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Emory Bell

Eastern Kentucky University, emory_bell18@mymail.eku.edu

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Cover Page Footnote

I would like to thank my mentor, Dr. Grempe, for all the hard work she put into this research with me. She spent countless hours preparing with me for this piece. I would also like to thank the various others who provided data, shared personal experiences, and insight that helped make this possible.

The Educational Experience of Students who are Deaf and Hard of Hearing in Kentucky

Emory Bell

Eastern Kentucky University

Abstract: *This article details the educational experience of a child who is deaf and hard of hearing (DHH) in the state of Kentucky. An ideal educational path for a child who is DHH in Kentucky is outlined and compared to actual experiences and data from a number of sources. Possible causes contributing to a less than ideal educational experience for some children in Kentucky who are DHH experience were discovered; some of these causes included lack of information for parents about the urgency of following up on newborn hearing screening results, lack of detailed facts about all possible communication options, and insufficient emphasis on the importance of early language development. Additional challenges that were discovered related to the availability of resources and services in certain areas and the overall shortage of qualified personnel across the state. Suggestions for possible solutions to these challenges are shared in the conclusion.*

Keywords: *Deaf, hard of hearing, education, certification, Kentucky, early intervention, specialized instruction, services, special education*

Birth to Three

Despite being considered a “low-incidence disability,” hearing loss is the most common of all birth defects. For every one thousand babies born, two to three of them have a hearing loss (National Institute on Deafness and Other Communication Disorders, 2017b). It is extremely important for these children to begin receiving intervention services as soon as they possibly can. Age birth to three is considered a critical period of a child’s life, where much language development occurs. Missing this window can really make the possibility of ever fully acquiring language very difficult.

Therefore, all babies who are born in the state of Kentucky are given a hearing screening, known as the New Born Hearing Screening, before they leave the hospital (American Speech-Language-Hearing Association, n.d.b). This process adheres to the Early Hearing Detection and Intervention (EDHI) guidelines that are in place through the American Speech-Language-Hearing Association. The screening is done right after birth so children can begin receiving services as soon as possible. Babies who have an abnormal hearing screening at birth are identified as having a potential hearing loss and are given a reference for a follow-up appointment with an audiologist

to determine if a hearing loss exists.

Aside from the Newborn Hearing Screening, additional EDHI services provided by the Kentucky Cabinet for Health and Family Services Commission for Children with Special Health Care Needs include:

Licensing requirements for audiologists and speech-language pathologists, teacher requirements for audiologists and speech-language pathologists, licensing requirements for hearing aid dispensers, support personnel requirements, early intervention requirements, telepractice requirements, and hearing screening requirements for newborns and school-aged children. (American Speech-Language-Hearing Association, n.d.a)

It is crucial to determine a child's language pathway as early as possible. The importance of deciding a language pathway early would ideally be stressed to the parents of a child who was born DHH. Much language development occurs when a child is just months old, even before a child's first word is ever used; therefore, the more quickly a language pathway is determined and implemented, the better a child's language development progresses.

The National Institute on Deafness and Other Communication Disorders (2017a) described this period:

The first 3 years of life, when the brain is developing and maturing, is the most intensive period for acquiring speech and language skills. These skills develop best in a world that is rich with sounds, sights, and consistent exposure to the speech and language of others. There appear to be critical periods for speech and language development in infants and young children when the brain is best able to absorb language. If these critical periods are allowed to pass without exposure to a language, it will be more difficult to learn.

Missing the critical window of language development, or even delayed access to language, can have negative lasting effects for a child who is DHH. The delay in gaining language can equate to learning struggles. A delayed foundation in language acquisition and development can often follow a child and interfere with their education in school for years to come. These potential delays make it necessary for the parents of a baby who is born DHH to understand the significance of picking a mode of communication and implementing it immediately.

