining room.” (Hamm, 2018, para. 13)

I believe that, with more time for this study, one could search through all the years of these articles and find even more mention of agriculture and the school farm. However, this is one of the very first articles that came up with this search, and therefore would be the article that someone might read first when looking for information on agriculture at the school, which makes it very relevant. Historically this tells us about the education system on the campus, and it also gives evidence that the school was teaching/training students for garden and farm work. This to me sounds like agricultural education.

Jacobs Hall Museum named one of the '10 Best Kentucky Buildings ...

<https://www.downtowndanville.com/.../jacobs-hall-museum-named-one-of-the-10-bes...> ▼

Dec 4, 2013 - ... which is located on the **Kentucky School for the Deaf** campus, one of the ... Federal Hill (My Old Kentucky Home), Bardstown; Calumet **Farm**, ...

In 2013 Jacob's Hall was ranked fourth in a KET (Kentucky Educational Television) contest of the best buildings in Kentucky. My reflections on the Jacob's Hall museum can be found in another memo, and I can attest from experience to the architectural marvel that is this behemoth building. The contest itself was meant to show the impact that some of Kentucky's most beautiful and historic buildings have on our lives and our communities. The director of the museum is quoted multiple times in the article, but specifically she thanks the Danville community for their continued support of the building and the campus. She says: "Since the standings were determined by public vote, it shows the pride this community takes in Jacobs Hall and KSD" (Hill, 2013, para. 5). The article then goes on to discuss more of the history about the building, but again I will discuss this more in depth in the section dedicated to the museum. The most important takeaway from this article is the publicity that KSD received, and the sense of support the school feels from the local community. It is also a testament to the history of the school and its imbedded importance in the state of Kentucky.

Danville PD: Bear sighted near Kentucky School for the Deaf - ABC 36 ...

<https://www.wtvq.com> > News > Local News ▼

Jun 23, 2016 - Danville Police Chief Tony Gray tells news outlets that the bear was seen at the **Kentucky School for the Deaf** Thursday morning.

Upon first read of this site, one might wonder why this would be relevant to discuss. This article is very short and only mentions that a bear put KSD on lockdown when it walked through campus. The article is dated June 23, 2016, and states that students and

staff were inside the school building for summer programs. Due to my relationship with the school, I know more behind this story. The students and staff were actually on campus for Ag Camp, and one of my students was taking the trash out that day and was the first to spot the bear. This article, though seemingly arbitrary, was still a talking point with my students in the spring of 2017, and regardless of the story behind it, it provides further evidence of school culture and summer programming. It is also one of the first things one would see if they did an internet search of KSD; at the time of the story bear sightings were a hot topic in the state, and this put KSD in the spotlight that they typically do not receive outside of the community. I remember seeing this on all the local news stations. This article also lists the principal at the time, giving historical context and lead for interviews.

I considered stopping here on my quest for websites pertaining to this case study, but I felt I wouldn't have done my best to be thorough until I had also searched "Kentucky School for the Deaf FFA." After all, this study not only seeks to understand the agriculture story of the school, but also the student perspective and the ways in which the FFA organization is being executed on campus. The search returned fewer relevant sites and many repeating sites from the first two searches, which tells me that the FFA and agricultural education are more often than not used interchangeably and within the same context in a majority of websites and news articles written about the KSD program. I decided that the following 7 hits returned the most pertinent information for this study:

[KSD FFA - Home | Facebook](#)

<https://www.facebook.com> › [Places](#) › [Danville, Kentucky](#) › [Agricultural Service](#)

★★★★★ Rating: 5 - 1 vote

KSD FFA. 370 likes · 12 talking about this · 9 were here. The **Kentucky School for the Deaf** agricultural education department was founded in 2009. This...

KSD FFA (@ffa_ksd) | Twitter

https://twitter.com/ffa_ksd ▼

The latest Tweets from KSD FFA (@ffa_ksd). **Kentucky School for the Deaf FFA** was established in 2009. KSD offers the second Deaf FFA chapter in US.

I will discuss both the Facebook and Twitter pages together, as there isn't really a lot to discuss with this but it is a key component of the program, and they are easily found by a Google search. I remember the agriculture teacher at KSD setting these accounts up while I was student teaching there. We used them to disseminate announcements and brag on students/things happening around the program. The Facebook page is used today far more than the Twitter page and is viewed by far more people. It appears to be an excellent means for distributing information, and most posts appear to receive a lot of attention. Being able to stay current on social media and keeping the organization in the public eye appears to increase support and recognition of the chapter. Though not a crucial focus of this study, it would be interesting to know if the social media presence of agriculture programs in deaf schools gains them more support and public attention, and if a social media campaign should be suggested as a means for other schools to begin marketing their program.

Gallaudet President Roberta Cordano visits Centre College - Centre ...

<https://www.centre.edu/gallaudet-president-roberta-cordano-visits-centre-college/> ▼

May 31, 2018 - Also attending was the new **Kentucky School for the Deaf (KSD)** ... Only two deaf **FFA** chapters exist in the entire country, one of which is at KSD ...

I found this article to be very interesting in that I didn't initially expect to find anything relating to KSD FFA and almost skipped past it in the search. However, upon

reading this article one can obtain a brief history lesson about the relationship between Centre College in Danville and the Kentucky School for the Deaf.

“Centre, KSD and Gallaudet have a long history of connections extending back to the early nineteenth century. Four years after Centre received its charter in 1819, KSD was created by the Kentucky legislature. For nearly 50 years, beginning in 1823, the Centre College Board of Trustees managed the school. One of the board’s initial efforts, in 1825, was to provide for the training of Centre student John Adamson Jacobs in the instruction of deaf children. Jacobs traveled to what is now known as the American School for the Deaf in Hartford, Connecticut, the nation’s first school for the deaf, founded in 1817. There, his teachers and mentors were Rev. Thomas Gallaudet and Laurent Clerc.” (Stryck, 2017, para. 4-5)

I was aware that KSD and Centre had a relationship, though I did not know how closely they were connected and the rich history that lies there. I am continuously overwhelmed and awestruck by the amazing history that KSD carries, a history that most will never know or even care to research unless they have taken an interest in Deaf Education or the school itself. I know from experience with the students and teachers at KSD that Gallaudet is a very prestigious college for deaf students, and I would love to know more about the annual “Gallaudet and Clerc Banquet” that is held at KSD. Again, I can remember the teachers talking about this banquet and even know some of the students chosen to attend, but the significance of the banquet I am unsure of. This part of the article contributes to historical knowledge and context of the case study.

There is only one small section of the article specifically relating to KSD FFA, but it is very much so worth mentioning. The article discusses how the KSD principal was talking

with Gallaudet's president and Centre College president about future collaborations and plans.

“Locally, [KSD Principal] shared news about recent KSD efforts to strengthen its agrarian programs, leveraging the 23-acres on its campus dedicated to farming. Only two deaf FFA chapters exist in the entire country, one of which is at KSD. Given Centre's interest in sustainability, farm-to-table initiatives and environmental studies, possible partnerships were discussed.” (Strynick, 2017, para. 8)

I personally feel excited that KSD's agriculture program was discussed amongst such high authorities, and I feel as though this is yet another example of why KSD is such a unique case and a successful example of agriculture programming in a deaf school. The collaboration with Centre on sustainability initiatives and the acknowledgement of the 23 farm acres on campus are interesting and exciting. One can only imagine the potential this program has, especially as it continues to gain recognition and support from someone like the president of Gallaudet. I fear the inaccuracy of the statistic I continuously see popping up in these searches about this being only one of two deaf FFA chapters, knowing now that there are at least 5 according to the National FFA chapter tracker website. For this to be unknown and unchecked at such a high level must mean that KSD is in the spotlight, along with West Virginia, though it begs the question, why aren't the others being recognized? Do they really exist, and if so to what extent? What could other deaf agriculture programs stand to learn from KSD?

[KSD FFA Invites you to the 1st of 2 Honey Bee Clinics! Why are bees ...](http://www.ksd.k12.ky.us/News/22420)
www.ksd.k12.ky.us/News/22420 ▼

KSD FFA Invites you to the 1st of 2 Honey Bee Clinics! Why are bees ... Ext. 6806 or email. Sponsored by KSD FFA ... Contact Us. **Kentucky School for the Deaf.**

This post is simply an announcement of the “who, what, when, where” of KSD FFA’s first honeybee clinic. This would not be significant, however I attended both this clinic and the follow up clinic. The first was about the importance of honeybees and the basics of starting/maintaining beehives. The second was regarding planting to attract the bees across the four seasons. These clinics were wonderful for two reasons. First, I learned a lot. The program sought out skilled members of the agriculture community that could provide sound, quality information about a trendy topic in agriculture currently. I personally benefited just from the information that was shared during those times. Second, I saw a true sense of community occurring, and what I would argue was evidence of Vygotsky’s Sociocultural Theory of Development. This theory stresses the role of social interaction on cognitive development and displays the role a community plays in making meaning of what you are learning.

At these bee clinics, I was pleasantly surprised not only to find that there were quite a few participants in attendance, but also the types of attendants. I discuss this more in my “Observations” field notes memo, but I wanted to address it here, as this is what a Google search may return, meaning this is public information. The clinic was not addressed solely for deaf, nor hearing, participants. Anyone and everyone was welcome to attend, even people who already have an extensive knowledge of honey bees, as well as people who know nothing about them (myself included). I saw hearing people, employees of the school, deaf community members, all there to learn, as well as interacting with the FFA

members who facilitated the event. This website hit shows that this program is reaching out to the community, building bridges between hearing and deaf people, in order to expand agricultural knowledge while providing social interaction and leadership opportunities for the agriculture students.

[KSD FFA Corn Festival 9-24-14 - Kentucky School for the Deaf](http://www.ksd.k12.ky.us/olc/126/page/4367)

www.ksd.k12.ky.us/olc/126/page/4367 ▼

100 Days of **School**, 1-30-14 · » Read Across America/Dr. Seuss Day, 2-28-14 · » Weather 101 with WLEX-TV's Bill Meck, 3-12-14. KSD FFA Corn Festival 9-24- ...

This link takes you to the Kentucky School for the Deaf website, into one of many folders portraying life on KSD's campus. Though no words are written here, the phrase "a picture is worth a thousand words" comes to mind. Due to prior knowledge, I knew this Corn Festival of 2014 was facilitated by the KSD FFA chapter. In some pictures on this website, you can see students wearing FFA t-shirts, seemingly conducting activities or performing in leadership roles. I recognize some of the teachers and students, and you can tell that this was a school wide event (staff from multiple departments are represented, students ranging from very young to high school are shown). Everyone appears to be having an absolute blast, and it looks to be a beautiful sunny day. The children are eating popcorn, playing outside, petting chickens in what appears to be a petting zoo, sack races, getting apples and candy corn painted on their face, riding in a make-shift train, and much more. I see the KSD art teacher running a face painting booth in one photo, and behind her are the KSD FFA banners.

Though these are only photos, they bring me a lot of joy to imagine the experiences of the little children at the event. They all seem to be having tons of fun. The teachers and

high school students running the event look genuinely happy as well. I think this link speaks not only to the fact that KSD FFA has hosted campus-wide autumn-oriented events like this in the past, but also to the pure community that this small school contains. The staff of the school appear to be passionate about the students, and the students appear to be invested in their school. The campus itself contains all grade levels, all buildings, all resident halls, and the entire school farm, all within eyesight at any given point on the grounds. The sheer proximity of the space, on top of the intimate enrollment and staff size, makes events like these seem even more special and family-like.

[KSD Opens Garden And Research Center - Canyon News](http://www.canyon-news.com/ksd-opens-garden-and-research-center/3787)

www.canyon-news.com/ksd-opens-garden-and-research-center/3787 ▼

Apr 30, 2014 - KENTUCKY – School officials for the **Kentucky School for the Deaf** in ... to Sandra Smock, Agriculture Instructor and **FFA** Advisor, the school has ...

This article reiterates several facts that other articles use when describing the KSD FFA program. At the time that it was written, this article claims that the KSD program was 5 years old, was in possession of 23 acres of land, and was the 2nd Deaf FFA chapter behind West Virginia School for the Deaf and Blind. I find out from this article (which claims its source as the current KSD agriculture teacher) that ag classes at KSD are electives that count towards graduation, and that 3 pathways are offered to students: Horticulture, Animal Science, and Ag Power.

According to the article by Canyon News,

“Each program at the Kentucky School for the Deaf focuses on helping students obtain knowledge and develop technical skills for agricultural jobs. Canyon News spoke to [KSD Ag Teacher], who indicated that the school incorporates math and

reading as well, in order to offer a natural transition into entry level college or career options. [KSD Ag Teacher] confirmed that the school encompasses 23 acres and that they plan to offer real world hands on plant and animal experiences with the building of the garden and Research Center.” (Canyon News, 2014, para. 2)

Additionally, the article goes on to say that the project’s groundbreaking ceremony was on April 10 of that year (2014) and that the students had already planted 200 pounds of potatoes. Additionally, they were going to plant five acres of sweet corn as a recipient of the 2014 FFA Food For All grant. Additional plans were in the works to plant tomatoes, peppers, onions, squash, and zucchinis, and donate food back to parents of students at KSD, as well as the local community members. Some quotes from the article, quoting the agriculture teacher and then a student, are as follows:

“...Many of the students have never had an opportunity to work with the land in any kind of food production. The response thus far has been very positive. In just two weeks there have been several times the students have asked to leave our classroom and go work in the garden on the farm. To see them this excited over plants I can only imagine their increased interest and enjoyment when we finally have a small pasture fenced off and we are working with a few calves, sheep or miniature horses. They will really become aggies then.” – Agriculture Teacher (Canyon News, 2014, para. 4)

“I am really excited to see the field full of plants. It’s a dream becoming reality! I am most excited that I can work on it for other 2 years. Ever since I joined FFA, I begged [KSD Ag Teacher] to set up the gardens of vegetables in the fields. We have both worked together to achieve the dream. Our FFA members share the same

dream. The farm gives us hope for the future, that the future will be better. Also, we can help feed other people in our city. Every town has people hungry for food; therefore, we hope we can make a dent on feeding some of those people. We have a brand new tractor for the field, and we plan on using it for the plants. I hope someday, we will be able to take care of animals in the field and build a small outdoor classroom for the teachers and students. That's why we have KSD FFA!"

– Student (Sophomore, FFA Vice President) (Canyon News, 2014, para. 5-6)

The excitement over this project is extremely evident, and gives evidence to a timeline of events showing when actual use of the 23 acres of land began (2014, 5 years after the creation of the program). The student mentions the new tractor, which was acquired a few years after the start of the program. Clearly, KSD's agriculture program is instilling the value of agriculture and its place in local communities, in the students. This article also speaks to the fact that most students do not come from an agricultural background, and often don't even have a hint of experience with agricultural ways or information. The student speaks to a vision of the agriculture program, talking about wishing for animals and an outdoor classroom. The possibilities seem to be endless for this program, and they seem to be taking advantage of them, much to the delight of the students.

Agstravaganza - Kentucky Living

<https://www.kentuckyliving.com/life-in-kentucky/features...kentucky/agstravaganza> ▼

May 1, 2014 - The **Kentucky School for the Deaf** is a small fully accredited public school for ... and the state Future Farmers of America (FFA) state convention.

Though a majority of the websites I am finding in this search pertain to Ag Camp at KSD, this one is probably the most in-depth description of what is occurring at these camps. According to this article, KSD Ag Camp is the only one of its kind in the US. This

article also reveals that Ag Camp was the “brainchild” of both the current agriculture teacher and a former principal. This principal is one that I have been referred to for interviews, so this tells me to be sure to ask about his thought process when creating this camp for the first time.

This article is one I would recommend anyone read if they have any interest in Ag Camp. It gives a comprehensive summary of things students have the opportunity to experience, the purpose behind providing these experiences for them, the passion of the agriculture teacher and the real experiences of the students who have attended.

“You might call the camp an “agstravaganza.” There is a guest speaker most days, multiple field trips, behind-the-scenes tours of agricultural businesses, numerous demonstrations, and lots of fun with cookouts, camping, fishing, and hay rides. There are new experiences most every day and lots of opportunities to touch and see. “We give our students a firsthand opportunity to become aware of how diverse agriculture is,” says [KSD Agriculture Teacher]. The ability to touch and see is especially important at this camp because the participants are deaf or hard of hearing.” (Kentucky Living, 2014, para. 4)

“They both knew that agriculture is the largest employer in America, encompassing 17 percent of the civil work force, and that KSD students, like most of their hearing counterparts, don’t have the daily exposure to agriculture that children once did.” (Kentucky Living, 2014, para. 8)

These excerpts from the article speak volumes about agricultural education for deaf students. Clearly the Ag Camp is a highlight of the KSD Ag program. Could it be the reason

why this program is more successful than others? Are other schools putting forth this kind of thought, effort and planning to meet the visual, experiential learning needs of deaf students in agriculture courses? The mere exposure to the agriculture industry is clearly a goal of the camp and perhaps the agriculture program at KSD as a whole. Placing value on providing real, hands-on experiences for these students would set a program apart and motivate more students to become involved in the industry.

This article also mentions many names and businesses that the students have travelled to and visited around Kentucky. It mentions how some of these people have taken a truly vested interest in these students and the mission of the program and continue to support and sponsor this camp. I believe this is good evidence of social capital being built for these students. Could it also be evidence of human capital, in that the investment in these students is returning a “profit” in that they are seriously considering future careers contributing to the agriculture industry and become more overall agriculturally aware citizens?

Research Memo #3 – Jacobs Hall Museum Tour

I was admittedly a bit apprehensive of my Jacobs Hall Museum tour. This was my first official mission for this case study, and I was afraid I would miss some small, revolutionary detail that might really enlighten us all about KSD and their agriculture program. I came armed only with a notebook and a pen, and a determination not to blink for even one second in this massive estate. I sat in my car taking a few deep breaths as I stared at the door from the parking lot. Again I marveled at the fact that I have lived in the area all my life, spent almost 6 months straight on KSD's campus, and yet it never struck me just how huge this place was, nor had I really ever even acknowledged its presence. Perhaps because it set away off the road, or perhaps because I was just too focused on getting from point A to point B – this is the first time that I have really had the opportunity to process all that KSD is and all that it ever has been. I felt as though I was really on hallowed ground as I walked through the door.

Though I appreciate older, historical buildings, I would be lying if I said they didn't give me a little bit of the creeps. The first thing that you notice as you walk into Jacob's Hall is just how massive the archways and the ceilings are. You begin to wonder why on earth anyone would ever need a ceiling that high, and how much does it cost to heat this place? There's a giant staircase, and I mean giant, leading up, up, up, and as you stand on the first floor you can look up through the center of the building and see all 5 dizzying levels with banistered holes in the floor – I could just imagine looking up several decades in the past and seeing young students looking back down at me. The building was awfully quiet, I felt super small and a bit out of place. I wasn't even sure where to start looking for my tour guide, so I ambled around the lower level looking at displays while I waited for

her to come find me. I jumped a little when I heard her voice through the extreme silence calling for me from another room, and went off through a room that had been converted into several office spaces to find her. She, the museum coordinator, explained to me that her office, along with those of a handful of other KSD employees, resided here in this space.

She led me back out to the main entryway where we talked briefly about my case study endeavors, then she began her history lesson. I was in the building for about an hour and a half, and by the time I left there I was feeling mystical, like a time traveler stepping in and out of the ages. The museum director and I, being the only two people in the building (I assume, though you wouldn't really know because it's just so massive), had a very light, conversational tour, and by the end of it we were chatting like two friends exploring a new place. We jumped around the timeline and took rabbit holes in our discussions, but here I will summarize what I learned by organizing the notes I took:

Jacobs Hall was built in 1857, 34 years after the founding of the Kentucky School for the Deaf (then under a different name, as noted below). This was to be used as the main building and throughout time would take many forms. The following overview of the building can be found on the KSD website:

“Jacobs Hall was continuously, from 1857 until 1965, the residence for female deaf students enrolled at the first state residential school for the Deaf in Danville, founded in 1823 as the Kentucky Asylum for the Tuition of the Deaf and Dumb with the name changed to the Kentucky Institution for Deaf-Mutes and, in 1905, to the Kentucky School for the Deaf. Female students lived in about half of the living space of Jacobs Hall for 10 months of the year until after World War II,

then two months straight with a weekend with parents, and later 1 month straight with a weekend with parents. By 1840 students enrolled for up to ten years, as long as they were making good progress. About 100 girls lived in Jacobs Hall by 1890. On the right side of the building on each floor were apartments - for the superintendent and his family (first and later second floors) and essential staff members. Successive KSD superintendents occupied this residence from 1857 until 2002. Nineteenth and early 20th century census records list the students and superintendent as residents of the Kentucky Institution. We have a student card for each student who attended the school from 1823 to the present. Each card shows the student's years of attendance, status on leaving (graduate certificate, certificate of attendance, and other information). The Museum has been open since 2007. Many of the rooms have been restored to their nineteenth century look and several are furnished as they were in the late 1800's – dormitory rooms, superintendent's quarters with two parlors, dining room, study. The furnishings are late Victorian, many donated by the descendants of John Jacobs (teacher and superintendent from 1826-1869).” (Jacobs Hall Museum, n.d., para. 2-5)

When KSD first opened, students could enroll from age 11 all the way to age 33, with most students over the age of 20. Students would come to campus for 10 months out of the year without leaving Danville, because it was too expensive to go home every weekend (students attending KSD in 2019 come to campus for the normal school year, however they get to go home on Fridays and return Sunday evenings if they are a residential student). Students would bring big trunks with all that they would need for the school year, and they would travel by train to nearby stations where staff would meet them and bring

them in to campus. There was a tuition, and students enrolled for 3 years. If they were making “good progress,” they were allowed to pay to stay longer. (Today, this is a state-supported school with no tuition, and students can enroll in preschool and stay to the age of 21) One of the most interesting new pieces of information I learned was that KSD was not just a school for the D/HH students in Kentucky (as it is today) but rather it was a place where all students in the south could attend, and was built for such a purpose via a federal land grant. KSD is the 4th oldest deaf school in the nation, with only a few years between the first deaf school being created (1817, American School for the Deaf) and KSD’s creation. The population of students declined near the onset of the American Civil War, as more southern states opened their own schools, possibly to keep their states’ students in line with their philosophies as successions began and Kentucky became a border state between the North and the South.

The bricks that Jacobs Hall is made of were all made on KSD’s campus; the walls are incredibly thick, and all interior walls are at least a foot deep with the bricks made from clay on school soil. In fact, KSD was totally self-sufficient like this, all the way up until after World War II. I learned of the massive land area that KSD once occupied, most of which was used for farming and producing food to feed students, staff and visitors alike. As the curriculum of KSD in the early years was described to me, it began to seem as though KSD was treated more like a trade school, with a mix of reading, writing and arithmetic thrown in for good measure. The girls who attended the school worked in the laundry area as their contribution to a self-sufficient campus, which was seen as an appropriate vocation for them. Students and staff would label their clothing, and then it would all be collected and washed in loads together by female students. Additionally, I was

shown large rooms in which there used to be rows upon rows of sewing machines – girls took sewing classes as their vocation. The girls were kept under close watch, not allowed to leave the building without a chaperone, along with other restrictions.

However, it would seem that being a male student at the Kentucky School for the Deaf in the pre-World War II days would've certainly been the life to live. Boys were allowed free reign of campus and downtown Danville, with no supervision, often spending lots of time in town and even living in rented spaces above the shops on Main Street! Woodworking, printing, and farming were the vocational education opportunities for the boys. Figures 2.1, 2.2, and 2.3 in this document show some historical evidence of vocational education on KSD campus (Copy of photographs in the Jacobs Hall Museum Archive. Used with permission). Figure 1 is an exhibit on vocational education, which includes a set up that represents the laundry room the females would've worked in, as well as some woodworking tools and pictures of the boys working. Figures 2.2 and 2.3 show a very nice chest of drawers that was made by the KSD carpentry class between 1892-1893. It was sent to the World's Fair as part of an exhibit of work from deaf students in deaf schools, according to the museum director.

Perhaps the most pertinent exhibit that the museum director showed me was a series of photographs showing evidence that agriculture had occurred throughout time on KSD's campus, with most evidence seen in pictures dated to the 1950s (why this time frame, I am unsure). The museum director could recall for me the names of 2 farm managers, Rankin and Lausman, and Christman, who she says ran the kitchen garden, all apparently from this mid-1900s time frame. My ears of course perked at the name Rankin – I have thought of

him for two years, since reading his name in the *Images of America* book. I was excited to finally be one step closer to knowing who this man was.

The photos on the wall have all been captured, as they were, here in this memo, however I was delighted when the museum director offered to share these photos with me digitally when she noticed my intensity in taking these pictures with my phone. We made a plan for me to return the next week with my external hard drive, and she would help me scan these photos in for my thesis. I am still overwhelmed by how exciting that was, and how kind a gesture! Those can be found in the “Pictures” memo.

Figure 2.4 of the below photos corresponds to Figures 2.7, 2.8, 2.9, and 2.10 (Jacobs Hall Museum Archives). The top photo in Figure 2.4 is a shot of KSD buildings on the KSD property, with the farm surrounding it. I am told that this photo showcases the barn and a cottage for the farm manager/gardener. The other 4 photos in Figure 2.4 are captured more clearly in Figures 2.7-2.10, and the captions on them are as follows:

Figure 2.7: “A number of fine Hereford cattle have been purchased and placed on the school farm for fattening and butchering to supply our school with fresh beef. This is the first time the school has ever owned any beef cattle. These cattle should do well on our bluegrass pastures. Shown above are our farm manager, Mr. Rankin and Dr. Lee discussing the feeding of the cattle.” (Jacobs Hall Museum, Our First Herd of Beef Cattle at KSD, 1957)

Figure 2.8: “GARDEN SCENE – Spring has certainly arrived from what the picture above shows. Mr. Rankin, the school’s farm manager issued his yearly call for help in setting out the onion crop. With plenty of volunteers, it is a simple matter to get

the sets into the ground. Mr. Rankin stands at the right in the rear near the truck. Mr. Grow is in the center of the picture. The boys are of the intermediate group.” (Jacobs Hall Museum, *Garden Scene at KSD, 1959*) ** NOTE: This photo corresponds to the top photo on page 72 of the *Images of America* book, with a similar caption.

Figure 2.9: “Over at the school farm the annual Onion Planting Party was held Friday afternoon. Shown above were small boys lined up, each with a pail of onions ready to plant his row. At left was Mr. Daniel Middleton, was a farmer, flagging the send off. At right, behind the boys was Mr. William Rankin, the school farm manager. Next to Mr. Rankin was Mr. Joe Helton, boys’ Supervisor. Onion planting at the school by that method had been going on for many years. The picture faced north and beyond the boys one could see the extensive school gardens...the onion crop and the various other vegetables grown in our garden provided a generous supply of food for use in the school dining room.” (Jacobs Hall Museum, *KSD School Farm, 1958*)

Figure 2.10: “Mr. William Rankin and his crew, also a number of our boys harvesting the year’s potato crop. That year the eight-acre field was planted at the far end of the school’s lands on Stanford Road. The crop was of excellent quality.” (Jacobs Hall Museum, *Harvest Scene at KSD, 1960*)

For these photos, we have no doubts what is happening in the scene, and the captions not only fascinate me but make me giddy to find more crucial information to piecing together the agriculture story on KSD’s campus. I finally learn the full name of William Rankin, I learn of the onion and potato crops that seem to be a staple, and I learn

when the school got their first herd of beef cattle, even finding that this farm manager was a Hereford fan. The captions all speak to the necessity and use of the farm products in feeding the school's campus. I see that "volunteers" were needed at times, which makes me wonder if these were students or community members, and if they are students, were they always expected to work the farm, or only on an as-needed basis, as with the laborious tasks like planting onions or harvesting potatoes? The other names mentioned in the photos do not sound like any that I have heard previously, though I am glad to have note of them in case they come up in future research.

The photos shown in Figures 2.5, 2.6, 2.11, and 2.12 all show more evidence of agriculture on KSD's campus (Jacobs Hall Museum Archives). At the top of Figure 2.5 is a photo of what is named the "Gardener's Cottage," which seems to match the small white structure in the farm overview photo in Figure 2.4. I would later come to find out in my research that the farm manager and the gardener were historically always provided a place to live on the farm. The other photos in Figure 6, below the gardener's cottage photo, all show what appear to be students working alongside adults to plant rows of crops, and to harvest from what appears to be a type of bean plant. The photo on the bottom right side of this figure matches a photo found in the *Images of America* book, which was there captioned to tell us that the man in the photo is Mr. Rankin, directing some boys in the harvest. This caption, on page 72 of the book (as found in the corresponding researcher memo), confirms that they are harvesting beans.

Figure 2.6 once more shows boys working to hoe fields and plant crops, while this series of photographs also portrays the animal husbandry side of the farm as well. The top right photo in Figure 2.6 appears to be a man kneeling down in front of three hogs; directly

below that looks to be a large vat of something hot and steaming, with hanging carcasses visible in the background. I believe this is showing the men in some step of the process of butchering meat, as mentioned in the caption of the Hereford cattle photo. Below that photo two men stand again in the same area, with many carcasses hanging behind them, and a table with buckets between the two of them. With my limited meat processing knowledge, I would make a guess that they are cutting the meat up off of the carcasses on that table. They are both wearing long trench coat-like outfits, perhaps to prevent contamination of the meat or to protect themselves from the less-than-pleasant products of butchering meat. The remaining two photos in the bottom of Figure 2.6 appear to be Holstein dairy cattle in a dairy barn; one photo shows a man peeping around the back of one cow, seemingly like he is milking them. The other photo shows three men smiling with some cute calves who seem comfortable with the human presence, even allowing the males to hug them around the neck – perhaps bottle babies?

The final two undiscussed figures in this series appear to be significantly older than the others, which all are presumably from the 1950s. I would guess Figures 2.11 and 2.12 to be dated somewhere near the turn of the century. Figure 2.11 shows a large group of younger and older males, all dressed almost identically, hoeing and watering a plot of land with neat rows of plants. What I find interesting here is the black males working alongside the white males; from what I have read, the school had a building for the “colored deaf,” but they were always kept separate, and the school did not own any slaves, again, from what I have read thus far. I would love to romanticize this photo, saying that the only time the racial divide was crossed was in pursuit of agriculture, however I will not be this naïve and will have to admit that I’m unsure why, at this era, the two groups would be working

together (I will speak more to this school for the “colored deaf” shortly). Finally, Figure 2.12 shows 4 little boys – 3 boys atop a donkey, while the fourth boy appears to pet his nose or keep the animal still for his friends (Jacobs Hall Museum Archives). Again, the boys are all dressed in earlier era clothing, and though I cannot say that the school owned this donkey or that this picture was directly related to farming on the campus, I can say that agriculture and livestock were embedded in KSD’s earliest culture.

The museum director admitted that she didn’t know a whole lot about the history of the KSD farm, outside of the names of farm managers and the handful of pictures there on the wall. She did tell me one story that gave me a smile: Mr. Christman was in charge of the garden and picking the strawberries. One day he noticed that the boys working the garden were being rough with the berries, and often would squish or bruise them due to carelessness. He invited the girls to come try their hand at picking the strawberries, and saw that they were much gentler, and “knew how to do it,” as the director said. From that point on, the girls were assigned the task of picking strawberries from the school garden, which appears to have been the only involvement any female had, historically, with agriculture on the school farm. I was told this story while standing next to the photo in Figure 2.13 below. The caption under this photo reads:

“Ever since we remember our school garden has produced delicious strawberries which have delighted the hearts of our students. This year’s patch is located near Second Street and the picture facing north shows Jacobs Hall in the distance. Caught in the picture left to right are Nancy Hillman, Lula Mae Morgan, Kay Slaven, Darlene Whitt, Wanda Taylor,

Wanda Branson, & Joyce Smith. They picked 168 quarts of berries.”
(Jacobs Hall Museum Archives, Strawberry Time, May 1959)

After our tour of the agriculture exhibit, we continued on the last half of the tour. During this time, I learned more about the vocational program of bygone days at KSD. As mentioned, there was a school for African American students, referred throughout time in all accounts as the “colored deaf” school. It wasn’t even on the same side of the street as the white school, and supposedly the two operated independently of each other, under the same jurisdiction as KSD. Colored students were taught by white teachers, however, and the museum director told me that their sign skill was not given as much attention as the white children, which made them harder to understand. Though they were not slaves, it would appear that they were treated similarly, trained to function only in housekeeping roles and serving others as laborers. The colored deaf students weren’t allowed to use any of the vocational equipment at the same time as the white children, and could only use it when they were not in use, such as very early in the morning. While the white children (pre-integration) were taught trades such as printing, carpentry, agriculture, sewing, the colored children were taught the “servant” trade, such as cooking, cleaning and yard work. I was told that their yard work, however, was not the same as farming, but rather general grounds upkeep. As mentioned in the *Images of America* Book memo, the vocational program was in fact the first area of the campus to integrate, post-segregation.

As we neared the end of our tour, we discussed the ebb and flow of history at KSD, the activities that have been available and the fluctuation in enrollment. Even in the late 1900s the school boasted much larger student bodies than the average 100 total students the K-12 institution has in 2019. I had heard of the Rubella outbreak many times during

my journey into the Deaf world since 2016, and on this tour I was given more context for this disease as I saw the huge spike in school enrollment when the “rubella generation” came of school age. The largest enrollment of KSD’s history came after the rubella outbreak of 1963-1964. Rubella (also known as the German Measles) was largely eradicated in the US after this outbreak, when a nationwide vaccine became available. As I’ve been told, many thousands of pregnant women contracted the disease, which causes babies to be born deaf. Figure 2.14 shows a photo I took at the museum, which appears to be a photo of all newly enrolled students in 1971, with the caption “The Largest Enrollment in KSD History, 1971, Eighty Students.” The picture appears to be mostly elementary age students – which the rubella babies would have been, 6-7 years after the outbreak. (***Note I did not do any extra research here, this is all merely notes taken from my tour and speculation from the photo, so this may or may not be entirely medically accurate)

Though that information may seem unrelated to agriculture on the campus, it does give context to the contrast between KSD’s past and present campuses. There are exhibits in the museum showcasing athletic uniforms and trophies for teams that the school no longer has, like football and cheerleading. I was most impressed by the museum’s display of a former cub scouts troop of the KSD boys, because I would think that the cub scout director may have faced some of the same questions that our agriculture teacher faces today regarding the FFA, and making an organization designed for the hearing students “work” for deaf participants. The museum director and I lamented these special opportunities that are no longer offered at KSD, for one reason or another. Perhaps the most obvious reason is the sheer number of students it takes to have a club or a team. A football team alone requires a significant number of people, as does a cheerleading team. I have no doubts that

even when enrollment was at its highest, the boys probably played all the sports, were a member of the cub scouts...whatever the school had to offer, it probably took all hands on deck to make up a team of anything. As medical technology has advanced and as educational reform has run its course, we simply have less deaf people than we used to. Deafness is now considered a low incidence disability. Our school systems are better equipped to educate them. Students always have a choice as to whether they prefer to be mainstreamed in their home district or attend the Kentucky School for the Deaf. I read articles for my literature review and have heard it said by some of my D/HH students, that sometimes that decision on which school to attend can be extremely difficult due to social and societal pressures. Simply, KSD does not have the enrollment numbers it used to. However, does that mean they deserve any less opportunities?

The tour ended with the museum director and I pondering this question, as she took me back to the first floor to show me the final display on the printing press and the newspaper produced by students on the campus. Historically, it was found that printing was a trade that deaf people were able to do as it required no hearing ability. The school taught boys this trade and they were often sent out to do this for a living. The school produced many, many, many newsletters over the many years the printing press was in existence, and even continued some of that into the age of computers. The printing press served a dual purpose: teach the boys a skill, and provide a mode of communication within the deaf community. I would later acquire the decades of archives of this newsletter from my new museum director friend, and I would use this resource to construct my historical timeline of agriculture on KSD's campus. I spent a good amount of time perusing these newsletters, and I found that the material was not only news from the school, but news

from school alumni, current events, and fun tips or anecdotes. The newspapers would be shared amongst other deaf schools, who would also have a printing press and could send news about their school. In this way, the deaf community stay connected to each other and to the school that had become more like home than their actual homes. I am beginning to find that KSD is more than a school to the deaf community. KSD was once (and perhaps, arguably, still is) their home territory, the foundation of the Kentucky Deaf network. Alumni are kept close record of, and throughout history the newsletter would report whenever someone moved, visited relatives, became ill and ultimately passed, got married, had children – the school didn't stop caring about its kids after they left. It was a lifelong home and refuge.

I ended my tour feeling a mixture of emotions – weirdly calm and simultaneously overwhelmed by knowledge, my head swimming with facts and ideas. It was clear that I had bit off a chunk of a long, deep, rich history, and I fear this thesis cannot do it all justice. However, I will use what I know to do my part in making sense of the history of a significant facet of life at KSD – the farm.



Figure 2.1

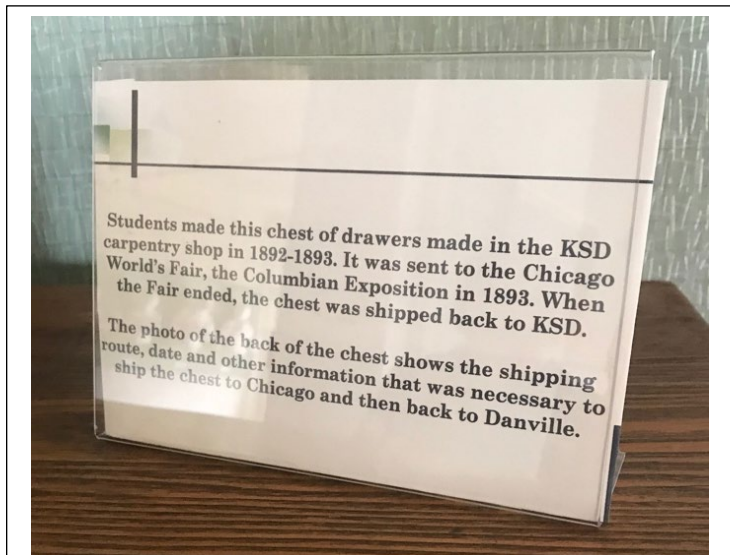


Figure 2.2



Figure 2.3



Figure 2.4



Figure 2.5



Figure 2.6



Figure 2.7



Figure 2.8



Figure 2.9

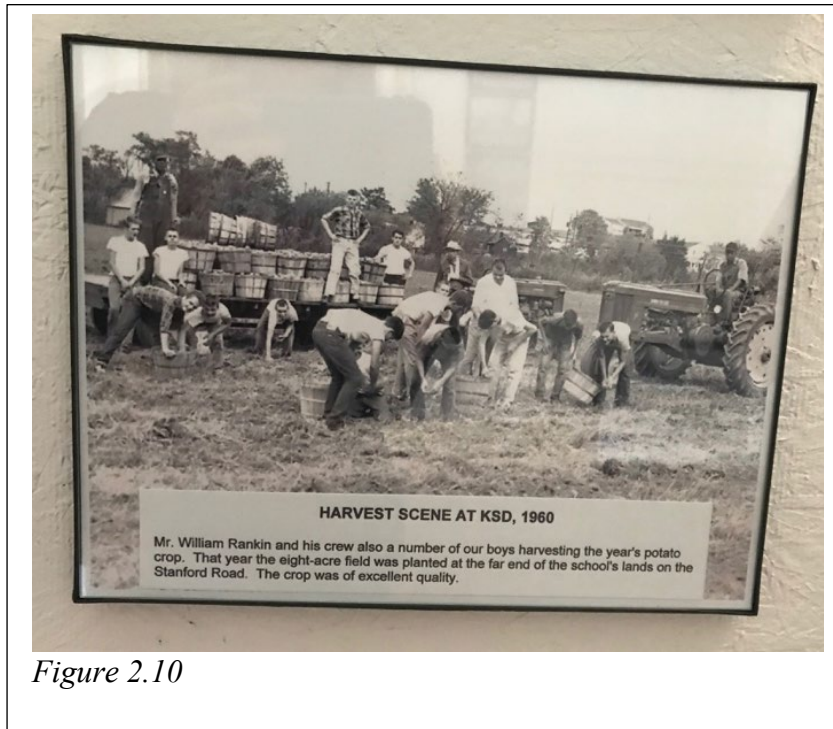


Figure 2.10



Figure 2.11

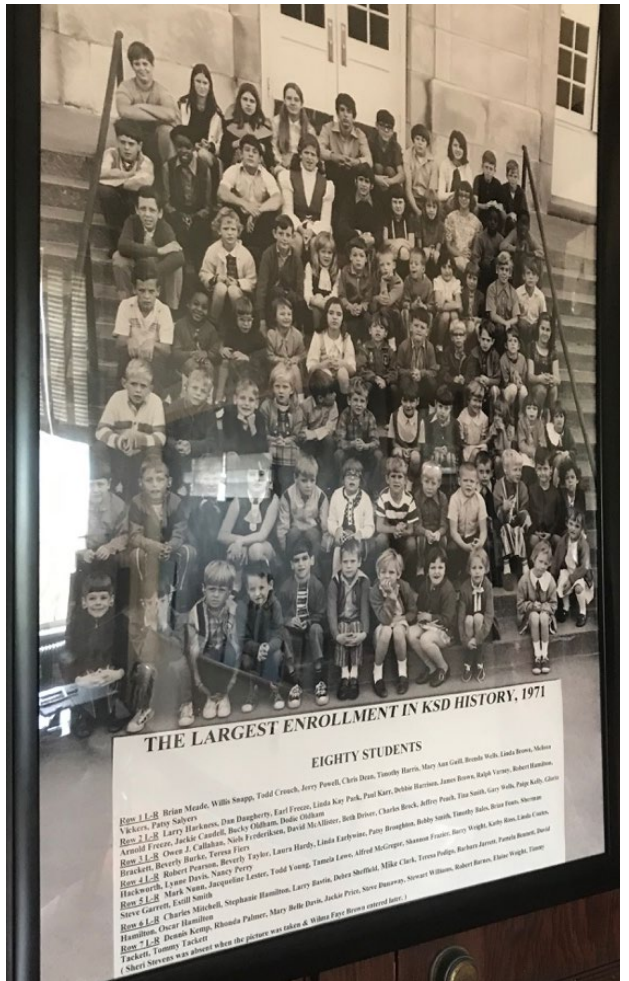


Figure 2.12



Strawberry Time, May 1959
 Ever since we can remember our school garden has produced delicious strawberries which have delighted the hearts of our students. This year's patch is located near Second Street and the picture facing north shows Jacobs Hall in the distance. Caught in the picture left to right are Nancy Hillman, Lula Mae Morgan, Kay Slaven, Darlene Whitt, Wanda Taylor, Wanda Branson, & Joyce Smith. They picked 168 quarts of berries.

Figure 2.13



THE LARGEST ENROLLMENT IN KSD HISTORY, 1971
EIGHTY STUDENTS

- Row 1 L-R Brian Meade, Wilho Soapp, Todd Crook, Jerry Powell, Chris Dean, Timothy Harris, Gary Ann Gull, Brenda Webb, Linda Brown, Michael V. Kavan, Patty Sabers
- Row 2 L-R Larry Harkness, Dan Daugherty, Earl Fress, Linda Kay Park, Paul Kay, Debbie Barone, James Brown, Ralph Varco, Robert Hamilton, Arnold Fresser, Jackie Caspell, Buck's Oldham, Dacie Oldham
- Row 3 L-R Owen J. Callahan, Nicki Fredericksen, David M. Altier, Beth Brewer, Charles Brock, Jeffrey Frank, Tina Smith, Gary Webb, Paige Kelly, Clara Brinkhoff, Beverly Burke, Teresa Elert
- Row 4 L-R Robert Pearson, Beverly Taylor, Laura Hardy, Linda Earbylin, Patsy Brangham, Bobby Smith, Timothy Babin, Brian Dean, Steven Hackworth, James Davis, Nancy Perry
- Row 5 L-R Mark Nason, Jacqueline Lester, Todd Young, Tamela Lewis, Alfred McGeorge, Shannon Francis, Barry Wright, Kathy Ann, Linda Graham, Steve Garrett, Estell Smith
- Row 6 L-R Charles Mitchell, Stephanie Hamilton, Larry Davis, Debra Shefflat, Mike Clark, Teresa Poljan, Barbara Jansen, Pamela Brown, David Hamilton, Oscar Hamilton
- Row 7 L-R Dennis Kemp, Rhonda Palmer, Mary Belle Davis, Jackie Price, Steve Dunaway, Stewart Williams, Robert Brown, Elaine Wright, Tommy Tackert, Tommy Tackert
- Sheryl Stevens was absent when the picture was taken & Wilma Fay Brown entered late.

Figure 2.14

Research Memo #4 – Historical Data: Pictures

I returned to Jacob's Hall Museum on a rainy day with my external hard drive in hand, ready to collect photos and documents the museum director had offered to collect for me on my first visit. Entering that massive building is like stepping back in time. After spending an afternoon walking every inch of the place the week prior, it felt familiar and welcoming. Knowing the story of the school better and imagining the generations of students who had ran those halls made the big historic building feel smaller and more charming – a feeling I have never felt in an old building before. A sense of solemn appreciation and peace came over me as I walked through the quiet hall to the back office where my new friend was stationed. Armed with a scanner and a box of pictures, we spent a calm hour digging through the selection of aged photographs she had picked out for me, while a computer in the background steadily copied files upon files of newspapers from the many decades of KSD history into my data pool on the hard drive. Perhaps it was the rain creating a soothing atmosphere, perhaps it was the familiarity after the tour, but all I know is that going through those pictures has thus far been one of my favorite moments in this research process. All photos to follow in this memo come from the Jacobs Hall Museum Archives.

I am quickly realizing it is hard to stay on track and succinct when telling the story of agricultural history on the Kentucky School for the Deaf campus. Ag truly runs deep here. With so many years and so many changes since 1823, I could easily write this entire thesis as a historical analysis of the school's farm, which was actually my original plan for this thesis, but I feared losing the opportunity to tell the current story of the FFA program if I confined myself to the past. I only had one shot at this whole thesis thing, I have to

make it count! This school deserves the most comprehensive story I can pull together. This means I can only dedicate so many pages and so much of my limited time to sifting through the years, but I believe there is way more to be told than the surface I am scratching. I find myself getting overzealous as I get lost in conversation with the museum director, floating back in time as the stories flow through my mind (I have always been a sucker for a good storytelling session). One could easily be overwhelmed by the sheer amount of data that can be gleaned from books and articles about KSD, but luckily I learned on this visit that pictures are truly worth a thousand words. The very first thing I learned on my very first visit to KSD three years ago is that these students are visual learners. Perhaps my historical analysis of their learning space ought to be visual as well?

Back to the task at hand. The museum director and I sat together and scanned photos into a folder on her computer, and as we went she told me tidbits of knowledge that the pictures brought to her mind. Most of the pictures are of people working on the farm, however I received a few photos of the property and the buildings. We picked out Jacob's Hall on a 1939 map of the campus (Figure 3.1) and then placed ourselves between 2nd Street and 3rd Street. To my surprise, this was the first time I really grasped that the current school grounds were actually all farm land (on the upper half of the picture, above 2nd Street), and the school at that time was contained in the space between 2nd and 3rd Streets. In the upper righthand corner of the photo I was shown the old barn, presumably where the cattle were kept that we see in other photos. Ironically, the building that houses the agriculture program today was a large, dense orchard in 1939. Along with this map, the director showed me the "old Argo building," which was the original vocational training

location on campus. A fun fact about the building: it was featured in a movie called “Raintree County” in the 50s.



Figure 3.1

This space between the two streets now has other businesses and almost all the buildings from that era have been razed, however there is one important building in this area that still stands. Next door to Jacob’s Hall is a building referred to as the “engineer’s house” (Figure 3.2) At one time an engineer for the campus did live there, however for a long while in KSD history this was designated the home of the farm manager. The director knew for sure of at least one manager that lived there, the last one before the farm became nonoperational, in fact she bought her house from him at a nearby location; however it is

predicted that several subsequent farm managers had resided in this home. Today it is the location of an Edward Jones financial business (Figures 3.3 and 3.4).



Figure 3.2



Figure 3.3



Figure 3.4

Side story: after I left the museum that day I walked next door with the intention of taking photos of the engineer's house as it stands today. I realized once I was standing outside that I might look a little creepy randomly taking photos of this business. I worked up the nerve to walk inside and speak to the receptionist, who was incredibly kind and conversational. I explained what I was doing and asked for permission to take a photo, and she warmly allowed it. In fact, she seemed very interested in my story and was unaware that this used to be the home of a farm manager, so it was fun getting to share my new knowledge almost immediately after learning it myself. I was so happy I wound up inside the place too, because the receptionist pointed out the historic features of the old home that were untouched by time. This included a beautiful staircase, stained glass window, and an ornate fireplace. What a unique workplace for this business! I knew one thing for sure after being inside both this home and Jacob's Hall – KSD didn't cut corners on making their buildings aesthetically pleasing and welcoming.

You can also notice Second Street with a car passing in the background on the left side of Figure 4. Notice the Edward Jones sign, and behind that is the brick building, Brady Hall, on KSD's campus. The small green space between Brady Hall and the Edward Jones building is where KSD's farm is today. Thus, the Engineer's House, which also housed farm managers at some point, would have been overlooking the farm from across Second Street, on the side of the road with the rest of the KSD buildings during that era.

I found other photos of buildings on the campus as well. There are two photos of the old Argo building, built in 1888 (Figures 3.5 and 3.6). This was the first building built specifically for the purpose of teaching trades. I was also provided maps from a fire insurance company that had drawn up KSD's campus in the late 1800s/early 1900s. In the

maps from 1886, 1891, and 1914, you can see the campus progress from having no building there, to having Argo, and then to having two wings built on to the back of the Argo building (Figures 3.7, 3.8, and 3.9). I can also see what appears to be a representation of the barns on campus in these photos, though they are not marked. I assume this based on Figure 10, which is labeled as “Farmland and Buildings 1900s,” and shows a view from what I would assume to be the top of Jacobs Hall, across the road, capturing what appears to be the old Argo building, the gardener’s cottage, a barn, and vast farmland. All of this is incredibly interesting if you have been to KSD’s campus lately. I imagine I could go to the top of Jacobs Hall and replicate this photo. This time, you would see the new Argo-McClure building (built in 1964), and in place of farmland you would be able to see Brady Hall, Kerr Hall, and other buildings all confined to the 23 acres left now in KSD’s possession.

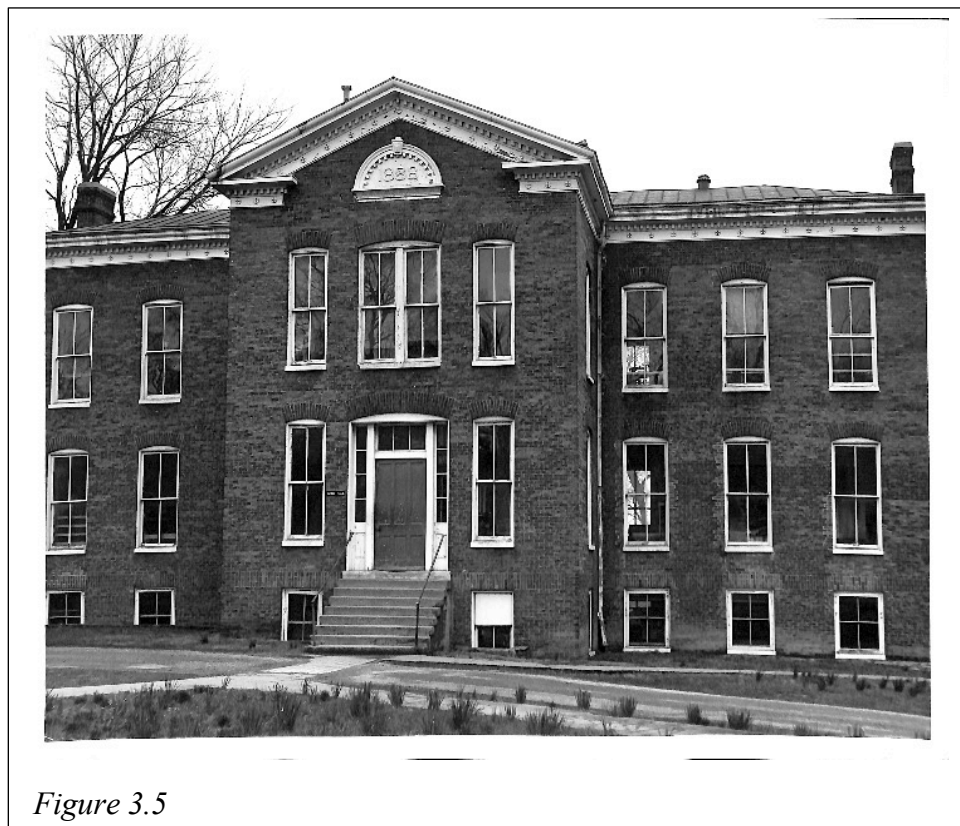




Figure 3.6

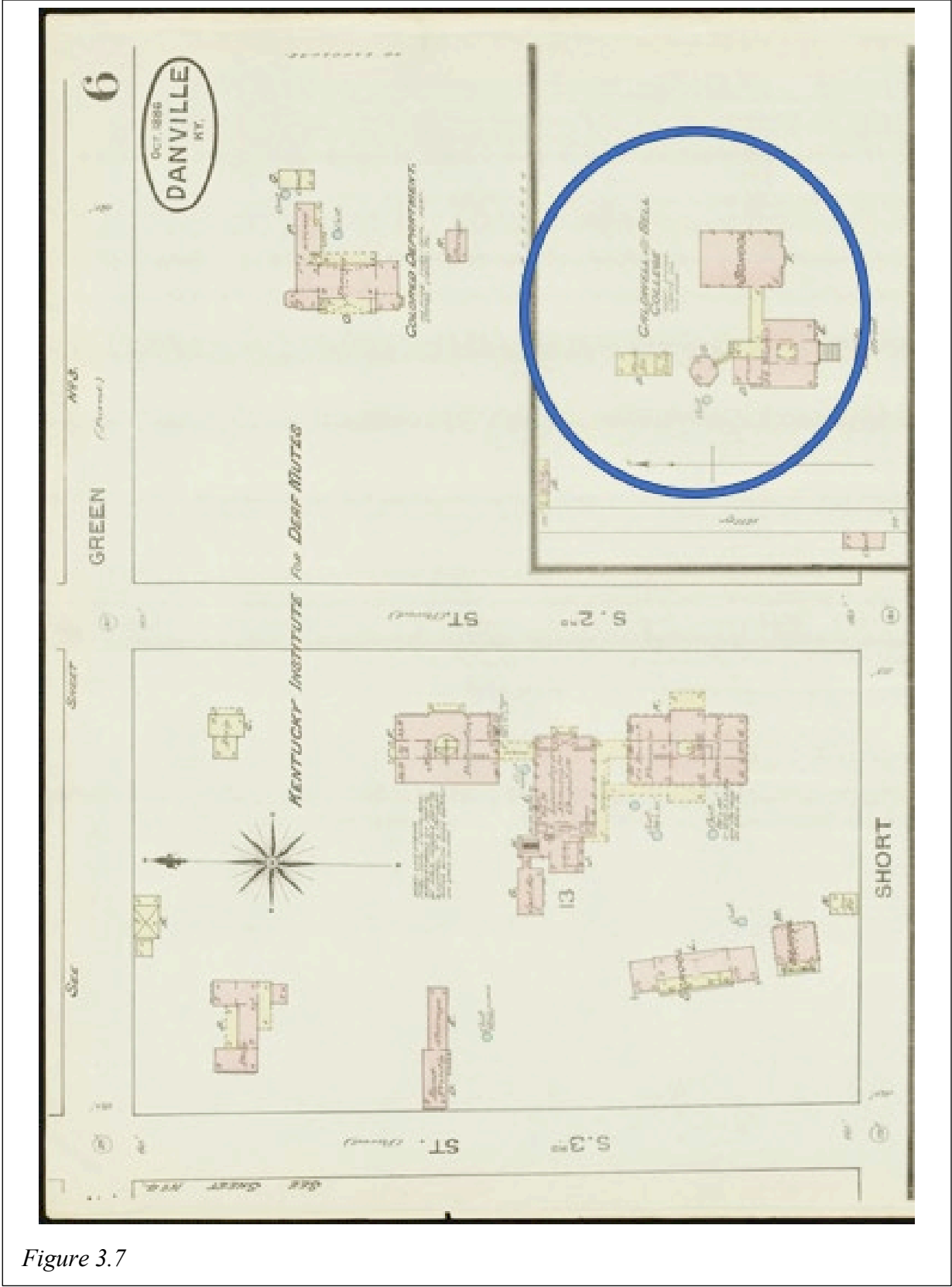


Figure 3.7



Figure 3.8

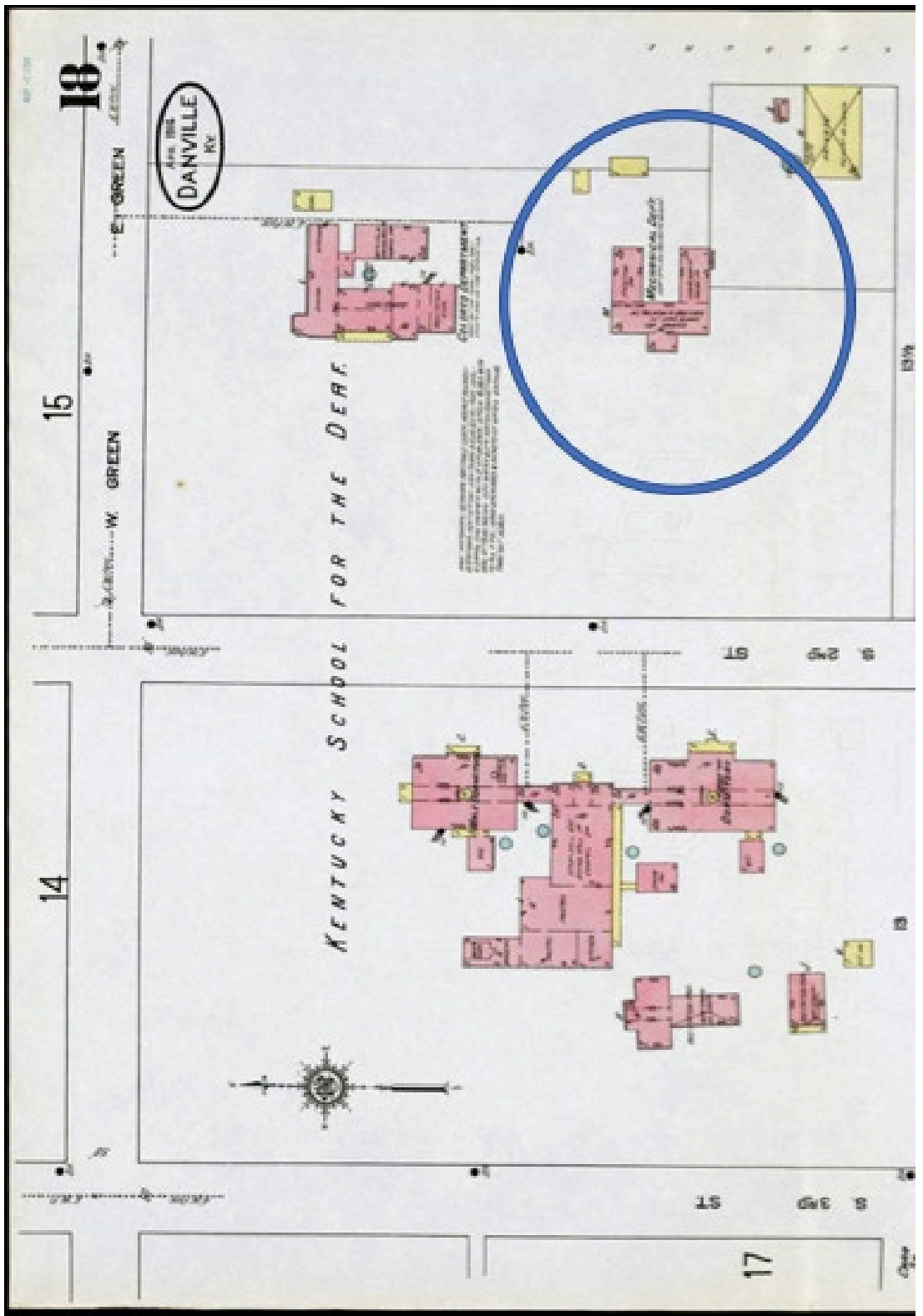


Figure 3.9



Figure 3.10

After perusing the structural photos, I was able to scan in some that really caught my eye. There is no better evidence that agriculture existed on this place than photos of young male students planting seeds in a plowed field and harvesting the fruits of their labor (Figures 3.11 and 3.12). Figure 3.11 carries the caption “Thompkins Farmhand with Jack 1910.” I’m not sure who or what Thompkins Farmhand or Jack might be referring to, though I speculate this might be referring to the two men towards the center-right portion of the photo. I find Figure 3.11 particularly interesting knowing that at this time the “colored” school and all people of color were kept totally separate from the white students; in this photo, however, it would appear that the two groups are working alongside each other to prepare this field, taking a break to pose for this photo. In the background appears

to be the barn to the left and the gardener's cottage on the right. According to my historical research, the cow barn was renovated in 1910, but it included a large silo, which I do not see in this photo. Perhaps this is not the cow barn, but a place to store equipment, house the horses, etc.



Figure 3.11



Figure 3.12

In the next photo to be presented we get a view of the same field in the 1910 photo (Figure 3.11), but this time the shot is farther back, next to the barn (Figure 3.13).

This close-up view shows windows open on the side of the barn, which might confirm that this was where they housed their horses. This photo is captioned “1950s” and appears to be younger elementary to middle school aged boys, planting something out of large tins that resemble repurposed coffee cans – my guess would be onions or potatoes based on the way the boys appear to be carefully placing each seed on their hands and knees. However, all the harvest photos I have appear to be green beans, so maybe they are planting those as well. I see at least three older men distinctly in the photo, with two other men who are too indistinguishable to say with any certainty their age. A man in a suit and tie appears to have his hands in his pockets in the background observing, while a man in

the background on the right appears to be a farmhand. In the foreground on the right appears to be a man who could be the farm manager. Based on the time frame given of the 1950s, it is possible that this is Mr. Rankin, though this man appears to be older and have a different body build than the lanky Rankin. It is possible that this could be Mr. Lausman, who passed away in December of 1953.

*** Note: I left those last few sentences speculating about the farm manager, because that is how I initially interpreted the photo compared to the others I had available. I can confirm now that this is in fact Mr. Henry Lausman, based on the caption of the photo on page 115 in the Beauchamp book, mentioned in the Historical Timeline memo. This photo is printed in that book, and there it is captioned “Gardener Lausman with the annual onion party planters.” So I can now confirm this was taken within the last few years of Mr. Lausman’s life, and that the boys are planting onions.



Figure 3.13

The next several photos appear to all be after 1954, because I think I can pick out Mr. Rankin in all of them. He is a taller, thinner-looking man, always wearing a hat. Figure 3.14 looks similar to Figure 3.13, in that the boys again appear to be planting their onions. This time, however, in the background of the photo you can see Jacobs Hall through the trees, and what appears to be the back of the gardener's cottage. Whereas the other photos appeared to be taken with the photographer's back to Second Street, This one appears that the photographer was facing Second Street, with the rest of the KSD property behind them. I believe I can pick out Mr. Rankin standing behind the boys in the center of the photo, next to a machine or farm implement of some sort. I can also see three other men in the photo, standing and appearing to direct the young boys – perhaps these are the farmhands? In this photo I see a large roll of fencing wire and a stack of fence posts.



Figure 3.14

newspaper archive that Mr. Rankin began a large operation of repairing and rearranging fences on the property. Could this photo be evidence of that?

Figure 3.15 and 3.16 appear to be the same field and, amazingly, the same basic shot, based on the line of houses in the background and the Danville water tower, which is dead center in Figure 3.15 and slightly more to the right in Figure 3.16. Based on the proximity of the fences in the background and the line of houses, I believe the boys are farther along the field in Figure 16 than in Figure 3.15. Figure 3.15 appears to be a warmer day, as the boys are in their t-shirts, while in Figure 16 they are all in their coats. Onions are typically planted around April, so it could be possible that the weather was still swinging from cool to warm as they planted the field.



Figure 3.15



Figure 3.16

It is clear in all the photos that the farm manager is working alongside them, even appearing to be advising them. In Figure 3.17 I see two tractors, and an African American man on a tractor as well, which tells me that the school valued the farm enough to invest in that kind of equipment, and makes me wonder what role this man played in the farm. According to the 1954 newspaper archive, the farm received “much needed equipment” during this year, like a tractor, truck, and wheat drill. It was also during this year that, according to the archive, the farm went “horseless” for the first time in history, due to the acquiring of the machinery that could replace the horses’ work. In Figure 3.17 the farm seems to be making good use of this new machinery, as the boys load baskets of something they are picking out of the field, onto a trailer pulled by a tractor in the background. Figure 18 looks similar to Figure 3.17, with the same man operating a tractor, and the smaller

tractor pulling the trailer in a better view. The trailer in this photo appears to be fuller of the bushel baskets, and this one comes with a caption: “Mr. William Rankin and his crew also a number of our boys harvesting this year’s potato crop. That year the eight-acre field was planted at the far end of the school’s lands on the Stanford Road. The crop was of excellent quality.” As written, I would be led to believe that there was a hired crew, led by Mr. Rankin, who typically did the farm work, and the KSD boy pupils would assist them as needed. Figure 3.17 and 3.18 look very similar, which would make me think that in Figure 17 they are also harvesting potatoes.





Figure 3.18

Figures 3.19 and 3.20 show the boys enjoying the fruits of their labor as they pick what appears to be green beans, carrying them in the same large bushel baskets as seen in Figures 3.17 and 3.18. Figure 3.19 looks to be a field of green beans next to a lane running alongside the gardener's cottage, with the horse barn in the background. Mr. Rankin appears to be observing from the edge of the field by the lane, in the upper right portion of the photo. In Figure 3.20, Mr. Rankin is working alongside the boys, appearing to be

advising a younger boy as he picks beans. I believe these two photos are taken on the same day at around the same time: Mr. Rankin is wearing the same clothes in both Figures 3.19 and 3.20, and it looks like the lane running along the back of the field in 3.19 is closer in the picture in 3.20. I even believe I can pick out the two boys he is working next to in Figure 3.20, in Figure 3.19; the younger boy wears glasses and a short sleeve shirt, working alongside an older boy wearing a long sleeve dark colored shirt, with a long lock of curly hair on his forehead, and are standing on the right edge of Figure 3.19, with the younger boy holding the bushel of beans and the older boy looking at the camera.



Figure 3.19



Figure 3.20

There are photos of cattle, both beef and dairy, though no other livestock animals other than the horses seen in earlier photos, doing work (Figures 3.21 and 3.22). I have seen in one other photo in the *Images of America* book that at one point there were hogs (see Memo #1), though I see no other pictorial evidence of any other kinds of livestock. In Figure 3.21 Mr. Rankin stands with another man, supposedly discussing the beef cattle, as described in the following caption from the *Images of America* book:

“Although the Kentucky School for the Deaf had a dairy herd at the beginning of the 20th century, the first herd of beef cattle came to the school farm in 1957 and provided fresh beef and additional vocational training for the students.” (*Images of America*, p. 73, para. 1)



Figure 3.21

Figure 3.22 is a group of 6 photos. The top left photo and the bottom right are duplicates of photos already discussed here. The other 4 photos are discussed in the Museum Tour memo. The caption sticker says “Photos: KSD Farm 1948,” and along with the fact that they are all grouped together would suggest that they are all taken in 1948. This would have been under the reign of Mr. Henry Lausman, and suggests that as late as 1948 the farm had hogs and dairy cattle, and was slaughtering and processing their own meat.



Figure 3.22

Finally, recalling the story about the girls picking strawberries that I learned about on my tour, we also found a picture of some of the strawberry picking girls sitting on the steps of the farm manager's home (Figure 3.23). This photo carries the caption "Strawberry Pickers at the Gardener's Cottage," and would appear to be significantly older a photo than that of the girls found in my Museum Tour memo. That photo was dated 1959, and though this one does not have a date I would place it around the early 1900s based on photo quality and the dresses the girls are wearing. This would suggest a long-standing tradition of having the girl pupils pick the school's strawberries.

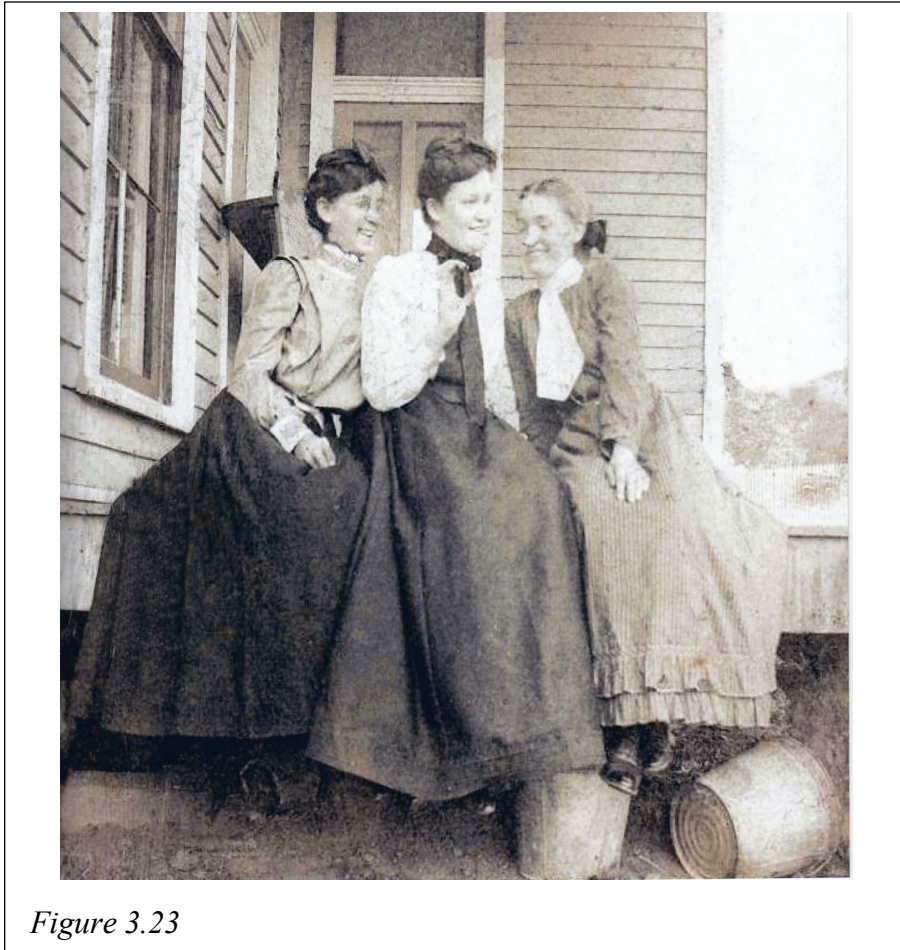


Figure 3.23

I felt honored to be in possession of these photos, the evidence of a timeless industry in action on KSD's campus. I left the museum that day and drove immediately to the Boyle County Public Library to write this memo before I could forget anything that we had discussed. While at the library I had gone to the restroom, and upon looking up from the hand dryer I caught a glimpse of a familiar image. There on the wall of the women's restroom in the Boyle County library was a drawing of none other than Jacobs Hall, where I had just been, dated 1857 (Figures 3.24 and 3.25). It may seem odd to include a photo from the bathroom, but seeing that photo in the library reminded me that KSD is not a secluded campus, it is not in some obscure part of town. KSD is in the very center of Danville, right off Main Street. At one point, there were acres and acres of farmland, right there in downtown Danville, where deaf children would come from their family farms to a school that was built just for them, where they could learn more about agriculture and could work to contribute to the task of feeding their peers. As I left the library that day I passed a bulletin board with a flyer advertising the community sign language classes, offered twice a year, at KSD today. From 1823 to 2019 and for the foreseeable future, the Kentucky School for the Deaf is an institution that has grown with the town it is located in. It has always been part of this community, and much of this community has been built upon the lands that were once plowed, planted, and harvested by deaf children from all across the state of Kentucky.



Figure 3.24



Figure 3.25

Research Memo #5 – Historical Timeline

My historical journey felt a lot like a ball of knotted yarn that I had to patiently and painstakingly unravel into a smooth, continuous story. I worked backwards, cross-referencing multiple sources, using my own judgement and maintaining a “let’s just see what happens” attitude in my quest. When I first began this thesis, I more so just wanted to prove that agriculture had once been a part of this campus, and I truly did not mean to find as much information as I stumbled upon. I thought it was going to be difficult to prove that agriculture “mattered” to this school, but that was an extremely naïve thought. I was reminded as I searched through the history pages that agriculture truly is the backbone and foundation of our nation, and most especially rural central Kentucky where Danville is located. In 2019, our general population is statistically three generations removed from the farm, meaning that most of our society has no clue what it means to depend on the land for your income and livelihood. We probably can’t fathom a time when the routine school year revolved around planting and harvesting, and we certainly can’t imagine ever having to do physical labor in order to eat in our school or workplace.

Through my research, I was able to step back three generations and beyond, into a simpler time, a time when the Kentucky School for the Deaf was dependent for sustenance on the very grounds it sat on, and the sweat from the brows of the very students it educated. This was never meant to be a focal point of this case study, though I have found that the rich history and sentimental significance of this plot of land refuses to be ignored. I have also found that nothing is meant to go quite as planned in qualitative research, and the very essence of this study is exploratory in nature. Knowing this, I decided that I could not tell the story of the KSD Ag-Ed and FFA program as it stands today without painting a picture

of what it looked like, back before agricultural education was even thought of as an official term in educational policy.

The acquisition and unfolding of this timeline went like this for me: In 2017, I found the Images of America book in a Joseph Beth bookstore, 100% on accident. Two years later I began to develop a plan for my Master's thesis, which was originally just going to be a historical analysis of the Kentucky School for the Deaf (this section of my thesis you're reading now is my extremely condensed version of all the "stuff" I have found through my research). The first thing I did was to go back to that bookstore and obtain the book for the sake of two pages worth of pictures (outlined in the Images of America memo). After this, I went on a tour at Jacobs Hall Museum, where I found more pictures and got a greater context for the historical timeline of this school (see the Museum Tour memo). At the end of this tour, I was invited to bring my external hard drive back so that the museum director could share a whole menagerie of files with me (see the Pictures memo). The agricultural timeline below has been constructed, to the best of my ability, from the information provided to me by my museum director friend. From her, I obtained the following:

- Two Books: "A Centennial History of Kentucky School for the Deaf," by Charles Fosdick (1823-1923), and "The Kentucky School for the Deaf: 50 Year History," by James B. Beauchamp (1923-1973). These will be cited in my references section.
- Scanned photos from the library archives
- The entire collection of archived newspapers written on KSD's campus (cited in references)

I began first with the pictures, sifting through what I had been given and making initial observations of what is occurring. Thanks to captions from the Images of America

book and captions on photos in the museum, I was able to get a name: William Rankin. I was also able to pinpoint that he was heavily involved in agriculture in the 1950s; specifically, the year 1954 kept popping out at me. My next logical move was to turn to the 1954 archived newspaper, then called "The Kentucky Standard." Because I had digital copies of this, I was able to do a search for the key word "agriculture." I highlighted and saved any relevant snippets I could gain from this article. From there, I would come to find out that Rankin worked at KSD until 1971, which was the year that KSD officially ceased all farming operations. I gleaned what I could from the 1971 archive, seeing it as my uppermost boundary in this search, and then went back to my 1954 date to begin my hunt for my oldest boundary in the timeline. I found out that Rankin had stepped in as Henry Lausman was stepping out, as there was an ode to Lausman in the paper and a welcome statement to Rankin. Thus, I worked in this way, utilizing significant dates found in these newspaper archives, then searching the paper from that year for significant agricultural details.

With the archives, I was able to work myself all the way back to 1895. I have reason to believe (as will be shown) that agriculture is older than even this year on the KSD campus. However, past 1895 the archives become difficult for the computer to recognize words and search, and I simply did not have time on my limited graduate school timeframe to search through these oldest archives manually. This is where my other two resources come in, the two books. I used the archives first to construct my timeline - give it bones, if you will. I then went back, after drafting the first timeline, and added details that I found within the two books. Again, I had the first book in digital format, so I was able to do a keyword search, and feel confident that I was able to find all that this author had to say

about agricultural endeavors on campus. The second book was in hard copy, so I cannot say with certainty that I got every single reference to agriculture, however I did spend a considerable time searching the book manually and marking the spots where agriculture was mentioned.

It was difficult to decide on the best way to organize what I had found in my searching. I finally decided to proceed as you will find below. I will first list the year, then the farm managers/gardeners/etc. who kept the place running, from the newspaper archive documents. I will then highlight what I found in that year's archived newspaper, either in summary or by direct quotation. All newspaper quotes will be found by the bolded years. I then went through and placed information and quotes from other sources in the timeline; these dates are underlined if they came from either the Fosdick or Beauchamp books (as will be specified). The italicized dates came from various other sources, as will be cited in the entry. This is merely the outlined timeline organizing the evidence I have, which will be interpreted and discussed at length in the results and conclusions chapter. At the end of the timeline will be photos of evidence found in the books or the archives that may have been too lengthy to summarize. They will have been mentioned in the timeline. Also, find a list of references cited at the end of this document. With that being said, below find the timeline I have constructed on the agricultural history of the Kentucky School for the Deaf.

1823 – The Kentucky Asylum for the Tuition of the Deaf and Dumb established in Danville, KY.

1824 – “The importance of industrial training was recognized at the outset, and stressed by the Board in its first report to the legislature in 1824, but with the exception of gardening

for the boys and sewing and housework for the girls, no systematic instruction in this line was attempted for some years.” (Beauchamp, p. 12, para. 2)

- “The contract system was not favorable to a policy of industrial education; there was wood to be cut, cows to be milked, horses to be fed and curried, and rooms to be swept, all of which left little time for learning a trade.” (Beauchamp, p. 12, para. 2)
- This section in Beauchamp goes on to discuss how a system of apprenticeships was utilized to teach the trades. The pros: real world action, so the boys learn the “quickness and skill” because they saw the relevancy of their work to their livelihood. The cons: often the environments were not safe or suitable for the young boys, and the foremen could be “hard-hearted,” more focused on the business than on teaching.

1826 – 14 acres of land acquired (first land purchase). (Beauchamp, p. 52)

1858 – 37 ½ acres bought for cow pasture. (Beauchamp, p. 52)

- “It was bought to secure pasturage for the school cows and was used for that purpose down to 1881 when it was exchanged for land nearer the school.” (Fosdick, p. 22, para. 2)
- “In 1858 work was begun on a building that was intended to house our industrial department. It was known as the old shop building and stood on Third street, west of the boys' building.” (Fosdick, p. 27, para. 2)

1861- 1865 – American Civil War.

1862 – “With the passing of the apprenticeship system the Board decided to establish an industrial department in connection with the school, and the first shop building was erected in 1862...” (Beauchamp, p. 12, para. 3)

1874 - “...But owing to the unsettled conditions that followed the war it was not until 1874 that the first trade, printing, was introduced.” (Beauchamp, p. 12, para. 3)

- “The war upset the plans for establishing an industrial department and the building was used for storage and servants' quarters until 1879 when a book bindery and soon afterwards a printing office and broom and carpenter shops were opened in it. But the building was never well adapted to the purpose and on the completion of the present shop building it was torn down.” (Fosdick, p. 27, para. 2)

1882 – 6 ½ acres purchased, on which The Engineer’s House and Dairyman’s House would be built. (Beauchamp, p. 53)

- “The inappropriateness of the term Asylum, as applied to a school, was early recognized but no change was made until 1882 when the Legislature, by an act dated January 27th, of that year, changed it to ‘The Kentucky Institution for the Education of Deaf-Mutes.’” (Fosdick, p. 44, para. 1)

1883 – Mr. John Christman begins his role as gardener, according to the 1896 archive.

1883 – “‘Hatchet and saw’ carpentry had been taught in a desultory fashion by one of the part-time employees, but it was not until 1883 that systematic instruction in this important trade was begun.” (Beauchamp, p. 12, para. 2)

1885 – “The purchase of the Grigsby property in 1885 more than doubled the area available for garden purposes...” (Fosdick, p. 36, para. 1)

1886 – 20 acres of pastureland purchased. (Beauchamp, p. 53)

1872 – “The cultivation of the garden was done by pupils and hired hands under direction of the superintendent and the boys' supervisor until 1872 when a regular gardener, Mr. D. C. Sullivan, was employed, remaining until 1876.” (Fosdick, p. 36, para. 1)

1877- 1923 employees – “James O'Hara was in charge during 1877 and James Riordan during 1878. They were followed by John Christman, 1878 to 1880; Henry Scales to 1881; Morris T. Long to 1885; Hiram B. Marlow to 1886; John Christman to 1896; Charles P. Fosdick to 1913; George Christman to 1920 and Henry Lausman since then.” (Fosdick, p. 36, para. 1)

- Summary: 1872-1876 – D.C. Sullivan.
- 1877 – James O’Hara
- 1878 – James Riordan
- 1878 - 1880 – John Christman
- 1878 - 1881 – Henry Scales
- 1881 - 1885 – Morris T. Long
- 1885 - 1886 – Hiram B. Marlow
- 1886 – 1896 – John Christman
- 1896 – 1913 – Charles P. Fosdick
- 1913-1920 – George Christman
- 1920 – 1923 – Henry Lausman

1879 – “Mr. Dudley introduced bookbinding [as a trade] in 1879, but after a trial of several years it was abandoned as too unstable and unremunerative.” (Beauchamp, p. 13, para. 1)

1888 - “Argo Hall: Boys’ vocational section built in 1888. Now razed.” (Beauchamp, p. 37, picture)

- “In 1888 a cottage of three rooms was built in the garden at a cost of \$350 for the use of the gardener's family and in 1905 it was enlarged by building an additional room.” (Fosdick, p. 30, para. 3)

1890 – “A cow barn 14 by 100 feet was built in 1890. and in 1915, having fallen into disrepair it was removed and a new one 25 by 60 feet erected in its place.” (Fosdick, p. 30, para. 3)

1892 – “The old barn that stood in the garden on the south side of the lane, 150 feet east of Second street, was burned down Sept. 16, 1892, at a loss of \$400, fully insured.” (Fosdick, p. 30, para. 3)

1894 – “The present one [barn], of frame 50 by 80 feet, was erected in the summer of 1894 at a cost of \$2,000.00.” – referring to the barn that was built after the barn burnt in 1892. (Fosdick, p. 30, para. 3)

1895 – John Christman is classified as the “Gardener,” under the “Industrial Department” heading on the list of staff members.

- “Mr. John Christman, our gardener, assisted by the boys who work in the garden transplanted the cabbage plants the latter part of last week.” (The Kentucky Standard 1895, p. 118, para. 9)
- “Mr. John Christman, our gardener, has about three hundred young chickens which were hatched in an incubator.” (The Kentucky Standard 1895, p. 158, para. 6)

1895 – “The school has always kept cows to supply the pupils with milk, the herd being enlarged until we now have thirty fine Holsteins. Prior to 1895 they were cared for by colored employees but in that year an expert dairyman, Mr. Daniel Beer, was employed, remaining until 1903 when failing health obliged him to seek the milder climate of California. He was succeeded by Mr. Joseph Huffman and he in 1906 by Mr. Henry Lausman, and on the latter becoming gardener, in 1920, Mr. Wm. L. Owen became dairyman.” (Fosdick, p. 36, para. 1)

1896 – Mr. Christman (gardener) resigns, and C.P. Fosdick is hired in his place.

- “Mr. John Christman, Institution gardener for thirteen years past [1883-1896] has resigned, the resignation to take effect Nov. 1st. He has bought a grocery and meat store in Louisville and will embark in business as soon as he leaves us. He is a splendid gardener and well-liked by our boys. Everybody here wishes him success in his venture.” (The Kentucky Standard 1896, p. 165, para. 13)
- “The position of gardener made vacant by Mr. Christman’s resignation has been filled by the appointment of Mr. C. P. Fosdick, who is too well known to our readers to require an introduction...” (The Kentucky Standard 1896, p. 181, para. 4)
- “Mr. Fosdick, who is a graduate of this school, and his mother and aunt have moved in to the house which was recently occupied by Mr. John Christman.” (The Kentucky Standard 1896, p. 198, para. 23)

1903 – “In 1903 a model dairy house was built near the barn and fully equipped for the care of milk.” (Fosdick, p. 30, para. 3)

1904 – School name changed to the Kentucky School for the Deaf. (Fosdick, p. 44, para. 1)

1906 –Mr. Huffman, the dairyman, retired in 1905. Lausman steps into Huffman’s role.

C.P Fosdick is still listed as the Instructor in Gardening

- “Every once in a while the question of poultry raising as an occupation for the deaf bobs up for discussion...” (The Kentucky Standard 1906, p. 314, para. 1)
- “The garden this season has been better than for years, and though it is getting along in October the pupils are having an abundance of fresh vegetables daily. Mr. Huffman who was our dairyman last year has retired and has been succeeded by Mr. Henry Lausman man, of Louisville. The school has a fine herd of dairy cows and the pupils get an abundance of pure rich milk.” (The Kentucky Standard 1906, p. 194, para. 6)
- “Mr. Fosdick, our gardener, has almost finished planting early vegetables.” (The Kentucky Standard 1906, p. 134, para. 11)
- “The strawberry season is here. We have a big patch in the garden that under ordinary conditions ought to yield a plentiful supply of berries for our household but the dry weather has cut the crop short.” (The Kentucky Standard 1906, p. 157, para. 6)
- “The garden boys have been busy digging Irish potatoes and sweet-potatoes for two or three weeks. They will store them in the cellar for winter.” (The Kentucky Standard 1906, p. 220, para. 5)

1910 – “...in 1910 it [the 1894 barn] was improved at a cost of \$2,411.04, taken from the permanent fund, by laying cement floors and putting in metal fixtures in the cow barn and by building a silo thirty five feet deep.” (Fosdick, p. 30, para. 3)

1914-1918 – World War I.