Parents face a difficult decision when choosing a language pathway for their child who is born DHH. There is a lot of controversy regarding which language pathway is best for children who are DHH, but ultimately it is up to the parents to decide. Parents can choose for their children to either use a listening and spoken language approach or a manual approach. It is also important to note that a child's communication pathway could

change at some point in his/her life; regardless, it is important to establish a communication pathway as early as possible to develop fully as the child's first language.

The decision of choosing a language pathway can be particularly difficult for parents because the majority of babies who are DHH are born to hearing parents. The National Institute on Deafness and Other Communication Disorders (2017b) states, "More than 90 percent of deaf children are born to hearing parents." Frequently, the parents' first experience with deafness is their child, meaning that parents can feel overwhelmed and undereducated regarding which mode of communication to implement with their child. Parents may feel additionally overwhelmed in deciding on a language pathway because of the critical period of language development.

A listening and spoken language approach focuses on communicating orally using spoken language (typically without the use of sign language). Children who use this language pathway often also rely on some sort of hearing technology or assistive device. Hearing technologies that could facilitate the use of spoken language and provide some access to sound include hearing aids and cochlear implants. Hearing aids are devices that are worn that amplify sounds and maximize residual hearing. Cochlear implants are surgically implanted equipment that stimulates the auditory nerve in the brain to gain access to sound. Additionally, children may also need FM systems, which are microphones worn by the speaker that input sound to the listener's personal assistive hearing device through a receiver (National Institute on Deafness and Other Communication Disorders, 2016).

Alternatively, manual approaches to language are visually based methods of communication. American Sign Language (ASL) is the most commonly used manual approach. ASL is a complete language that includes all the elements of a spoken language such as morphology and syntax; however, ASL has no written component, meaning there is no way to write in ASL. Other manual approaches include Cued Speech or Manually Coded English (Gardiner-Walsh & Lenihan, n.d.).

According to National Cued Speech Association (n.d.), Cued Speech is "a visual communication system that uses eight handshapes in four different placements near the face in combination with the mouth movements of speech to make the sounds of spoken language look different from each other" ("Definition"). While Cued Speech is less common than other modes of communication in some regions of the United States, it is still a possible language pathway for children who are born DHH. Manually Coded English is a term that encompasses several other modes of manual communication such as Conceptually Accurate Signed English (CASE), Pidgin Signed English (PSE), Rochester Method (RM), Signed Exact English 1 (SEE1), and Signed Exact English 2 (SEE 2). These are all varying approaches to a visually-based language system. These methods are different from ASL because they represent English language word order through the use of signs. ASL is structurally different from spoken language; it is not simply English translated word for word (Gardiner-Walsh & Lenihan, n.d.).

The multimodal approach is also a possible language pathway for DHH children. A commonly used type of multimodal approach is

Simultaneous Communication or SimCom. Those that use SimCom would communicate with spoken language and sign simultaneously. This approach is typically geared towards students who have a cochlear implant. This method utilizes a person's residual hearing and their understanding of ASL to provide the most access to language (Hands & Voices, n.d.).

Ideally, parents of a baby who was just diagnosed with a hearing loss would be very informed on the different modes of communication that their child could utilize when deciding a language pathway for them. It is important for them to know that there are multiple approaches available, that they are not limited to just one. There is much debate about which approach is best, but providing parents with all of the information regarding the modes of communication would help them make the most informed decision that would best meet the needs of their child.

There is a long history surrounding the controversy as to which mode of communication a person who is DHH should be using. There is a division between those that have taken the spoken language route and those that have taken the ASL route. As previously stated, most parents with a newly diagnosed baby who is DHH have not had previous experience with anyone else who is deaf; therefore, it is very important that those delivering services to families making this big of a decision provide information about all possible options in an unbiased fashion. Additionally, early intervention providers should also ensure that families receive the appropriate services and support for whatever communication route they decide to take. These considerations are important because any bias from someone aiding in this decision can ultimately skew the parents' decision.