1914 – “Vocational Training at KSD, In 1914” by Jacobs Hall Museum Staff (this is a document that was included in the archives shared with me from the museum director, and appears to be a review of the 1913-1915 Annual Report, with a focus on vocational training at the time)

- “KSD wanted to train the students’ hands as well as their heads. Learning a trade could solve the bread and butter problems when students left KSD.” (para. 1)
- “Essentially the girls were trained to become housewives, learning such skills as sewing, dressmaking, and needlework. This was further enhanced with the chores they did around their dormitories – making their beds, sweeping, washing dishes, and ironing clothes for all the students.... Not only would this enable them to become better homemakers. But also they could ‘earn a comfortable living as cooks and housekeepers if compelled to support themselves after leaving school.’” (para. 2)
- “For our meals we were provided with very good food which was grown on the KSD farm. A lot of the boys worked in the gardens and also picked the strawberries. The farmer became frustrated with the boys’ messy way of picking the strawberries so he decided to see if he could depend on the girls to do it. Much to his delight he never gave up on the girls to continue with that role.” – Quoting Beulah Hester in the article (para. 5)
- “There were several trades they [the students] could pursue – printing, shoemaking, carpentry and cabinetmaking, tailoring, and also working on the school farm. Not only did they learn a trade, but in learning a trade, they aided the school also.” (para. 6)

- “To allow more time for boys to learn trades, the daily schedule was changed for the two advanced classes ‘whereby they are given less text book and more trade instruction. They will hereafter spend a little over two hours each forenoon in the shops in addition to the regular two and a half hours in the afternoon.” (para. 7)

1917 – Smith-Hughes Act provides federal funding for agricultural and vocational education. I see no evidence in the resources if the school benefitted from this or not.

1920 – 60 acres of farmland purchased. (Beauchamp, p. 53)

- “In 1920 the School bought of G. B. Swinebroad sixty acres of farm land lying on the west side of the Stanford pike, south of, though not adjoining, the school pasture and extending down to Clark Run, for the purpose of raising additional forage and farm crops.” (Fosdick, p. 24, para. 1)

1923 – Centennial Celebration.

- “The school now owns about one hundred and fifty acres of land.” – at time of Fosdick’s centennial history publishing (Fosdick, p. 24, para. 1)
- Officers of KSD – “Henry Lausman, Foreman Garden and Farm.” (Beauchamp, p. xiv)
- “A census of occupations followed was taken [at the centennial celebration, where many alumni gathered]. The larger number were farmers, for Kentucky is an agricultural state. Practically everyone owned his own farm.” (Beauchamp, p. 16, para, 4)
- “But practically every able-bodied deaf person who goes out from a school for the deaf is self-supporting. The deaf who complete the vocational course at school usually find their own jobs without trouble.” (Beauchamp, p. 16, para, 4)

- In response to reservations at this time of employers in hiring deaf workers: “But the late Henry Ford who knew a good work-man when he saw one, had many deaf workers in his factories; he said of them ‘No special consideration need be given to the deaf; they do their work one hundred percent.’” (Beauchamp, p. 16, para, 4)
- “The decades covered in Dr. McClure’s final chapters [referring to the centennial time period] saw the school go through some lean years. It was quite difficult to secure appropriations to successfully operate the school and make repairs. The stringent economy required then was nothing new. Each administration in the past had learned to marshal its dollar and make do with whatever was allotted by the legislature.” (Beauchamp, p. 25, para, 1) * most likely referring to the Great Depression.

1928 – 48.07 acres of farmland purchased. This would be the final land purchase made for the purpose of farming on KSD’s campus. (Beauchamp, p. 54)

1929 – 1939 – The Great Depression.

1939 – 1945 – World War II.

1940 – 3.95 acres of land from the south edge of the school farm sold to the City of Danville for the City Sewage Disposal Plant. (Beauchamp, p. 54)

1943 – 37 acres of farmland purchased. (Beauchamp, p. 54)

- “In 1943-1944 the school was closed almost a year while repairs were made...” (Beauchamp, p. 25, para. 2)

1943 – Lausman is classified as “gardener.”

- “A national survey shows that the deaf are engaged in 250 different types of work. At present they are successfully filling positions in almost every calling where hearing is not absolutely essential. Only in law, music, and medicine we do not find them. There are deaf...farmers, fruit growers, poultry raisers...” (The Kentucky Standard 1943, p. 5, para. 3)
- “Superintendent Lee along with Mr. Guy Ingram, president of our Board of Commissioners made a flying trip to Garrard County recently and returned with an excellent team of coming 5-year-old mules for use on the school farm. We are confident that our farm and gardens will produce their share of needed supplies.” (The Kentucky Standard 1943, p. 6, para. 18)
- “Following instructions from the Board of Commissioners which met on February 2nd, Mr. Lee, Miss Bruce and Mr. C. B. Grow have worked out a plan to give the pupils of the school as many days of classroom instruction as possible this year and at the same time send the children home in time for many of them to help with cultivating crops.” (The Kentucky Standard 1943, p. 7, para. 4)
- “22 YEARS AGO [1943 - 22 = 1921]: The school purchased a farm out on Stanford Pike then bought a couple of mules in order to plow the fields....The mules were needed, as ‘George,’ our faithful black horse, grew weary last summer of the constant ‘let George do it’ and laid down and passed to the place where good horses go.” (The Kentucky Standard 1943, p. 16, para. 8)
- “From the window of our history teacher’s room, Mr. Charles Grow’s, I saw two KSD employees working in a Victory garden. They were Miss Edwards and Mrs. Ewing. Sure, Miss Edwards is a farmer. She can hoe fast and work hard. Mrs. Ewing

is also a fine gardener. Miss Edwards has some blisters by now.” (The Kentucky Standard 1943, p. 12, para. 12)

- Obituary: “Brother [Hiram Bell] Marlow was educated at, and became one of the most reliable instructors of agriculture at the Kentucky School for the Deaf, Danville, Kentucky. Most of his former pupils became very good farmers.” (The Kentucky Standard 1943, p. 15, para. 11)
- “On farms and in other places where the deaf work for their board as well as their wages, hearing people often complain of their bad manners at the table. They eat with their mouth open, smack their lips, push away unwanted food, and so on. Schools for the deaf have the opportunity to teach good manners at the dinner table.” (The Kentucky Standard 1943, p. 3, para. 7)
- Six former alumni members were mentioned as successful deaf farmers, and it was told what crops they raised and how many acres they owned. Many stories like these prevail of alumni being recognized for their successful agricultural endeavors.
- A deaf farmer wrote a letter recounting his experiences on the farm: “The following letter from one of our alumni gives a vivid picture of Kentucky farm life and tells how farmers are striving valiantly to do their bit.” (The Kentucky Standard 1943, p. 11, para. 1)
- “A much needed addition to the school farm has been made through the purchase of 36.7 acres of land which joined our school lands on the south bounded by Second Street and Clark’s Run. This land has been seeded to alfalfa and will produce a great quantity of hay which is needed to feed our herd of Holsteins. This land was at one time a part of the Cecil estate and had a race track on it. The land had been

furnishing a heavy yield of high class hay for several years. The purchase of this property is the result of a visit of Governor Johnson and several state officials.”

(The Kentucky Standard 1943, p. 7-8, para. 12)

- “Larger Crop of Potatoes Planted: Our gardener, Mr. Henry Lausman has just completed planting the annual potato crop. Eight acres were planted which makes our acreage about one third larger than last year. Mr. Lausman called Superintendent Lee into consultation trying to determine the date for the darkening of the moon in March, mindful of the old adage which bids one plant potatoes in the dark of the moon. Mr. Lee sought help from various sages as to the proper date but found no one agreed, so Mr. Lausman set out and planted them in the ground, instead of in the dark of the moon, which is just where potatoes ought to be.” (The Kentucky Standard 1943, p. 8, para. 2)
- “One of the delights of my school years was listening to the tales of the Civil War days told by...pupils in this school during those days...Another told of herding the school’s cows into one of the school buildings to prevent their being driven off for the army.” (The Kentucky Standard 1943, p. 8, para. 7)
- “Edward Issacs has left school on account of being needed at home. He should have stayed here to complete his schooling. Eddie said he had to stop school as he was needed on his farm.” (The Kentucky Standard 1943, p. 13, para. 11)

1940s-1960s - Post-World War II Educational Reform: this was a time of great change in our country as the federal government became more involved in public education, especially with the onset of the Cold War in the 1950s. From what I have read in the KSD resources, cross referenced with an online educational timeline, this most likely resulted in

requiring the school to place more focus on academics, pulling attention away from the trades. This was also a time of great industrial and technological advance in our country, which made much of the trades, as they were presently being taught, outdated and unnecessarily laborious. (American Education Timeline, Oregon State University, <https://oregonstate.edu/instruct/ed416/ae8.html>)

1945 – “So the school continued like an island in the river of time. As our country emerged from World War II there came a period of great change.” (Beauchamp, p. 25, para. 3)

- “Every school for the deaf in the country took advantage of the rush to erect new buildings, renovate old ones and in some instances to build entire new plants. The Kentucky school was somewhat slow to accept the changes, the administration being reluctant to give up practices which had been in use for a century and a quarter and which had proved good, although outmoded elsewhere. Among them were: operating a school dairy...the regulation of vocational training classes in the afternoon...” (Beauchamp, p. 25, para. 4)

1950s (midcentury) - “One of the greatest challenges to come in the mid-century was in the world of work. Technology eliminated many long standing jobs enjoyed by the deaf. It created new ones at an amazing rate, and schools for the deaf all over the country found that a great deal of the equipment and methods of instruction were outmoded. Few of the schools could afford to provide the modern equipment needed or secure instructors to train the deaf as required by industry. (Beauchamp, p. 65, para. 6)

1953 – Time period range of 1953-1971: “Due to the high cost of material needed to rehabilitate the school’s bakery, it was found necessary to abandon it in 1953. Later the school’s dairy herd was dispersed, and the school secured its milk elsewhere. The pursuit

of agriculture has long been dropped in other schools, due to labor costs, and it was gradually abandoned at the school, although beef cattle and hogs were kept for a while, until 1971 when it ceased altogether.” (Beauchamp, p. 26, para. 5)

1954 – Mr. Lausman passes away, and Mr. Rankin is recommended to take his place as farm manager. This appears to have been a big year for the school farm.

- “Our school and the city of Danville were shocked December 23 [1953], to learn of the sudden passing of Mr. Henry Lausman, who was our school’s gardener and farm manager...Mr. Lausman had held his present position for thirty-three years [1920-1953] and prior to that he had served as dairyman for fourteen years [1906-1920] and had served the school longer than any member of the present staff [47 total years]....Mr. Lausman was widely known for his success in gardening and was an authority on hot-bed garden plants which were used in our gardens...Mr. Lausman came to Danville and was appointed dairyman at our school in 1906...” (The Kentucky Standard 1954, p. 1)
- A farm-related death occurred in December of 1953: “The accident occurred while he [Ulysses Burdette] was driving across Second Street from the school grounds to the school farm and the jolting of the wagon as it entered the farm driveway unseated Burdette and he fell beneath the wagon. The horse became frightened and bolted. The wheel of the wagon is believed to have passed over him...” (The Kentucky Standard 1954, p. 2, para. 8)
- “In the death of that fine gentleman, Mr. Henry Lausman, who served as farm manager and gardener for so many years...His long service made him known to generations of our former pupils, who will regret to learn that Mr. Lausman is gone.

These same pupils have doted on his strawberries, potatoes, onions, kraut, and other products of his gardens, which have been an important contribution to the pupils' menu." (The Kentucky Standard 1954, p. 8, para. 1)

- "Mrs. Henry Lausman, who lived in the garden's cottage for over thirty years, has moved to an apartment on Alta Avenue..." (The Kentucky Standard 1954, p. 8, para. 7)
- "Mr. William Rankin of Boyle County has been appointed farm manager to succeed the late Mr. Lausman. Mr. Rankin comes well recommended for this position. We wish him much success and fine crops. Mr. Rankin recently held a big sale of his farm and stock." (The Kentucky Standard 1954, p. 8, para. 17)
- "Our farm is in line for some much needed equipment and we learn that new machines such as a tractor, wheat drill, truck and other modern pieces have been purchased by the superintendent's office. This will benefit the farm considerably." (The Kentucky Standard 1954, p. 10, para. 6)
- "It is reported that the state will build a National Guard armory on a piece of land taken from the school farm bordering the Stanford road." (The Kentucky Standard 1954, p. 9, para. 7)
- "Horseless Farm: Our school farm is now without horses or mules for the first time in its history due to the acquiring of machinery and motors to do the hauling required. The state department of Frankfort has kindly allowed our farm a truck and tractor along with many other fine machines within the last year or so and the horses and mules were disposed of. For many years the school barn housed driving horses

also work horses and mules which required feeding and attention all through the winter months.” (The Kentucky Standard 1954, p. 13, para. 7)

- “Big Farm Operation: Mr. Rankin and his men are now in one of the largest improvement moves on the school farm in many years. They will begin rebuilding as well as rearranging the fences on the farm as recommended by experts from the state department in Frankfort. This will include the use of hundreds of fine locust posts and a thousand rods of woven wire fencing. The plan is to arrange the pastures and fields to afford better grazing and cultivation areas. The men will have the benefit of a power driven post-hole digger which should speed up the work. Our school farm consists of approximately 230 acres of fine rolling bluegrass land and at present we have a fine herd of Holstein cattle which produce milk for the school’s use. Our big barn is in need of attention as it was built around the turn of the century.” (The Kentucky Standard 1954, p. 8, para. 10)
- William Rankin (farm manager) and M. J. Lee (superintendent) attended a demonstration of the “Funk’s Hybrid Seed Corn” store. Here they participated in a raffle, in which “M. J. Lee’s name was the first one drawn from the wheel and he was awarded a half bushel of 711 Hybrid Silage Seed Corn which will be planted on the school farm.” (The Kentucky Standard 1954, p. 11, para. 4)
- A student wrote and submitted to the newspaper an article titled “I Work on the Farm.” In it, William Gulley (the student) details his experience going home for the summer and working in the tobacco and corn fields of his family farm. He describes how hard he worked with his father, telling his father they need extra hands, and asking his dad to buy a Farmall because it can do more work and will be easier to

use than a team of mules. The student describes selling the tobacco and being satisfied with the price it brought. He describes fencing on his property and buying hay from a neighbor. This article shows that some of these students were coming from farms, and could clearly articulate the lifestyle and labor because they were expected to be farming right alongside their fathers.

1957 – Rankin brings beef cattle to KSD’s campus, according to the caption on photo, p. 73 in Images of America book (see corresponding memo).

1963 - “In 1963-1964 there was a serious epidemic of rubella or German measles throughout the state, as well as the rest of the nation. This resulted in numerous deaf children, many of them multi-handicapped, being born, and the heads of schools for the deaf began to make preparations for the entrance of these children.” (Beauchamp, p. 29, para. 3)

1964 - “Argo-McClure Hall: Boys’ vocational section, built in 1964.” (Beauchamp, p. 39, picture)

1964 – Civil Rights Act, desegregation. The vocational program was the first to integrate, as I learned during my museum tour.

1967 - “In 1967, a vocational rehabilitation facility was established in Argo-McClure Hall, with Mr. John Shugars as director. This was in keeping with the movement throughout the United States to improve the employment situation among graduates of schools for the deaf.” (Beauchamp, p. 29, para. 1) * contradicts 1969 date found later in the book

1969 – “Conditions became critical, so the United States government began to give aid. The Department of Health, Education, and Welfare gave a great deal of attention to the deaf and provided vocational rehabilitation services throughout the land.

In 1969 a Vocational Rehabilitation Facility was begun at the school...The facility began assisting graduates and former pupils with placement in industry and other employment and also with additional training.” (The Kentucky Standard 1969, p. 66, para. 1-2)

- “The Vocational Rehabilitation Program provided the school with new equipment for vocational training of the pupils. The project proved very beneficial to the Kentucky School.” (The Kentucky Standard 1969, p. 66, para. 4)
- “Through the programs provided by this new undertaking the deaf all over the United States have been trained in new vocations and have found enjoyment in fields which were closed to the deaf heretofore and now enjoy much more fruitful lives.” (The Kentucky Standard 1969, p. 66, para. 7)

1971 – William Rankin is listed as the Farm Manager, with Duke Bugg and Joe E. Robinson listed as Farm Hands, all under the “School Farm” heading on the staff page. End of farming operations on KSD campus.

- “As school nears the end of this semester we learn of resignations and retirements of some most valuable members of the school staff....Mr. William Rankin, farm manager...” (The Kentucky Standard 1971, p. 11, para. 4)
- “Mr. William Rankin succeeded Mr. Henry Lausman as the school’s farm manager in 1954 and served for seventeen years. He saw the school switch from dairy farming to raising beef cattle, and was very successful with his garden and field crops.” (The Kentucky Standard 1971, p. 5, para. 9)

- “Farming Here Phased Out: At the close of school in May the last of the school’s cattle were sold, bringing an end to agricultural pursuits which began almost a century ago. Mr. Joe Craig has moved in to the house at Second and Jacobs Street where Mr. Rankin lived. Several fine crops of hay were sold off the farm land.”
(The Kentucky Standard 1971, p. 20, para. 1)

1971 – “With the abandonment of farm practices in the spring of 1971, the school was faced with a new problem – what to do with the farm lands which had been accumulated during the century and a half. As the enrollment grew through the years the school administration made purchases of land, some in small building lots, and others in farm acreage. The last acquisition of farm property was in 1928, which was made in an effort to increase pasturage for school’s dairy herd and also to raise forage. Many residential schools for the deaf traditionally operated farms in an effort to raise food for the school’s use. But early in our second century such practices were gradually abandoned. Kentucky was one of the last schools to abandon agricultural pursuits.” (Beauchamp, p. 49, para. 1-3)

1973 - “Within the last decade or so [1963-1973], there has been more attention given to extra-curricular activities, which tend to create diversion, brighten the life in a residential school, and contribute to the development of the total deaf child, who will one day take his place in society as a citizen, worker and parent.” (Beauchamp, p. 57, para. 2)

- “These extra-curricular activities, the numerous parties and the dances, hobbies and crafts, intra-mural athletics, dormitory mini-courses, captioned feature length Hollywood films, dramatic presentations and the athletic contests throughout the year serve to make the after-school life at the Kentucky School interesting. In addition to this, many field trips to places of interest and of educational value are

arranged during the year. This has been made possible by the acquisition of a fine school bus and school vans for transportation.” (The Kentucky Standard 1973, p. 57, para. 5)

1980 – Though farming operations had ceased, further evidence of Rankin’s employment with KSD was mentioned in this issue.

- “Mr. and Mrs. William Rankin celebrated their fiftieth wedding anniversary on November 11. Mr. Rankin is retired from KSD, where he was a farm manager from 1954-1971.” (The Kentucky Standard 1980, p. 16, para. 1)
- “When he retired as farm manager Mr. Rankin set out a long line of white dogwood trees on the Second Street school lawn. They make a fine memorial to the gentleman who raised so many fine vegetables for KSD.” (The Kentucky Standard 1980, p. 7, para. 3)

1993 – First mention of the Horticulture program at KSD, taught by Mrs. Kathy Wilson.

- “The new Horticulture Program in the Vocational Department is moving right along. A cooperative venture with the horticulture classes and the woodworking classes has resulted in a greenhouse that can be used on a temporary basis until KSD can acquire a more permanent one. Under the direction of Mr. Brent Gilpin and Mrs. Kathi [misspelled] Wilson, the students got some very practical experience in preparing the ground for the foundation and walkways. They also learned how to build a frame and attach a plastic cover. Mrs. Wilson will no longer have to seek out unused window sills on campus to house her growing plants. We are all looking forward to Spring to see what comes out of the new structure.” (The Kentucky Standard 1993, p. 7, para. 9)

- “Horticulture classes have been beautifying areas around campus with flowers and have been utilizing the temporary greenhouse for propagation of plants.” (The Kentucky Standard 1993, p. 8, para. 15)

2000 – Mrs. Kathy Wilson is listed as the Horticulture Teacher under the Career and Technical Education section of KSD staff.

- Under the Student Awards section, a Horticulture award was rewarded to Marty Edmonson (The Kentucky Standard 200, p. 13, para. 1). This award was not listed in any other newspaper after 2000, nor was Mrs. Wilson listed as a teacher.

2009 – [AG TEACHER] hired as the Agriculture Instructor for KSD. FFA chapter chartered in November of that year.

Research Memo #6 – Student Teaching Observations

“There is no particular moment when data gathering begins. It begins before there is a commitment to do the study: backgrounding, acquaintance with other cases, first impressions. A considerable proportion of all data is impressionistic, picked up informally as the researcher first becomes acquainted with the case. Many of these early impressions will later be refined or replaced, but the pool of data includes the earliest of observations.”

(Stake, p. 49, para. 1)

“Qualitative case study is highly personal research. Persons studied are studied in depth. Researchers are encouraged to include their own personal perspectives in interpretation. The way the case and the researcher interact is presumed unique and not necessarily reproducible for other cases and other researchers. The quality and utility of the research is not based on its reproducibility but on whether or not the meanings generated, by the researcher or the reader, are valued.” (Stake, p. 135, para. 2)

It was these quotes from one of my sources on case study methods that sparked the idea to include excerpts from my student teaching observations at the Kentucky School for the Deaf. I submit the following 15 weeks of thoughts as evidence of the daily happenings of the agriculture classroom and school that is KSD. Note that, as Stake said in the first quote, many of these early impressions will later be refined, but the first impressions can and should be included in the data pool. These may appear out of context, as they are sentences or paragraphs taken from a larger document. During my final semester at UK in 2017, I was placed at the Kentucky School for the Deaf under the agriculture teacher to complete my student teaching practicum. A requirement of this experience was to write weekly reflections on my experiences. I had to give an account for how my time was spent,

list two strengths of my teaching, and discuss how my presence in the classroom impacted learning.

I look back on these reflections, now two years later and knowing a lot more about teaching and deaf culture than I did then. I see erroneous thought processes, even in some of the excerpts below. However, this was how I first felt, what I saw upon first impression, on my journey with KSD's program. This is raw data from someone who experienced an extensive immersion into this school firsthand. You'll find accounts of the classroom that seem to be very specific to this site, and then you'll see accounts of my time there that seem like any other classroom (like addressing the issue of phones in class or cheating on tests). What follows in this account are portions of these weekly reflections that I believe add to the data pool and contribute in some way to shedding light on the agriculture program at KSD.

Week 1

- I was really struggling with connecting to the kids because I can't sign all of my words, so the interpreter has to relay everything I say. This causes some lag time in instruction. To remedy this, I began to draw out what I was saying on the SMART board, so as I talked I would draw very elaborate pictures while the interpreter signed. This was my most successful class of the week. The kids were very engaged and communicating with me.
- The kids were looking at me and trying to talk to me, so they are warming up. I am learning so many new signs every day. During this day, I was given my sign language name. A sign name means you are accepted by the deaf community, so this was a huge day.

- It was just a hard day, I was very tired and getting frustrated with not being able to communicate as well as I would like with the students.
- On Fridays the students leave at 1, so all classes are shortened to 30 minutes long. On this Friday we also had many students absent, because they were sent home if their home district had a snow day.
- My two strengths this week were my “pictorial discussions” and my connection with the students. Since I couldn’t sign very well, I had to get creative with my communication, and the kids ate it up. They loved how I drew pictures on the board. I gave my characters names, like when discussing domestication, I called our early hunter-gatherer “Hungry Caveman” and the kids were able to follow “Hungry Caveman” all the way through to modern industrial revolution. I also did a good job connecting with the students. By the end of the week I was able to carry on full conversations with the kids when I was just talking to them one on one. They come in and want to talk to me and they are at the point where they treat me like an equal to [Ag Teacher]. I consider this a strength that I have been able to make this connection early on.
- I have been able to explain the FFA to my students and create a desire in them to participate. Every kid on the class roster is paid for by the KSD funds to be a member of FFA. I created several worksheets to give to kids to keep in their binders for the first week, so that they have an understanding of the FFA and ag education, specifically why they need to be there in that room listening to us teach. I have also been able to create social media pages (Twitter, Instagram, and Facebook) with [Ag

Teacher] which will enhance the students' presence in the community and gain them more support.

Week 2

- I'm constantly trying to focus and decide what is going on, as is most everyone else in the room. I absorb so much new information every time I step outside of our little ag room. There is much to be learned in the world of Deaf Ed.
- Tuesday was a blur as we rushed to get stuff ready for the bluegrass meeting, but the meeting itself was awesome. This was my first time in the advisor's meeting and not in the student FFA meeting, and I loved that sense of community amongst ag teachers. The two students we took had an absolute blast too, and I saw them teaching some agriculture signs to some of their peers. I introduced them to some of my fellow student teachers, and the kids even gave them name signs! They were so excited the whole ride back to Danville. That made all the stress worth it, just to see the pure enjoyment on those kids' faces. KSD has never sent delegates to this meeting (according to [Ag Teacher]) so this was definitely a successful endeavor. Tuesday after the meeting we dropped one of our student's off at her home. I walked the girl to her door and I got to chat with her mom. The culmination of seeing the kids enjoying this meeting that we almost didn't make it to, and then talking to a proud parent who is so excited for their child and her opportunities in the ag program at KSD, made Tuesday the highlight of my week.
- Also, one of the girls can hear a little, so she said voices in close proximity seem loud to her and intimidate her (something I never thought about, in a deaf classroom some students might not be used to hearing voices because most teachers don't talk

and sign at the same time, but [Ag Teacher] does because she has both hearing and deaf students. I am finding in observation and discussion with students that being a hard of hearing student is more challenging than being a deaf student).

- There are so many things I could write about this program and all the quirks and special scenarios. It is all incredibly interesting with so much potential.
- In all classes we did post-it note assessments which is where [Ag Teacher] asks them questions about what they should have learned so far and they write their answers on the post-its. This cuts down on paper usage and is very quick and simple, giving the kids a solid quiz grade and letting us know where they are.
- Thursday after school I attended an ARC meeting, which is a student's annual IEP review conference during which all the student's teachers, supporting staff, and parents come together to discuss if any changes or adjustments need to be made to the student's IEP. I learned many new things about special education during this meeting.
- My second "strength" was just relating to the students and being able to help them make connections. Deaf students don't learn the way we do. We have a lot of knowledge we have picked up just from overhearing conversations, or making observations of others. If you live in silence, you won't have these experiences of "accidental learning" unless someone sits you down and actually teaches you. During my history lesson I put a bunch of cute pictures of donkeys in my slides, and this seemed to keep their attention. They are extremely visual learners, so sometimes just drawing a picture up for them is more sufficient than trying to talk my way through a subject. Which is good and is an unintentional strength for me;

I can't talk to them very efficiently yet, so it's a good thing I can draw. I also found that they enjoy being able to find relevance in their own lives to the topic. During our donkey domestication discussion, we talked about why Shrek's best friend is a donkey. Donkeys are historically burden animals that do work for us. They made the connection that Shrek has a donkey because Donkey helps him do the work he needs to get done. Not sure if this is cinematically correct, but the kids really got into making those connections, so I just went with it.

Week 3

- I had brought it to [Ag Teacher]'s attention that we hadn't discussed SAEs with the kids (mostly because I know I need to do some visits), and she explained that she's never really addressed this in depth (it was more of a choice for kids than an assignment), but if I wanted to we could do it! The first day I simply explained the 4 areas of SAEs and tried to make connections with the students that they would need to create a project by May. It took until about Thursday to really convince the kids of this, they weren't making the connection that they would actually be *doing* an SAE. [Ag Teacher] told the kids that this was an area her program has always been weak in and together we are trying to build it up this semester. I think everyone really got on board! Once they fully understood what an SAE is and that they could create their own project, they seemed more vested in the conversation.
- 7th period is a crop tech class, but its January so our student farm is stagnant, and the greenhouse is currently out of commission. So, no crop related things can happen at the moment, and it's hard to really effectively teach deaf kids something that they can't get their hands on. Until crop things can happen again, [Ag Teacher]

has decided to teach the boys in that class about tools and engines (we have an engines lab) on the justification that we will be using tractors and machines on the farm later in the class, so the boys need foundational mechanic knowledge.

- Also, on Friday we didn't do any teaching because the whole school went on a field trip to Danville Cinema to watch Hidden Figures. It was super cool because they had rented out one of the theatres specifically for KSD and close-captioned the movie for that time frame.
- I also worked one on one with the 7th period boys. They were having a hard time understanding the difference between all the various types of screwdrivers, wrenches, etc. so I drew them a little graphic organizer they could use to study for their tools quiz. They did very well on the quiz so I think my graphic organizer could have helped them!

Week 4

- One of my favorite little middle schoolers was absent because he was having cochlear implant surgery. This only caught my attention because on Monday night driving back from Bardstown I was asking [Ag Teacher] questions about the cochlears because I've been noticing that some students wear them, and others have scars where they had the surgery but no longer wear the implant. She said there is a lot of cultural controversy around the cochlear implant because often times parents will make their kids get this rather invasive, permanent surgery in an attempt to make them more like a hearing child. Sometimes the implants work, and sometimes they don't. Either way, the child is left with a permanent scar on the side of their head where hair won't grow back. As they get older, some of their

profoundly deaf peers will actually tease them for trying to hear. Once again, life as a hard of hearing student is often much more difficult than that of a deaf student; there is always this constant battle of wondering which culture you fit in with, the deaf or the hearing. So, once they get to KSD, there is a rule on campus that dorm staff will not make a child wear their cochlear unless a parent signs a paper that says they have to. Some of my students wear them, and others don't. It is a personal preference based upon success of the implant and cultural feedback.

- I also noticed that one of my student's hearing aids was making a super high pitched squeaking noise one day. I also asked [Ag Teacher] about this. She said it is feedback from the amplifier and that the student just has to adjust it. There's even a sign for the noise, and a teacher just has to make the sign and all students will check the dial on their hearing aid. I also found out that there are different sized batteries for different hearing devices, and that KSD provides every staff member with a large array of these batteries to keep in their desks in case a student ever needs one. Coincidentally, later in the week I actually witnessed a student come in and need a battery. On Friday I was talking to [a friend] and I was telling him about some of the stuff I have observed. He and I had an hour long conversation about his experiences growing up deaf/hard of hearing. He told me all about growing up during a time of rapid technological development and how his hearing devices changed. We discussed the classes he had to take in speech therapy, and he answered my burning question of what exactly he can and can't hear. He took his hearing aid out and showed me how and why it makes the high pitched noise, and he showed me how to change the battery. He told me that when he is in school he

can usually go on one set of batteries for about 1-2 weeks, depending on how often he turns them off at home. I thought it was so awesome to see this occurring in my school and then be able to have a conversation with one of my peers about his life that I probably never would have had if I wasn't student teaching at KSD. It was just a really awesome connection and a super cool conversation.

- During third period I had my middle schoolers get on The Weather Channel website. They were allowed to browse and get familiar with it, and they were hooked. My goal was to have them find connections between what is happening in the weather and how that affects agriculture, but I was blown away by the fact that none of these kids even knew weather predictions or stories existed. Not joking, these kids were absolutely enthralled with looking at the videos of flooding, snow, rain, or sun in various parts of the country. They were devouring every single story and we had some awesome conversations about just very basic weather occurrences. This was just another example of how a deaf student will not learn if you do not directly give them the information. I remember being in 7th grade; by no means did I care a hoot about the weather. But, I could hear my parents discussing it. I could hear the weather man. I could hear the predictions on the radio. Something so simple as a weather report could be a foreign concept to a student who lives in their own world, literally. I didn't even get close to my plans for the day, but I was just thrilled to see that the kids actually walked away with a valuable life skill that they might not have been exposed to otherwise.
- [Ag Teacher] actually gave me one of my strengths that I'm going to list this week and it made me feel all warm and fuzzy inside. She said I had an awesome attitude

about learning sign language because I can laugh and joke and I don't mind to fail and try again when I get a sign wrong, and that I was very positive about trying to understand and adjust to this diverse climate. She also told me that "KSD isn't for everyone" but that I am fitting right in to the system, and that I am very comfortable with the kids. [Ag Teacher] says that some of her colleagues feel uncomfortable and like they have to be giving their full attention to any deaf person that comes in, but that I don't make a big deal of them and I treat them just like any other person. Those were two awesome compliments that really empowered me through this week. I do feel like I have a natural comfortability in front of these kids.

Week 5

- As a midweek pick-me-up, I let first period think of some fun hashtags for our FFA social media pages. This got them excited for the first part of class and I think it carried over, because they were all very excited and ready to work for the rest of the two class periods I had them (plus we got some cool stuff to fancy up our social media accounts). ***Note: This is where the title of this thesis, "DeaFFA," came from.
- All KSD staff got laptops to replace their desktops, and by the end of February every student will also have their own laptop. The school is moving to Google Classroom and all the Google goodies, so they're getting everyone on the same technology page.
- I could tell as the week progressed that I was able to make this ceremony process fun by answering questions and finding ways to make it more accessible to the students, because I have been through these things before and I can give logistical

advice. This has increased student learning about the FFA, and also their enjoyment of the process. [Student] is taking a lot of ownership, as are a lot of the other students. It's really cool to see that sense of community and to watch it develop right in front of me with the more activities we do.

Week 6

- Monday night was our officer installation ceremony and it went very well. It was awesome to see the kids interacting with the state officers, and our truest chapter leaders started showing themselves more. For example, since Monday our Vice President has completely blossomed into this total classroom leader. She was already showing leadership skills but I think she is stepping out of her shell even more. She has taken more initiative to make announcements about FFA and is actively asking us about planning events, etc. She is totally on board, and I think she will be the driving force to get more kids involved! On Tuesday we continued work on our large animal and equine kits. I have one student who is struggling very hard with these areas. One of the good things about letting them work independently is that I can help them individually when they struggle.
- On Thursday I introduced gender names with Equine Science and Large Animal science. I made the mistake of trying to explain Taxonomic Classification at the beginning of the class because I wanted to explain the difference between "Equus" and "Equine," and it totally blew their minds. I had to just give up on that and move on with my lesson.
- During 7th we had our boys make a spreadsheet for the poultry project that they work on. We are going to begin selling the eggs the boys collect next week.

Week 7

- On Monday we reviewed in all classes for the tests they would be taking in class on Tuesday. I created a study guide for them, and then on Monday I gave them the answers to the study guide after we went through the whole paper, just so there would be no confusion over what would be on the test ([Ag Teacher] advised me to do this for our audience).
 - Then I attended the community sign language class. One of my students' parents are in the class with me, so it was good to make that connection with them.
 - Also on Tuesday I had a lot of issues with students having their phones out even after I asked them to put it away. This has been building and culminated to a lecture on that day. We are still having issues but not as bad. They're at least trying to pretend it's put away now. 😊
 - Then in 4th I gave their exam, and one of my students cheated. He had written the entire study guide on his right arm. I have to hand it to him, that took some dedication, I mean his whole arm was inked up!
 - [I helped plan and implement homecoming weekend] We finished setting up decorations and blew up tons of balloons. At half time we went over and crowned our homecoming court. Then I went back and set up my music – you're looking at the world's best deaf homecoming party DJ. I picked songs with tons of bass. It was such fun night!
- *** Note: I remember being told that we had a lot of balloons because the deaf students can hold the balloons and feel the bass vibrating.

Week 8

- The kids came up with something they called the “hashtag project” in which they went out to a teacher and borrowed chalk, and wrote all over the concrete shop floor. They also designed posters and things to decorate the shop. It was really awesome to see these kids taking on some initiative for their party.
- [First time in Official Dress for a young member] I gave the student his new clothes and all the other kids were so supportive, telling him how to tie his tie, how handsome and professional he looked. It was such a sweet moment. He said this was his first time in nice professional clothes like that.
- During 3rd and 4th period I showed the documentary “Farmland” on Netflix. I paused the video occasionally on the words that seemed to confuse the class and tried to explain. At one point in the video it was discussing CSA programs, which KSD recently implemented this past summer.
- I saw our FFA officers step up to the plate big time this week. They really took charge of their peers and became actively involved in aiding us in planning, set up, and conduction of events. I can see a huge change in their leadership abilities just in the few short weeks I have been here. I think they are learning to become more independent and developing a greater sense of self-efficacy.

Week 9

- I did catch pieces of the conversation and I took away these useful buzzwords about special education: repeat, re-teach, pre-teach, modeling. These are things I have been learning to do with this audience. I didn’t know they were actual special

education staple words, so it was interesting to hear the conversation connecting what we do naturally with this audience with words to describe it.

- During 4th period I began my unit on anatomy and physiology. It all moves very slow, and I can only give them very basic knowledge at first.
- Wednesday was an interesting day. The bad storms blew through that morning, so we had to hold the first period kids over through second period, so we got very little accomplished with all the excitement. The thunder really freaks the kids out because they can feel it. We discussed the weather in all classes on this day, and how weather impacts farmers.
- I worked on getting the interpreter request, field trip request, etc. ready for our trip to UK on the 15th for regional contests. I have been trying to get the kids interested, but they all seem a bit unsure about going. We have our chicken man committed to going for Poultry Impromptu, and one other girl is going for Small Animal. We could not convince either the President or Vice President to go as of Wednesday. As with most things, it is very difficult to make them understand what the contests are, how to prepare for them, etc. I know I will have to help heavily with coming up with sources in the coming days.
- We were interrupted by the statewide tornado drill. It was interesting to finally get to see how a drill at KSD works. The sirens are incredibly loud obviously, but there are also flashing lights to signal to the deaf students that a siren is going off. There is a different colored light for fire, tornado, and intruder alerts. It was difficult to herd all the kids where they needed to go, but they got there.

- I differentiated my instruction when I saw my 4th period kids were not grasping all of the anatomy stuff. I broke it down further, went online and found diagrams and visuals. We related everything back to their bodies whenever possible. This contributed to my development as a teacher because I was able to read that my students were not understanding and I backtracked to reign them back in; it's important to be able to read your class like that.

Week 10

- Third period was once again scattered because half of my middle schoolers had to be released to go take their SLPI test, which is an annual check to see what progress they have made in developing their sign language.
- I still have 3 students who think a dog can't pee if you neuter them. We have spent several days now just discussing the concept of spaying and neutering. It's kind of fascinating to watch, no matter how we explain it, no matter how watered down it gets, some of them still cannot grasp it (perhaps without a visual, which I'm not sure I can provide here).
- We are teaching students who do not speak English. Think about all the words we use to describe things and actions and just general life. They have a limited vocabulary. I would compare it to myself sitting in a room trying to learn about horses from a teacher who speaks Spanish the whole time. Not only are we asking them to learn a new concept, we are asking them to learn it in a foreign language to them. It helps when you can get as hands-on as possible; tomorrow I will be using chicken wings to show the relationship between skeletons and muscles. We use diagrams and videos whenever possible. Resources are limited, but I think if this

was my perfect classroom, I would have unlimited access to real-world ag. I wouldn't teach a single lesson that didn't have a hands-on component. If we wanted to discuss the skeletal system of a horse, we would have a horse skeleton, so on and so forth. Obviously that is extremely unattainable, but I think that would be the most optimal way to teach deaf students. Agriculture is such a visual subject, after the two months I have spent at KSD I am convinced that you could teach about ag completely without any language at all, just actions and visuals.

- I also had created a data sheet for the lab for them to record observations and answer questions, but I quickly realized they could not multitask like this, so I nixed the worksheet. I also did not strictly follow the procedures I had created for this lab. Basically, I realized that for my special, small audience, they really just needed the limited time to explore the material in front of them. When I stopped trying to keep everyone on the same step and allowed them to just cut wherever they want and “play” with the chicken wing, I realized they were more engaged, asking more questions, and learning more about the skeletal/muscular system. This would definitely not work in a public school, but I learned that it worked specifically with this group.
- I started the class with the circle of life video from the Lion King, which seemed like a fun interest approach, but then I had to spend 10 more minutes explaining we were talking about puppies, not lion cubs. My students are concrete learners.
- They didn't learn the names of the muscle groups, I can't promise they understand the word ligament, but they do know now how bones and muscles and joints move and attach to each other. Even if they don't have the language to tell you about it,

they have seen it with their own eyes and understand that is how the skeletal and muscular system look. That was more impactful, in my opinion, than a lecture.

Week 11

- [Day of the regional speaking contests] When it was time to go to the prep room, the students had the instructions explained to them twice, and I walked down front with them to make sure they understood about picking their topics. No other advisor walks in with their students, but we did. We also sat through the whole time with them. [Ag Teacher] said that this was to make sure they understood what was expected of them. In deaf culture, “no talking” is typically a very loosely followed rule, so we had to make sure the kids did not sign for any reason (for fear of being considered cheating).
- [Professor] came by, and I told him that [Student] has expressed to me that she wants to be an ag teacher. He gave her his business card and told her that he wants her at UK. That lit up her world, and it was all she talked about for the rest of the day. She was so excited, it was awesome.
- [Student] and [Student] both got superior ratings, and [Student] got a fair rating. In these cases, they ranked higher than some students from the hearing public schools. “Deaf can do anything except hear!” I finally understood the meaning of this sentence I have seen plastered all over the school. My kids were competitive. They were just like the hearing kids on paper.
- On Thursday, March 16th, 2017, I cried (borderline sobbed) for the first time in front of students. But, you’ll like the story. ☺ While the other boys did odd jobs during our limited time, [Student] (chicken man) and I worked with the eggs in the

incubator. Three of the eggs had started hatching, so we were moving them over to the other incubator. [Student] kept signing “I’m so excited!” over and over again. It’s so awesome to see an at-risk kid this invested in a project. I was already a little overcome with emotion because of that. Then, as we were moving the eggs, I heard a little peep. I have never worked with chickens before, so this was a new experience for both [Student] and I. I got way too excited when I heard the peeping, like, WAAYY overly excited. I started signing to [Student] “I can hear the chicks!” And we were both just so excited standing there. I held the egg up to my ear so I could hear it better. That’s when [Student], with a big smile on his face, asked me “What does it sound like?” I lost it. It hit me that this boy, a kid who has been bullied and shoved aside his whole life, who faced struggles I can’t comprehend every day, was so invested in a chicken project, the one thing I would guess that keeps him coming back to school every week. The kid who was so nervous about speaking in those contests but trusted me anyways when I asked him to participate, and who had the courage to go speak. He has an enormous amount of faith and trust in this ag program. He was so excited about these chicks. But he can’t hear them. I can’t give him that experience. Hearing those chicks in the eggs was such an awesome moment that I got to experience while the one person on earth who truly deserved to hear them was standing next to me, and he can’t hear it. I just stood there crying with an egg peeping in my hands and the poor guy didn’t understand why, he probably thought I was crazy. I still cry thinking about it. These kids are so brave and they have to live in a world they can’t even fully comprehend. It was so beautiful to hear those little peeps, but he will never get to experience that

moment the way I did. That really floors me. All I could do was spell the word “peep,” and it sucks because that isn’t enough. He deserves to hear his chickens. But, what’s beautiful in that is how trusting and excited he is, despite not being able to fully experience the peeping.

- I recognize I have a huge advantage in having been so involved in FFA [in high school], as compared to [Ag Teacher] who had no FFA experience [in high school]. She struggles to find time to learn about FFA when she is trying to keep up with her teaching as well.
- With this audience, leaving nothing up to the imagination is crucial; if you want them to know it, don’t assume they will infer it, because this audience will not. If you give them the concrete evidence, they will grasp the concept.

Week 12

- Because our student body is so small, testing days throw off the dynamic, and we really have a hard time moving forward with curriculum.
- I tried to make the connection between the “My Plate” diagram for human nutrition and livestock rations, but I’m not sure if they understood or not. In an attempt to keep my words simple and not find myself down a rabbit hole, I also think I left out a lot of information. It’s difficult trying to talk about things like this when its mostly a whole lot of vocabulary, which I know this audience struggles with. It’s always better when they can physically touch and see what we’re talking about.
- I know I probably jump around a lot with these kids but I try to relate what I’m telling them back to stuff they already know. [Ag Teacher] does a really good job of doing this naturally.

- On Friday one of our sick baby chicks died, so during first period we had a burial ceremony for it in the field beside the school, under some bushes. When [a student] started crying, we decided to give the kids closure and let them bury it. It was really a sweet moment, and I think the kids got to freely experience the “joys and discomforts” of agriculture.
- With this audience, I have to start at an extremely basic level and work up. This audience also greatly benefits from being able to touch/see something concrete to relate their content to. By providing feed samples to match the nutrient being discussed (corn = carbohydrate), I saw the connection being made much clearer. I also found that they understood even better if I connected it to something they ate every day.

Week 13

- Once again during this time I was reminded of just how crucial it is for a deaf student to watch every move you make. If they look away for even a second, they could miss some vital information and throw off part of the process you’re working towards. When this happens, the student often gets lightly admonished, from what I have observed. When they are corrected, it causes them to be leier of performing other tasks, for fear of being wrong. That’s one of the main things I’ve noticed about my deaf students, you have to be extremely careful on how you correct them and be very clear on why they are being corrected. They already have a low sense of autonomy and feel like they need to be guided on every task. If you give them a role and they feel proud to have performed it, and then you cut them down on something, I have noticed that they will be less willing to complete a task

independently the next time. I have also noticed that my deaf students tend to be “finished” a lot, when a task is definitely not finished. I play this game every day with my middle schoolers especially. They will say they are finished with their projects, and when I check it they have left several sections blank. They do this very frequently, and I have yet to figure out why it happens or how to remedy it. I also noticed this on Wednesday while kids were working with the aquaculture lab. One boy was given the job of cleaning the sides of the fish tank. When he said he was finished, half of the fish tank was still clearly not cleaned. It’s very strange and something I have discussed with [Ag Teacher]. She has no explanation of why it occurs either. ***Note: Today I’d say that’s probably a teenager thing in general

- One of the students said, “this isn’t horse work” (talking about how this isn’t equine science) and [Ag Teacher] explained to her that because her program is so small, she has to use kids from all classes to get work done in all areas. The kids seemed to accept that.
- We worked on getting our chicken coop ready for spring time! First and second period moved the chicken coop over from the gross muddy area to a clean grassy place. We had the girls form a human fence around the chickens and keep them from running off. [Teacher], the construction teacher, brought his class and together all the boys picked the coop up, with the help of the front-end loader on the tractor, and moved it. It was a great show of teamwork.
- Giving them an outdoor, hands on task, however smelly it may be, is still more appealing than learning content in the classroom.

- I impacted [Student] in that class, because he has found something that he really connects with, and I think it has really anchored him in this program and given him something to feel ownership/excited about. He has started volunteering to do other stuff too, like feeding the chicks and cleaning eggs, without being prompted. I feel like the kids learned a lot of ownership and teamwork while we were working in the chicken coop. This week I really saw a lot of positivity from the students, they all seemed really vested in the program and willing to help out. I feel like we have really created a good atmosphere.

Week 14

- During 4th period we once again discussed Field Day, and the whole class was enthusiastic about it! Everyone wanted to be in a category. [Ag Teacher] says this is the largest group of students she has ever taken to field day, so that's definitely exciting. Because there are two of us we will be able to organize and help the students practice.
- A lot of the students have never been to an FFA function, nor do they even begin to understand the concept of competition. A lot of students attending field day are first year ag students. It has been a bit challenging to help them wrap their minds around what exactly they need to be doing, so we have spent a lot of time narrowing topics and deciding which topics they understand most from what we have talked about in class. This concept of applying what they've learned in the classroom is so incredibly foreign to them.

- I've really tried to strategize the best way to teach greenhouse concepts, while still getting work done in the greenhouse, without bogging them down with information they can't physically see in the greenhouse.

Week 15

- On Monday school was closed due to Easter weekend. Students typically have to leave their home on Sundays around noon to come back to campus, so closing school on Monday gave them the chance to spend the full day with their family.
- On Thursday we attended UK Field Day. We took 11 students on a KSD bus; they competed in demonstration categories, seed ID and the new Serving Out Loud category. When we arrived I got the kids registered and then helped them find their areas....I got back just in time to catch the last of the cookout and hear one of my students get their name called. We had 3 students place in their competition areas. This was the largest group of students KSD has ever taken to field day and the first time they have placed. The kids were all so excited and proud, and I certainly was as well! It was a great day.
- Also at the noon meeting, the graphic design STLP team presented their state project. It was the first time that hearing kids from another school came to speak at KSD, and it was not received well by the students. It was the first time that the veil of the deaf vs. hearing conflict was lifted for me and I was confronted with the issue first hand. Just like we have hearing students from Danville in our Ag classes, there are Danville kids in [Teacher]'s graphic arts class. The hearing students worked alongside the deaf to complete the STLP project, just like our kids work on FFA projects. So, when they got up to present, it was only natural that hearing presented

alongside the deaf. Some of the deaf students were first upset by the fact that hearing kids from a public school were in their school, presenting to them without sign language (they had interpreters, but it still wasn't preferable for the deaf students); this caused some initial backlash. But the real problem began when one of the KSD students, who is hard of hearing, used his voice and spoke English in front of his deaf peers, without signing, even though he knows sign language. That was his choice in the situation, perhaps for the sake of his hearing partners.

- One profoundly deaf girl in my class stood up, in front of a class full of hard of hearing peers, and said that this is a deaf school, for deaf people. It is an intense debate and one that leaves the already confused hard of hearing students feeling even less welcome. This is an issue being dealt with and fought over every day in this environment. It is a unique issue that most public school teachers will never be exposed to, yet there are kids everyday dealing with it.
- These kids put their full trust in us to teach them and take them places, almost blindly, because they have no previous experience like it to compare and draw from. By highlighting on the papers I gave them exactly what was expected of them, by giving them ample access to me for help, and by setting up mock judges and making them practice, I think they were very well prepared for Thursday and what would be expected of them, as well as what they could expect. Taking away that fear of the unknown is crucial to success with a visual, concrete-thinking audience like this. This is a very specific skill that I have developed for this audience but I am sure I will be able to draw from it in the future in a public school setting.

Research Memo #7 – Site Observations

I realized after I had compiled all my student teaching observations that not much has changed in the KSD ag program since my time there, and it would be unnecessary to rewrite much of what I had already written. The methods I saw the ag teacher use were still the same, and even during my days on campus the students were still working on the same seasonal work they had been at the time, such as seeding plug trays and working on the chicken coop. Instead, this memo is an update on new things that happened during this round of visits.

Two years ago the greenhouse remained nonfunctional throughout my student teaching semester. It was just this year that the greenhouse is finally back up and running! This is exciting not only for the students and the ag teacher, but also for staff of the school. So many people mentioned the greenhouse being up and running again in their interview. Two years ago I also felt like the ag teacher was much like a one-woman band, always running around trying to keep up with all the labs, classes, and FFA activities, on top of being a staff member and attending meetings, trainings, etc. We always received support when we reached out during my time there, but something felt different this year, in a very good way. One of the instructional aides that would help us from time to time seems to have stepped into a more prominent role within the FFA program. She spoke about it in her interview, talking about how she is literally the ag teacher's right hand woman. They bounce ideas off of each other, and the aide attends all FFA meetings and functions. This is so amazing to me, because one of the greatest observations I had found two years ago was that the ag teacher is obviously swamped with responsibility and definitely needed extra hands whenever possible.

On this note, I almost got the sense that the whole school seems to have the hang of this “ag thing,” more than they did two years ago. I didn’t come in contact with any staff or teacher who didn’t express total support for the program. Perhaps this could be a biased observation, considering they know I’m writing everything they say down (haha), but I sincerely feel like the school “gets” it. The ag teacher seems to also have more of a routine of FFA functions and is working well with her resources, consulting often with other educators.

The best example I can give of this is for the FFA party we started during FFA week two years ago. This year they hosted this party for the third time. During one night of FFA week the entire high school is invited to the ag shop, which the FFA officers clear out and decorate for the event. Before the event this year, the entire residential school, elementary through high school, came and ate a meal together in the ag shop. The agriculture students truly showcased leadership during this time, and I could tell that the ag teacher had released the reins on them even more than she was willing to do two years ago. When students needed more chairs, the ag teacher told the officers to solve the problem, instead of just doing it herself (which is always the easy route but doesn’t teach your young leaders much). I saw the high school FFA members explain to the younger members that they would find some chairs for them, and they did. They encouraged every single person, student, teacher, guest, etc., to get in line and get food before they even considered getting food for themselves – without being told to do so. In fact, I saw the ag teacher tell them at one point to get in line, and I saw them say that they would wait until the very end. Two years ago I feel like I was helping coach these very same students as sophomores as to how an FFA event should be run, easing their anxieties. Now, as seniors,

they were truly soaring with absolute confidence, owning this event and owning this program.

Speaking of sophomores: I had worked with a student two years ago who kind of rode the fence about agriculture and FFA. She had been an officer but was asked to step out of her position due to some behavior issues and general apathy. We kept tugging on her and took her to Field Day that year and she did phenomenal. By the end of my time there I could tell she was changing, though still very 50/50 on whether she would continue to be involved in FFA or not. This year? That girl was the FFA president, and I could see change all over her. She acted much more mature than she had two years ago. I couldn't believe my eyes, one of my kids had become an impressive young lady right in front of me! She greeted me warmly and we caught up on how the last two years had been spent for each of us. She was kind and forgiving as I struggled to regain my conversational ASL, which had quickly disintegrated when I stopped using it every day. I learned that her and the ag teacher had developed an awesome relationship, and the ag teacher had taken notice of this student's interests. Two years ago she had expressed a very serious interest in animals, and this semester, with the ag teacher's help, she had obtained a PAID work experience at a local veterinary clinic!! I watched excitedly as this student explained to me some of the things she had gotten to experience and learn at the clinic. She had been allowed to hold animals during clinics, perform fecal sampling, watch surgeries and even got to experience a somber moment as they put an animal to sleep. Her passion was written all over her face, and I believe she will continue this employment even after high school. She is a motivated young woman and was interviewed as the only current student in the program for this thesis (she's one of the very few 18 year olds in the ag program currently).

I am convinced that the ag teacher and this agriculture program changed her as a person, and changed the course of her life, giving her a purpose, passion, and a paycheck.

As far as classroom operations, the classes were all in preparation for the opening of their newly renovated greenhouse, as mentioned previously. I was reminded again that this is a very small school (population-wise) and thus a very small student body to participate in ag classes. At most I saw 6 students in the classroom at any given time this semester. In my interview with the ag teacher she listed off all the various labs and spaces the ag program is in possession of, which will be discussed more in depth in the concluding chapter of this thesis. In summary, there is a land lab (farm land) with land for crops, a chicken coop with about 15 laying hens, an engines lab, floriculture area, greenhouse, various machinery, rabbits, fish....this is a lot for a single person to maintain, and often requires all hands on deck with the few students she has available. Thus, for about one week the students in the animal science classes were helping during their class period with seeding plug trays. I noticed, during these classes and all others, that ALL students were engaged and involved. They were all excited about watching the plants grow. They were all invested in what they were doing and always worked diligently during each class period. There were no behavior issues while I was there, and every student signed to me and talked about what they were doing, even the ones who didn't remember me. I was reminded that these are good kids, and when given a task that engages their hands and allows them to see the fruits of their labor, you've got them hooked. I watched the ag teacher lead by example, showing the students every single step of every process she wanted them to do. She had patience and is clearly very experienced at knowing 1) what kind of content to deliver and

2) how to deliver it. I believe it is because of this confidence that she has been so successful with this program in the last ten years.

Perhaps the most prominent new event occurring for the KSD FFA program are their learning clinics they have been hosting for their community. I attended two events over the course of my observations in which members of the community were invited to clinics about bee keeping and planting for pollinators. These occurred at night, from 6:30 – 8 pm, and anyone who wanted to come was welcome. When I arrived the first night I was met at the door by one of the FFA officers, who was instructing people to sign in and write their name on a name tag, then to take a seat in the shop floor area of the agriculture shop. Where, two years ago, there typically would be sitting a large tractor and other farm equipment, the students had cleared out the shop, cleaned the floors, and set up a semi-circle of chairs around a presentation area where the speaker would soon stand. There was a black backdrop set up, with a TV screen mounted up above it, where the speaker's PowerPoint would be projected. On a table in the front of the room sat many interesting items related to beekeeping, which the speaker would no doubt address in their presentation. Alongside said items was a stack of handouts of the PowerPoint presentation, a copy for each participant.

At first read, this surely sounds like any other presentation you may have attended previously, however there is an intentional method to this set up. The chairs, as mentioned, were arranged in a semi-circle pattern, two rows deep. At a typical community event or presentation, you may expect instead to find rows of seating, or clusters of chairs around tables. In deaf culture, it is preferable for everyone to sit in a semi-circle, so that everyone can be seen by all participants. As ASL is a visual language, creating a space that allows

for access to communication is vital. The semi-circle method is one that can be seen all over KSD's campus: in classrooms, at meal times, in meetings and common spaces. I recall when teaching in the ag classroom that it always felt very intimate and personal, with so few people and everyone sitting facing each other. If the audience were sitting in rows and someone signed either in front of or behind them, everyone would have to turn around, or the speaker would have to stand up and turn around for every comment. The semi-circle takes some of that barrier out. I noticed quickly as I scanned the audience that there was an unspoken courtesy occurring: all hearing people had opted to sit in the second row of seating in the circle, and all deaf participants were in the front row. I might add that all participants at this first event were either members of the deaf community (retired KSD teachers, KSD alumni, friends of either group, etc.), or involved in some way with the school (teachers, aides, receptionists, myself). I believe those who were familiar with the setting naturally picked the back row because they are familiar with deaf culture and the need for the deaf to see each other in communicating.

The black backdrop is another interesting point of discussion. There is a term I have come to know called "visual noise," which means exactly what you might think it does. If you have ever seen a sign language interpreter, you may notice that they are almost always wearing black or solid, muted-color clothing. If you have never noticed this, I would challenge you to take note of it the next time you see an ASL interpreter. If I have typed it once I have typed it a million times – ASL is a visual language. When someone is signing a message, the receiver of the message must focus for a period of time on that person, blocking out all other movements happening around them so as not to be distracted and look away from the speaker. If you have ever attempted to hold a verbal conversation with

someone at a crowded, loud party, I imagine that is what it might be like to be deaf trying to hold a conversation with a lot of clutter or movement happening behind the person they are trying to communicate with. Wearing brightly colored or patterned clothing can distract the eyes as they attempt to focus on a person's hands, face, and body language (as ASL is not simply a motion of hands but a whole-body interaction). If there are people walking around outside of a window behind the interpreter, or if there is simply a lot of clutter on a bookshelf or table behind them, it could be a distraction to the deaf person, much like its distracting for hearing people to hold a conversation with a lot of people talking or clamoring about near you. Auditory noise prevents the hearing from clearly listening to a message, and visual noise prevents the deaf from clearly listening to a message with their eyes (The ag teacher used the sign for hearing (which looks like bunny ears on your ear) to show visual "hearing" by making the sign at her eyes, to explain this to me within my first days at KSD). Thus, the interpreting department at KSD has a professional black backdrop that stretches across a frame, to be set up for events such as this. Additionally, the interpreters were wearing black shirts with the KSD interpreting department logo stitched on the breast – this makes them look uniform and professional, and does not draw attention from the message they are transmitting to their deaf audience. They stood in front of this backdrop throughout the presentation.

I learned when I taught at KSD that the beloved PowerPoint that I relied on as a crutch in the hearing classroom would no longer be conducive to my message. I learned that you can't simply pass papers out and keep teaching while students pass them around, either. One of the challenges that I believe any teacher would face who is not familiar with teaching to a D/HH audience is that if you do not have that child's eyes on you (or on the

interpreter), they are not getting your message. We are used to hearing students glancing at the floor, tying their shoe, sharpening their pencil – we just keep talking because even if they aren't looking at us, we believe they are still listening. I made the mistake several times of trying to show an image on a slide and talk about it at the same time, and my interpreter would always gently but firmly remind me that they are looking at the image, not at her. Got it, okay, so I'll give everyone a second to look at the image before I continue. Moving right along, I'm teaching...as a teacher we learn how to finesse our presentation, so as I talk I just click the button to move to the next slide, without taking a breath, a seamless transition. But that doesn't work in the deaf classroom either, because even though you've got their attention, as soon as they see that slide move out of the corner of their eye, that's what they're going to look at, and you've lost their eyes again. We're innately taught how to pass out papers in our education courses, we practice it in methods of teaching – you pass a stack to the right, pass a stack to the left, and you keep talking as the students pass papers around. They might even look at the worksheet you've given them while you talk, so even though they aren't making eye contact with you, you know they're still attentive. This, again, is not so in the deaf classroom. I had a hard time breaking myself of this habit, and accepting what to me felt like an awkward pause as my D/HH students broke eye contact with the interpreter or myself and glanced over the worksheet I had given them. I learned the hard way that if you've got a paper for your audience, you explain it first, THEN pass it out, not the other way around. And once you've passed it out, you give everyone time to look at it before you say anything else.

I noticed that this presenter had been alerted to this technique as well, because she had already printed her PowerPoint slides and handed them out to participants. I noticed,

too, that everyone was flipping through them, preparing for what was to come. I had thought about this in the context of a classroom but never in the context of a community informational event. Those who rely on their eyes to communicate cannot also use their eyes to write notes as a speaker is presenting. That's why we have services on college campuses that will transcribe professor's lectures for deaf students. The deaf person must be watching the interpreter at all times and cannot look away to write down an interesting thought or a key point in the discussion. Therefore, if you want your deaf audience to be able to reflect on what you have taught them, provide notes and outlines of your presentation for them to look over ahead of time, and to take with them. I also noticed that this presenter seemed more comfortable with this audience than some others I have seen in the past. She knew when to pause to give the interpreter time to catch up, and she knew to look at the deaf person as they sign, not at the interpreter as they tell her what the person is signing. She was comfortable with them, not because she knew how to communicate in ASL, but because she was willing to modify her own behaviors to show that she wanted to communicate to the best of her ability.

Taking all this into consideration – the seating arrangement, the interpreting set up, the notes – I felt very happy inside to see that this was truly a deaf-inclusive environment. They had come back to KSD, to their school, their home turf, to learn about a subject that they were all very interested in. Beekeeping is a trendy subject right now, you can go to any extension office or any hobby farm enthusiast club and receive informational presentations on the topic. However, this group of people came here for that. They came here because they knew, without having to call ahead and make arrangements, that this place would understand them and be ready to meet them where they are in their

communication needs. Nowhere on the Facebook advertisement did I see “interpreters available upon request;” they didn’t have to put that, because deaf people know that KSD is a refuge that understands them in a world that often doesn’t “get” it. No deaf participant had to call an interpreting service so that they could show up. They didn’t have to walk through a crowded room, trying to find a seat closest to the front, or sit off by themselves somewhere with the interpreter in the corner. They didn’t have to frantically track the movement from the presenter pointing to a picture, then walking to the back of the room, then turning their back to write something on a board. They didn’t have to sit by themselves as their hearing peers averted their eyes, because people don’t know what to do when they encounter a deaf person, and that’s an ugly truth I have witnessed with my own eyes. They simply showed up. What a comfort it is, to simply show up at an event and know you are going to be welcome.

There were probably 10 older deaf people there, including a woman who is believed to be the oldest living KSD alumnus. They all knew each other, or if they didn’t know each other, they seemed to chat like old friends regardless. I was the minority as a hearing person, and that felt good. It felt good because I could see the beauty and the value in what was happening around me. Three of the FFA officers opened the event, thanking everyone for coming and introducing the speaker. I was over the moon proud of them, as all three of them had two more years of public speaking experience under their belts since the last time I had seen them in those blue jackets, and it was obvious they knew what they were doing. They were in no way nervous, they rolled with the punches, they chatted with their deaf elders before and after the event. One man even interrupted their opening remarks by standing up and telling the audience that one officer was the granddaughter of one of his

old school buddies, and he was proud to see her up there. He even gave me some more historical evidence, as he described that the room we were sitting in used to be an autobody shop in his day. The room was silent but for the interpreter voicing all these interactions for us hearing folks, who are not lucky enough to be privy to the deeply cultural sign language that was occurring before us. The interpreter could say words, but she couldn't convey the pride in that man's sign, the way that you can hear pride in someone's voice. She could tell us a joke they were signing, but we didn't get to share in the uproarious laughter that comes with being "in" on a joke. I am never more jealous of a sign language interpreter than when two profoundly deaf friends are sharing a special conversation together. I can pick out signs and get a gist for what they're saying, but I can't pick up on all the body language and facial expressions, the slight movement of a hand that can turn one sign into a completely different meaning. ASL is a culture, just as much as it is a language.

I wonder now if those kids were not nervous because they felt prepared, or if they were not nervous because this was their home turf too. They knew most, if not all, of the adults in the room. Everyone there was fluent in sign, everyone could speak to them on their own terms. Truly, I was the least fluent person in the room. As the presentation began, the adults were not afraid to ask questions. It felt exactly like any other community event I had ever been a part of with FFA. The students were there to promote their program, they were interacting with a community that supports them, and all were there for the sake of learning about agriculture. It was just another example that the deaf are just people, plain and simple. They long for that sense of community, perhaps even more so than we do, knowing that the majority of the world can't communicate effectively with them. I want to

note here that I have been told many times, the deaf do not want sympathy, they want empathy. They are happy, they are living their lives, they enjoy the world just like a hearing person does. They don't feel sorry for themselves, they are proud, fiercely proud to be deaf. You don't need to pity them. However, you do need to understand them. Understand their communication needs, interact with them, empathize with them so that you can serve them best, if you are in service role such as education or extension. Don't just hire an interpreter and expect that to be enough, like a band-aid solution to inclusion. Put forth the effort to make them feel welcome, make them feel like they are truly a part of what you are doing by learning these techniques discussed here.

I have been told many times by interpreter friends that agriculture is a harder subject to interpret because it is so heavy vocabulary, heavy science based. There often aren't any signs to convey a lot of the words we talk about. I noticed at both of these community events that it is very hard to convey a lot of what we talk about in ag without a visual. We use words like pollinator, and the interpreter has to spell it out every single time. That's a long word to fingerspell four or five times in just a few minutes. There are signs for different types of pollinators - like birds, bees, butterflies – but when talking about them as a group, as pollinators, that must be spelled. When the presenter on the second night began to talk about all the varieties of plants that you can put in your garden to help pollinators, the interpreter was just finger spelling as fast as her hands could work. There is a sign for flower, but there isn't a sign for lantana, alstromeria, or lavender. First the interpreter would have to sign “flower” to give context to what the speaker is talking about, and then I would watch them spell the flowers' names. I saw that it was much faster for the speaker to say the names of these flowers than it was for the interpreter to spell them. And how fast is too

fast? Sure, a skilled interpreter can sign like the wind if they have to, but don't we all like a little time to absorb what's being told to us? The speaker did her best, but her presentation was full of vocabulary just by the nature of what she was talking about. I even saw the interpreter stop her at one point and ask her to repeat her last few sentences, because she had told a joke and the interpreter had had to very elaborately illustrate the context of the joke, then the joke itself, which had taken much longer than it did for the speaker to tell the joke in the first place. This is but one example of a phenomena I see happen every day in the agriculture classroom. There simply aren't signs for a lot of what we talk about. One might think, okay, so there's no sign. No big deal, just spell it! But what good does it do to spell something for someone if they don't know what that word means? If you don't give them context, you're just throwing random letters at them. This is why it is so crucial in our agriculture classrooms to have pictures, objects, videos, whatever you can show to represent something. If you're talking about the flower lantana, spelling "lantana" means nothing to me. If you sign "lantana is a flower," that gives me a bit more, but truly that doesn't mean much either. But if you can show me a picture of lantana, or better yet if you have some growing out in the greenhouse or the yard and you can walk me over to it, touch it, and sign to me that this is a flower called lantana, I will remember it if I am your deaf, visual learner. I think a common misconception is that the deaf are slower to learn, but that's not entirely true. They learn very rapidly when you teach to their learning style, just like I learn faster when my teachers teach to my style. Perhaps the learning process takes longer because there are more steps involved to get around that communication barrier, but that doesn't mean that their mind takes in information any slower than a hearing student. I made the comment in my student teaching observations that I am convinced we could teach

ag without words, and I stand by that. It's not the word that holds meaning, it's the function of the object you're describing by the words. Even if you don't know the word hammer, if you have watched someone drive a nail into a piece of wood, you know what a hammer is and how to use it. I saw this with the community learning event about plants. A lot of the deaf participants didn't know the name of a common weed that the presenter threw out there, without a visual. The interpreter spelled it, and no reaction came from the audience. But on the next slide she had a picture of it. This time, everyone knew what it was. One woman briefly told a story about fighting that weed in her own yard. They all knew that plant, but they didn't know the random string of letters that made up the English name of it. We are fortunate that agriculture is so visual itself, you can see the product of your labor, you can touch and feel the objects we talk about.

At the end of these events, there would be a Q & A session with the presenter, as well as snacks and socialization. Everyone mingled, asked questions, exchanged information, and truly had a positive experience from what I could tell. Before we all went home on the last night, the ag teacher stood up one last time to thank everyone for coming, and she started explaining why these events were important to her and to the kids. I was able to record some of what she said:

“Our kids’ families live in all four corners of the state, and after I really thought about it, I realized that these folks [she pointed to the audience], the retired folks, people in this town, people we’ve made relationships with....that’s our community. This is their program [gesturing to the students] and they need an audience. Tell me how my students can serve this community, because that’s my job. I am the resource for them, but you are the stakeholders.”

She went on to ask for suggestions for more community learning clinics, like the one about beekeeping and planting for pollinators. She asked these people what she could do to serve a dual purpose – provide them with information that they want and provide her students the opportunity to serve their community and make connections with the people who care about and support them. Finally, she told the community that one young man would be the FFA president for the upcoming school year, and I am so glad I was able to catch a video of it, because the look of pride on his face was amazing. He was being recognized in front of people who know him and support him, and being told by his agriculture teacher that she is proud of him and that he is a great leader. He had the biggest smile on his face, his cheeks got a bit flushed, and he signed “thank you, thank you” as everyone clapped for him. This interaction, along with the rest of the event, looked exactly like it would in a public school. The only difference was the mode of communication. I saw a community invested in their agriculture program, students learning leadership and being recognized for it, and everyone was comfortable.

To conclude these observations, I’d like to share a thought that I had while watching the students learn about a misconception in agriculture, the subject of a lesson I observed the ag teacher presenting. I feel like there are many parallels between the agriculture industry and the deaf culture. Though agriculture employs a great many number of people in our world, its often overlooked and forgotten by the general public. After all, not everyone is affected by agriculture, at least not in a way that they can see and understand. They don’t know where their food comes from and they don’t quite understand the way things are done on the farm, so they are uncomfortable with it, forming incorrect thoughts and spreading misinformation. As agricultural advocates, we spend a lot of time fighting

misconceptions that the general public has about how we do things, why we do things, etc. There's often an "us vs. them" mentality that can arise, as agriculturists become defensive – agriculture is a way of life for some, it is the only way they know, they were born into it, raised this way. Often I feel like the agriculture industry is really rather small, because it seems like everyone is well networked, everyone knows everybody. Everyone involved in agriculture is fiercely proud to be a part of it, and you become "one of them" just by also caring about agriculture.

If you can see this vision of mine and relate to it, then perhaps you can empathize a bit more with your deaf peers. Though there are still a great many people who identify as deaf and hard of hearing in our world, its often overlooked and forgotten by the general public. After all, not everyone has met a deaf person or communicated with them, the only way you would know if someone in the supermarket aisle next to you is deaf is if you took the time to talk to them, which we certainly don't do in this hustle and bustle society. People don't know sign language and even if they know a few signs they don't quite understand the way things are done in the deaf culture, so they are uncomfortable with it, forming incorrect thoughts and spreading misinformation. As advocates for our deaf students and community members, we spend a lot of time fighting misconceptions that the general public has about deaf people, the way they learn, the way they communicate. There's often an "us vs. them" mentality that can arise, as the deaf become defensive – deafness is a way of life for some, it is the only way they know, they were born into it, raised this way. Often I feel like the deaf community is really rather small, because it seems like everyone is well networked, everyone knows everybody. Everyone who identifies as deaf is fiercely proud to be a part of that community, and you become "one of them" just by also caring about

them. You become a part of the deaf community when you simply take the time to empathize and understand them.

Many people cannot relate to agriculture, because they have never been exposed to it. Many people cannot relate to a deaf person, because they've never met them. There are barriers that prevent us from truly understanding agriculture or the deaf community, but there is no barrier to understanding your fellow human being. Whether they are a farmer or a deaf person, or even a deaf farmer, we all have the same desire to be understood and communicated with. After one of my interviews, a teacher off-handedly said "maybe this will plant a seed for people who don't understand what's going on here...no pun intended." I don't think this thesis will move mountains, but perhaps it will simply plant a seed, so that others may see the beauty and the importance of agricultural education in schools for the deaf across the country.

Research Memo #8 – Interview Coding

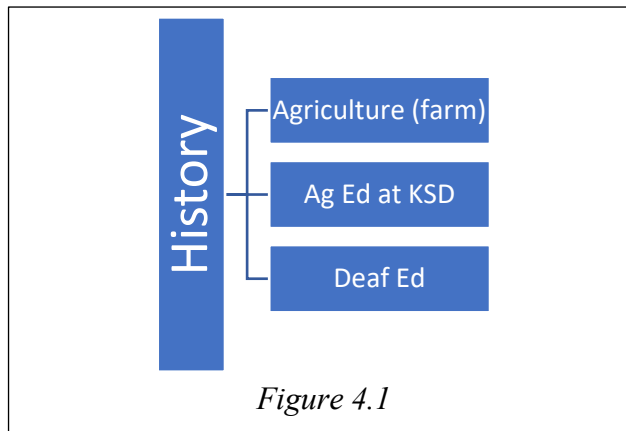
After I had analyzed all of the pictures and documents presented to me and constructed my own interpretation of the history of agriculture at KSD, and after I had pulled my own experiences as an active observer down into the data pool, I began to sift through the 17 interviews I conducted regarding agriculture at the Kentucky School for the Deaf. Admittedly, these interviews began to take a life of their own as I delved deeper into the lives of those involved with the school, and I eventually had to tell all of the amazing people volunteering that I could take no more interviews because I had accrued almost 20 hours' worth of audio to transcribe. Had it not been for gracious colleagues and staff at the University of Kentucky jumping in to help me transcribe, I would have been highly overwhelmed by the sheer amount of data to sift through. I was very nervous and unsure where to even begin using the information my participants had provided in my interviews, and I quickly realized that my extremely detailed coding method I had originally planned to use would have taken far longer than I had time to manage. I turned again to the Saldana coding manual I had learned about in my Qualitative Research Methods course for guidance. As mentioned in Chapter 3, two methods of coding were used: Descriptive and Structural. The interviews were organized into categories and then coded using these methods.

In the next several pages will be a summary of the findings from each category in my Structural Coding of DeaFFA Interviews section, found in Appendix 9. This summary is my own interpretation of the interviews, though I would highly encourage the reader to read the actual coding in the Appendix. The quotes captured there bring this story to life and provide firsthand accounts of what it is like to be a student, teacher, or community

member associated with this school. My own words cannot and do not do their voices justice.

Structural Coding of DeaFFA Interviews

1. What is the story of the Kentucky School for the Deaf agriculture and FFA program?



History

The majority of my agriculture historical information found during the interview process came from two Deaf farmers, both of which had attended KSD, about 10-15 years apart. The older of the two was present when agriculture was still in full swing in the mid 1900s, and the younger farmer was graduating around the time that farming started to phase out on the campus. Other information was provided by a Child of a Deaf Adult (CODA) who recounted what her parents had told her about KSD in the early 1900s.

Agriculture

Agriculture was a family tradition that was passed down from generation to generation and all duties were shared amongst family members, deaf and hearing alike. Before the rise of industry and technology, farming was a necessity and a way of life, more

so than a chosen career path. It was not necessarily “taught” in a formal classroom, but rather the interviewees reported having learned how to farm from their older family members. If applying Vygotsky’s sociocultural theory, the older family member would be the “More Knowledgeable Other” from which the young deaf child would grow up gleaning information from. The deaf child internalized this way of life, and grew up able to also farm as an adult.

Ag Ed at KSD

The interviewees confirmed much of what the newspaper archives had as far as what kinds of crops and animals were raised on the KSD farm. The older Deaf farmer also confirmed that the students would go to class half a day and then work on the farm. He spoke about harvesting the cattle next to a stream that runs through the campus, then field dressing the carcass and taking it to be stored. This man knew Mr. Rankin, the farm manager, and said that Rankin would come and help him on his farm until he died. The farmer also talked about Mr. Rankin living in the Gardener’s Cottage and then moving across the street to the Engineer’s House. I didn’t find much new information presented in interviews, but it was extremely interesting to get first-hand accounts and confirmation of what I had read in history books, straight from people who lived it. Not only did they experience agriculture at KSD, they themselves grew up to be successful Deaf farmers, which was mentioned throughout the archives, as the school seemed very proud at one time of its farming alumni.

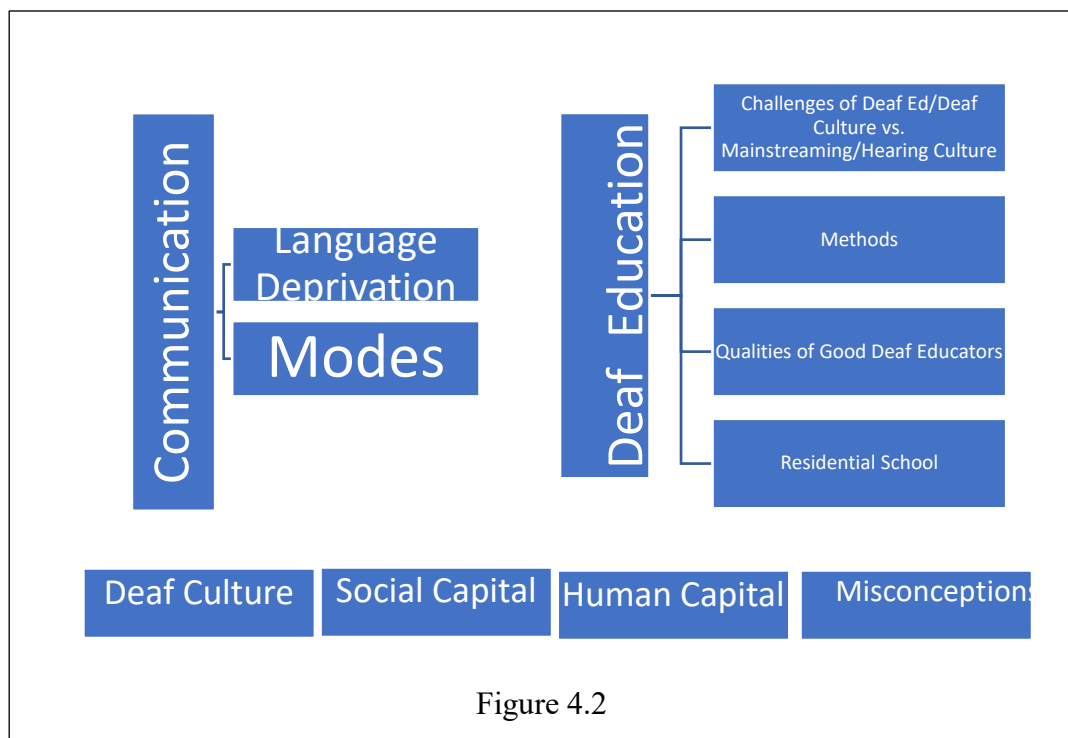
Deaf Ed

I got relatively vague information on the history of deaf education itself from my interviewees, however I can infer a few things from their stories. There was a time when lipreading and oral speech was taught to deaf students, and seemingly had more emphasis placed on these techniques than on ASL. Even based on my interviews with the two Deaf farmers, I could tell that they understood much of what I was saying, without signing. They both vocalized often during their interviews, and you could tell that the older farmer had more home sign and used less actual ASL, which was fascinating because he is profoundly deaf. Though I do believe ASL should be taught and the deaf should obviously be allowed to use this language as their primary, I wonder what it would be like if we also taught deaf students today basic oral/lip reading skills? Neither of these deaf men reported feeling like they couldn't communicate with their hearing farmer counterparts, presumably because they can get the gist of what they are saying by reading lips and can respond with some vocalizations. I also wonder if this ability simply arose as a survival skill, based on their upbringing and their chosen professions. Whatever the case, I found it very interesting.

The rubella outbreak was mentioned a few times across several different interviewees (mostly teachers from the school and deaf community members), confirming the historical context of this disease. The CODA interviewee was also a former teacher during the latter half of the 1900s and was teaching at the school during the passing of ADA and IDEA laws. This interviewee reported that the LRE and Special Education laws actually played a large role in taking a lot of the students away from KSD and back into their mainstreamed school. This could explain some of why the population in deaf schools is so low today compared to the massive campus that KSD once was.

Finally, a few retired teachers gave their opinion about why the farm phased out in the 1970s, and they believed part of it to be based on our culture beginning to see kids less as small working people and more as, well, kids. Our culture in the late 1900s did seem to shift to placing more emphasis on extracurricular activities and developing the child, as opposed to expecting them to come home and work alongside the parents on the family farm (which also were quickly diminishing across the country). The teachers all speculated that outsiders to the school saw that the students were being treated unfairly, forced to do unpaid labor, forced to work. Along with the age of our convenience culture and the increased efficiency for purchasing food, there simply may not have been an argument left in favor of having the children work on the farm.

2. *Is there evidence that Vygotsky’s Sociocultural Theory of Cognitive Development is occurring in the KSD agriculture/FFA program?*



Deaf Culture

Several of my participants spoke to the difference between Big D “Deaf” and little d “deaf.” In summary, the difference boils down to one word: culture. The Deaf culture consists of persons with some range of hearing loss, from slightly hard of hearing all the way to profoundly deaf. A D/HH person ultimately gets to decide whether they want to claim Deaf or deaf. When claiming the Deaf culture, that person is accepting that it is okay to be “different,” and they are celebrating this alongside a community of others who share this acceptance. Often, those who claim to be deaf are considering themselves to be more a part of the “hearing world,” or the general population culture. This doesn’t necessarily mean that they are denying their lack of hearing, but more so they are choosing how they want to identify themselves as a person. This can be easily understood if one understands the basic idea of “culture,” in that this is a term used to describe a group of people that share a common interest, origin, lifestyle, etc. There is a culture of people who like country music vs. a culture of pop music; there is the Hispanic culture, the German culture, the Asian culture. The Deaf culture, then, is defined by the physical hearing loss, as well as the use of ASL, whether or not you interact with the Deaf community, if you went to a deaf school, amongst other factors.

The deaf community, on the other hand, as defined by one of my teacher interviewees, is the support system that surrounds deaf people. I will never be a part of Deaf culture, because my primary mode of communication is not ASL, I don’t share the common factor of hearing loss. But anyone can be a part of the deaf *community* by showing your support and allegiance with Deaf people. I was told early on during my immersion into the deaf community that one can consider themselves “accepted” by the Deaf if you

are given a sign name, which I feel honored to have. I believe my interviewees who discussed Deaf culture all expressed the similar notion that we should all strive to be allies to the deaf community and not oppress the deaf by seeing them solely as a disabled member of society. Additionally, I heard many times throughout the interviews that it is often more difficult to be hard of hearing than it is to be deaf, because you struggle with finding exactly which group or culture you should align with. You may not feel 100% included in the Deaf culture, but you may also not feel 100% included as a hearing person. This creates personal frustration and heartache for many students at KSD as well, especially at an age when you're already struggling to figure out who you are as a person.

Communication

Language Deprivation

Perhaps the most pressing matter that every deaf school must address with every D/HH student is language deprivation, or the lack of language development. Here is where many participants discussed incidental learning, where a hearing person may pick up on new vocabulary and language simply by overhearing it, while a deaf child only receives that new vocabulary if it is directly presented to them. The range of deprivation a student comes to KSD with will depend on the environment they are coming from: Does mom and dad know ASL? Has the family worked with the child to teach them language, or have they been unable to communicate with the child? Did the mainstream school the child came from work with them on language development and full access to the classroom, or did they just give them band-aid solutions and pass them along from grade to grade? Additionally, children who come from Deaf families (CODAs) or families who put forth the effort to learn sign language may have been exposed to language from day one, and

may come to school with a rich ASL vocabulary. However, having a rich ASL vocabulary also does not mean they have any form of mastery of the English language, and though they may be highly conversational in ASL, they may read several grade levels behind their own or be unable to effectively convey a written message.

Language deprivation is a serious issue that must be addressed for D/HH children, by finding out exactly where they are and building from there. One interviewee told a story about developing this language with students at KSD. This retired teacher stated that the first word a child will be taught to sign is “more.” The child learns that when they sign “more” – at meal times, while coloring, in the classroom – that they will then receive more of whatever it is they want. This is reminiscent of Classical Conditioning: when you make this sign, you get this positive feedback. This is how they establish the basic essence of communication with a language deprived child. From there you can teach them that making other signs will elicit other responses.

The interviewee expressed that without basic communication, you see major behavioral and psychological issues form within a child. If a person doesn’t know how to express themselves, they become frustrated. This becomes magnified the younger that person is, and is an explanation for toddler tantrums – they don’t know enough words to express why they’re upset. Imagine if you have gone your whole life without being able to express your needs, wants, hopes, dreams, happy and sad thoughts, because no one knew how to communicate with you at home? It isn’t difficult to understand then why the middle/high school students who come to KSD with no language have severe behavioral issues that seem to magically dissipate over time as they become more fluent in ASL and become more accepted into the community.

Modes

Many modes of communication were discussed across all interviews in various forms. Though it may seem simple to mention, there are two basic types of “verbal” communication that can take place in the context of the deaf school, and two basic modes by which a child may receive that message: auditory (hearing English) and visual (sign language). Teachers at the school report using a mixture of these two as needed, as well as using them separately depending on the preference of the community and the student. One teacher referred to the IEP (Individualized Education Plan) that each KSD student has, saying that this is a true testament to the “individualized” component – each individual student has a preferred mode of communication that they are legally allowed to request, under IDEA protocols. They can choose to be spoken to, signed to, or a combination of both. Often the hard of hearing students prefer a mixture, while the more profoundly deaf prefer solely ASL.