Before deciding on a language pathway for their child, parents should be provided with the resources to decide which mode of communication to choose for their child. First Steps is an exclusive initiative to the Kentucky Early Intervention program that provides resources and help for parents making this decision (Kentucky Cabinet for Health and Family Services, n.d.). They provide support and services to children birth to three years of age that have developmental disabilities as well as to their families. First Steps providers work with the family to develop an Individualized Family Service Plan (IFSP) that plans out all intervention services being provided, who will provide them, where they will be provided, and when they will be provided. IFSPs are parent-centered and heavily take into account parents' desires for their child.

A child who is DHH could receive a variety of services provided by Developmental Interventionists through First Steps depending upon the level of need. Some services that First Steps can provide are assistive technologies, speech therapy, and developmental intervention. First Steps can also refer children and their families to local community partners for additional services. For example, a child whose parents are interested in pursuing a listening and spoken language approach could be referred to Lexington Hearing and Speech Clinic or Heuser Hearing and Language Academy in Louisville and receive services there (A. Thompson, personal communication, August 1, 2017). These services are provided at the setting that is deemed appropriate by the IFSP team. This could be the child's home, an agency, or somewhere out in the community.

It is possible that a child who is DHH also has another form of delay. In fact, according to the Gallaudet Research Institute (2003), as many as 40% of children who are DHH have an additional disability. In Kentucky, these children are also referred to First Steps. Parents may choose to focus on an intervention for whichever disability that they see fit, which is often the first disability identified (Borders, Bock, & Szymanski, 2015). It is important for First Steps employees to stress to parents the impact that waiting too long to begin receiving language intervention services can have on language development. Parents rely heavily on the opinions of professionals helping them; therefore, if First Steps providers explained the importance of language development and encouraged pursuing early intervention services, it could really positively influence parents and, ultimately, the child.

In reality, the state of Kentucky follows all Early Hearing Detection and Intervention (EDHI) guidelines; however, not every child who is DHH is receiving services. Too often, children come into kindergarten having never received services or interventions. This means that there is a discrepancy between those who do not pass the newborn hearing screen and are referred for further audiology testing and those that go on to receive early intervention services (Centers for Disease Control and Prevention [CDC], 2016).

Nationally, the CDC (2016) reported in the Summary of 2014 National CDC EHDI Data that 12% of babies that do not pass the Newborn Hearing Screening fail to receive an audiology exam as a follow up to determine hearing loss. They also reported that only 64.9% of babies born with a hearing loss begin receiving early intervention services (CDC, 2016). This leaves a huge portion of babies who are DHH and not receiving early intervention services during this very crucial period of development.

Lester, the EDHI Health Program Administrator for Commission for Children with Special Health Care Needs, stated that on there are, on average, about 76 newborns diagnosed with a hearing loss in the state of Kentucky (C. Lester, personal communication, October 3, 2017). However, Goff, who works for the Department of Public health, stated that in the 2017 fiscal year, First Steps was serving 91 children who had a DHH diagnosis (P. Goff, personal communication, September 18, 2017). Ninety-one children ages birth to three were being served, but 76 babies are born on average every year with a DHH diagnosis. If 76 babies who are DHH were born every year and First Steps serves children for three years, then theoretically First Steps would be serving 228 (76 times 3) children in the birth to three age range on a yearly basis.

The discrepancy of the number of children being diagnosed as DHH as newborns and the number of children receiving services by First Steps is alarming. If 91 three and under are being served, then on average 137 (228 minus 91) children are not receiving services every year (C. Lester, personal communication, October 3, 2017; P. Goff, personal communication, September 18, 2017). This gap potentially leaves 45 or 46 children every year entering kindergarten having never received the beneficial services and supports that First Steps can provide. These children are missing out on an enormous amount of language development and ultimately beginning school at a disadvantage to their hearing peers.

There is no way to truly know why this lapse in numbers is taking place. It could be that parents of babies who are diagnosed as DHH are unaware of the First Steps program and the services that are available for their child. It could be that they live too far away from a First Steps service coordinator, so it is not feasible to drive and receive services. It is also sadly possible that parents just do not think that receiving services for their child is necessary. Regardless of why families are not receiving services from First Steps, it is important that this discrepancy is addressed.