Additionally, many deaf people find that the easiest mode to communicate with hearing counterparts is by writing conversations with paper and pencil, or typing it out in a cell phone or mobile device. The problem with this comes into play when the deaf person does not have a clear grasp of the English language, which would make both reading and writing more difficult to understand and can skew the message. One of my teacher interviewees reported that, because D/HH persons, whose primary mode of communication is ASL, rarely encounter others who can communicate with them well, they will appear blunt or direct with their questions because they simply need to get the information. Their only way of receiving information, remember, is by being directly told the information (no incidental learning), so when requesting information they are equally as direct. This will

be discussed later in the FFA section, regarding formalities in Parliamentary Procedure as well as reported miscommunication amongst students.

Deaf Education

Most perspectives in this category came from current and former teachers at the school, as well as current and former students.

Challenges of Deaf Ed/Deaf Culture vs. Mainstreaming/Hearing Culture

As mentioned previously, it is often very difficult to be a hard of hearing student at a deaf school, as you are trying to live your life in two different cultures at the same time. In my literature review I presented an article that focused on the struggles students have in choosing between mainstream education and special schools, like KSD. One student made the decision to mainstream to the local public high school and receive his diploma there, though he had been raised at KSD as a young child. He expressed that he knows a reality most of us don't consider, which is that there is a lingering discrimination in the workforce towards people who have a degree that labels them "special ed." Though a high school diploma from KSD is equivalent to one from any other public school in Kentucky, it carries a stigma with it regardless. Thus, if a student can survive in the public school, they will, in order to have a better chance upon graduating. This trade off removes the stigma from the child, but isolates them within the public school, as this student said that it was "hard to be the deaf kid." It is hard to be the hearing kid at a deaf school, and it is hard to be a deaf kid in a hearing school. It is no wonder that hard of hearing students face a constant internal battle.

The other student in this category gave another perspective entirely, as an outsider “public school kid” granted access into the school. KSD has a partnership with two local high schools, Danville Independent and Burgin Independent, in which students from these schools are bussed to KSD to participate in their CTE courses (Agriculture Education, Technology Education, Culinary, Teaching & Learning – as reported by the agriculture teacher). This allows the schools to collaborate to provide more opportunities to these students that they would not otherwise receive at their schools. This was called the CCR (College and Career Readiness) Exchange Program when I and this student had interacted with it, though it has changed names according to an interview with a school administrator. At one point, the agriculture program population at KSD consisted of exactly half hearing students and half D/HH students. The student I interviewed was from one of these other schools and expressed the difficulty in being the minority at this school, as well as a sort of attachment to the program over time, considering they left their own home FFA chapter to be join this one. The student expresses throughout their interview the challenges that came with organizing events when half of your officer team attended another school, as well as communication barriers, miscommunication and misunderstanding.

Methods

The methods of Deaf Education I pulled from teachers may not align directly with curricula taught in a collegiate Deaf Ed program, however this is what I interpret to be accurate as it came from KSD teachers. First, the teachers expressed many times that what they were explaining to me was specific to KSD, and that they didn’t know how other deaf schools do things – every deaf school is different, falls under different legislation and powers, different school schedules, different classes, so on and so forth. This goes back to

the extreme individualization necessary to cater to this audience. Different student populations in different states are going to require some similar things, but also many different things. That being said, the following is a gathered summary of what KSD looks like, from the teachers' perspective.

The Kentucky School for the Deaf is a state school, meaning that there is no middle ground, local school board governing them, but instead they fall directly under the Kentucky Department of Education jurisdiction. KSD is home to a unique set of students, including those that come from foreign countries where deaf children are often not educated. This would mean that child comes to KSD with more, if not total language deprivation. Another set of student demographics at KSD comes from lower socioeconomic Kentucky families, who may struggle to provide for their child (thus making KSD a more stable home environment), or the family has no means or ability to learn ASL and thus has no way of communicating with the child – who will also come to KSD language deprived. Still other students come from local families, deaf families, and families who have determined KSD to simply be the most appropriate and beneficial environment for one reason or another, and this child may or may not have some range of language deprivation.

Regardless of the student's background, a teacher's job at KSD is to meet that student where they are, figure out what they know now and what else they need to know moving forward. This process is referred to as scaffolding by the educators. Vocabulary is a key factor in educating the deaf child, as they first need language and words to be able to learn new language and new words. The deaf student is often seen to portray a better understanding of concrete as opposed to abstract concepts. This is because they are visual

learners – if they can see it, touch it, smell it, taste it (concrete concepts), then it must be true, it must be real. If they cannot see whatever it is you are explaining, then it is harder for them to believe that it is true, or to even compartmentalize it in their minds. This is why teaching by association is so key. Finding out where that student’s mind starts on a subject and then building from there by making associations to things they already have familiarity with allows them to build their own picture of what happens in the abstract. This is why hands-on and experiential education has proven to be leaps and bounds more effective and engaging to the deaf child than lecture style classrooms. Finally, repetition was reported as being absolutely essential in the KSD teacher toolbox. Repeating concepts, repeating experiences, over and over again allows that experience or concept to become concrete, as the student can see it occurring multiple times and has the time to process it.

Qualities of Good Deaf Educators

The qualities of an effective educator of deaf children appear at first glance to be the same qualities you would expect out of any “good” teacher in any setting. Teachers, principals, and students reported in this category that their best teachers must have a strong work ethic, a passion for their jobs, and must be a “team player,” willing to collaborate with others for the greater good of the school. The best teachers put the kids first, above all else.

What began to set a good KSD teacher apart in the interviews, however, was the specific ways in which teachers at KSD, and specifically the agriculture teacher, have showcased their skill. A former principal of the school reported that the greatest struggle he faced when hiring new teachers was based upon their content knowledge skills versus their ASL communication skills. He reported that, in his experience, he could find a teacher

who was content area certified, and he could find a teacher who was Deaf Ed certified, but he could rarely find a teacher that could perform in both roles. Thus, the best, most efficient CTE teacher at a school for the deaf would be one who has expertise and could teach the content, while communicating effectively with the deaf child in their primary language. The tradeoff occurs when this perfect scenario reveals itself to be highly unlikely, and thus either a deaf educator must teach a subject they are unfamiliar with or a content certified educator must teach with an interpreter (which we will find throughout the interviews to be ineffective in the long run). A “perfect storm” brewed the day the agriculture teacher at KSD went back to school and gained her Bachelor’s Degree in Agricultural Education, without any forethought given or intention to start this agriculture program. The Ag Teacher had already been working at the school in the dorms for two decades prior to becoming a teacher, thus giving her the experience and ability to communicate with the deaf child. The principal acknowledged that this was a blessing of a situation and recognized the rarity of it.

Besides this seemingly unique situation, there are other ways in which a deaf educator stands out. For example, the teacher must be able to determine when a child is not receiving or understanding a message or concept, and adjust instruction accordingly. This is complicated by the fact that you are literally translating everything from English into ASL, and sometimes there just isn’t an easy translation. The best educators are those who have enough mastery of both English and ASL, as well as cognition enough to decipher confused looks, and backtrack until they find a place of understanding in that student’s mind (by making associations and concrete concepts, as discussed in the Methods category). Once they have found this, that teacher is able to scaffold onto that ground level

of understanding, explaining the concept in multiple ways when it does not translate well. The teacher's job is to provide that student a big picture view of a concept, which can only be done once the child can grasp individual components of the concept. This process is further complicated by the individual needs of the child, their background and level of language development. Thus, the effective teacher of deaf student must, truly, put the kid first – no matter how long it takes, no matter where that child is coming from, no matter how much patience they must muster, no matter how much planning and thinking and strategizing. Simply, the teachers at KSD must have a passion for these kids that surpasses understanding from the outside world, as there are a majority of people who would find this too challenging and walk away.

The students notice the teachers who have this kind of motivation and passion for them, and the students have especially taken notice of their agriculture teacher, who goes above and beyond to provide them every opportunity that she can in order to convey agricultural concepts to the students. The students count themselves lucky to have a teacher who not only cares about them, but is highly knowledgeable both in agricultural content and in ASL communication.

Residential School

KSD is set apart for obvious reasons from public schools due to their population, however they also offer a unique situation in that students have the option (and often it is their only option) to live on campus throughout the week. Interviewees reported that students live on campus Sunday night through Friday afternoon, in communal dormitories separated by gender. At first this doesn't sound like a big deal – boarding schools exist

everywhere. But the layer to this that always gets me is the age of students in the dorms and the reason kids live in the dorms.

Students at KSD can either be classified as a “day” student or a “dorm” student. Day students are bussed from their home districts every morning and then back at the end of the day. There is a certain radius of miles that student must live from the school to qualify for daily transport, and I think it comes to being under a one hour drive for the student. Otherwise, if a child lives outside of that radius, they no longer qualify for daily transportation by the school district and thus must live in the dorms throughout the week if they want to be a student at KSD. Note: no child is required to go to KSD. Our current special education laws require most schools to provide accommodations for D/HH students if they choose to go to their public school within their home district. However, there are times when a school district does not have the ability to provide the best options for the child, or the parents believe KSD can serve that child’s educational needs better. Still other parents and their children choose KSD for the social aspect (as reported by a hard of hearing mainstreamed student, it is hard to be the deaf kid in a public school). Children who live within the daily driving range are also allowed to live in the dorms if they so choose.

Let me make it clear: the day students get to go home to their families every night. The dorm students become each other’s family. I have always thought that the KSD students are awfully brave and courageous to be able to leave their families every week in pursuit of belonging and education. The dorms not only hold the high school students (who are probably reaching that age where they want to get away from their parents anyways), but also the elementary aged children, that age of attachment and need for security. That is what always gets me, there are 5, 6, 7, 8 year old kids who go days upon days out of the

year without seeing their families. Thus, the dorm staff become their mother and father figures, as do the teachers of the school. Their classmates become their brothers and sisters, as expressed by one of my interviewees.

When expressed in this light, it is no wonder why the community at the Kentucky School for the Deaf is extraordinarily tight-knit. Teachers care about these kids as if they are their own blood, because these kids see their teachers more than they see their own parents. As previously discussed, sometimes families can't communicate with their child because they don't know ASL, thus the members of the school have more bonds and relationships with the kids than their families simply because they can communicate with them. Language is such an integral part of relationship and community. I don't present this information to stir feelings of sympathy for these children, but rather to showcase their extreme bravery and character, as I myself admire the strength of several 6 year old children. I believe this strong community carries an electricity that is felt by all outside visitors, and this is what makes people walk away saying, "something about that place is truly special." This is also, in my opinion, what makes FFA so powerful and perfect for this school.

Addressing Misconceptions

Interviewing people, both within the realm of KSD and outside the school community, allowed me a bird's-eye view of general misconceptions that people possess who have never been exposed to the deaf population or ASL. One of the most common phrases I have heard (and one that has become my own personal pet peeve) is "I get it, I understand, they just can't hear." Well, yes, but that's only the tip of the iceberg. One interviewee examined the use of the Deaf mantra: "Deaf can do anything except hear!"

According to this former teacher, this saying is meant to tell the rest of the world not to discriminate against deaf people's abilities; however, it does not mean that the only thing that defines a person of the Deaf culture is their inability to receive auditory input. Quite the contrary, as outlined in the Deaf Culture and other categories, there are many layers to a deaf person and a deaf child specifically that you do not understand unless you have taken the time and effort to get to know that person or the Deaf culture. Along the same lines, you cannot accommodate a deaf person with "band-aid fixes." These are solutions that people "slap on" a problem without actually understanding the problem itself, such as providing an interpreter and expecting that person to just translate everything a speaker says word for word without any prior knowledge of the speaker or their topic, or providing written instructions/messages in English to a child who can't read English because it's not their primary language. Don't be a person who slaps band-aids on a wound that needs stitches. Simply, you don't truly know deafness until you have experienced the culture and the specific challenges that come with a lack of hearing.

With that being said, the general population must be cognizant of implicit biases they have towards deaf people as well. I heard often in my conversations that deaf people don't want sympathy, but rather empathy; don't feel sorry for them or pity them, just do what you can to understand their situation and needs. They don't need the standard to be lowered for them, just teach them in a way that they can reach the standard. Deaf kids also are not shy or withdrawn because they are deaf or fearful, they appear shy and withdrawn because most people can't communicate with them. When you show a deaf child that you are interested in them and in making them feel welcome, they are more than willing to open up to you. Even if you don't know sign language, they will appreciate an honest effort and

can figure out a way to communicate with you to some degree. Deafness is seen by the general public as a disability, and is even classified as such by our laws. In a sense, yes, it is by definition a “disability,” in that not being able to hear depletes and limits that physical sense and ability. However, imagine a world where everyone knew sign language. Would it be as much of a disability then? In the same way that a native Spanish speaker is not disabled simply because they cannot speak English, a deaf person is not disabled simply because they use ASL, which is recognized as its own language in America. Deaf people can still function in our world right alongside their hearing counterparts, they just don’t communicate the same way hearing people do. Though there are obvious reasons why we consider deafness a disability, we must be aware of the stigma and bias this label places on a child who simply uses a different language than other children, especially in the context of FFA events and agricultural education. I heard some hesitation in some of my interviewees, who say that it is unlikely that KSD FFA could be successful in speaking events, and that they should probably stick to things that don’t require speeches. I understand why this is a common thought, especially the way that our FFA events are currently set up. We’ve never had to cross that bridge of trying to figure out how to “make it work” for a deaf participant. I would challenge my audience to think about crossing that bridge now. “KSD FFA may never be the best at giving speeches”...Why not? Let’s find a way to at least give them a fair chance.

Social Capital

Social Capital, outlined in Chapter 2, is the amount and quality of relationships people have that allow our society to function and allow people to be successful within society. This is called “capital” because it is believed to possess value in our society, and

thus creating more social capital for the students at KSD would add more value to their lives and our society. Social capital is a concept I believe students are being taught and provided at KSD, especially in the context of the agriculture classroom and FFA program. Many of the students I interviewed expressed that KSD had given them networking skills and relationships with people that they value intrinsically, and they place value on these relationships as a tool for advancing in their careers. Multiple times, students reported that their agriculture teacher is the one that introduced them to a particular interest or a career, and in some instances even got them hired for a job. The students acknowledge that their agriculture teacher is a valuable resource to them for this purpose, meaning that they are gaining social capital when they develop a relationship with the agriculture teacher (who could also be considered a More Knowledgeable Other, in Vygotsky's theory). It could be inferred that the student may never have had these particular opportunities or relationships, had KSD not instituted this agriculture program.

The agriculture teacher also puts forth an effort to connect students with members of their own community and the Deaf culture, such as through collaboration with other teachers, teaching clinics that bring in deaf adults, and Ag Camp which attracts students from across the state (and often from other states). One of the Deaf farmers even expressed an interest in coming and working with the students himself, teaching them what he knows and helping them with their farm. This all builds social capital amongst the deaf community, for both students and adults alike. Ag Camp field trips and events that the FFA does out in the hearing community builds social capital in students with the hearing world and the general agriculture industry, which they may not otherwise have access to due to the seclusion that comes with being labeled with a disability and attending a special school.

Agriculture and the ag classroom at KSD serves as the vector by which all of these social connections are created.

Students also expressed a desire for more networking and collaboration throughout their interviews. They enjoy meeting students from other Deaf FFA chapters and they remember these interactions long afterwards. They also desire to be included in events and activities with other public school FFA chapters, contrary to the misconceptions of surrounding chapters. They are being made aware of the value of social capital and they understand the benefits that would come with interacting with the public school FFA chapters, especially within their own region. One student even expressed the knowledge that collaboration may be difficult at first due to language barriers, however she believes that the public school chapters would benefit equally from the deaf chapter's perspectives. Thus, social capital for all involved parties would be gained.

Human Capital

Human capital, by contrast with social capital, deals more heavily with the individual value of a person as opposed to the collective value of a network of persons. Human capital is the value of an individual's skills, experiences and attributes that, quite frankly, make them valuable to a society. All across the board, interviewees unknowingly expressed all the ways in which human capital was being built in each child who takes an agriculture class at KSD. Work ethic probably stands out as the most frequently cited trait that is being taught in the KSD agriculture and FFA program. We know that our society values work ethic, as this trait is what drives our economy by placing hardworking individuals in jobs that create revenue and contribute to our overall success as a nation. Many people lament the lack of work ethic that children raised in our era of convenience

have, thus making it a desirable trait to be instilled in schools. Often a child who has a disability, who has never been taught that they are capable of work, will become reliant on their families, communities, and government assistance programs. KSD strives to teach children how to live independently when they leave the institution, and the agriculture program has shown great success in teaching children how to work as adults. The children learn responsibility and practice that feeling of satisfaction in seeing a job completed when they work on their school farm, raising poultry and collecting eggs or planting seeds and harvesting fruits and vegetables. This goes back again to providing a concrete experience for an abstract concept: “work ethic” and “hard work” are just words until you put meaning with them, via an experience.

In addition to self-sufficiency and work ethic, human capital is being built in KSD FFA members in the form of leadership skills and confidence in themselves as a capable human being. Students who had travelled with the program out of state or on field trips, or who had competed against hearing students in FFA events, expressed a sense of accomplishment and pride in their abilities. I believe that placing a child in an isolated environment, such as a resource room in a school or another school altogether, sends a subliminal message to that child that they cannot perform like the rest of their peers, even though this is not true and no educator has ever intended to give off this vibe. It is just an unfortunate side effect and nature of the situation, even though these students will ultimately benefit from this separation in the long run. This is why KSD and the agriculture teacher must work extra hard to provide opportunities to the student to negate this subliminal message and reassure that child that yes, you CAN do things just like the other kids. Putting on the FFA jacket alone has been reported by interviewees to create a sense

of unity and allegiance amongst the deaf members, making them feel included. Coupled with the opportunity to actually compete or participate in events, while dressed the same, alongside their hearing counterparts, only serves to strengthen this sense of pride. However, I have noticed that there is something extraordinary that happens within the deaf student when they not only perform with their hearing counterparts, but even go above and beyond to *outperform* them, winning contests that they previously would've never thought they could have even tried to participate in. That right there is life changing, and you can see it all over their face when they talk about it. That is pure empowerment. When you provide a deaf child with the ability and the opportunity to perform on even-footing alongside hearing people, you are unlocking a confidence in them that will far outlast the blue FFA jacket. This builds character that makes them successful and motivated individuals, which are traits valued in our society.

Finally, not only does the KSD agriculture and FFA program generate human capital within its students, I also encountered a surprising and unpredicted finding: interacting with KSD FFA members, and deaf students in general, creates human capital in the hearing teachers and students they encounter. The students who came to KSD as part of the exchange program with the public schools expressed that working alongside their deaf counterparts has given them new perspectives, crushed their former misconceptions about disability, and given them a sense of confidence in their future ability to interact with deaf people. Practicing communication skills with a person you previously would have had no obligation to communicate with will serve hearing people well in the future, should they need to interact with a deaf friend or colleague. This also bodes well for the deaf community, because it means that there is one more person out there who truly “gets it,”

who understands what it means to be deaf and will thus make the world a bit friendlier for a deaf person. In this way, hearing people also become more valuable to society by owning a widened perspective and an open mind, which creates peace in society.

3. What do other deaf schools stand to learn from a successful agriculture program?

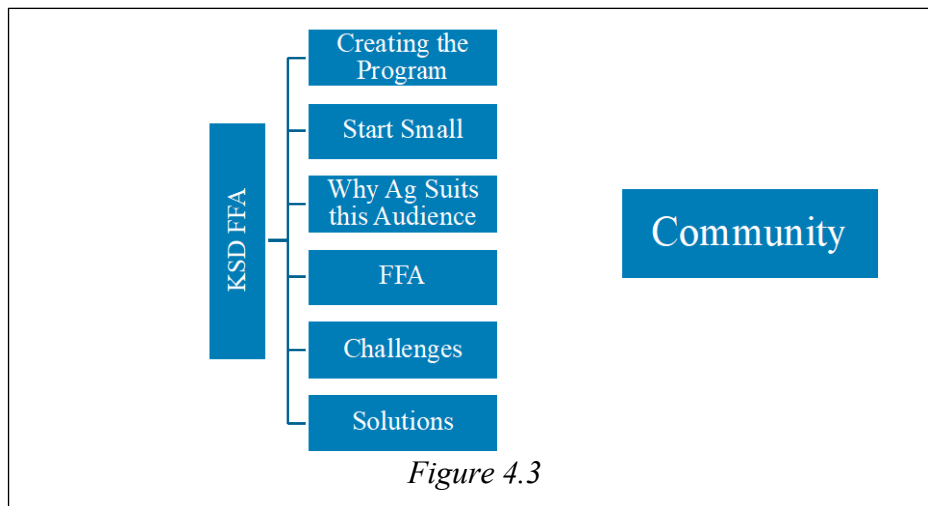


Figure 4.3

KSD FFA

Creating the Program

Most of the knowledge gained from interviews regarding the start-up of the KSD FFA chapter came from a former principal and the current agriculture teacher, as well as a few former students. The main takeaway that I got from the interviews is that creating this program was a perfect storm, in that it all came together at just the right time with just the right people. The principal I spoke with said that there were some retirements happening in the CTE department at KSD, and they were reevaluating the positions to determine if they should simply be replaced or if the school should go a different direction. Meanwhile, the agriculture teacher told me that she had just completed her Ag Ed degree, though she

had not gone into the degree with the intention of teaching, she was simply pointed to the degree by a college advisor and had an appreciation for the subject. In fact, the agriculture teacher had never taken an ag class in high school, and had absolutely no familiarity with FFA. Many people may think that this program was purposefully planned to happen, because it all seems to have come together so naturally – there was availability, there was an employee with a certification, obviously they must have been planning this. However that is 100% not the case, it all miraculously happened from coincidence and networking, a principal who was cognizant of the needs of his student body, and the talents of his employees.

Upon digging further into the story, however, the interviewees did reveal some factors that possibly played a role in creating this perfect storm. For instance, the principal who hired the agriculture teacher says that he grew up on a family farm and had always had a deep appreciation, not only for the agriculture industry, but for hard work and strong work ethics. Similarly, the agriculture teacher had a deep appreciation for agriculture, and had many years of experience in the industry – obtaining an Associate’s degree in Horticulture, working as a florist, and owning her own farm. The agriculture teacher had also worked for many years in the dorms at KSD, and had worked her way up in leadership roles there. This allowed her to have a thorough understanding of the school, the students, and Deaf culture. It can be suggested that a love of agriculture, in addition to the ability to communicate effectively with students, and the availability of supportive administrators all play a huge role in allowing a program like this to be possible.

Throughout the past 10 years since the KSD agriculture program was created, it has seen much growth and progress. The program has always hosted two career pathways in

which students have reported taking courses: Animal Science and Plant Science. The agriculture teacher reports having taught courses such as Greenhouse Technology, Landscape Design, Crop Technology, Small Animal Technology, Large Animal Science, Equine Science, Poultry Science, and a general Principles of Agriculture course. The program is in possession of 23 acres of land that students are very appreciative of, on which they have had the opportunity to plant and harvest various crops, and build a successful poultry production from which they get to sell eggs. Other teachers in the school report having collaborated with the agriculture teacher to co-teach Agriculture Science and Poultry lessons at the middle school level, and an Aquaculture class at the high school level. There are a variety of tools and labs available for students within the program, which can all be found recorded in depth in the Structural Coding Appendix.

From what I have gathered in interviews, the program was created because the teacher was highly motivated and highly qualified; the administration and fellow teachers were highly supportive; and the community had an appreciation for the agriculture industry and understood the necessity of it being taught to these students. A school could theoretically orchestrate any piece of this perfect storm to begin their own program.

Start Small

I asked my interviewees questions along the lines of, “what advice would you give to a school wanting to start an agriculture program like this one?” The resounding answer I received was, “start small.” Interviewees discussed the importance of examining what the school has available to it currently, what resources they could expound upon, and building from there. It can be easy to look at KSD, with their large farm and variety of labs and tools, and become overwhelmed, thinking that you don’t have that at your disposal. But

just like every other school, KSD started out with very little and due to support from administration/the community and the hard work of the agriculture teacher, within 10 years it has blossomed into this beautiful agricultural mecca that it is today.

Determining the needs of the students and the community you serve is another suggestion made by the interviewees. Find out the specific needs that you can address and choose one at a time to build upon. If you live in an area where you can place students in job options involving lots of horticulture and plant science, perhaps that is the area you focus on first. If later you find that there is also a need for more knowledge with small engines or aquaculture, then add those subjects and their corresponding labs in as you progress. It is not necessary to teach every single subject in agriculture directly out of the gate. Find out what your community wants, what your students need, and what you have to work with. Start with these small tasks, and build from there.

Why Ag Suits this Audience

If a school is interested in starting an agriculture program and is looking to KSD FFA as a role model, they might glean some evidence from my interviewees that would make a solid case for agriculture for this audience, when presented to administration. As mentioned briefly throughout the previous categories, agriculture provides experiential learning and concrete evidence of abstract concepts, which is directly beneficial to the deaf child's learning style.

Agricultural Education suits this audience perfectly because it accomplishes many goals that deaf schools share, such as teaching children life skills for post-graduation, providing career options, and exposing students to new experiences and opportunities in a

safe, controlled environment. My interviewees all, again, expressed how the ag classes and the FFA chapter at KSD has taught its current and former students how to work, as well as the value of work. It has also shown them the concrete evidence of work – pulling a line from the FFA Creed, students get the chance to experience the joys and discomforts of agricultural life, while also witnessing the fruits of their labor. Students at KSD report craving exposure, they want to experience the world around them and they have a curiosity about agriculture and where food comes from (perhaps because food is a concrete idea, they eat it every day, and growing food is a concrete, visual process that they can experience for themselves). Students report learning from their ag classes, they report having fun while learning, and they report that their ag classes have helped them with their postsecondary outcomes.

Finally, from an agricultural education perspective looking to capitalize on uncharted territories, our industry should concern themselves with finding ways to reach out to this audience to educate them about the industry, to dispel misconceptions that the industry works to eradicate. Agriculture affects everyone, including the deaf. However, if we now know that the deaf may not receive a message or information unless it is directly given to them, how can we not make concerted efforts to reach out and provide information about their food and their environment? We in the agricultural education profession justify public school programs all the time by saying, “if they don’t get it here, where else will they get it?” I can confidently say that this argument applies even more relevantly to a deaf audience.

FFA

The FFA chapter associated with the agriculture program at KSD is an interesting concept to be discussed as its own entity. I have gathered inadvertently from my interviewees that KSD FFA is synonymous with KSD agriculture courses, which is actually very exciting and shows that the FFA at this school is highly intracurricular, as was the original intention of the organization. When teachers at the school think of the agriculture classes, they think of the students in their Official Dress, and they associate it with the FFA emblem. Most of the stories teachers told me involved them calling the program the “FFA” program, grouping the classes under the title of the student organization. Therefore, it can be inferred that perhaps the FFA component of KSD agriculture is the most visible and prominent. In a sense, KSD FFA is the agriculture program’s brand. It has been compared to athletics in the deaf school world, which are very popular amongst the students and creates the greatest sense of community both within the school and amongst other deaf schools. For the FFA to be regarded in the same light as the basketball or volleyball teams, this can be considered a great compliment.

Some of the most notable positive impacts that the FFA has had on the students of KSD include the sense of pride and inclusion they feel, as well as the exposure and opportunity the organization provides. For some students, wearing the standard official dress of the FFA (black pants, dress shoes, white button up shirt, tie, and the blue and gold corduroy jacket) is the first time in their life that they have been “dressed up” in “formal” attire. Families of students from low socioeconomic backgrounds often cannot afford these clothing items, so the agriculture teacher uses chapter funds to provide them when necessary to give that student a fair opportunity. Having a smaller student body to provide

for may provide advantageous in this case, as larger programs may not be able to afford this, thus excluding some members. I can think of one particular scenario when the student admitted that their official dress clothes were the nicest clothes they own, which is actually very commonly reported by other agriculture teachers in rural communities around the state of Kentucky. Not only might this be the first time that student has felt “formal,” but it may also be the first time that they have been exposed to true professionalism, and taught how to conduct themselves in a professional manner. Again, you can preach professionalism at a deaf child all you want, but it won’t be a concrete concept for them until you give them the chance to put professionalism into practice. The formality and the high standard that the FFA organization provides for young students is an important life skill, especially when the student can draw on this experience as they begin to apply for colleges or jobs.

Additionally, being a part of the FFA may be the first time that the child has felt truly included and represented in their young lives, especially if they have felt outcasted by public school systems or their own families. Student interviewees reported over and over again feeling a sense of pride, and loved having KSD represented on the back of their jackets. FFA is a place of refuge for many students across America, and can be even more so for a deaf child who would otherwise be “left out” of the hearing world activities. The FFA organization is very popular especially here in Kentucky, and particularly in the central Kentucky regions that surround the school. KSD FFA has shown their students, and other deaf students in other schools, that when they put that jacket on, they are just as much a part of the organization as anyone else, no matter their disability or lack thereof. They are not only a part of a local organization, but also a regional, state, and national one. This organization at KSD has also given students opportunities to travel – for many students, it

may be their first time leaving the state of Kentucky when they travel to National Convention. One interviewee reported that the National FFA concert was the first concert she had ever been to, and this was thanks to the agriculture teacher and the National FFA working together to provide seating arrangements and an interpreter to give her that experience. This gives that child an advantage compared to their deaf peers who are not so fortunate as to gain these exposures.

The next category works very closely with this one, as it addresses some of the components of the FFA that are not as glamorous as has been described in the preceding paragraphs. One final notable component of the FFA chapter at KSD are the accommodations that the chapter must often make in light of the formality of the FFA chapter. A concept that was described to me by one of my interpreter participants is that the FFA contains a lot of “frozen text,” which are texts that never change, like the FFA Creed, officer installation ceremonies, degree conferring ceremonies, and the officer stations in opening ceremonies. These must all be translated into American Sign Language, and interpreters work closely with the students and the agriculture teacher to make this happen. The frozen texts themselves are not a challenge, so much as the translation. This was a surprising and interesting finding that I did not expect, and it will be discussed more in depth in the next section. I felt it was worth mentioning here as it is an interesting perspective for fellow agricultural educators to be aware of.

Challenges

Just as the formality of the FFA organization can have a positive impact on students in deaf schools by teaching professionalism, the teachers at KSD also report that this formality can actually be quite foreign to the students because of their culture, thus making

some aspects of the FFA a difficult concept for them to master. For example, the deaf typically communicate very directly, so the verbiage and the formality of running a meeting with parliamentary procedure may seem ineffective to them – if they want your attention or want to say something, they are used to just getting your attention and saying it. The deaf culture as a whole is very informal and conversational – there’s no need for formalities when you are amongst a very select group of people who can actually communicate effectively with you. This is not to say that they can’t learn parliamentary procedure, but simply that this may be an area that is new to them and may be a challenge when starting an FFA program in a deaf school.

Another challenge a school may need to address in a Deaf FFA program may be the residential aspect of the school and the widespread student population across the state. Public school FFA chapters are used to conducting activities at night, on weekends and during the summer. In Kentucky, we have our State FFA Convention in June, and an FFA camp runs from June through July. Chapters with school farms know that summer is peak work season, and requires multiple hands. When your students all live within the district, it is much easier for them to come on the weekends to a community service event or come throughout the summer to attend camp, convention, or tend to the school farm. However, KSD presents a unique challenge, in that their students go home every weekend and every summer to every corner of the state. It is unreasonable to plan an event on a Saturday and expect a child who lives 3 hours away to attend. Equally, the agriculture teacher and a very small handful of local Danville deaf students (if the teacher is lucky that year) may be the only people to see the farm for the two months of summer break. Thus, activities must occur during the school day or at night (which can exclude your day students who live 45

minutes away). This is a dilemma that does pose a threat to growth of the KSD farm – the agriculture teacher cannot possibly run 23 acres alone every summer, on top of her own personal farm. This leaves the conundrum – do we plant crops on the farm land in the spring, knowing the weeds may overtake them due to neglect all summer? Do we invest in livestock, knowing that the agriculture teacher is committing herself to driving to the school every day to tend to them, even on the weekends? In a public school, the students may use their school farm as an SAE, taking shifts and sharing the responsibility of tending the farm and the animals. This is simply not feasible to expect of KSD FFA members who do not live in the same community year-round.

Vocabulary itself is a challenge that encompasses various aspects of agricultural education at deaf schools. This perspective came mostly from my two interpreter interviewees, who expressed just how difficult it can be to translate the highly specialized vocabulary of the agriculture industry, as well as the FFA Organization. In Kentucky, students have taken KOSSA (Kentucky Occupational Skills Standards Assessment) exams for many years to determine if they can be considered competent in a CTE pathway. These tests are written in dense agricultural language that can be difficult for native English speaking, public school students. The teacher who told me this had been a reader for one of these tests and, without disclosing any test material, could simply tell me that she was shocked by the level of vocabulary, and could attest to the extreme difficulty the interpreter had in trying to translate these words (that do not have word for word translations) without giving the student any advantage. One interpreter interviewee gave an in depth account on the process she goes through when interpreting an agriculture class, and how she would have to stop the teacher throughout their lesson to ask for further clarification on a word or

concept that doesn't translate easier, or would tell the teacher or speaker that the students did not appear to be understanding. The interpreter and teacher would have to work together to unpack these technical vocabulary words, often repeating and reexplaining multiple times. This can make a class go slower, which may seem as though the students learn slower. This is not the case; they can only learn at the pace that an instructor can teach the content directly to them, and an instructor in a highly specialized field may have to do a lot of scaffolding and concept association to explain some things.

Not only does the difficulty in translating agriculture terms from English to ASL pervade the classroom, it also affects the FFA chapter and activities. I marvel often at the memory I have from student teaching, watching an interpreter interpret the final round of the Parliamentary Procedure competition at our Bluegrass Region FFA Day here in Kentucky. The interpreter had no clue what the competitors were going to say, because it is all improvised as part of the contest. Further, the words used in parliamentary procedure are not common words even in the English language, and they hold no relevance in ASL, much less have a direct sign. It was also all very formal and proper language, not to mention the students were speaking very fast to try to meet the time limit for the contest. All this together had that interpreter's hands flying as fast as they could go. I could see just a touch of panic on her controlled interpreter expression. It made me a nervous wreck watching her, so I can't imagine how that was perceived by the deaf students who had never seen this before. I mentioned FFA frozen texts in a previous category, which were described by my interpreter interviewee. These are also wrought with deep vocabulary that doesn't translate very easily. The interpreters that I interviewed all made comments that made it sound very overwhelming and nearly impossible to translate any of this on the fly, without

any prior knowledge of the speeches or contests, and without any prior preparation by event staff. I was informed gently but firmly to let the audience of this thesis know: please, do not stress your interpreter out by making them translate highly specified vocabulary on the spot without any prior preparation.

The challenge on interpreters and students using them in contests is further complicated when a judge in a competition has no knowledge of sign language or the interpreting process. ASL Interpreters in my study reported that it is unfair to both the judge and the student to make a deaf student sign a speech in ASL and expect the judge to score it fairly and accurately against English speaking participants. It would be like expecting a judge, who knows no Spanish, to listen to a speech in Spanish and then accurately determine its quality compared to English speeches. The quality of the speech lies not only in the words that the interpreter speaks, but also in the body language and quality of ASL “speaking.” ASL is not English, it simply isn’t. ASL has its own dialects, nuances and styles that you can only pick up on if you have an understanding of the language.

However, this challenge brings up another: at what point are we adapting an event or contest, and when do we cross the line into modifying it? Adaptation is providing the student with an interpreter or something that doesn’t necessarily change the event itself, while modification is changing what is expected of the student or the event. We must remain fair and equitable to all participants, while also being sure to fully address the needs of your deaf members. This is a very fine line and uncharted waters that have yet to be explored in Kentucky. Attending FFA camp during the summer is an example of a time when KSD FFA could not be included due to the amount of adaptation that would have had to occur. Either KSD or the Kentucky FFA Association would have had to provide

interpreters for all students at all times. At camp, students are scattered across a vast amount of space, making it nearly impossible for each student to have equal access at all times unless they stay together (which is limiting on their individuality of choice and preference) or an interpreter be provided. Paying that many interpreters for a week would have been expensive for either party involved. Does expense mean that the child doesn't still have a right to be there? At what point do we as a society draw a line on total inclusion? This is just one example of a challenge faced in Kentucky that has yet to find a direct solution, though I will address KSD's custom solution in the next category.

Other challenges occur on the local level within the chapter, such as travelling together, miscommunication, and students being teased. These challenges were reported by students who expressed how difficult it can be to keep up with each other in crowded locations, such as National FFA Convention – a problem only further complicated by the fact that everyone is dressed alike! Students reported having miscommunication issues and quarrels amongst themselves, which on the surface sounds exactly like every other group of teenagers trying to work as a team. However, this particular student brings a unique definition of the miscommunication challenge as he discusses the language and cultural barrier. Sarcasm was reported to have caused a major riff in some FFA friendships amongst an officer team, as a deaf student allegedly took a sarcastic text from a hearing student seriously. Finally, a very disheartening account from a hearing student reported overhearing some rude comments made about deaf students at an event, which I would hope would be a disappointing, isolated event but can see how this might be an unfortunate

challenge that these students may face venturing out into the general public due to misconceptions.

The final challenge reported by interviewees dealt with the question, “why do you think there aren’t more agriculture programs in deaf schools?” Many proposed ideas such as not having a certified agriculture teacher, or not having resources like KSD’s program. One idea that reoccurred across multiple interviews, seems very plausible and is worth investigating was the notion that many people in the realm of Deaf Education simply don’t know about agriculture programs, or don’t know that they are a career option for deaf students. We are living in a world of technology where agriculture is often pushed to the back burner, considered to be “outdated” and uninteresting as a career prospect, however this is a common misconception. Many people do not realize how technical agriculture truly is, and how prevalent careers related to agriculture are. Misconceptions about the agriculture industry as well as unfamiliarity with school-based agricultural education could be a challenge and a hurdle that we must overcome in order to get more agriculture programs in schools for the deaf.

Solutions

The Solutions category wound up containing the most content and evidence from all the interviews, which should bring us all hope – we may have more potential solutions than problems.

To address the challenge of having FFA members spread out across the state, the agriculture teacher has instituted a CSA (Community Supported Agriculture) program at the school. The students get the experience of learning about gardening and crops, they get

to raise them from seeds in the greenhouse, they get to plant them before they leave for the summer, and they get to harvest them at the end of the summer when they come back to school. So, who tends to the garden and crops while they are gone? Teachers and deaf community members have developed a tradition of working various times throughout the summer to plant, weed, and collect fruits and vegetables from the garden. In exchange for their work, they get to divide the spoils of the harvest amongst themselves, free of charge. This not only benefits the students, who still get the opportunity to see the agricultural process from start to finish, but it also has a secondary, unintentional effect of strengthening the sense of community and relationships amongst the teachers and deaf community members who work together towards a common, delicious goal.

KSD was able to provide a wonderful opportunity to students in response to the inability to attend FFA camp. The agriculture teacher and the principal worked together to create Ag Camp at KSD, a two week program that is open to all students, hearing and deaf, both in Kentucky and from other states. During these two weeks, students and their camp counselors travel around Kentucky on field trips to various agricultural sites and businesses, determined by the camp's "theme" for the year. They also host speakers and activities on-site at KSD. Campers stay in the dorms for the two weeks, with the option to either go home on the weekend between the weeks, or to attend the actual camping trip that the camp provides to Fort Boonesborough, where they set up tents, cook, and relax. This camp is equally informative, educational, fun and experiential for the campers. Speakers who have attended the camp for a day or hosted a field trip have spoken highly of the students and the program. Several former students that were interviewed expressed their satisfaction with the camp and cited it as a highlight of their KSD FFA experience. The

agriculture teacher hires former students as “Counselor’s in Training” (CITs) for the two weeks, thus bringing them back and providing them the opportunity to put their learned leadership skills and agricultural experiences into action, guiding and mentoring younger members.

Addressing the language barrier and ASL translation of technical Ag Ed vocabulary takes up the majority of space within this category and will be summarized briefly here, though I would encourage readers to peruse the Structural Coding Appendix for more details, directly from the first-hand expert sources themselves. One of the simpler solutions posed by an interpreter, and reinforced by the agriculture teacher and past experiences of students, is to create an ASL frozen form for FFA traditional texts, like the creed and other scripted manuscripts we expect FFA chapters nationally to follow. Some examples of things that could be turned into an “ASL frozen form” (meaning we create an agreed upon ASL version of these things and use it across the board for deaf members) might include: the FFA Creed, the FFA Motto, the FFA Mission, Greenhand/Chapter/State/American degree ceremonies, Opening and Closing ceremonies, and even common words and phrases to the organization like “official dress.” Creating these frozen forms, however, would only be efficient and acceptable if they passed the inspection of “deaf eyes,” not just a person who has no ASL experience or even a person who knows ASL but isn’t immersed in the culture. ASL is such a culture-specific language that needs to be viewed within the context of Deaf culture; only “deaf eyes” can tell you if the frozen form makes sense the way it has been translated. This is just like taking a Spanish dictionary and translating the FFA Creed from that without any understanding of the language itself. The most accurate

translation of a Spanish FFA Creed would come from a native speaker who represents the majority of the people that frozen form text will service.

On an individual basis, working with an interpreter in advance of any speech, lesson or event is absolutely vital to providing the deaf participant with the absolute best experience possible. One interviewee discussed the term “ELK” with me (Extra Linguistic Knowledge). Finding an interpreter who already has some life or professional experience with a topic insures that you will get a more accurate translation than throwing an interpreter out there who has no previous concept of the topic. For example, finding an interpreter who has grown up near or within the agriculture industry, though presumably a challenge, would be greatly beneficial. KSD is fortunate to have that, due to the rural nature of our state and the greater likelihood for agricultural exposure. If you don’t have an interpreter who has previous knowledge about the content, finding one who has worked in this setting previously would also provide you with greater expertise. After having been interpreting for KSD FFA for 10 years, there are some staff interpreters who have learned enough about agriculture and FFA that they feel more comfortable with the vernacular and the expectation of the students, so they can give that student in turn a better translation and experience.

When an interpreter has no prior experience, however, and needs to be trained from the beginning, the KSD interpreters offered some advice in their interviews on the best way to prepare interpreters for agricultural content and FFA events. If a student is giving a speech, have the student work with the interpreter beforehand to practice the speech, so that the interpreter can ask questions and help the student hone their signs to be best understood the day of. This works even better when the interpreter already has a prior

working relationship with that student, as is the case with many students who have grown up at KSD using the staff interpreters. The needs of that student should always be a top priority, and pairing the student with an interpreter that matches their skill and style should be considered. If a student is comfortable with their interpreter and has a connection with them that allows both parties to understand each other effectively, the deaf participant is going to have a better experience.

Not only should the interpreter work with the student, but they should also prepare themselves individually and take responsibility as an interpreter when working with hearing people. The interviewees suggest doing your own research on a topic to prepare for a wide range of possible vocabulary – specifically, familiarize yourself with the FFA website, handbook, rules of contests, etc. before the actual event. This is not new news to interpreters – they are trained to know this. However, many of us in the general public do not see the work that interpreters put in on the back end of an event, all we see is the day of as they sign our messages beautifully. Coordinators of events, agriculture teachers and anyone who requests an interpreter should be cognizant that the more preparation you can give the interpreter, the better the experience will be for the deaf person.

Interpreters should also be sure to explain the interpreting process to new judges at FFA contests, and clarify any misconceptions or questions that judge may have before the student even comes in the room. Telling the judge what it's going to look like, especially if they've never been in that situation before, will ease their own discomforts and give the student a more equal view. Even better, though, would be to ensure there is at least one judge in the room who is familiar with sign language, who can evaluate the student based on their facial expressions, body language, eloquence of signing...these are all just as much

a part of the speech as the words the interpreter speaks. This may prove to be difficult when there are often few people who actually know ASL; however, I have seen it done that schools who bring students to contests are required to also recruit judges. Perhaps KSD could help recruit members from their deaf community, or deaf communities across the nation, to assist in judging contests.

Finally, addressing the last challenge that people might simply not even know about agricultural education within the Deaf Ed world. This is where publicity and advocacy come into play, as a responsibility of everyone who has been exposed to Deaf FFA programs. Spreading the word, via the deaf community, social media, even this thesis, will all help to make people aware of the benefits and possibilities that lie in wait for deaf schools who establish agriculture programs. Many interviewees gave helpful examples of ways that we can spread the word, citing the KSD FFA Facebook, Twitter and Instagram pages as a start. The Facebook page in particular gets a lot of traffic, and serves as a means of bringing two world together – the deaf community who want to see their students successes, and the hearing community who want to come alongside and encourage this chapter. Social media is a great way to quickly share messages across the country. Other interviewees cited making videos about the program and sharing them on the social media pages. Two former students both had the idea of actually sending students or the agriculture teacher to other deaf schools and setting up a Q&A panel, helping them start their own chapters based on the experiences KSD FFA has had. Almost all interviewees discussed the easiest solution to unawareness that we can all do, starting today: just reach out and talk to people. When someone comments on the FFA emblem on your shirt, tell them about KSD FFA, as did one former student as she was attending college. One teacher reported

traveling with the chapter as a chaperone and encouraging everyone she meets on these trips to go like the Facebook page. Getting these students out there, letting them advocate for their program, will ultimately be one of the most impactful ways to spread the news as well.

Community

The final category in the Structural Coding guide should be interpreted as both examples of community being formed as a result of the KSD FFA program, as well as the already established examples of communities that support the program. This category still falls under the third research theme, “what do other deaf schools stand to learn from a successful agriculture program?” I think that all my interviewees across the board either explicitly gave account of the effects of community on KSD FFA, or unintentionally made mention of examples of community.

The City of Danville, KY, where KSD is located, appears to take great pride in the Kentucky School for the Deaf and boasts its rich history via historical landmarks and mention of the school as a highlight of the town. Many interviewees echoed this apparent support, saying that the city and the citizens of Danville may not totally understand what happens at KSD, but they are supportive and welcoming of the deaf community regardless. Hopefully, other deaf schools experience this same sense of community support. The deaf community of Danville, which consists of employees at the school as well as deaf adults who call Danville and surrounding areas home, have shown themselves to be absolutely amazing and supportive of the KSD FFA and agriculture program. My deaf community member interviewees made mention of their great excitement to see agriculture back on

the campus, and unanimously agreed that the agriculture program was beneficial for their young deaf students.

Additionally, members of the deaf community expressed continued interest in the program, being more than willing to volunteer to mentor young deaf agriculturists, and stepping in often to fulfill role model positions and comforting relationships where the child's family cannot. KSD has been a mecca of opportunity and hope for deaf people in Kentucky since 1823, and that tradition continues to this day. It is a sanctuary where they feel safe to be exactly who they are, and interact with people who accept them.

It is because of this sense of community, which has long been engrained in the Kentucky deaf community, that the big picture of FFA seems to make total sense to deaf students; they already have an understanding of community and support far greater than the rest of us. Other deaf schools should know that their deaf students crave community, and FFA is just one avenue of access for that sense of belonging and accomplishment.

CHAPTER 5. RESULTS AND CONCLUSIONS

What follows in the coming pages are the results and conclusions of a case study on the Kentucky School for the Deaf agriculture program.

“For the reader’s sake, for the case’s sake, for the forest’s sake, this particular research situation’s best story needs to be found. It is an effective author who tells what is needed and leaves the rest to the reader.” (Stake, 1995, p. 121)

“Instead of storytelling, the development of the report will more likely follow...a chronological or biographical development of the case.” (Stake, 1995, p. 127)

My first research objective for this case study was to tell the story of the Kentucky School for the Deaf agriculture and FFA program. The first section of this chapter will answer the question: *What is the story of the Kentucky School for the Deaf agriculture and FFA program?*

KSD Agriculture History, 1823 – 1971

In 1823, “The Kentucky Asylum for the Tuition of the Deaf and Dumb” was established in Danville, Kentucky, a historically rural town that lies roughly 35 miles south of the more widely-known city of Lexington. The name of this school would be changed to “The Kentucky Institution for the Education of Deaf-Mutes” in 1882, and again to “The Kentucky School for the Deaf” in 1904, the name which it maintains today. Almost immediately upon creation of the institute, the school’s Board of Directors made known to the state legislature that the school intended to place heavy emphasis on industrial training, especially in the areas of gardening/farming for boys and housework for females. Though we can speculate that the school was proactively training the pupils to enter the workforce

upon leaving KSD, earliest records show that the real reason these topics were taught was born of necessity.

From the onset, KSD has been a residential school, meaning students would travel from far and wide to attend and would live on the campus for extended periods of time. In the first several decades of its existence, KSD serviced deaf and hard of hearing students from multiple states across the south, being the fourth deaf school created within a 10 year time span of the first deaf school in 1817, as well as being the first school in the southern region of the US meant for such a purpose. The Civil War would change the school's population in the early 1860s, as states below the Mason Dixon line began to secede from the Union, taking their deaf children with them, most likely in an attempt to prevent the deaf students from being taught abolitionist philosophies in the border state of Kentucky. Nevertheless, the 1800s and early 1900s would see a populous student body at KSD, a refuge for children who otherwise would have received no education in the formal setting. Since the Civil War, students have travelled from the farthest corners of Kentucky, by trains and later automobiles, to live, work, and learn on campus.

Modern medicine would later make strides to eradicate deafness, to the point that today it is considered a "low incidence" disability, however it was still a relatively common byproduct of congenital diseases, high fevers, and various illnesses being contracted in the first century of the school's existence. Therefore, there were once hundreds of deaf students and their mixture of hearing and deaf staff members living in the heart of Danville, on tracts of land that would ebb and flow in size as the need arose. The first land purchase made by the school was 14 acres in 1826, followed by 37 ½ acres of pastureland for the school cattle in 1858. It was also in the year 1858 that work first began on a building that

would be dedicated solely to the education of the trades, though the Civil War delayed completion of the construction project until 1888 when the doors of the first Argo Hall would be opened for the purpose of providing vocational education to male pupils. Prior to the decision in the 1850s to educate the students in a trade on campus, the boys would be sent out on apprenticeships with local tradesmen. It was determined that, while this was very practical training and they would certainly be prepared for a trade, the boys were being placed in unsafe, uncontrollable situations with businessmen who may or may not have any desire to actually “teach” the child, and thus a more controlled and educational environment at the school was decided to be better for the pupils.

Though there are no accounts that any students left the school to fight for either side in the Civil War, there are accounts from at least two interviewees and one of the historical records that both armies made multiple attempts to use the campus facilities as base camps and hospitals, though each time the superintendent was able to ward them off. At one time, the superintendent told the soldiers that they could use the school, but all the staff would be leaving and the soldiers would have to take care of the deaf children in their absence (an offer which I’m told the soldiers quickly declined). Another account says that the school’s cattle were herded into a building on the campus and the windows were painted black to prevent them being commandeered by the army. In both instances, the school was able to deter the soldiers and preserve the school for educating the children. Nevertheless, the school felt the effects of an unsettled, war-torn society, and it was not until 1874 that the dust would settle enough for the first trade to officially be taught on KSD’s campus. This trade would be printing, and would allow the students to print newspapers throughout the next 100 years, which served as my main historical reference in compiling this thesis.

Mind you, printing is recorded as the first trade to be “taught” on the campus, however evidence shows that the students were working the school farm from the very beginning of this story. I believe agriculture was not historically seen by KSD as a “trade” to be taught, so much as it was a way of life and a means of survival common in this rural state. In a time where there were no grocery stores (the way we know them today), and back when schools could not purchase large quantities of prepackaged food to be served in a cafeteria, everyone pitched in to feed every mouth. One of my interviewees quipped that this was the original “farm to table” movement in that the students and farm workers were planting, harvesting, milking and slaughtering all of their meals: if there had been no agriculture, there would have been no food. I would reason that the students did not need to be lectured on where their food came from and the value of agriculture, as an appreciation for the land and the livestock was instilled in them from an early age - hearing, deaf, black, white, everyone shares a fundamental need for sustenance.

In 1882 the land on which two residences would be built - The Engineer’s House and the Dairyman’s House - was purchased. These homes would see the passing of several generations of KSD employees who carried the titles farm managers and school gardeners. The first record I have of an agricultural employee is Mr. D. C. Sullivan, who was called the school’s first regular gardener in 1872 – previously the lands were managed by the superintendent and boys’ dormitory supervisor. In 1885 a land purchase would be made that would double the size of farm land used for growing a garden at KSD, and in 1886 20 acres of pastureland for the cattle would also be added. In 1890 a barn was built to house the school’s cattle, which would be enlarged in 1915; A new, larger barn for storage of equipment and the like was built in 1894 (after a previous barn that had come with a land

purchase burnt down), and it too would be enlarged in 1910. It would seem that the school's population must've recovered from the war with much gusto to warrant the need of an employee whose sole purpose was to maintain the school farm, as well as the major increase in barns and farm land to be cultivated. From 1872 until 1971 there would be a list of men called farm managers, gardeners, and dairymen (used often interchangeably or indistinctively) who could be considered to be the first agriculture teachers of the Kentucky School for the Deaf, though agricultural education would not formally be introduced to the public school system until 1917.

There is no evidence to suggest that agriculture was ever formally taught at KSD in a classroom, however accounts from 1914 say the school day was changed so male pupils would go to school in the morning and would work the farm in the afternoons. The farm was a part of regular school days for every male student, so there was surely much that was learned informally during this time. The females were involved only minimally in any capacity with the farm, as their primary trade was sewing and general housekeeping; however, a tradition was established in the early 1900s that the females were in charge of the strawberry patch, because they were gentler with the delicate fruits than their male counterparts.

I believe the term "garden" is used most often in the records because the farm manager would plant only the types of crops that would be used for food, and there is no indication that the school ever farmed for large-scale production or profit purposes. All food raised on campus was eaten on the campus, and many times throughout the record the students and staff of KSD raved about how delicious the meals of fresh vegetables were. Crops that pop up repeatedly in the records include onions, potatoes, sweet potatoes, green

beans, cabbage, and strawberries, though it would be naïve to think these are the only crops that were grown, as the school claimed to be totally self-sustaining. I hypothesize that these are mentioned most often as they may have been the most labor intensive to plant, maintain, and harvest, as could be supported by the number of photos we have showing a full team effort in planting onions and potatoes.

There were hogs on the campus in the 1900s, though these are mentioned so infrequently that it is difficult to say if hogs were a constant component to the farm. However, records indicate that dairy cattle were a big success for the campus, as they are mentioned numerous times in the archives, and the milk was supposedly consumed by both pupils on the campus, as well as a mental institution not far from the school. Other livestock found in the records include mules and horses, which performed all the labor needed prior to the popularity of machines like tractors. Beef cattle came with the last farm manager, Mr. Rankin, though this was within the final decades of agricultural pursuits on the campus.

Prior to World War I, activities on KSD's campus seemed to be generally uneventful, in that there was relatively little change in agricultural practices other than the obtaining of land and the inconveniences created by the American Civil War. This could be simply because the records were lacking or not as easy to track in the 1800s as they were in the 1900s, but I believe this is because American lifestyles were generally steady and constant until the growth brought about by the industrial revolution changed our culture and brought about the growing pains of a rapidly modernizing world. The earliest records of agricultural activities on campus all seem to point to farming as an activity that was common for all people in Kentucky, thus it was not foreign to the pupils and was seen as a means for life. The pupils would typically come from family farms and would leave to go

farm upon graduating from KSD. I see a shift in agriculture on KSD's campus in the early 1900s, specifically after World War I and even more so after World War II. Though I would never venture to call myself a "history buff," there are some general themes that I know came with the industrial revolution and the competitive nature of countries leading up to and resulting from the wars. The impact of this was felt across our nation, and the effects would change the way agriculture looked on KSD's campus multiple times throughout the 1900s.

An organized, intentional vocational training plan for KSD's campus was brought about in 1914 according to the school's annual report for that year. It was very soon after that the Smith-Hughes Act would be passed in 1917, which was the federal government's approach to supporting vocational education to combat unemployment and unskilled labor in our rapidly industrializing society. Where we all once farmed to simply live, farming was now becoming a trade that would require skill and efficiency to keep up with the demand of feeding a nation as people left rural America by the masses to seek opportunities working in factories in large cities. Simultaneously, conflict was brewing abroad and our country was preparing for war; schools began teaching not only the basics of reading, writing, and arithmetic, but also patriotism, ethics, and physical training to boost morale and hold our nation together. When we officially joined the front lines in World War I, men were pulled from the factories to fight, and women and children had to step in to keep things running on the Homefront. Technology rapidly continued to develop, making some tasks less laborious to ease the burden of a lessened workforce.

What did all of this change bode for KSD? The trades being taught on KSD's campus began to take shape as a more structured curriculum. Work ethic was instilled in

all the boys, and it was reported that every boy who left the vocational program at KSD was able to secure a job easily, mostly on farms and in factories. The American economy would overall suffer in the 1920s, and the archives speak of lean times at the school. Morale was seemingly not affected, however, and though they make mention of the economy there is little to suggest that KSD was unable to continue its duties – perhaps this self-sufficient campus survived the Great Depression on its ability to produce its own food and not rely solely on our economy. Farming was revered as a great profession for KSD alumni, as it required no hearing ability to farm and the deaf person could sustain themselves and their family by living off the land.

Further change would come in the 1950s, as American education was greatly impacted by World War II. Another spurt of great technological advancement made many of the trades being taught obsolete, as machines could do much of the work that a man previously had. Because communication was not a high priority in trade labor, the deaf had found a niche in which they could easily earn a wage. This pushed a lot of the deaf out of their manual labor jobs, forcing deaf schools to get ahead of this and modernize their vocational programs. Our nation, in an attempt to keep up with the intellectual and technological advancements being made by other countries, would place more emphasis in the coming decades on math and science, and KSD felt the push to bring students back inside to focus more on academic studies. It is said in the archives that the Kentucky school was reluctant to change and would not abandon the old way for quite some time after other campuses had. Most residential deaf programs had a school farm, and supposedly Kentucky was one of the very last deaf schools to abandon farming practices and the model of vocational training in the afternoons. The farm went horseless in 1954, as the state

department provided KSD with tractors, trucks, and machinery. This made the horses and mules more costly to feed and maintain, as the machines could outwork the horse. It is never mentioned in the archives, but one can speculate that it was during this time in our country we truly started to abandon the family farm model, as it became more efficient to spend your time earning a wage at a job and purchase your food, instead of spending your increasingly valuable time growing it – time became money. There most likely came a time for KSD when it was cheaper and more time efficient for them to purchase food so that the students were no longer needed on the farm and could return to the classroom.

The 1960s proved to be another decade of great change for KSD. In 1963 a Rubella epidemic swept the nation. Rubella, when contracted by pregnant mothers, can cause their children to be born deaf. The effects of this epidemic would be felt 8 years later in 1971, when KSD experienced its largest enrollment in history when the Rubella generation started elementary school. This would be the last generation to pass through KSD before the student population would steadily begin to decline as modern medicine and educational policy improved. In 1964, Argo-McClure Hall was built to replace the old Argo Hall as a facility for vocational education. This building still stands today, and the KSD agriculture program as we know it in 2019 is in an area that previously housed an autobody workshop, which became a popular trade for the deaf in the latter half of the 1900s. Also occurring in 1964 was the passage of the Civil Rights Act, which set in motion desegregation on KSD's campus (which I am told was a smooth, welcome transition). The vocational programs of the colored school and the white school were the first to be integrated together on KSD's campus. In 1967 the school continued their efforts to provide timely trade instruction for its pupils by establishing their first Vocational Rehabilitation office in Argo-McClure Hall.

This program was heavily supported by the US government who placed great emphasis at the time on finding work for the deaf in the industrialized society. The government funding that was provided to the school for the purpose of educating current pupils and re-educating former pupils also allowed KSD to invest in the vocational program with new technology and equipment. This programming was life changing for many deaf people and allowed them to once more access industries that were previously unavailable.

KSD Agriculture History, 1971-2009

1971 would be the year that farming on KSD's campus was completely phased out, after nearly 148 years of self-sufficiency and informal, unscripted, experiential agricultural education. Though very little reason is actually given in the archives as to why KSD ultimately abandoned agricultural practices, there are allusions made to labor costs. Perhaps it was simply cheaper for the school to purchase food than it was to finance the salaries of the farm workers and the upkeep of the lands. Perhaps farming was no longer a viable option for deaf graduates to make a living on after graduation, and it was a better long-term economic decision for their efforts to be spent learning other trades. I would postulate that the KSD farm lasted as long as it had because Kentucky is historically an agricultural state, and even late into the 1900s it still provided a large portion of employment for our citizens, deaf and hearing. It was what the students knew, as they were often coming from the family farm, and it held on as a cultural tradition in rural states far longer than in the urban areas. Today, statistics would tell you that the average American is three generations removed from the farm (Farm Bureau, 2019); if a generation is roughly 25 years, that would place our closest link to the farm 75 years back, around 1945. Coincidentally, this is the same year that World War II ended and we saw a shift in our

country's work culture. Thus, it would make sense that the first generation to be removed from the farm and seeking other employment falls historically in line with the end of the KSD farm.

There is a country song I grew up listening to in which Mark Willis reminisces on the culture of the 1970s and '80s era, singing "it was the dawning of a new decade when we got our first microwave, dad broke down and finally shaved those old sideburns off." This song came on the radio as I was writing this thesis and gave me an epiphany as to what may have been occurring in the years after the fall of agriculture at KSD. Again, I'm certainly not a history buff, but from what I have gathered, the latter part of the 1900s was the beginning of our culture of convenience and entertainment. Technological advancements made the concept of work easier on all of us – machines improved so that we could grow food with less labor input, transportation improved so we could get food to other places faster, and microwaves allowed us to then cook that food faster than the conventional oven. Perhaps it was during this time that the agriculture tradition lost its appeal with a society hungry for less work and more play. As a generation removed itself from the farm, so too it lost interest in the joys and discomforts of agricultural life.

The school had a few hundred acres of land at the time when farming operations ceased, and the question became, "what shall we do with all of this space?" As the enrollment surged in the 1970s from the Rubella outbreak, the school used some of the lands to build in anticipation of the influx, but over the years after 1971 the lands were slowly but surely sold. KSD had accumulated quite a bit of prime real estate in downtown Danville, and much of the land was bought by the Danville school district and the city, as well as a few private developers. By 2009, the school possessed only 23 remaining acres.

It was during these decades that KSD began to focus more on extracurricular activities. With the decrease in labor needed, children had more free time that needed to be occupied, and there were increasingly more options for activities that students could become involved with. The Kentucky School for the Deaf began to develop a rich residential life for those students who made KSD their home throughout the week. Sports, crafts, hobbies, and field trips were organized. The intent was to entertain the children and develop a more total person, a task that I would argue was fulfilled when the students were given the responsibility of work and upkeep of facilities that no longer existed. Providing clubs and sports gave the students leadership skills and developed their physical bodies, while taking them on field trips added to their cultural mindset.

Agricultural pursuits of any kind lay dormant on KSD's campus until 1993, when the first mention of a horticulture program is made in the 1993 campus newspaper archive. This record would suggest that the program was brand new in this year. The woodworking classes worked alongside the horticulture class to build a greenhouse, under the direction of a woman who is identified as a horticulture teacher but not an agriculture teacher. It is unknown what this teacher's certification area was, however most sources would suggest she was not a certified agriculture teacher. Very little is known about this program, either from my archives or my interview sources, though one account says that the horticulture classes spent time beautifying campus with flowers, and propagated plants in the greenhouse (though for what purpose, it is unclear). The final mention of the horticulture program in any of the newspaper archives was the year 2000, when the horticulture teacher is listed under the Career and Technical Education section of KSD staff members. It is unclear if this is the year that the horticulture program ended, or if it simply was not noted

any longer in the archives. A quick Google search of the horticulture teacher's name returned her public LinkedIn profile, where she lists having worked at KSD from 1990 to 2009. She lists classes taught such as Greenhouse Management, Principals of Landscape Design, Introduction to Horticulture, Floral Design, and Wildlife Management. Though these are all agricultural course topics that are widely taught in Kentucky agriculture classes, her listed accreditation does not claim any agriculture education certifications or titles. Perhaps this horticulture program was a spark of inspiration that would lay foundations and once more ignite a passion for agricultural pursuits at the Kentucky School for the Deaf.

KSD Agriculture History, 2009-Present

The agriculture teacher currently employed at the Kentucky School for the Deaf (current as of May 2019) began her employment with the school many years prior to her official installment as an agricultural educator in 2009. Though we know from the past several pages that there have been many mentors of agriculture throughout the ages, she is the first teacher employed by the school with a degree and certification in agricultural education, whose job description explicitly expects her to provide agricultural instruction to KSD pupils. The Ag Ed program at KSD was created 10 years ago as a result of a “perfect storm” of occurrences – the CTE department at KSD had retiring teachers, thus creating new positions; there was a candidate who was perfectly suited to the position (content certified and able to communicate with the students); the school's history had left them the agricultural land as a key resource to build upon, and the Argo-McClure building was built for CTE programs (facilities were present); and the school itself was receptive and supportive of the program (specifically, the principal supported this). These factors

were all ingredients that came together in a recipe for an agriculture program in a deaf school with extraordinary potential.

The first years of KSD FFA were special to the students and staff involved with laying the foundations of what we see now. Support was the key word that drove this program forward. The school was supportive of the agriculture teacher, helping her get whatever she needed. The state Ag Ed staff supported her by helping her charter the FFA chapter, and worked with her to make modifications where needed. A fellow agriculture teacher in the county helped her establish the structure of her pathways and courses she would teach. A student who had mainstreamed from KSD into Boyle County came back, with knowledge he had gained from the public school FFA chapter he was involved with, and helped the agriculture teacher with planning and creating the KSD FFA. The students, staff, agriculture teacher and community members all worked together towards this common goal of establishing Ag Ed at KSD, supporting each other and gleaning information from the various experiences each person had to offer. To me, this is the purest example of what communities can accomplish, and portrays the value that relationships with people can have in our society.

As the program grew, it saw its fair share of challenges and hardships, making the decade of KSD FFA's existence a true testament to the persistence and grit that this community possesses. Because the concept of Ag Ed in a deaf school is still so very new (at the time of its inception, KSD FFA was only the second Deaf FFA in the nation), there are many uncharted waters that the program has had to wade through. There are some things that are simply different about a school for the deaf compared to public schools – the students often live on the residential campus Monday through Friday, but they are gone

all summer, excluding them from summer activities. The student population is much smaller than public schools, meaning that there are fewer hands to do the work necessary to keep a school farm running, or to conduct FFA events. There are obvious challenges that come along with the language barrier and translating much of our agricultural vernacular into ASL has been no small task for interpreters at the school. But for as many challenges the school has had to overcome, they have seen encouraging success stories that serve to inspire others. The program has obtained resources and equipment that some public school chapters only dream of. Students have performed and recorded their own signed version of the FFA Creed, opening and closing ceremonies, officer installations and more. Students have represented the chapter at the local, regional, state, and even national level, getting the opportunity to travel places they've never been and be exposed to new ideas and people they may have never interacted with previously. The program has been self-sustaining itself by selling hay, eggs from their poultry project, and plants from their greenhouse, and though SAEs (Supervised Agricultural Experiences) may look slightly different here you can be assured that students are absolutely getting their own agricultural experiences, on their own turf, in a way that can be effectively communicated with them. The program has focused its efforts on serving the KSD community, by showing appreciation for the campus and its staff, and by always having an open door to the deaf community members who desire to support these students. 10 years truly isn't all that long – I was becoming a freshman in high school the year this program was created, and now I am leaving graduate school. I am sure this time flew by in the blink of an eye for this program, just as it has for me. Nevertheless, KSD FFA is a true example of what a group of people who are passionate and motivated about agriculture can accomplish and build in such a short amount of time.

The future is bright for KSD FFA. As they continue to grow and knock down barriers that stand in their way, they will be knocking down barriers that are holding other deaf schools and other deaf students back as well. Looking back on the past and where this program gets its roots, it is easy to see that something unique and extraordinary has occurred at this school. May other deaf schools now examine their history as well and begin to write their own agriculture story.

Vygotsky's Sociocultural Theory of Cognitive Development, Social and Human Capital

When examining the case of the Kentucky School for the Deaf FFA and agriculture program through the lens of theory, it can be rather fascinating to see the collective observations, artifacts, and interviews all cohesively supporting Vygotsky's theory and showing evidence of social and human capital being created. To answer Research Question 2, *"Is there evidence that Vygotsky's Sociocultural Theory of Cognitive Development is occurring in the KSD agriculture/FFA program?"* in a single word: Yes.

Vygotsky's Sociocultural Theory emphasizes that learning is a social process and that the knowledge we gain during the learning process is based upon the culture and the society we interact with. Knowledge is passed to the learner from the More Knowledgeable Other (MKO), who is anyone within that person's realm of social interaction that can provide more information to the learner than they had previously. Vygotsky's Social Constructionist worldview would tell us that our psychological development as a human being is directly correlated to our social interactions. When you place this view as a filter on the picture of KSD and their agriculture program, there is evidence that supports

Vygotsky's theory – or, perhaps Vygotsky's theory is supporting the idea of and the argument for agriculture programs in deaf schools in general.

For KSD, you can first define the sociocultural setting as the school itself. Since 1823, the school has been specifically designed to cater to the needs of the deaf community. From what I have gathered, the main aspect that sets a “little d” deaf person apart, besides their depleted auditory ranges, is the use of American Sign Language as a primary mode of communication, which has created the “big D” Deaf culture. This school understands Deaf culture and understands how to use this culture to educate the deaf child. The most crucial difference between a public school and the Kentucky School for the Deaf is KSD's ability to provide a sense of belonging and social interaction that deaf children often miss in the public school setting. Thus, Vygotsky would say that KSD is an ideal place for deaf children, as social interaction is the basis for learning, and KSD provides social interaction for otherwise isolated children.

Next, you can define the sociocultural setting in this particular case study on a more specific level as the KSD FFA and agriculture program. The agriculture class in any school serves to educate students about the agriculture industry and provide skills those students can use to contribute to society. That's why CTE programs were established in the first place: to teach kids how to do jobs our society needs to function. No workforce, no society. The Ag Ed model provides opportunities for learning to occur at a social and cultural level through the National FFA Organization. Students do not only sit in a desk and regurgitate facts all day, they also get to apply their new knowledge and skills by working on projects and interacting with students from other schools. Vygotsky says that learning occurs in the sociocultural setting, by the learner interacting with a More Knowledgeable Other. The

teacher first acts as the MKO in the classroom, and the student's interaction with that MKO provides them with knowledge. Once the student has internalized this knowledge, they can become the MKO for others. Therefore, students working together, interacting with each other, helps them glean knowledge from each other in a game of switching positions between the role of MKO and learner.

Additionally, the FFA itself becomes a culture because of its shared values, mission and traditions. The notion that FFA is its own community makes sense to deaf students, who are already familiar with a sense of community within Deaf culture. This should make FFA programs look extremely appealing to Deaf Ed. It simply makes sense to provide students access to an organization that allows them to learn career skills in a sociocultural context, as deaf schools already strive to provide both career skills *and* a sense of community to deaf students. Agricultural Education and FFA *work* for deaf students and Deaf Education. Both Ag Ed and Deaf Ed operate on experiential education principles and Vygotsky's Sociocultural Development Theory. They share the same goals of providing students with skills that will help them contribute to society.

I also posed a secondary question in examining this case through a theoretical lens: *How do Human Capital Theory and Social Capital Theory apply in the deaf school community?* Social Capital Theory (SCT) and Human Capital Theory (HCT) were used as guiding concepts in analyzing the data, and the evidence of these two theories in action for KSD's agriculture program serves as "clues" pointing back to Vygotsky's theory. Though each of these three concepts are separate theories, posed by separate theorists at various times in the 20th century, in my mind I see them working together under the Social Constructionist framework. SCT and HCT both deal with assigning actual value to

ourselves in a collective sense, as well as ourselves as individuals. Social Capital Theory suggests that our social interactions and the relationships we make in life make us a more valuable member of society, and that our society places value on networking and community. Knowing more people, knowing people from various areas and industries, having a good relationship with people, and being able to call on these people for favors or knowledge are all examples of Social Capital. The more people you have available to you, the more MKOs you know, the more capital you accrue.

Human Capital Theory suggests that we ourselves have value as an individual when we possess traits, characteristics and knowledge that our society says makes a person valuable. Having a good work ethic, being exposed and open minded to various cultures, having skills that you can use to earn a wage or provide a service and contribute to society, being considered a person of moral ethics or character – all are examples of Human Capital. The more ethical you are, the more skilled you are, the more opportunities you have had to personally refine yourself – all of these make you more valuable as an asset to society. The well-developed human being themselves is capital. Capital in economics terms is synonymous with value, with money and profit. If we could assign dollar amounts to moral character and social networking, they would be like stacks of hundred dollar bills kept locked in bank vaults. These theories postulate that the more human capital and social capital you accrue as a person, the “wealthier” you are as an individual. The more people our nation accrues that possess this capital, the “wealthier” the nation as a whole will be. Therefore, when a nation makes an investment in its communities and in its people, it is investing in Human and Social Capital, like purchasing stocks and bonds in the form of people and the relationships amongst those people.

From what I have learned, Human Capital and Social Capital are the byproducts of Sociocultural Cognitive Development in action, at least in the context of the KSD agriculture program. From my interviews and observations I have seen that students of the program are in fact gaining social and human capital by partaking in the program. This would suggest that learning best occurs for deaf students in this social context (i.e. providing direct instruction, experiential education and practical applications of abstract concepts), and the knowledge and experiences they are gaining can be “cashed in” as human and social capital when they leave the school and join our society as adults. The agriculture teacher at KSD is the MKO, and she is passing along information that will make these students more valuable in a society that unfortunately often does not place value on its citizens with disabilities. This learning is occurring in a setting specifically designed to meet a social need in its students, and providing social interaction when they otherwise may not receive it in a public school.

Evidence that supports this notion includes the sacrifice students make to attend the Kentucky School for the Deaf, trading a general public school “inclusive” education for an isolated environment where they will be surrounded by people who understand them and can communicate with them. I have seen that students coming to KSD will often trade their non-stigmatized public high school diploma for one that permanently labels them with a disability. They will trade the experience of being “included” in the hearing world for the experience of being “accepted” in the deaf community. Students leave the comfort and familiarity of home with their families for the unknown but exciting opportunity to be fully understood, often for the first time in their lives. Though they may lose something by coming to KSD, they are gaining something too, and for some the benefits far outweigh

the costs. Families who send their children to school here and students who make the decision to stay here as they get older are inadvertently acknowledging Vygotsky's Sociocultural Development Theory, and believe that the sociocultural context for learning is important.

When the students are provided the opportunity to learn agricultural concepts and skills in an environment that meets their specific cultural needs, they are able to internalize this knowledge and use it later in life. Former students report feelings of pride and confidence, a sense of belonging, and overall greater ability to work in a professional setting, attributing these skills, at least in part, to their involvement with agriculture and the FFA. These feelings and skills are examples of human capital, thus the KSD agriculture program is building human capital in these students. Additionally, students report meeting new people outside of their school through FFA, interacting with previously foreign concepts through field trips at Ag Camp, and a general sense of gratitude for the opportunities their agriculture teacher provided them with because they were involved with the program. These are examples of social capital, and thus there is evidence that the KSD agriculture program builds social capital within its students.

All this being said, what it really boils down to is this: deaf students thrive in learning environments that allow them to have concrete experiences for abstract concepts while catering to their sociocultural nature and learning style. The agriculture program does this. As a result, students are gaining personal characteristics, skills, and making relationships that will all coalesce to make them a more "valuable" member of society, thereby enhancing their postsecondary lives and making our society a better place for all.

Finally, a surprising find was the outward effect this program has on its community as well – people who become involved with KSD FFA show signs of having gained social capital specifically, but some human capital as well. The general public and hearing community has much to learn from deaf people as well, specifically the KSD FFA members, who could be considered the MKO for hearing counterparts. Interacting with KSD FFA not only provides students with a higher value in society, but also makes everyone else more valuable as well. Examples of human and social capital that others receive from interacting with the program include: a better understanding of deafness and Deaf culture, more open-mindedness and less animosity towards the unknown “other,” inspiration and internal fulfillment to know that your fellow human beings are conquering barriers, and connections with valuable resources that one may have never had otherwise.

When one begins to study this case through the lens of Vygotsky’s Sociocultural Theory of Cognitive Development, Human Capital Theory, and Social Capital theory, the case study begins to present evidence which supports that not only are these theories at work here, but they are affecting our entire society, one Deaf FFA member at a time.

What Other Deaf Schools Should Know

My third and final research question was posed as follows “*What do other deaf schools stand to learn from a successful agriculture program?*” My ultimate goal and objective for this case study research was to provide insight into agricultural education in deaf schools by spotlighting a successful program with the intent of creating awareness that will lead to more opportunities for deaf students in the agriculture industry. I would like to break this hefty goal down into more manageable pieces.

“Provide insight into agricultural education in deaf schools by spotlighting a successful program...” I spotlighted KSD’s agriculture story from the very beginning of its history, when agriculture was not a career option so much as it was a necessity for life. In more recent history, the Kentucky School for the Deaf created the country’s second official agriculture program with a chartered FFA program. By telling this story, other deaf schools can see that not only is it possible to create a program like this in their own school, but there are solid ideas included in this report that can serve as a starting point for a program to make it possible for them to start a program as well. “....With the intent of creating awareness that will lead to more opportunities for deaf students in the agriculture industry.” The first half of my goal with this thesis was to simply provide information and tell a story. The next half of this goal is my call to action, or what I would like to see my audience do with this information. Creating awareness for others who may otherwise have never known about this program, and then using that awareness to spur conversations and opportunities for other deaf schools and D/HH students.

The audience of this report, including (but not limited to) other deaf schools, should know overall that D/HH students are fully capable of participating in agricultural courses and agricultural activities. In fact, evidence would suggest that not only do deaf students perform well in agriculture courses, they have the capability of excelling in the courses and obtaining jobs within the industry upon graduating high school. Agricultural Education techniques have proven to be quite similar to Deaf Education techniques, with an emphasis on experiential learning and visual representation of concepts. Agricultural Education is highly suited to this audience and their learning styles, and both students and staff at KSD report finding value, benefits, and enjoyment from the courses.

Further making an argument in favor of agriculture programs in deaf schools, evidence from this case study shows that students who have been involved with the agriculture classes, and especially the FFA chapter, gain valuable life and vocational skills that deaf schools generally strive to integrate into their general curriculum. A buzzword in Special Education is “postsecondary outcomes” – what will these students do when they leave the safety net of this school and become legal adults? Our government gives money specifically to special education purposes in an effort to provide these students with skills that will allow them to support themselves and contribute within society. Thus, an investment in agriculture programs in schools for the deaf is an investment in not only the child, but also our society. Our agriculture industry needs a skilled workforce to continue the effort of feeding our nation and our world; deaf and hard of hearing people are just as capable of fulfilling these roles as their hearing counterparts.

If a deaf school were to begin the process of creating their own agriculture program, there are several people who should be at the table for the conversation. The administration of the school and whatever governing body is ultimately legislating the school (for instance in Kentucky, it is the state Department of Education) would first need to determine that this is a good fit for the population and that the students would be interested in this. Copious amounts of evidence in this case study would suggest that most schools would benefit from a program, and most students would appreciate the opportunity. Next the school should look for a candidate in the hiring process that possesses two key skills: agricultural content knowledge and an ability to communicate well with D/HH students. Though this may seem to limit the candidate pool severely, it is an ultimate goal to strive for, as it seems to be the key that has kept KSD’s program ever advancing for the past 10 years. This educator should

immediately begin working with the state Agricultural Education staff to create, modify and adapt curriculum and activities to make the agriculture classroom possible. Though an FFA chapter is not truly necessary to teach agriculture curriculum, the FFA component adds extra value to the program, as discussed in the previous section. Determining what requirements are needed to obtain a charter with the National FFA Organization will allow your students to truly be immersed in Ag Ed, and will add them to a growing list of trailblazing Deaf FFA chapters. Perhaps the most valuable thing a new program could acquire would be some form of agricultural experience or facility beyond the four walls of a classroom. This case study has found that these students excel in this agriculture program, most likely due to the wide array of visual, physical experience they are provided within the agriculture industry. The school farm, the greenhouse, all of the equipment – students understand it best when you can make an abstract concept concrete in front of their own eyes. A new Deaf FFA advisor should begin to look for funding and collaborate with their administration to provide hands-on learning for the students.

Deaf schools starting agriculture programs should heed the advice and comfort offered from KSD – start small. Determine the needs of your community, find the most important topic for your students, and work with what you have. As the U.S. Marines would say: improvise, adapt, and overcome. Remember that the FFA chapter ultimately functions on the local level, so find out what works best for you and do that, start there and scaffold onwards. Keep in mind the true goal: do whatever it takes to give these students opportunities, because they have a right to access Ag Ed just as hearing students do. Attend events and participate in contests, not because you are striving for a gold medal but because it gives the students exposure and allows them to interact with other students who also

share a love for the agriculture industry. Don't be afraid to have conversations with the state organization, reach out and ask for accommodations at events and contests. Work together to improvise, adapt, and overcome whatever challenges arise; as we have realized here in Kentucky, there is no handbook or prewritten guide on how to do this. Every new Deaf FFA member is pioneering a new path, and through trial and error and honest, informative conversations we can all provide better access for these students.

The new Deaf FFA advisor should be aware that most people outside of the school and the deaf community do not fully understand what it is like to educate a deaf child. They may not understand that ASL is not a word for word translation to English, that the students' first language is not English, or that interpreters need time to process all the seemingly foreign FFA jargon and agricultural vocabulary. Interpreters have suggested that contests which Deaf FFA members participate in need to have judges who understand ASL – perhaps you can recruit current or former educators at your school, or from your deaf community, to volunteer for the event. In the Bluegrass Region of the FFA in Kentucky, each chapter that attends the regional speaking contest is required to recruit volunteers to serve as judges. Though it is imperfect and does not address the possibility of bias when recruiting members of your tight-knit community, it is a step towards assisting those outside of the realm of Deaf Ed in accommodating your students. Help them to help you by educating them on the reality of Deaf Ed, and what a D/HH child truly experiences.

Ag Ed institutions and organizations within the state should work with the school to either locate or train educators who can teach the content and communicate with the students. The University of Kentucky, along with Eastern Kentucky University, have both been supportive of the KSD program, providing tours for the students, guest speakers from

various departments, and sending undergraduate students to the school for exposure and observation in the classroom. Further, it is very likely that the deaf school is located in an area that has a public school FFA chapter. The new Deaf FFA advisor would benefit greatly from reaching out to this program and working with them to provide local opportunities for collaboration amongst their chapters. State Ag Ed and FFA offices can collaborate with the school to determine what is necessary to include deaf students fully at contests and events. State staff from the 5 identified states with Deaf FFA programs (Kentucky, West Virginia, North Carolina, South Carolina, and Alabama) should have a conversation amongst themselves, talking about challenges they have faced and offering solutions where they have experience. As more states create Deaf FFA programs, that state's Ag Ed and FFA staff should glean wisdom from the experiences of the other chapters and states. Though we do not have an exact handbook on this yet, this exploratory case study has provided enough information to at least start conversations. The more we all collaborate, perhaps a more comprehensive road map for successful programs can begin to emerge.

I would like to see this report reach the National FFA Organization to offer awareness of an underserved population, and spread to schools for the deaf across the country to start a nationwide conversation. The FFA has shown interest in recent years towards creating a more inclusive organization, as evidenced by the Diversity Taskforce discussed in an earlier chapter. I know that we now have an official Spanish version of the FFA Creed – perhaps the National FFA Organization could work with Deaf FFA members and chapters to create an official ASL FFA Creed. Now is as good a time as ever to hone in on an untapped potential population that is currently not being exposed to agriculture in

the classroom, knowing that they would excel at and benefit from this type of program and organization.

As reiterated throughout, this case study was exploratory in nature. There is still so much to be learned, and collaboration through communication will be key if we truly want to include deaf schools and provide opportunities to these students. I would challenge all schools for the deaf who have any form of agriculture occurring on their campus to reach out, make yourselves known if only for the sake of creating a clearer picture of what Ag Ed has the potential to look like in these schools. KSD has seen great success with publicly advertising themselves, and networking with other chapters and teachers in the state via social media. If this report reaches another Deaf FFA chapter who does not have an internet presence, it would be highly suggested that you create social media accounts, websites, blogs, etc. to make your program more widely known, and then connect with other programs on these platforms as well. How beautiful would it be if these pockets of Deaf FFA members knew that they were not alone, if they could network amongst themselves?

This case study is surely just the tip of the iceberg of all the information we stand to learn about agricultural programming in schools for the deaf. Future research should replicate this study on the West Virginia School for the Deaf and Blind (the first Deaf FFA chapter) and the North Carolina School for the Deaf (the 3rd Deaf FFA chapter). Often the school for the deaf and the school for the blind in a state work closely together, as is the case in West Virginia; in Kentucky, both are state schools that fall under the same laws and statutes. I have no experience with FFA chapters in schools for the blind, but I am aware that the Illinois School for the Visually Impaired has an FFA chapter. This leads me to believe that there could be many similar situations in alternative schools across the country,

and spotlighting each of those programs would bring valuable awareness to other schools and the National FFA Organization as a whole. Agricultural Education programs at the collegiate level, along with national Ag Ed advocacy groups like NAAE (National Association of Agricultural Educators) could pursue further research and investment in understanding these programs, how to effectively educate these students regarding agricultural content, and taking action to place qualified teachers in these schools. Future research in this area should always keep in mind the ultimate goal of finding ways that we can serve this student population and provide equal access to Career and Technical Education for students with special needs.

Final Thoughts

I can still remember very clearly the first time I observed the agriculture classroom at the Kentucky School for the Deaf. On this day, the agriculture teacher taught me about the concept of incidental learning, and how the hearing population is so fortunate to pick up vast amounts of information without even consciously realizing they are absorbing this information. Deaf people simply are not exposed to as much as the hearing are, unless someone takes the time to directly provide that exposure for them visually either through experiences or sign language. The concept of incidental learning from that point forward has always fascinated me, and it brings to mind a philosophical concept which I will use to summarize and conclude my experience and understanding of the KSD agriculture program.

Plato's Allegory of the Cave is one of the most famous educational philosophies in history. Here is a brief summary:

Imagine a group of prisoners who have been chained up inside of a dark cave, facing a wall, their whole lives. Behind them, a light or a fire is illuminating the action occurring outside of the cave. As figures pass by the light, they cast shadows onto the wall, and the prisoners watch these shadows dance and move all day long. Now, the prisoners are not aware that there is a world outside of their cave. To them, everything they know, their entire world, exists in the form of these shadows on the wall. They interpret the shadows for themselves, not knowing that the shadows are not the full story.

One day, a prisoner breaks free! He runs outside and is instantly blinded by the lights, all the colors, all the people, all the animals. So many new things to see, it is almost overwhelming. He can't initially make any sense of any of it. Soon his eyes adjust, and he can see back into the cave he has come from. He notices the source of the shadows as he watches the world bustle about. With this newfound information, the man excitedly runs back to his fellow prisoners, explaining everything he has seen outside of the cave, explaining that the shadows are simply that, shadows of the real story happening just behind them.

But the prisoners don't believe him. They call him crazy because they *know* that the shadows are true, they can see those with their own eyes, have experienced the shadows for themselves. Why should they believe this man's crazy "new world?" They still only see the shadows. Their shackles prevent them from turning around, from running outside. They cannot understand the concept of a shadow, because in order to do that you would first have to acknowledge the light source, and the other objects causing the shadows – this is foreign and abstract if you are chained by ignorance and cannot turn around.

The story ends there. Socrates tells this allegory as a representation of his own intellectual rebellion in society. He goes on to explain that the fire behind them represents enlightenment and knowledge, the shackles are ignorance, and that it is often difficult for the general public to accept new ways of thinking that are unpopular within society. But he never goes on to say if the freed man ever convinces his fellow prisoners to come with him into this new world.

And how would he do that? Would he continue to talk to his friends until they eventually believed him? Would he explain over and over again what he has seen, hoping they will make some connection in their own minds, even though their only reference is the shadows? I personally would like to believe that the man wastes no more time with his words. I would like to imagine a scenario in which the man simply breaks his friends' chains, and leads them outside to experience everything for themselves. Why would he continue to explain the concept of shadows to people who have never seen the light? How do you explain the entire rainbow to someone who has only ever seen shades of darkness?

In one sense, the prisoners in the cave are our students, and specifically for this case study, they are our D/HH students. How do you explain anything to a child who has no language? If they have spent their entire lives in a cave, with no one who can communicate with them, your first goal when you get the child into your classroom would be to establish a form of communication. However, words are only words until you give them meaning. You can spell the word horse, tractor, greenhouse, food, all day long. But if that child has never actually seen a greenhouse, your words mean nothing.

The agriculture program at KSD is a way to break the chains of students who have never been exposed to agriculture. The agriculture teacher is the "freed prisoner," excitedly

telling the students about all the concepts and ideas in the agriculture industry. The teacher is just another person signing words at the students, however, until the teacher actually breaks the barrier, breaks the chains, whatever is holding that student back, and leads the student outside, leads them into an experience. I believe that the difference between the Other and the *More Knowledgeable* Other lies in an ability to break barriers standing in the way of education, and provide the student with an opportunity to experience something totally new, which they may have never experienced otherwise. KSD, and every other agriculture program in a deaf school, is making the effort to break barriers and allow deaf students to experience something that could change their lives. At the very least, it allows the student to see truth and meaning; instead of guessing at the shadows on the wall, they get to see the source. Instead of wondering where your food comes from, instead of falling victim to rampant misconceptions, instead of being tossed about in a sea of uncertainty about future career possibilities, the students can see the knowledge that is truly available to them, just the same as it is available to a hearing child.

From another perspective, we are all prisoners in a cave when it comes to Deaf culture and Deaf Education. We think we know the truth, we think we've got it all figured out: they just can't hear. That's easy. We have a tendency as human beings to reject the uncomfortable and to avoid things that upset our traditional ways. I can type thousands upon thousands of words, telling you everything I have observed, everything that my interviewees have told me, and you might find it interesting, you might even learn something. But until you have taken the time to interact directly with a Deaf person, you won't understand Deaf culture. Until you have opened your mind and considered new ways to make Agricultural Education more accessible for D/HH students, all you will do is

provide written instructions in a language they don't speak, and provide an interpreter to spell words that have no meaning. I also believe, that until you have seen the beauty of an agriculture program in a deaf school, seen the amazing bond these students have, actually seen someone understand agriculture on a very personal, visual level- you won't find value in a program that serves only 25 students compared to 250 until you know, firsthand, what a difference it is making for those students, and what a difference it is making in the lives around them. What a difference it is making in the industry we all share a deep-rooted passion for.

Our society doesn't value the one sheep who is not being cared for, when you have a flock of 99 others who have their needs met fully. Everyday there are sheep who are lost from the herd, that most people do not care to seek out – it is more efficient and cost effective to concentrate on the many, not the few. This case study report has shed light on the few, on a group of students who are classified with a low-incidence disability. They are tucked away in schools that most of us drive past every day without any knowledge of the miraculous breakthrough that teachers are having, with children who have been raised in their own personal caves. This case study has provided evidence to show that not only are these students just as valuable and worthy of access to agriculture as their hearing counterparts, but also if we take the time to understand their specific needs, they can excel in this industry far beyond our wildest dreams.

“The rising sun is a token of a *new era* in agriculture. If we will follow the leadership of our president, we shall be led out of the *darkness* of selfishness and into the glorious sunlight of *brotherhood* and *cooperation*.”

(Emphasis added) (FFA Manual, 2019, p. 36)

APPENDICES

<i>Appendix 1: IRB Approval Letter</i>	280
<i>Appendix 2: IRB Consent Form</i>	281
<i>Appendix 3: Kentucky School for the Deaf Approval Letter</i>	284
<i>Appendix 4: Parental Permission Form</i>	285
<i>Appendix 5: Interview Invitation</i>	286
<i>Appendix 6: Interview Guide – Students</i>	289
<i>Appendix 7: Interview Guide – Agriculture Teacher</i>	292
<i>Appendix 8: Interview Guide – Community Supporter</i>	295
<i>Appendix 9: Structural Coding of DeaFFA Interviews</i>	297

APPENDIX 1. IRB Approval Letter



Office of Research Integrity
IRB, RDRC

XP Initial Review

Approval Ends:
1/28/2020

IRB Number:
47889

TO: Sarah Warren
Community and Leadership Develop
PI phone XXXXXXXXXXX
PI email: XXXXXXX

FROM: Chairperson/Vice Chairperson
Non Medical

Institutional Review Board (IRB)

SUBJECT: Approval of
Protocol

DATE: 1/31/2019

On 1/29/2019, the Non Medical Institutional Review Board approved your protocol entitled:

DeaFFA: An Exploration of Agricultural Education in Schools for the Deaf and Hard of Hearing

Approval is effective from 1/29/2019 until 1/28/2020 and extends to any consent/assent form, cover letter, and/or phone script. If applicable, the IRB approved consent/assent document(s) to be used when enrolling subjects can be found in the "All Attachments" menu item of your E-IRB application. [Note, subjects can only be enrolled using consent/assent forms which have a valid "IRB Approval" stamp unless special waiver has been obtained from the IRB.] Prior to the end of this period, you will be sent a Continuation Review (CR)/Administrative Annual Review (AAR) request which must be completed and submitted to the Office of Research Integrity so that the protocol can be reviewed and approved for the next period.

In implementing the research activities, you are responsible for complying with IRB decisions, conditions and requirements. The research procedures should be implemented as approved in the IRB protocol. It is the principal investigator's responsibility to ensure any changes planned for the research are submitted for review and approval by the IRB prior to implementation. Protocol changes made without prior IRB approval to eliminate apparent hazards to the subject(s) should be reported in writing immediately to the IRB. Furthermore, discontinuing a study or completion of a study is considered a change in the protocol's status and therefore the IRB should be promptly notified in writing.

For information describing investigator responsibilities after obtaining IRB approval, download and read the document "[PI Guidance to Responsibilities, Qualifications, Records and Documentation of Human Subjects Research](#)" available in the online Office of Research Integrity's [IRB Survival Handbook](#). Additional information regarding IRB review, federal regulations, and institutional policies may be found through [ORI's web site](#). If you have questions, need additional information, or would like a paper copy of the above mentioned document, contact the Office of Research Integrity at 859-257-9428.

APPENDIX 2. IRB Consent Form

IRB Consent Form:

KEY INFORMATION FOR “DEAF FFA: AN EXPLORATION OF AGRICULTURAL EDUCATION IN SCHOOLS FOR THE DEAF AND HARD OF HEARING”

WHY ARE YOU BEING INVITED TO TAKE PART IN THIS STUDY?

You are being invited to take part in this study because you have either been directly recognized or referred by another party in your association and involvement with the Kentucky School for the Deaf Agricultural Education and/or FFA program. Your experiences and thoughts may prove valuable to the purpose of this study.

WHO IS DOING THIS STUDY?

This study is being conducted by Sarah Warren, a graduate student at the University of Kentucky, as part of a thesis project for completion of a Master’s degree. The people in charge of the study are Sarah Warren and her thesis committee members: Dr. Rebekah Epps, Dr. Stacy Vincent, and Dr. Seburn Pense.

WHERE IS THIS STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

This study will take place at the Kentucky School for the Deaf. The interview should last no longer than 1 hour. If you are unable to come to KSD for the interview, this form will be mailed to you, signed and returned prior to a phone call/video call interview.

WHAT IS THE PURPOSE, PROCEDURES, AND DURATION OF THIS STUDY?

By participating in this study, we hope to learn the history of the KSD Agriculture and FFA program and how they came into existence, as well as the perceptions and experiences from people who have been involved or impacted by these schools. Participants will be asked a series of non-invasive questions about what they have experienced during their involvement with the program. The interviews will be scheduled within a 3 month time frame for data collection (January to March, 2019) and interviews will be scheduled at the convenience of the interviewee.

WHAT WILL YOU BE ASKED TO DO?

You will be asked to give honest answers to the interview questions. You may be asked to describe things you have seen or emotions you have felt, as well as personal benefits and/or struggles you have experienced during your involvement with the program. Follow up questions may be asked in response to your answers in order to elaborate on a specific topic.

WHAT ARE THE REASONS YOU MIGHT CHOOSE TO VOLUNTEER FOR THIS STUDY?

You might choose to participate in this study if you have an interest in sharing your knowledge and expertise in order to help educators provide better learning opportunities for deaf students, and to allow others to develop a better understanding of the experiences of a deaf student in an agricultural classroom.

WHAT ARE REASONS YOU MIGHT CHOOSE NOT TO VOLUNTEER FOR THIS STUDY?

There are no risks associated with participation in this study. You may choose not to volunteer if you do not wish to contribute your time or responses.

WILL YOU BENEFIT FROM TAKING PART IN THIS STUDY?

We do not know if you will get any benefit from taking part in this study. However, if you take part in this study, information you provide may help students receive greater learning opportunities in the future.

WHAT WILL IT COST YOU TO PARTICIPATE?

There are no costs associated with taking part in this study.

DO YOU HAVE TO TAKE PART IN THE STUDY?

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any services, benefits, or rights you would normally have if you choose not to volunteer. As a student, if you decide to take part in this study, your choice will have no effect on your academic status or class grade(s). As an administrator/current employee of the school/any affiliated service in the state of Kentucky, you will not lose any professional value or compensation from your employer for participating; the final report of interviews will be totally anonymous, and no one will know what was said or by whom. However, you have no obligation to participate in this study, and declining to participate will not affect you either.

WHO WILL SEE THE INFORMATION THAT YOU GIVE?

When we write about or share the results from the study, we will write about the combined information. We will keep your name and other identifiable information private. You should know that there are some circumstances in which another interviewee may say your name in their interview, as the researcher cannot control what peers within this small sphere of influence may say (i.e. students discussing memories involving classmates, school and community supporters discussing other supporters tasks within the circle of influence), however your name will be redacted for privacy in the interview transcription. Officials from the University of Kentucky may see or copy pertinent information that identifies subjects.

WILL YOUR INFORMATION BE USED FOR FUTURE RESEARCH?

All identifiable information (e.g., your name, date of birth, etc.) will be removed from the information or samples collected in this study. After we remove all identifiers, the information may be used for future research or shared with other researchers without your additional

informed consent.

CAN YOU CHOOSE TO WITHDRAW FROM THE STUDY EARLY?

You can choose to leave the study at any time. You will not be treated differently if you decide to stop taking part in the study. If you choose to leave the study early, interviews conducted until that point will remain in the study, however you will be asked no further questions nor will you be contacted regarding the study again. The investigators conducting the study may need to remove you if you cannot answer the questions.

WHAT IF YOU HAVE QUESTIONS, SUGGESTIONS, OR CONCERNS?

The person in charge of this study is Sarah Warren of the University of Kentucky, Department of Community and Leadership Development. If you have questions, suggestions, or concerns regarding this study or you want to withdraw from her study her contact information is: Cell phone XXXXXXXX, Email XXXXXXXX If you have any questions about your rights as a volunteer in this research, contact the staff in the Office of Research Integrity at the University of Kentucky at 859-257-9428 or toll free at 1-866-400-9428. You will keep a copy of the signed consent form with you.

Signature of Participant agreeing to take part in
this study

Date

Printed name of Participant

Date

Signature of Investigator obtaining consent

Date

APPENDIX 3. Kentucky School for the Deaf Approval Letter

Kentucky School for the Deaf

ESTABLISHED 1823

303 South Second Street
Danville, Kentucky 40423-0027
Telephone (859) 239-7017 V/TTY
Fax (859) 239-7006



Dear Sarah Warren,

We would be most happy to accommodate you in your University of Kentucky research project for Agriculture at the Kentucky School for the Deaf. We see this as a true opportunity for growth for our students as well as yourself and know that you will work well with our staff since you did your student teaching here with [REDACTED] recently.

Please write a letter of introduction of yourself to our students and parents prior to any research projects that you conduct. You will also need to get permission from parents when engaged in projects here on our campus. We look forward to seeing you again and are available to assist you in any way possible.

Best regards,

[REDACTED]
Asst Principal/DAC

APPENDIX 4. Parental Permission Form



University of Kentucky
College of Agriculture, Food and Environment
Community and Leadership Development

2/5/19

To whom it may concern:

Hello! My name is Sarah Warren, I am currently a graduate student at the University of Kentucky in the College of Agriculture, Food and Environment. As part of my requirement for graduation, I will be completing a thesis project titled “DeaFFA: An Exploration of Agricultural Education in Schools for the Deaf and Hard of Hearing.” For this, I will be on the Kentucky School for the Deaf campus in the agriculture classroom observing [AG TEACHER] and interviewing students, with your permission, who are at least 18 years old and have taken agriculture classes while at KSD. The interview will be completely noninvasive. I am only going to ask questions regarding their experiences at KSD in the agriculture classes (such as their favorite memories or things they found challenging), as well as their opinion about how to improve the program for other students. This is completely voluntary and will in no way impact their lives as a student at KSD. The interviews will remain totally anonymous, and any identifying information about the student will be redacted prior to final publication of my thesis.

If you will allow your student to speak with me during their agriculture class, please sign and date this permission form. Feel free to return the signed portion below the dotted line and keep the letter. I appreciate you allowing me the opportunity to discuss with your child the positive experiences students are gaining from [AG TEACHER] class! Please, let me know if you have any questions. My contact information can be found below and I am more than willing to address any concerns you may have!

Thank you,

Sarah Warren
(XXX) XXX-XXXX
XXXXX@uky.edu

I give permission for my child, _____, to be interviewed by Sarah Warren for her Master’s thesis project titled “DeaFFA: An Exploration of Agricultural Education in Schools for the Deaf and Hard of Hearing.”

Printed Name _____ Signature _____ Date _____

APPENDIX 5: Interview Invitation

“DeaFFA: An Exploration of Agricultural Education in Schools for the Deaf and Hard of Hearing”

Hello!

My name is Sarah Warren. I am a graduate student at the University of Kentucky, working towards my Master’s degree in Community and Leadership Development. As a requirement for my degree, I must complete a thesis research project. My thesis topic is agricultural education in schools for the deaf and hard of hearing, and is a focused case study on specifically the Kentucky School for the Deaf agriculture and FFA program.

Purpose Statement: Researching the topic of agricultural education programs in schools for the deaf/hard of hearing will add understanding to the pool of knowledge already published about special education. The purpose of this study is to provide evidence that will serve as a guidepost and a standard for other educators wishing to modify their classrooms to meet the needs of deaf students, as well as deaf schools wishing to establish an effective agriculture program. At the national level, changes could result from the findings of this study by way of contests, events, rules and procedures, and other aspects of the National FFA Organization.

From the highest level down to the lowest, this topic has the potential to expand boundaries and spark highly influential discussions amongst people from all areas of education and community development. State and national decision makers for the agriculture profession will be interested in knowing more about this topic to influence practices and procedures that may need to be revised to become more universally inclusive in all areas of agricultural education. Local administrators, guidance counselors, resource teachers, and all others involved in ensuring the success of deaf students will find this research to be helpful in strategizing the trajectory of a student’s academic career. Most importantly, students and adults, in deaf schools and deaf communities, will be given a voice to express ways in which we can accommodate their needs alongside the needs of others to create a harmonious system with which to advance the agriculture industry.

My Request: a typical case study contains 5 components: documents, archival records, interviews, direct observations/participant-observations, and physical artifacts. Your name has been provided by [AG TEACHER], the agriculture teacher at KSD, because [AG TEACHER] believes you have played an important role in the KSD FFA chapter and/or agriculture program. I am asking you, therefore, to allow me to interview you regarding your experiences or knowledge about agriculture at KSD. This might include historical information, anecdotes from your time spent at KSD with [AG TEACHER], or your role in creating and maintaining the program. In short, I simply want to hear your story and get your perspective. I will have a list of questions to ask you, however I am using an open interview design, meaning I want to leave the conversation

open for you to speak freely about anything you know regarding KSD's agriculture program.

*** If you are willing and able to participate, please continue to the next page. If not, I understand and will regret missing your perspective ***

Participation: If you are willing to participate, I will be more than willing to accommodate you in any way to get your story. I would prefer to have my interviews done by March 8th, and the sooner the better. I am willing to drive within the state of Kentucky to meet with you, or can video call/phone call with you. I am able to meet with you on KSD's campus or at a quiet coffee shop/other quiet location. If an in-person interview is not possible I would prefer a video call but am also open to a simple phone call.

For my D/HH participants: Though I have a basic understanding of sign language, I will need an interpreter to get the best results of your interview. I have set up a time with an interpreter in the mornings throughout the week to either sit down with you on KSD's campus or video call with you. Let me know a time that is best for you!

Please note that as part of the research process, I will be recording our conversation for the purpose of transcribing and notetaking. All identifiers will be removed from your interview, and privacy will be upheld as outlined in the consent document. This recording will be kept locked in a safe location on UK's campus for 6 years before it is destroyed, as is protocol for research. I will not share your interview with anyone, and I will be the only person to use the recording.

I will be providing you with a consent document for your review. If I will be interviewing you in person, I will bring a printed copy of this document for you to sign, and obtain verbal consent at the beginning of the interview. For my virtual/distance interviews, I will be emailing you the consent document and obtaining verbal consent. I will of course be available at any time to answer any questions about this study or my research methods.

After we have set up a date and time for our conversation, I will email you the list of guiding questions I plan to ask, just to get your brain thinking in the direction of the information I'd like to get. Again, this will be very open, so I will also be asking you simply to tell me your perspective and story regarding KSD FFA and the agriculture program. My goal is to keep our interview as short as possible while collecting the most pertinent information, and I expect the process to take no longer than 1 hour at most. I will be very mindful of your personal time, I am so appreciative that you are taking the time to do this and do not intend to abuse this privilege.

From the very bottom of my heart, I thank you for agreeing to sit down and talk to me. KSD holds a very special place in my heart, as I'm sure it does for you as well. My goal is to give back to the school that has given so much to me, and to provide more D/HH students across the country with the opportunity to be involved in agriculture. KSD

is a unique and special school with a special program, and I appreciate your participation in telling this fantastic story!

Thank you so much again! Please, don't hesitate to call, text, or email anytime with any questions or concerns you may have.

Talk soon!

Sarah Warren

(XXX) xxx-xxxx

xxxxxxx@uky.edu

APPENDIX 6: Interview Guide – Students

Interview Guide - Students

Opening Script – Layperson Explanation:

Thank you for taking time out of your schedule to sit down and answer some questions for me. For my thesis project I am compiling information on the KSD agriculture program in order to tell the story of how it came to be and how agricultural education looks in deaf classrooms. I want other deaf schools to be able to look at your program as an example of what an agriculture program could be in their school. I'll be asking some guiding questions just to assist us in getting a comprehensive narrative of your experience. These questions should be fairly easy to answer, they will all be about the program you were a part of at KSD. I may ask you to elaborate on some answers for clarity just so I can get the most representative picture of your program. I believe this will take about an hour to complete.

Interview Guide:

- 1) Before we begin, can you confirm that you have received a consent form and that you are allowing me to record this interview? As a reminder I will not be publishing this interview anywhere, it will be solely for my own purposes in transcribing our talk so that I can make sure I don't leave out anything you have said.
- 2a) [Current Students] Can you tell me a little about yourself? What do you do at home?
 - a. What is your current grade in school? How long have you been here at KSD?
 - b. How old are you?
 - c. What classes have you taken here at KSD?
 - d. How many agriculture classes have you taken?
 - e. What are some of your interests?
 - f. Have you thought about your plans after high school?
 - g. Do you have any interest in a career in agriculture?
- 2b) [Former Students] Can you tell me a little about yourself? What are you doing in life?
 - a. Do you go to school/work? Where? How long have you been there?
 - b. How old are you?
 - c. What are some of your goals in life?
 - d. How long were you a student at KSD?
 - e. How many agriculture classes did you take? Did you enjoy them?
- 3) Tell me more about your time at KSD?
 - a. What is the school culture like?
 - b. What kind of classes and programs are offered? (Specifically, CTE)
 - c. Are you/Were you a part of any teams or organizations in the school? (sports, clubs, etc.)
 - d. Do you/Did you stay on campus during the week? (Are they a dorm or day

student)

- e. What do you/did you like to do for fun while here at KSD?
- f. How do/did you and your friends/peers here at KSD feel about school in general?

4) Let's talk more specifically about the agriculture program at KSD. Tell me what the program is like, from your perspective.

- a. How do feel about your agriculture classes?
- b. Do you like learning about agriculture?
- c. What are some of the things you get to do in your ag classes?
- d. What is your favorite/least favorite class you've taken in ag? Why?
- e. [Current Students] Do you feel like you will use the skills you're learning in ag when you graduate?
- f. [Former Students] Have you used the skills you learned in ag class since graduating?

5) Now I want to focus in on the FFA chapter you are/were a part of. Can you tell me about that?

- a. What has your role been in FFA?
- b. What kind of activities have you gotten to participate in?
- c. Did you enjoy those activities? Why or why not?
- d. What has been your favorite/least favorite FFA memory? Why?
- e. Have you met many people/made friends by being involved with FFA?
- f. Do you think being in FFA has changed anything about you personally? Did it make you think or act differently?
- g. Are/Were your friends in ag/FFA with you?
- h. Have you gotten any chances to travel with FFA? Tell me about that!
- i. Have you participated in any competitions with FFA?
- j. Do you/Did you have an SAE project? Can you tell me about it?

6) How do other students in the school perceive the ag program?

- a. What would you say to a younger student who was thinking about taking an ag class?
- b. Have you ever heard other students talking about your ag program? What kind of things were they saying?
- c. How do you/did you feel when you wear FFA official dress to other classes?
- d. How would you react to another student talking bad about your ag program?

7a) [Current Students] You'll be leaving KSD soon. What would you suggest be done to improve the agriculture program for future students?

7b) [Former Students] Now that you have been out of KSD for a while, what would you suggest be done to improve the ag program for future students?

- a. What would you like to have learned that you didn't get to learn while in ag?
- b. Do you think there should be ag programs in other deaf schools?

c. Why do you think other deaf schools don't have ag programs? How can we get more ag programs in other deaf schools?

8) How has agriculture impacted you?

a. Is there anything else you'd like to share about your experiences here in ag at KSD?

End of Interview: Thank you, that's all the questions I have for today! I will reflect on what we have discussed here and read back through our transcribed interview. If you have any questions for me, please let me know! I will leave my contact information here for you. Thank you again!

APPENDIX 7: Interview Guide – Agriculture Teacher

Interview Guide – Agriculture Teacher

Opening Script – Layperson Explanation:

Thank you for taking time out of your schedule to sit down and answer some questions for me. For my thesis project I am compiling the story of your agriculture program in order to tell the history of how it came to be and how agricultural education looks in deaf classrooms. I want other deaf schools to be able to look at your program as an example of what an agriculture program could be in their school. I'll be asking some guiding questions just to assist us in getting a comprehensive narrative. These questions should be fairly easy to answer, they will all be about the program you have built here at KSD. I may ask you to elaborate on some answers for clarity just so I can get the most representative picture of your program. I believe this will take about an hour to complete.

Interview Guide:

1) Before we begin, can you confirm verbally that you have received a consent form and that you are allowing me to record this interview? As a reminder I will not be publishing this interview anywhere, it will be solely for my own purposes in transcribing our talk so that I can make sure I don't leave out anything you have said.

2) What is your current occupation? How long have you been in this position?

a. How did you get to this position? What did you do before this?

b. How old are you?

c. What educational degrees and/or certifications do you hold?

Are you certified in:

i. Special Education?

ii. Agricultural Education?

iii. Deaf Education?

3) What is your experience with the Deaf culture and Deaf/Hard of Hearing students?

a. How fluent would you consider yourself in American Sign Language?

i. Do you have a SLPI:ASL score?

b. Do you feel as though you have been immersed and accepted by the culture?

c. How has your involvement with the Deaf community impacted your life? career?

d. Do you feel confident in your ability to teach D/HH students?

4) Tell me more about your time here at KSD?

a. What is the school culture like?

b. What kind of classes and programs are offered? (Specifically, CTE)

c. Do you serve any other roles in the school besides that of an agriculture teacher?

i. committees, faculty groups, bus duty, etc.

* The history and general information of the school can be found through records and other sources, it is not necessary to waste time in this interview focusing too much on the general school itself. Just collecting basic information through the eyes of this participant and their experience.

5) Why were you chosen to create this program?

a. Why did you decide to take on the role of creating it?

b. What were some of your personal feelings along your journey?

(Specific examples?)

5) Tell me more about the history of this agriculture program?

a. How old is it?

b. What is the story behind its founding?

c. Who were some important people that helped along the way?

6) What were some of the struggles you faced in creating this program?

a. What advice, based on what you have been through, would you give someone wishing to start their own program?

b. If you could go back and change anything that you did in the process, would you change anything?

7) What were some of the exciting and most memorable parts of creating this program?

8) What is the process for getting a new program started?

a. Who did you speak with? Who assisted you?

b. How long did it take?

c. What kind of documentation, licensing, etc. was required of you? Of the school?

10) What is the program like today?

a. What is your student population? Demographic?

b. What kind of activities do you all participate in?

c. What classes are offered? Career pathways?

d. How involved in the Local/State/National levels of the FFA would you consider your chapter?

e. How many FFA members do you have? What is the protocol for new membership?

f. What resources do you have available to you?

11) Do you feel as though your program receives support from...

a. Community – both the physical setting and the Deaf community

b. Faculty, staff, and administration of the school and state level

c. other FFA chapters in the local area/State/Nation

d. Parents and family of students

e. the student body of the school

12) How does this program compare to “hearing” or public school FFA and Ag Ed programs?

- a. Similarities?
- b. Differences?
- c. Is it more challenging to teach agriculture to deaf students? (If so, elaborate)
- d. What are some of the barriers to involvement for deaf students in FFA?

13) From your experience, what do you see as the major issues associated with Ag Ed in Deaf Ed settings?

- a. What modifications need to be made to curriculum?
- b. What modifications need to be made to the FFA?
- c. What barriers prevent other deaf schools from creating agriculture programs?

14) Finally, is there anyone you can refer me to who is currently involved with the program, or has formerly been involved, that would be able to give me more perspectives?

- a. Do you have any final thoughts or comments you would like to make?

End of Interview: Thank you, that’s all the questions I have for today! I will reflect on what we have discussed here and read back through our transcribed interview. If I have any questions regarding our time here today, would it be okay for me to contact you via phone or email? If you have any questions for me, please let me know! I will leave my business card with contact information on it here for you. Thank you again!

APPENDIX 8: Interview Guide – Community Supporter

Interview Guide – Community Supporter

Opening Script – Layperson Explanation:

Thank you for taking time out of your schedule to sit down and answer some questions for me. For my thesis project I am compiling the story of your agriculture program in order to tell the history of how it came to be and how agricultural education looks in deaf classrooms. I want other deaf schools to be able to look at your program as an example of what an agriculture program could be in their school. I'll be asking some guiding questions just to assist us in getting a comprehensive narrative. These questions should be fairly easy to answer, they will all be about the program you have built here at KSD. I may ask you to elaborate on some answers for clarity just so I can get the most representative picture of your program. I believe this will take about an hour to complete.

Interview Guide:

1) Before we begin, can you confirm verbally that you have received a consent form and that you are allowing me to record this interview? As a reminder I will not be publishing this interview anywhere, it will be solely for my own purposes in transcribing our talk so that I can make sure I don't leave out anything you have said.

2) What is your current occupation? How long have you been in this position?

a. How did you get to this position? What did you do before this?

b. How old are you?

c. What educational degrees and/or certifications do you hold?

Are you certified in:

i. Special Education?

ii. Agricultural Education?

iii. Deaf Education?

3) What is your experience with the Deaf culture and Deaf/Hard of Hearing students?

a. How fluent would you consider yourself in American Sign Language?

i. Do you have a SLPI:ASL score?

b. Do you feel as though you have been immersed and accepted by the culture?

c. How has your involvement with the Deaf community impacted your life? career?

d. Do you feel confident in your ability to teach D/HH students?

Why/Why not?

4) Tell me about your experience with KSD's agriculture program?

a. In what capacity have you worked with the agriculture teacher/staff at KSD?

b. In what capacity have you worked with the students?

c. What do you know about the agriculture courses taught at KSD?

d. About the FFA chapter?

5) Do you know any historical information specifically regarding agriculture on the KSD campus?

6) Do you know anything about agricultural education at other deaf schools?

7) What do you see are the potential benefits to having agriculture programs in schools for the deaf?

a. Do you think deaf students benefit from the program?

b. Do you think more deaf schools should incorporate more agriculture programming?

8) What do you see are the potential challenges to having agriculture programs in schools for the deaf?

a. From a classroom perspective?

b. From the FFA chapter perspective?

c. From a community perspective?

9) What are some things this program does well? What are some things they could improve?

10) Anything else you'd like to tell me about your experiences working with KSD, their agriculture courses, or their FFA chapters? Deaf/Hard of Hearing children in general?

End of Interview: Thank you, that's all the questions I have for today! I will reflect on what we have discussed here and read back through our transcribed interview. If I have any questions regarding our time here today, would it be okay for me to contact you via phone or email? If you have any questions for me, please let me know! I will leave my contact information with you. Thank you again!

Structural Coding of DeaFFA Interviews:

<p><i>1. What is the story of the Kentucky School for the Deaf agriculture and FFA program?</i></p>
<p>History</p>
<p><u>Agriculture</u></p> <ul style="list-style-type: none">- [How did you learn to farm?] From family. I watched my grandfather do it. My grandparents, my father. Just being around it. I just learned from being in the thick of it. I've farmed my whole life." (Interview #5)- Family tradition- Cultural standard years ago, necessity- Deaf or hearing, we all need food- CODA talking about a conversation with her parents about agriculture on the campus when they were students at KSD in the early 1900s: "She said, 'we had to sew and wash dishes and do all the girl things and the boys got to do their things. They got to be outside and work at the gardens.' Of course, my dad would say 'I got so sick of planting onions I couldn't stand it, they worked us hard' - that kind of thing. But I asked Mom I said, 'Do you think if there'd been agriculture classes and an organization such as FFA, do you think it would have changed the lives of some of the students?' And she said 'yes, definitely - there's no question.' Because especially in their era, and even still, a lot of them grow up on farms but they never get to take that to another level. They never get to realize that there's a science behind what you're doing and there's a method to the madness...it becomes just a way of life for them. But to have more to it, mom said 'yeah, that would have been fascinating for them.' And she said 'you probably would have seen a lot more deaf farmers and still today you would if they had exposure to something like this.'" (Interview #7)

Ag Ed at KSD

- KSD crops: potatoes, vegetables, onions
- KSD animals: dairy cows, beef cows, hogs
- Self-Sustaining farm
- “When I went to school here, 1977, they didn’t have FFA, but my brother and sister – they had FFA at their public school.” (Interview #5)
- Graduated in 1968: “A long time ago it was half day. They worked until about 3:00. I worked here until 3:00 and then went home and worked on my own farm.” (Interview #6)
- “We had a garden, we had pigs back here. Milking cows and a barn over here. They planted a garden out front, actually. We had strawberries out there. We also had hay. The school would finish at noon and we would go put up the hay.” (Interview #6)
- “No sheep here, just cows. Lead the cow right to this building. The creek that ran on the other side of this field over here? A long time ago, when we would slaughter the animals we would do it over there. Lead them out and then go ahead and field dress it and we would take it over there to refrigerate it.” (Interview #6)
- “We helped [starts signing the letter R on forehead, which is a name sign, then spells it for me] R-A-N-K-I-N. He ran the farm and I helped him. That was my favorite. And when I was finished with school and graduated, I started growing tobacco for myself. I actually called him to come over and help me. He said “Yeah, I’ll be happy to come help you.” So he came over and helped me strip tobacco. Like for four years he came and helped me until he finally died.” “He had a white house right over here....And then he moved to this brick house. But there was a barn and silo right near the house where he lived.” (Interview #6)
**Gardener’s cottage and Engineer’s house

Deaf Ed

- Lipreading and Oral speech (used to be taught)
- Rubella
- LRE and Special Ed laws sent lots back home
- Convenience culture, poor little working kids

2. Is there evidence that Vygotsky's Sociocultural Theory of Cognitive Development is occurring in the KSD agriculture/FFA program?

Deaf Culture

- Deaf vs. deaf
- Sign name
- Culture vs. Community
- "I do not consider myself to be a part of Deaf culture. Deaf culture is people who have a hearing loss, but they identify themselves culturally as deaf. I am part of the deaf community...Anyone can be part of the Deaf Community if they have relationships with people who are in the Deaf Culture." (Interview #10)
- CODA (Child Of a Deaf Adult)
- "It's personal for each person. What I have found and seen over the years, is that a deaf person whose family has pretty much just said, we don't know what to do with this deaf child and...then the people that were put in the school at a young age, if they attend the school for the deaf you see a lot more of the deaf community - the Big D deaf, School for the Deaf thing. The kids that are out in public schools that are being mainstreamed, a lot of them never even get exposed to the deaf-knitted, tight-knitted community feeling or even the ownership of 'it's okay to be deaf.' You know, 'I'm all right, that's who I am.' A lot of those kids never ever get that experience. They're so isolated and they're told -I'd be so bold as to use the word forced to be hearing - to be like a hearing person when they know deep down in their hearts they aren't. I've seen deaf people, some that assimilate beautifully into the hearing world and function very well. And I've got a lot of deaf friends that have married hearing partners and as much as they've worked and tried and everything's as good as can be, they still say 'I never feel totally 100% included.' It's because of the communication. It's strictly a language and communication issue. I've got deaf friends that have married hearing individuals that still stay very strongly in the big D community and they try to play both sides of it and some of them do beautifully and some of them, divorce always ends up being the issue. But, the kids that have come to the school for the deaf over my years, you know 40 plus years now of being involved in the school for the deaf, that come from a mainstreamed isolated setting to the school for the deaf. They always talk about how much it changes their lives. In every aspect – socially, in you know, just even internally their self-esteem and their self-identity. It all changes when they come here because they're finally with people that can communicate with them 24/7 in their language. And these people get it...a lot of people say, 'everybody just gets it - they understand what I'm like and who I am. Nobody gets it where I am in that little isolated setting' that kind of thing. So you find a lot of those people become more of the big D versus little d. They don't want to be 100% into the deaf community. They want to be in the hearing world and assimilate as well as they can, they want that. But they will admit if you pin them

down ‘yeah, I don’t feel 100% included, but this is my choice, this is where I want to be. This is what I like and want.’ I’ve never ever, ever put anybody down for that. I’ve never said, you know, well you’re wrong or you should be this or that. It’s just an individual choice.” (Interview #7)

Communication

Language Deprivation

- Deaf vs. Hard of Hearing
- Teaching “more” is the first thing, gateway communication (interview #1)
- Independent or behavioral issues
- Affected by varied backgrounds and life experiences (family, environment, school)
- “This is how we try to explain it to parents who couldn't understand why their kids just weren't learning as fast and I said that it had been proven that a hearing child needs to hear a word something like 10,000 times before it becomes ingrained in part of their vocabulary and mindset and understanding of that word. A deaf kid has to see it - its something like, I feel like 50,000 times. Well, think of how often a deaf kid is going to see that word or concept versus a hearing kid who can incidentally pick up language. They can be just sitting over here doing something and they can hear you and me talking and they can pick up little things, a new word, or a new concept, or a new nuance. Versus a deaf child sitting right there and you and I are talking and we're not using sign language. Even if we are, they're having to look down at their work, they can't look down and up and down and up to take in all this language that a hearing kid can. Turn on the radio. We have no clue the language that we pick up and information we pick up...driving from here to Walmart and in that little bit of time I can hear something totally new or so different or just bizarre and pick that up. Whereas how does the deaf child or person get that Information? They don't. And they have to visually take it in in some form whether it's on television through captioning or watching people talk and communicate with each other. And so I would tell the parents that's why it's crucial, critical that you learn sign language, and that you learn how to communicate with your child, and that you expose them to language 24/7.” (Interview #7)

Modes

- Auditory (hearing)
- Visual (sign language)
- Individualization (hard of hearing students need both, deaf students need full ASL)
- “A lot of writing back and forth. As far as communicating with the hearing people in the community.” (Interview #7)
- Writing isn't accurate if they don't know English very well
- “Deaf people have forever been like, okay, my biggest way of getting information is from direct communication with another deaf person. Someone telling me, and they

will give me every detail that they know. Then they will ask [very personal] questions that sometimes we think, ‘say what?’ and that's okay because this is how they get information.” (Interview #10)

Deaf Education

Challenges of Deaf Ed/Deaf Culture vs. Mainstreaming/Hearing Culture

- “But I told her ‘well, I’m going to be mainstreaming back to Boyle County and going to graduate with a Boyle County degree.’ Because it was complicated. Because I didn’t know what I was going to do. When I was a senior I said, ‘well, what about I’ll go to college, what am I going to do.’ I didn’t want to run around with the degree in my hand that says deaf on it. Because deaf has always been discrimination – it’s always been and it still is. And I was afraid that would really hurt me to get a job.” (Interview #15)
- “I was closer to my teachers than I was the students because high school wasn’t the best being the deaf kid at Boyle County.” (Interview #15)
- {Interviewer}: “So, what was it like coming as a hearing person to a deaf classroom?” {Interviewee}: “I’ll be honest with you and I mean you can put this in your paper. It’s pretty damn hard...if you’re not one of them, you’re not one of them.” (Interview #16)
- CCR Exchange with Burgin, Danville HS
- When choosing to be a part of KSD FFA instead of Burgin FFA: “Well, they needed somebody to set but roots... I mean is there some regrets? Yeah. But I’m glad that I did set the roots for this place.” (Interview #16)

Methods

- Every deaf school runs different
- Kids from foreign countries
- Concrete vs. abstract concepts
- Repetition
- Vocabulary
- State school
- Start where they are, scaffolding
- Making Associations

- “I think you’ve got to show them, get them in the trenches. Teach them and then the more exposure they have to that then the more they’ll know.” (Interview #5)

- “You would just learn by trial and error and that’s what I think is having hands-on opportunities for students to be able to learn and get them excited about it, and then get people who are willing to show them how to do it.” (Interview #5)

Qualities of Good Deaf Educators

- Content vs. communication
- Work ethic
- Passion
- Don't rely on Interpreters
- Team player
- Kids first, always
- Provide the big picture for them

- "I fell in love with KSD." (interview #10)

- "That's the frustration as a teacher is how do you do that? It's not just the word and what it means but then you've got to go into the whole grammatical syntax of language and how it plays into written language versus American Sign Language which has a total different syntax and grammatical structure than written English language does and spoken English language. And trying to make all that come together for deaf kids while you're still trying to give them language vocabulary, the world around them. It becomes insurmountable as a teacher, it does. And then when you see success, even the little pieces of success, you're just like - Yes! And then when you look at the big picture, you're like "I'll never get there!" It's rewarding and frustrating. That's why I say, it's a challenge but I absolutely loved it." (Interview #7)

- "The teacher needs to be cognizant, aware, and in tune with students to know that there's no comprehension, or there's gaps that need to be filled. Language gaps happen when you are language deprived, or at home not everyone uses the language that you readily access the world in, and school tries to fill those gaps. We really do try to fill those gaps here....It's tough to divide that, in the classroom, the teacher has responsibilities the interpreter has responsibilities, and they should still collaborate to be successful." (Interview #8)

- "KSD is really lucky to have her [the Ag Teacher] and the years of experience that she has and working with animals. But then also just working with deaf children, she has that knowledge to be able to accommodate them and to enrich their strengths and KSD is really fortunate to have such a great teacher. If you don't understand she'll go into depth. She'll put hands-on experiences in there and place and she'll make sure that everyone is on board to make sure that they understand what is being taught and that they learn it and they actually get it." (Interview #14)

Residential School

- Community
- Brothers and sisters, live together
- Leave their families
- Creating relationship

- “This is their school and in many cases this is their home. This is where they feel connected. Because some of our kids go home and can’t have real communication with their own family. So, this is their school and I don’t ever take that for granted.” (Interview #10)

Addressing Misconceptions

- Writing back and forth doesn’t work if they can’t speak/read English
- You don’t know deafness until you’ve experienced the culture
- Technology is the trend
- Don’t want sympathy, but empathy
- Deaf can do anything except hear
Deaf kids are “shy” or prefer to stay in a “safe cocoon”
- Deafness is seen as a disability, though speaking another language is not
- KSD will never be the “best” at speeches because of the language barrier and should be competing in other areas, like demonstrations.

- “You can push them just like you would any other kid. They just have to learn in a different way.” (Interview #10)

- “Even though we live in a technology age and you have FaceTime and you have your video relay services, deaf people still do not have full access....[Captioning Videos] They still miss out captions. If you've ever muted it and just watched the captions you either miss completely the action of what's happening or the emotions because you can't look at their face and keep up with the captions. And you read really well, but for student who doesn't read on grade level? Forget it. So even now they don't have full access.” (Interview #8)

- Accommodating is as simple as providing written English instructions or an interpreter: “And so it's got to look a little different when we do CDEs, we've got to have interpreters or written directions or whatever. But again, most of those things are very easy. They're easy to do, they may not be simple, but it's not rocket science to give you written directions because you’re deaf. That is very easy, as long as we plan ahead.” (Interview #5)

Social Capital

- “I think its important to have someone come talk to them from experience. To teach them and relate to them about anything that might come up...So those are the types of questions that I would like to explain to students that are coming here to school, and I’ll be happy to share any of that knowledge with them.” (Interview #5)
- Rankin would help students farm on their own land (Interview #6)
- “I want to work. I work right now as a vet assistant in my hometown and I do want to keep working there after I graduate. I don't know about going to college yet or not. But if I do want to advance, you know, it does make sense to go to college, but for right now I'm a vet assistant. That's what I've been doing. [Ag Teacher], she helped me find a job. It was through a co-op program.” (Interview #13)
- Interaction about another Deaf FFA program - {Interviewer}: “Have you ever seen students from other deaf schools in FFA or in Ag programs?” {Interviewee}: “Uh huh...North Carolina School for the Deaf - they have a program.” {Interviewer}: “Where did you see them?” {Interviewee}: Well, actually there's a girl that I've met who was at a volleyball tournament, Mason-Dixon volleyball tournament. I think it was last year I found out that her school had already set one up and she told me about it. I was like, oh, that's awesome that they did.” (Interview #13)
- “You can't get very far in life without networking. Students who are going into college, they may be able to reach out to other [former FFA, now college students]... maybe [the Ag Teacher], maybe she knows some people that are needing applicants or needing work, for them to work on their farms. And she can refer [students] out and find people that are available to help and kind of help you reach those places where you might not be able to get otherwise on your own.” (Interview #14)
- “I would say if it weren’t for the Ag classes I wouldn’t probably be at the jobs I have now because me and my Ag teachers worked closely together. He knew what I needed to do because he’s been through all that. He can tell what kids are good at. That’s their job. That’s what they are supposed to do – to tell me what I should do. Boyle County had a different kind of program than what we had here. Their program was to make sure kids get a job or go to school when they graduate. That’s their number one goal. Here [At KSD] it’s the same way but a little bit different. They want to make sure they will be able to live too.” (Interview #15)
- “I am hard of hearing so I can talk some and so I kind of was able to open up. [Ag Teacher] pushed us always to communicate however we could and not to be shy and so we would put ourselves out there. Sometimes I do remember talking to people...meeting people and networking with them and talking with them.” (Interview #17)

- “I wish that we would have partnered more with them, Boyle County or any of the local schools. I wish we could have worked more with them, but it could have gone both ways, they could have taught us and then we could teach them and then communication could have been faster and easier and we could have learned a lot of things from one another by working together because we had two different perspectives.” (Interview #17)
- On Ag Camp: “It was a great place to escape and just think out of the box and talk to students from across the state of Kentucky.” (Interview #17)

Human Capital

- Creating well-rounded individuals
- Teaching self-sufficiency
- “I don’t want to have to hire someone to do something for me.” (Interview #5)
- Confidence
- Independence
- Not seen as the disabled, but as a working person

- Being exposed to the deaf: “It has taught me just to be nice to everybody. Just being willing to help anybody because like even at my job I always run into them because I'm here in Danville. So, like the deaf community usually stays here...I'm able to have general conversations with them. I mean, granted its home signing, but, I mean, it's made an impact.” (Interview #16)

- Being exposed to the deaf: “I think its given me a better understanding of perspective. I think that I’m never going to know the deaf experience and I get that. But it really does help me look at things differently than if I were just teaching in a public school.” (Interview #10)

- “I think that first of all you’re a human being and you need some of this information just to make wise choices about how we take care of our environment and our food. I think every kid needs that, period.” (Interview #10)

- “It gives them confidence to go on and do other things, like ‘I can interact with hearing people, I am smart. Look what I just did, I can learn. And I can grow.’ I think ag offers that. In the classroom and out of the classroom. FFA does.” (Interview #8)

- What FFA teaches: “The thought of it is partly on your shoulders to feed the world. That's pretty awesome. and it translates into not just if you're directly working in agriculture. It is on your shoulders to make this world a better place. It is on your shoulders to be an active advocate in your community.” (Interview #10)

- “I’ve been treasurer twice and now president and it’s a big job. A lot of learning, realizing my mistakes, learning from those and kind of moving on but I think I've done well.” (Interview #13)

- “I’m shy and I got to feel brave because I'm competing against a bunch of hearing people. Last year I did take first place in the animal demonstration. We talked about birds and hatching - incubation and hatching the chickens. Yeah, I took first place out of all those that were there competing, but I was very surprised that I could do it and I had to face those fears and show that deaf students can do the same as other hearing students.” (Interview #13)

- “I had to learn...You have to finish [work] before you leave [class], just like work. And I’m not used to that cause I’m used to, they give you something to do – you take

it home in all the other classes. You can't do that in the real world going to work and stuff like that. So I had to learn how to do that. Do something and get it done before you go, not sit around and do nothing. If I sat around and did nothing and didn't get it done then I'd get a bad grade. I had to do some leadership too...I say 'I'm gonna do it myself, I know it'll be right.' That's not always true. If you give a job to somebody else and have them do it, if they do something wrong, you can go help them. That's what leadership is, you help each other. I had to learn how to communicate with the people around me so we could get jobs done." (Interview #15)

- "There were some words that I had no idea, never even heard them before and she [the Ag Teacher] explained them to us and I would go home and I would talk to my parents and they'd say 'yeah, exactly' and I just would get a sense of confidence and excitement." (Interview #17)

3. What do other deaf schools stand to learn from a successful agriculture program?

KSD FFA

Creating the program

- A perfect storm
- Retirement, reevaluate
- Motivated, knew content and communication, knew the school and kids
- Support the teacher, help however you can, trust the teacher as the expert
- Poultry lab
- Collaboration with other teachers in the school
- Horticulture and Animal Science Pathways

- 23-acre farm, greenhouse, chicken coop, incubators, floral coolers, rabbits, cab tractor with front-end loader and implements (plow, harrow, disc, three-point hitch cultivator, plastic mulch applicator, dripline attachment, waterwheel transplanter, 25 foot boom sprayer, 6-row planter with corn and bean meters, bucket attachment, forklift attachment), garden tractor and wagon.

- Labs: Small Engines lab, Aquaculture Lab, Poultry Lab, Greenhouse, Shop floor, Classroom.

- “And so, we have everything to do anything we want to do except for I do not have hay harvesting equipment. I don't have a mower or a rake or a baler... I have a local man here in town who does it [harvests the farm’s hay] on percentages. He takes his 60% and I get the 40% and then we sell it with the proceeds going to the KSD FFA. So that's been very, very helpful since my very first year because our families aren't around and we have fundraisers and bless the hearts of all the teachers here because every class and every group we sell to the same people and it's been very helpful because the FFA does spend a lot of money and we try to spend it right back on our school. So having that money that comes off the hay helps a lot. Just like this last week we had the teacher appreciation breakfast during National FFA week, but we also fed every member of the staff to include aides and secretaries and outreach department, all that. And this week we'll be feeding pizza and soft drinks to maintenance, housekeeping, and groundskeepers. We feed everybody in student life...So, you know, we try to pay it forward and people appreciate it. They really do.” (Interview #2)

- “So, we have a garden tractor with a little wagon on it. The kids use that...well, for everything. Only the kids who have passed my driving test get to use it and so, usually it means they're a second year student, at least a sophomore or above, and they can use it to run around campus and run errands and haul stuff for me or they can run down to the chicken coop and feed and water the hens and get the eggs. We have a chicken coop and 15 Rhode Island red laying hens where kids raise those hens, raise those chicks in our poultry lab and now there'll be three years old this

May. So, we sell the eggs for money for our FFA. Our poultry lab, talking about labs inside of the building, our poultry lab is sponsored by Centre College. So we have a commercial incubator, a commercial hatcher, four heated brood houses, and about 50 grow pens all sponsored by Centre College. Then we have of course our classroom, which is also our computer lab. So we have six desktop computers, 10 laptops that were bought with my Perkins money, and my smart board that I bought with my Perkins money, and then last year we went one to one so every kid got their own Dell laptop. So, kids pack their own laptop around and all staff members do. Then we have the aquatics lab where, I had a collaboration going on with the high school science teacher and we've been waiting on some plumbing issues so, we kind of let that die down but we used to keep about 450 koi and we would sell the koi. At the same time we would sell the bedding plants in the spring and we had tilapia. They're mouth breeders, you know, and they have lots of babies so we had tanks everywhere. ... We have a small engines lab. Took an old paint booth. The original paint booth that was in this department, cause this was built to be an auto body shop. The original paint booth, I converted it over to a small engines lab. Got permission from a prior principal. We threw out all the junk that I had inherited and then we painted the whole entire lab the Briggs & Stratton colors and kids use the overhead projector put Briggs & Stratton way high up on the wall, and painted it and we got drafting tables from my floral design class and we modified those into tables for the small engines lab. I had our maintenance department build me wood engine mounting blocks that we can mount our engines on. Briggs & Stratton sponsor that lab so they gave me a case of Briggs & Stratton vertical shaft engines so I have a whole case of them in there. I believe the case was 10. It might have been 12, but I think it's 10 ... then I got two larger B-Twin engines from them. So, we have engines in there. We have our flammable proof storage cabinets because I was allowed to scavenge all around. I've always been resourceful. We have a few buildings around campus and I knew that had science labs in them so I was allowed to go and pull the cabinet's out of them and bring them over here so we can store our gas products and things in there. Sometimes we have diesel in there. And then we have all the tools that you would need to break an engine down. So we have a parts washer in there and that was so fun building that lab because kids were so excited about that. And so, you know, they mount those little engines and gas em up, oil em up, and crank them up and then pour gas all out and then they have to break them down, see all the parts and put it back together... Got a new plasma cutter out there. I'm gonna be getting the table for it next year which is a 2 by 2 so it would be a CNC plasma table." (Interview #2)

- "There were some years that our 8th graders had a rotation class and so they got to do a quarter with [Ag Teacher] and that was nice for them to see if this is something they want to go into in high school." (interview #10)
- "Our program's not a cookie cutter program. The KSD program's not. We're special, we're different. That's fine. We don't have to be just like everybody else." (Interview #15)

- “We have four different programs. We have AgEd, tech ed, (technology education), culinary and the new teaching and learning pathway. [Agriculture] is the only one that has two pathways...animal science and plant science.” (Interview #2)

- “Well, examples would be in the Plant Sciences, typical stuff - Greenhouse Tech, Landscape Design, Crop Technology and a basic principles class. Animal science have small animal technology, large animal science, equine science. I offer poultry science for a kid who doesn't have any interest in large animal as a substitute and of course principles of Ag.” (Interview #2)

Start Small

- Start with basic classes, add as the program progresses

- “Start maybe with a little tractor. Don’t start out with that huge tractor...Start with the basics when they are kids. Show them those things.” (Interview #6)

- Evaluate what you have to work with currently
- Build relationships in the community
- Determine community needs

- “It doesn't have to start on a big scale, it can still be just as effective. Now, is it exciting to keep growing the program? Of course, it is a big deal when you get a tractor that two people can sit in so someone can be driving and someone signing to their deaf student who's driving the tractor. That's huge. but you don’t start there. That's okay. And I think that it's easy for people to think, ‘Oh, but we don't have the money to do all of that.’ Yeah, but when you start smaller and you just keep building and adding as it gets successful, I think that works.” (Interview #10)

- “In Kentucky to have an FFA chapter you have to have three things: you have to have a certified Ag teacher offering the curriculum, you have to have a curriculum that we approve at the state level that basically is going to offer the courses for students to complete at least one career pathway, and then you have to have facilities to offer the program. And we're fairly flexible on facility. So, it's not like you have to have a greenhouse and a shop and the tractor and all this, but you have to have something beyond just the classroom. So, if you have those three things you're eligible to Charter chapter. And so then to Charter a chapter you have to have a program activities or a list of activities that you plan to do, a constitution and bylaws, and you have to elect officers. If you have a certified teacher in place, all the other things can and will happen pretty easily.” (Interview #5)

Why Ag Suits this Audience

- Teaches work, but can see the payoff from work
 - Students get one-on-one attention, more experiences
 - Very visual, concrete
 - Exposure
 - Students report craving more exposure, wanting to see the program do more
 - Job path potential
 - Just like hearing kids, address misconceptions – where else will they get it? (“Agvocacy”)
 - Ag is everywhere, prepares for entrance into workforce in ag-heavy communities
 - Push comes to shove, they at least understand how to get food
-
- “I think a lot of kids, even hearing kids, think ag means, ‘that farmer that's out on the tractor’ they don't realize all the other things that farmers do, all the other jobs related to [agriculture].” (Interview #8)
 - “We always want to give our kids more choices and more options in terms of careers. I also think that no matter what career they're doing all those other skills - that leadership, that sense of community and responsibilities – it's built into FFA, they are the gold standard when it comes to CTE.” (Interview #10)
 - “I'm just really grateful to have had that opportunity to be able to have [Ag Teacher] to see me grow and mature and the support that we felt from her. All of us students feeling validated and just having that sense of a safe place to be able to grow and we always learn something new every single day. I'm so grateful for the program at KSD that gave me that opportunity.” (Interview #14)
 - “It was just a break from the mundane same classes, and I got to work and be hands-on and be involved and I learned a lot, it really has benefited me.” (Interview #17)
 - “I love FFA, I'm honored to have been a part of the first FFA at KSD. I wish that I could tell [Ag Teacher] in enough words how grateful I am for her investment in us and how much she loved KSD to bring that program here. It was an honor to be there and I think it's perfect for KSD to be in that spotlight for something like that Ag program.” (Interview #17)

FFA

- Formality
 - First time wearing nice clothes
 - Pride to be a part of something
 - just like hearing/public school
 - compared to athletics in deaf schools
 - Exposure
 - First time travelling, first time going to a concert, etc. (exposure)
 - A big deal in this region
- No distinction culturally at KSD between FFA and Ag Class
- “From the interpreting perspective, the verbiage that is required to understand the FFA Creed and understand the [officer] position descriptions and going through all of the frozen text that the FFA has and being able to put that into American Sign Language. Understanding it in English is one thing, but then to be able to put it in another language is a daunting task and very challenging... Frozen text means something that never changes; the national anthem, the Pledge of Allegiance, the FFA Creed. It doesn't change, the English words are frozen text. You don't deviate or paraphrase. Working through that in another language, sometimes it takes a while to figure out which signs are conceptually correct or which phrases in ASL are conceptually correct to match the English verbiage. It isn't a sign for sign translation - sometimes you have to work at the phrasal level not a word level. So it might be several words that might have a few signs or a few words that have several signs because it's not a word for word translation.” (Interview #8)
 - “Well my opinion with the FFA is its really valuable, it's really important for teamwork. We learn about news, learn about weather, we learn about how to deal with animals, what to do on the farm – what to do and not to do. Like in the future if we want to own our own farm. Really the Ag program, it's not all about just plants and planting crops and stuff. It covers everything from A to Z. That's what's so cool about the program and I'm happy that I did join.” (Interview #13)
 - “A lot of kids will say ‘FFA's boring.’ Well, they haven't really experienced it to the full level. They've not been in it and I have. I've seen it, I've witnessed it. I've witnessed it is a fun program. We go on a lot of really cool trips. We go to Lexington to do presentations with FFA field day. We go to Indianapolis for the FFA National Convention up there and so there's so many opportunities and really good experiences that we have along with other states, to see everybody in their official dress and it's like a family and companionship that we can all share together.” (Interview #13)
 - “My favorite experience is going to the Nationals in Indiana. I was just so shocked at what everything looked like. There were two million kids and it just seemed like everything went on forever. Those blue jackets, we were all dressed alike. Like I didn't feel alone. I didn't feel like I was in this one little clump in the school, but we were all represented across all the states and even other countries as well. It was just

shocking.” (Interview #13)

- “We got to meet other FFA officers from all over the nation: Alaska, Hawaii, just everywhere people just like me. We got to show a sense of pride and being deaf, and that we could do things that they could do too.” (Interview #14)

- “I was just so proud to wear [Official Dress]. I know that there's a dress code that you have to follow and just the idea of uniformity and being able to show my school, my position, and all the awards that I had accomplished and I just really loved it.” (Interview 14)

Challenges

- Formality
- “But they miss out on so much all the time that when they're among other people that can communicate directly with them, they're just going to ask the question, and you're just going to give me an answer. So, it makes parliamentary procedure really foreign.” (Interview #10)
- Official Dress is hard for some families to buy, and “it's not any easier that you're teenagers, you're going to grow really fast and you're here five days a week. So, you know, there's less time for mom to take you shopping.” (Interview #10)
- Students totally gone from area during summer, weekends, breaks
- “I think you have two schools of thought, people who very much value Ag Ed and your people who think ‘oh that's in the past, we should be preparing these kids for the future and everything should be more technology’ and sometimes they can be administrators. Their perspective is that ‘well, that's really something we should just set aside, it's a lot of money. It's really old news.’ And I think that that's a challenge anywhere. But when you only have a small population - like K/preschool through 12th grade, we only got a hundred kids. You don't have as many kids to share the work amongst. I think that's a really big hurdle sometimes, that you're having to defend the program so that it continues and it continues in the way it should and I feel like that's unfortunate. I think it's probably the case everywhere.” (Interview #10)
- Vocabulary in KOSSA exams
- “Its rich vocabulary, a lot of ag stuff is science terms, a lot of Latin and Greek Roots... you need to get a document or get the vocabulary in your hand, get the teacher's PowerPoints, get a book or get something. My gosh, you better read up on it, because on the fly you're not going to get a good interpretation because that language is so rich. You have to unpack the verbiage even for a hearing kid. The word equine might be a new word. They know horse. They know what a horse is, but they might not have heard equine... And the students have a puzzled look on their face. Hopefully the teacher catches that - if not, the interpreter, I feel, has the right since it's an educational environment to say ‘I'm spelling the word equine and just so you know, they're puzzled, I'm not getting a response that you want.’ So it's more like partnering with the teacher, making sure that you're both headed in the same direction to get that goal that the teacher wants.” (Interview #8)
- ELK: “In this area, would there be an interpreter likely maybe to have farm experience? You betcha. Because we're a rural community here in Danville, but other schools for the deaf, they might be city folk and they might not have that background.” (interview #8)
- Translation of Speeches, Competition

- {Interviewer}: “What would you do if a student came in and spoke very little to no English, like their native language is Spanish?” {Interviewee} “I guess maybe you would score them using a Spanish version of the [FFA] Creed, but the challenge is if your judges didn't speak Spanish, your student's at a huge disadvantage.” (Interview #4)
- “There's a difference between adaptations and modifications. Legally. Adaptions is providing the interpreter or providing more time, because of the interpreting process. Modifications mean actually changing what is given to or expected of a student under certain situations.” (Interview #8)
- Publicity, the Unknown
- “Not many people know about it. When I wear my I believe creed FFA shirt, a lot of people look at me and they're like, ‘what is that?’ And so it gives me an opportunity to explain to them what FFA is. And many people don't know because a lot of deaf schools don't have it. And so when I explain what it is, they are just very interested that there's even such a thing as FFA. They've never even heard of it.” (Interview #14)
- Miscommunication
- “Sarcasm wasn't in context and sadly I'm a very sarcastic person. So, I had to be more blunt and straight forward, but there was some moments that fights arose.” (Interview #16)
- Travelling: “I mean convention, that was interesting trying to keep up with each other, ‘cause you can't do Marco Polo.” (Interview #16)
- Teasing – A hearing student reported two incidences (at National Convention and at UK Field Day) of overhearing mean comments about deaf people. “I really don't want to share that because it was very vulgar.” (Interview #16)
- FFA Camp – too hard/expensive to provide interpreters

Solutions

- CSA program – maintain the farm while students are gone
- Advocate for more deaf Ag Ed programs
- Create an ASL “frozen form” for FFA texts (creed, induction processes, etc)
- Make sure frozen forms, changes made for deaf students go through “Deaf Eyes” to see if it makes sense
- Get an interpreter with ELK about agriculture (Extra Linguistic Knowledge)
- “Each interpreter carries their own life experience. So that adds to their ELK and their experience which helps you interpret things related to that more easily because you can visualize it or you've experienced it and it makes sense.” (interview #8)
- “Get a judge that knows sign language, so they can at least evaluate that aspect of it. I think the first go-to I would recommend is that the judges read the code of professional conduct for interpreters. If you look on the rid.org website – RID is Registry Interpreters for the Deaf - and we have a code, we've got the CPC - the Code of Professional Conduct - that we have to follow. The tenants list the things that were supposed to do and it's all about intent and not adding to and not straying from, and you are a voice and a voice only for that person. If you have any biases or ethical issues, you're not supposed to take the job and you're not supposed to let that play into what you're doing. We can't be better or less than anyone in their speeches...So when a deaf student's giving a speech we have to give the exact message and intent. If they stumble we have to stumble. If they get off on a tangent we have to get off on a tangent. If they cry we have to cry. If they scream we have to scream. If they cuss we have to cuss, we can only do what they're doing. So when a judge is hearing [the interpreter]...Yes, it's not that person's voice. But it is exactly as close as you can get to the tone, the intent, the inflection. We're trained to do that. I actually did FFA speeches when I was here before I left. And I would tell the student “I'm only as good as you are. I'm only as bad as you are.” So be good for me so I can be good...My advice would be to try to have at least one judge that knows sign language and to watch the speaker, to watch their body language and their facial expressions because that is the speech. In addition to the words they're signing, that is the speech and if the person's real animated and the interpreters not then they got a terrible interpreter. And if they're real boring and look, you know, like they're ready to just doze off any minute and if the interpreters not dozing off with them in their speech then something's wrong.” (Interview #7)
- Interpreters work with the student beforehand
- “I read the speech with the kids. I read the written version and then I sat down and watched them sign it and we practiced that together.” (Interview #7)

- “The interpreter has to be given as much information as possible ahead of time. Not handed to them right when the speaker goes onstage, not handed to them the morning of, even. As soon as a student gets their speech down pat, actually even prior to that, if the interpreter can be working with them, that lets the interpreter know the kid’s goal - the speaker’s goal- their intent. And can even help them with sign choices because it's all new verbiage for the kids... On the fly, that type of interpreting...it can be impossible at times. So preparation is vital.” (Interview #8)
- “I got on [the FFA] website, printed off everything, read everything, and read as much as I could. I still have the folder on my desk when we printed it out, everything and all the notes that I've taken because I never know when I'm going to have to be called back, I will go back and review that...It's on the internet, but I have a paper copy because I got to go, I got to travel. Research, arm yourself, collaborate with the teacher, just the biggest advice for any [interpreter] - this is so highly specialized, the language, everything is so rich - I don't think you can just drop into it. Unless you've had that experience. So that would be my advice [to other interpreters].” (Interview #8)
- Relationship between interpreter and student
- “Some interpreters work with and understand [the student], and vice versa the student understands the Interpreter, better than other interpreters. You want your best ASL interpreter matched with [a student strong in ASL]. If a student is maybe more, what we call, “CASE,” Conceptually Accurate Signed English, and you have an interpreter who matches that, that's who you would put that interpreter with. That helps with competitions, too. You're obviously not going to put an interpreter in with a kid if they don't understand each other.” (Interview #8)
- “Woo! Once again, prep work! [Referring to impromptu speeches} Even though a student might be speaking right off the cuff, they're making it up. They still have that knowledge. They're just putting out what they know. Therefore, in order for the onterpreter to really understand, they need to know, like, “they're going to be talking about goats, and here's-” have the kid write down everything they know about goats because they're going to say one of those things. So all that prep work is vital to show off what their skills are, and owning it. If the interpreter does not understand and ask the student clarify. I would make sure that a judge understood that it was not the student, that the interpreter needed to be clarified, interpreter needed to clarify with a student. Just make it known, that's ownership. That's accountability for the interpreting process. Beforehand, anytime I meet someone for the first time...a judge at a competition...I always introduce myself and ask that person if they've ever worked with an interpreter. And some yes, some no, so I always try to explain the process and so they can get a feel and understand that: their hands are moving, I process this into a totally different language, there's going to be a delay, then I'm going to say something. Now, when I'm talking, they may start signing again. I may have to stop and wait and process. So there's always this lag time, so explaining that to judges helps. Just something basic, so the interpreter needs to have that prepared in

their head to let them know the process.” (Interview #8)

- “People in higher levels like in Department of Education and other National levels, they don't get it. They just don't get what it's like to serve and work with deaf individuals. And even though deaf community's mantra is 'we can do anything except hear,' when it comes to serving them and getting them prepared for things such as National FFA. Getting them more involved and feeling inclusive, there's so much more to it than just well, yeah sure we'll support that. But having interpreters, having national certified interpreters, having rights for them to give their speeches, having all the services they need is more involved than they realize and you can't just put a blanket on it and say 'okay we've covered it.' Because you don't unless you've given into those specific individual needs that they have...if you really want to make them feel included and if you're going to truly say 'I'm inclusive' then you have to provide the services and things that make that happen. It's just like saying to a person in a wheelchair, 'we're not going to build a ramp for you, you have to pick yourself up and get across the stage by yourself.'...I mean like Helen Keller even said, 'if I could choose between deaf and blind, I would choose to be blind because communication is everything.' Communication makes you who you are and if you don't give that then you're declining them and who they are. You're depriving them of who they are. But it's been a constant battle from the minute I stepped into deaf education. Well, I don't think it's ever going to end because you always have people making decisions for and about deaf people without including deaf people and understanding their true needs and rights.” (Interview #7)

Community

- Danville supports, might not understand, but supports
- Provides resources
- Role models (social capital)
- Elders teach work ethic “All my life I’ve had to work hard.” (Interview #5)
- Stepping in where families across the state can’t
- Passing knowledge down that families used to pass
- CODA speaking about their father, who taught a trade at KSD: “My dad worked downtown in a department store. He was a tailor. And so everybody in the community knew the deaf tailor. So he was kind of like an icon in the community and then he went back to school, to vocational college, to get his degree so he could teach...and he taught tailoring...here at KSD.” (interview #7)
- [Interviewer: Because KSD is like a home?] Interviewee: “It is, oh it is! It really is - and the deaf community’s like that too. It’s very close-knit. Strong sense of community. It’s a different type of community that some people just don’t get.” (interview #7)
- “The school was the hub, the mecca. Everything the school did, the people, the deaf community tried so hard to be part of it.” (interview #7)
- “Transportation, I mean constantly we had people at our house all the time growing up because that’s how - you can’t pick up the phone so how you gonna talk to each other? So you get in your car and you drive to that person’s home and they would stay for hours.” (Interview #7)
-
- “They have such a strong sense of community with one another and with the Deaf community that it is very easy for them to understand that in the context of the FFA. I think that they’re good at building those connections. Even last year someone had asked one of the students, ‘why are you guys doing breakfast for the teachers?’ and she said ‘it’s about community’ and I think they really get that because it’s something that they feel so strongly on a personal level.” (Interview #10)
- “We had some public school kids tour that wanted to see a different perspective kind of thing. And we wanted to show them that it’s the same as public school here. We just can’t hear. There’s a lot of really good things that we’ve done that I’ve really enjoyed.” (Interview #13)

BIBLIOGRAPHY

- Adekemi-Ayantoye, C., Luckner, J. L. (2016). Successful students who are deaf or hard of hearing and culturally and/or linguistically diverse in inclusive settings. *American Annals of the Deaf*, 160(5), pp 453-466.
- Agstravaganza (2014, May 1) *Kentucky Living*. Retrieved February 2019 from <https://www.kentuckyliving.com/life-in-kentucky/features-life-in-kentucky/agstravaganza>
- Andreason, R., Seevers, B., Dormody, T., & Vanleeuwen, D. (2007). Training needs of New Mexico agricultural education teachers related to inclusion of students with special needs. *Journal of Agricultural Education*, 48(4), pp 117-129.
- Angelides, P., Aravi, C. (2007). A comparative perspective on the experiences of deaf and hard of hearing individuals as students at mainstream and special schools. *American Annals of the Deaf*, 151(5), pp 476-486.
- Beauchamp, J. B. (1973). *History of the Kentucky School for the Deaf: 1923-1973*. KSD Press.
- Berry, R. (2010) Preservice and early career teachers' attitudes toward inclusion, instructional accommodations, and fairness: three profiles. *The Teacher Educator*, 45, pp 75-95.
- Blue Jackets Bright Futures (2012, February 17) Retrieved February 2019 from http://nyx.uky.edu/dips/xt79zw18mw0z/data/70102_A4Fri0217.pdf
- Bourdieu, P. (1986) The forms of capital. In J. G. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* (p. 41-58). New York: Greenwood Press.
- Buford, S., Baylot-Casey, L. (2012). Attitudes of teachers regarding their preparedness to teach students with special needs. *Delta Journal of Education*, (2)2.
- Cawthon, S. W. (2001) Teaching students in inclusive classrooms with deaf students. *Journal of Deaf Studies and Deaf Education*, (6)3.
- Coleman, J. S. (1988) Social capital in the creation of human capital. *The American Journal of Sociology*, 94, p. S95-S120.
- Creswell, J. W. (2006). *Qualitative inquiry and research design: choosing among five approaches*. SAGE Publications (2nd edition).
- Crumbie, T. (2014, June 19) Retrieved February 2019 from <https://www.kentucky.com/news/local/education/article44494170.html>

- Danville PD: Bear Sighted Near Kentucky School for the Deaf (2016, June 23) Retrieved February 2019 from <https://www.wtvq.com/2016/06/23/danville-pd-bear-sighted-near-kentucky-school-for-the-deaf/>
- Department of Education (2004). Individuals with Disabilities Education Act. Retrieved March 2019 from <https://sites.ed.gov/idea/>
- Department of Education (2017). Office of Special Education and Rehabilitation Services. Retrieved from <http://sites.ed.gov/>
- Dormody, T. J., Seevers, B. S., Andreasen, R. J., & Vanleeuwen, D. (2006). Challenges experienced by New Mexico agricultural education teachers in including special needs students. *Journal of Agricultural Education*, (47)2, pp. 93-105.
- Easterly, R. G., Myers, B. E. (2011). Inquiry-based instruction for students with special needs in school based agricultural education. *Journal of Agricultural Education*. 52(2) pp 36-46.
- Ellis, B. (2017, October 17) KSD's Farm-Fresh Festival. Retrieved February 2019 from <https://www.kentuckyteacher.org/features/2017/10/ksds-farm-fresh-festival/>
- Farm Bureau (2019). Our Food Link. Retrieved March 2019 from <https://www.fb.org/programs/womens-leadership-program/our-food-link/>
- Faulkner, P. E., Baggett, C. D. (2010) Preparing future secondary agricultural education teachers to work with students with learning disabilities: reports from teacher educators. *Journal of Agricultural Education*, 51(3), pp. 88-99.
- FFA Manual (2019). Retrieved March 2019 from <https://www.ffa.org/official-manual/>
- FFA: Needs of the Committee for Exploring Methods of Increasing Diversity & Inclusion in National FFA Programs (2016). Retrieved August 2018 from https://www.ffa.org/SiteCollectionDocuments/delegates_d_and_i_complete_research.pdf
- FFA Statistics (2017). Retrieved August 2018 from <https://www.ffa.org/about/what-is-ffa/statistics>
- Fischer, C. (2009) Bracketing in qualitative research: conceptual and practical matters. *The Journal of Psychotherapy Research*, 19(4), pp. 583-590.
- Fosdick, C. (1923). *A centennial history of Kentucky school for the deaf*. KSD Press.
- Foster, S. (1988). Life in the mainstream: deaf college freshmen and their experiences in the mainstreamed high school. *Journal of the American Deafness and Rehabilitation Association*, 22(2), pp. 27-35.

- Foster, S. (1989). Reflections of a group of deaf adults on their experiences in mainstream and residential school programs in the United States. *Disability, Handicap & Society*, 4(1), pp. 37-56.
- Gallaudet University (2018). Schools and programs for deaf and hard of hearing students in the US. *Laurent Clerc National Deaf Education Center*. Retrieved August 2018 from <http://www3.gallaudet.edu/clerc-center/info-to-go/national-resources-and-directories/schools-and-programs.html>
- Gordon, H. R., Yocke, R. J., Maldonado, C., & Saddle, S. J. (2007). Selected career and technical education teachers perceptions of the No Child Left Behind Act (public law 107-110): an exploratory study. *Journal of Career and Technical Education*, 23(1).
- Gottfried, M. A., Bozick, R., Rose, E., Moore, R. (2016). Does career and technical education strengthen the stem pipeline? comparing students with and without disabilities. *Journal of Disability Policy Studies*, 26(4), pp. 232-244.
- Hamm, J. (2018, February 3) Looking Back: Kentucky School for the Deaf. *The Advocate-Messenger*. Retrieved February 2019 from <https://www.amnews.com/2018/02/03/looking-back-kentucky-school-for-the-deaf/>
- Hill, C. (2013, December 4) Jacob's Hall Museum named one of the '10 Best Kentucky Buildings.' *Downtown Danville*. Retrieved February 2019 from <https://www.downtowndanville.com/news/details/jacobs-hall-museum-named-one-of-the-10-best-kentucky-buildings>
- Hintermair, M. (2010). Health-related quality of life and classroom participation of deaf and hard of hearing students in general schools. *Journal of Deaf Studies and Deaf Education*, 16(2).
- Humphries, T. (2013). Schooling in American Sign Language: a paradigm shift from a deficit model to a bilingual model in deaf education. *Berkeley Review of Education*, 4(1).
- Jacobs Hall Museum (n.d.) Retrieved March 2019 from <http://www.ksd.k12.ky.us/content/jacobshallmuseum>
- Kentucky School for the Deaf Statewide 9-12 High School Agriculture Camp PDF Fillable Form (2018). Retrieved February 2019 from <https://www.pdfFiller.com/447815236--Kentucky-School-for-the-Deaf-Statewide-9-12-High-School-AGRICULTURE-CAMP-2018->
- Kessell, J., Wingenbach, G. J., Lawver, D. (2009) Relationships between special education confidence, knowledge, and selected demographics for agricultural education student teachers. *Journal of Agricultural Education*, 50(2), pp. 52-61.

- Kretschmer, R. E. (1997). Educational considerations for at-risk/marginal students who are deaf or hard of hearing. *American Speech-Language Association: Language, Speech, and Hearing Services in Schools*, 28(4).
- KSD FFA Facebook Page (n.d) Retrieved February 2019 from <https://www.facebook.com/KSDFFA/>
- KSD FFA Invites You to the 1st of 2 Honey Bee Clinics! Why Are Bees Important? (n.d.) Retrieved February 2019 from <http://www.ksd.k12.ky.us/News/22420#sthash.pr5sKTfJ.dpbs>
- KSD FFA Twitter Page (n.d) Retrieved February 2019 from https://twitter.com/ksd_ffa?lang=en
- Lara, K. (2013). Acceptance of deaf children in mainstream schools and their academic success: a literature review. *UC Merced Undergraduate Research Journal*, 5(1).
- Lenihan, S. (2010) Trends and challenges in teacher preparation in deaf education. *The Volta Review*, 110(2).
- Luckner, J. L., Goodwin, S. M., Johnson, J. H., Sebald, A. M., Young III, J. Y. (2005). An examination of the research and training needs in the field of deaf education. *American Annals of the Deaf*, 150(4), pp. 358-368.
- Luft, P. (2017) What is different about deaf education? the effects of child and family factors on educational services. *The Journal Of Special Education*, 51(1), pp 27-37.
- Maxwell, J. (2013). *Qualitative research design: an interactive approach* (3rd ed.) Thousand Oaks, CA: Sage.
- Meadowbrook Welcomes Kentucky School for the Deaf FFA (2017, June 14) Retrieved February 2019 from <https://farms.eku.edu/insidelook/meadowbrook-welcomes-kentucky-school-deaf-ffa>
- Merritt, L. (2011). *Images of America: Danville, KY*. Arcadia Publishing. pp. 72-73
- McNeill, J. H., Jordan, L. J. (1993). Factors that contribute to stress as reported by teachers of deaf students at residential schools. *American Annals of the Deaf*, 138(3), pp 284-287.
- Myers, B. E., Dyer, J. E. (2004). Agriculture teacher education programs: a synthesis of the literature. *Journal of Agricultural Education*, 45(3), pp. 44-52.
- NAAE (2017). What is agricultural education? Retrieved March 2019 from <https://www.naae.org/whatisaged/>

- Nagle, K., Newman, L. A., Shaver, D. M., Marschark, M. (2016). College and career readiness: course taking of deaf and hard of hearing secondary school students. *American Annals of the Deaf*, 160(5), pp. 467-482.
- Namey, E., Guest, G., Thairu, L., & Johnson, L. (2008). Data reduction techniques for large qualitative data sets. *Handbook For Team-Based Qualitative Research*, 2(1), pp. 137-161.
- National FFA: Chapter Locator (2018). Retrieved August 2018 from <https://www.ffa.org/about/who-we-are/chapter-locator>
- Nunes, T., Pretzlik, U., & Olsson, J. (2001). Deaf children's social relationships in mainstream schools. *Deafness & Education International*, 3(3), pp. 123-136.
- Pagliaro, C. (2001) Addressing deaf culture in the classroom. *Kappa Delta Pi Record*, 37(4).
- Pense, S. (2009). Curricular needs of students with specific learning disabilities in Illinois secondary agricultural education programs. *The Journal of Agricultural Education*, 50(2), pp. 87-99.
- Pense, S., Watson, D., & Wakefield, D. (2010). Learning disabled student needs met through curriculum redesign of the Illinois agricultural education core curriculum. *The Journal of Agricultural Education*, 51(2), pp. 115-126. doi:10.5032/jae.2010.02115
- Pense, S., Calvin, J., Watson, D., & Wakefield, D. (2012). Incorporating learning objects in a curriculum re-design to meet needs of students with specific learning disabilities in Illinois agricultural education programs. *The Journal of Agricultural Education*, 53(4), pp. 112-123.
- Phillips, B. K., & Myers, B. (2011). Experiential and inquiry-based learning literature search. *The Agricultural Education Magazine*, 84(6), pp. 10-11.
- Plato (1943). *Plato's The Republic*. New York :Books, Inc.
- Powers, S. (2003). Influences of student and family factors on academic outcomes of mainstream secondary school deaf students. *The Journal of deaf studies and deaf education*, 8(1), pp. 57-78.
- Putnam, R. (2001). *Bowling alone: the collapse and revival of American community*. Simon and Schuster.
- Reese, S. (2004) A quiet success: career and technical education for deaf students. *Association for Career and Technical Education*. 79(2), pp. 17.

- Richardson, J. M. (2005). *Strategies employed by North Carolina agriculture teachers in serving students with mild to moderate learning disabilities* (Doctoral dissertation, University of Florida).
- Rodina, K. A. (2007). *Vygotsky's Social constructionist view on disability: a methodology for inclusive education* (Doctoral dissertation, UC San Diego).
- Saldana, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage.
- Scheetz, N. A., Martin, D. S. (2008). National study of masters teachers in deaf education: implications for teacher education. *American Annals of the Deaf*, 153(3), pp. 328-342.
- Schirmer, B. R. (2008). How effectively are we preparing teacher educators in special education? the case of deaf education. *American Annals of the Deaf*, 153(4), pp. 411-419.
- Shaver, D. M., Marschark, M., Newman, L., Marder, C. (2013). Who is where? characteristics of deaf and hard-of-hearing students in regular and special schools. *Journal of Deaf Studies and Deaf Education*, 19(2), pp. 203-219.
- Shultz, T. (1961). Investment in human capital. *The American Economic Review*, 51(1), pp. 1-17.
- Staff (2014, April 30) KSD Opens Garden and Research Center. Canyon News. Retrieved February 2019 from <http://www.canyon-news.com/ksd-opens-garden-and-research-center/3787>
- Stair, K., Moore, G. E. (2010) Including special needs students in ag ed. *Association for Career and Technical Education*, 85(4), pp. 52-55.
- Stair, K. (2013). Working with children with special needs in 4H and FFA: tips for success. *The Agricultural Education Magazine*, 85(6).
- Stair, K. S., Blackburn, J. J., Bunch, J. C., Blanchard, L., Cater, M., Fox, J. (2016). perceptions and educational strategies of Louisiana agriculture teachers when working with students with special needs. *Journal of Youth Development*, 11(1).
- Stake, R. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.
- Steffes, T. (2014). Smith-Hughes Act, 1917. Retrieved March 2019 from <https://www.britannica.com/topic/Smith-Hughes-Act>
- Strysick, M. (2017). Gallaudet president Roberta Cordano visits centre college. Retrieved March 2019 from <https://www.centre.edu/gallaudet-president-roberta-cordano-visits-centre-college/>

- Theobald, R., Goldhaber, D., Gratz, T., Holden, K. L. (2017) Career and technical education, inclusion, and postsecondary outcomes for students with disabilities. CEDR Working Paper 2017. *Center for Education Data and Research*.
- Tracy, S. J. (2003). *Qualitative research methods: collecting evidence, crafting analysis, communicating impact*. Wiley-Blackwell.
- U.S. Department of Justice (2010). ADA Requirements: Effective Communication. Retrieved from <https://www.ada.gov/effective-comm.htm>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner & E. Souberman., Eds.) (A. R. Luria, M. Lopez-Morillas & M. Cole [with J. V. Wertsch], Trans.) Cambridge, Mass.: Harvard University Press. (Original manuscripts [ca. 1930-1934])
- Wasburn-Moses, L. (2011). An investigation of alternative schools in one state: implications for students with disabilities. *The Journal of Special Education, 44*(4), pp. 247-255.
- White, D. (2015) Engaging students regarding special needs in technology and engineering education. *Technology and Engineering Teacher Magazine, 75*(2), p. 8.
- Wilson, B. (2014, September 9) KSD FFA Corn Festival. Retrieved February 2019 from <http://www.ksd.k12.ky.us/olc/126/page/4367>
- Wonacott, M. (2001) Students with disabilities in career and technical education. *Career Development for Exceptional Individuals, 27*(1), p. 7-25.
- World Health Organization [WHO] (2018). Deafness and hearing loss. Retrieved March 2019 from <https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss>
- Yin, R. K. (2003). *Case study research: design and methods* (3rd ed.). Thousand Oaks, CA: Sage.

VITA

Sarah Danielle Warren

(Expected) M.S. Community and Leadership Development
College of Agriculture, Food and Environment
University of Kentucky, 2019
Graduate Teaching Assistant

B.S. Career and Technical Education – Agricultural Education
College of Agriculture, Food and Environment
University of Kentucky, 2017
Student Teaching: Kentucky School for the Deaf (Danville, KY)

Research

“DeaffFA: An Exploration of Agricultural Education in Schools for the Deaf and Hard of Hearing.” Master’s Thesis. May, 2019.

“Ladies, Start your Engines: Women With Engines Outreach Event,” Innovative Poster Presentation. American Association for Agricultural Education National Research Conference, 2019

“Andragogical Lessons Learned from the Stockyards Beef Learning Series,” Innovative Poster Presentation. Southern Region Association for Agricultural Education Research Conference, 2019; American Association for Agricultural Education National Research Conference, 2019

“Agricultural Literacy 5K,” Innovative Poster Presentation. American Association for Agricultural Education National Research Conference, 2018

“Educating First Responders to Assist in an Agricultural Hazardous Situation,” Research Study. Innovative Poster Presentation. Southern Region Association for Agricultural Education Research Conference, 2018; American Association for Agricultural Education National Research Conference, 2018