There are a few possible ways to ensure that more parents of children who are diagnosed with a hearing loss pursue services. One approach is having audiology services that diagnosis hearing loss immediately refer the patient's family to First Steps. Doing so would stress to the family the importance of going to First Steps immediately to begin deciding language pathways and services. It may be beneficial to provide every audiologist with a specific name and number (based on location) of a First Steps worker for parents to contact that is sent home after a hearing loss diagnosis. Finally, the audiologist could also provide First Steps with the parents' contact information to schedule a meeting (with the parents' consent).

Three to Five Years Old

When a child turns three they transition from an IFSP to an IEP, or an Individualized Educational Program. An IEP is a plan that follows a student who receives special education services. IEP teams consist of the child's parents, a special education teacher, a general education teacher, a school district representative, and someone who can interpret the child's data (Stanberry, n.d.). The U.S. Department of Education (2007) describes aspects of an IEP in the following manner:

To create an effective IEP, parents, teachers, other school staff--and often the student--must come together to look closely at the student's unique needs. These individuals pool knowledge, experience and commitment to design an educational program that will help the student be involved in, and progress in, the general curriculum. The IEPs the delivery of special education supports and services for the student with a disability. (Introduction section)

Ideally, the IEP would state that the child would attend some sort of language-focused preschool program. Children who are DHH during this age period need continual language enrichment to foster development. More exposure to language is ideal for children who are DHH at this stage in their development. The preschool program outlined in the IEP would also ideally provide a lot of small group or one-on-one instruction to give DHH students as much individual attention and commitment to their language development as possible.

Most importantly, someone who is not only Interdisciplinary Early Childhood Education (IECE), or preschool, certified, but also DHH certified would teach this preschool program to best benefit the student. Having

a teacher who is certified in both areas would be extremely beneficial to the child’s learning because the instructor would possess an abundance of knowledge and experience regarding the best methods to teach a child who is preschool aged and DHH. A teacher that is DHH education certified knows specifically how students who are DHH learn best. For example, they would teach directly and explicitly, focus on language, model language, and teach with vocabulary, pragmatics, and structures in mind.

If a child who is DHH is in a preschool program that is not geared towards children who are DHH or language exposure and development, then it is unlikely that a DHH teacher is included in that child’s IEP team. Ideally, regardless of the preschool program a child is in, a DHH teacher would be included on the IEP team and attend the IEP meetings because of the insight that a DHH teacher can provide when developing IEP goals. The expertise of a DHH teacher could really aid in making IEP decisions for the child’s benefit. However, it is not currently mandatory that a DHH teacher is on a child’s IEP team. Because of their ability to advocate for what is best for a child because of their knowledge on teaching children who are DHH, it should be mandated that there be (at least) one DHH teacher included on a DHH child’s IEP. An IEP team may not have the ability to set appropriate goals for the child without a DHH teacher being involved.

In reality, some children who are DHH are not only not attending a preschool program geared towards language development but are not in preschool whatsoever. While many families choose to enroll their children in preschool to get a jump-start on learning and to help their child adjust to the school climate, legally, a child does not have to attend school until kindergarten.

Table 1 shows the number of students enrolled in a public preschool program in the 2016-2017 school year and the 2017-2018 school year. Based on the data of birth to three years old, considering that there are about 76 newborns diagnosed with a hearing loss every year in Kentucky, there are fewer children who are DHH enrolled in preschool programs than anticipated. Hopefully some of the students not enrolled in a public preschool are enrolled in some sort of private preschool program that would better meet the educational needs of a child who is DHH; however, it is fair to assume that a vast number of these students are not enrolled in any preschool program whatsoever.

Table 1

Students who are DHH in Public Preschool Programs in Kentucky

Age	Number Served in 2016-2017 School Year (Total 91)	Number Served in 2017 - 2018 School Year (Total 64)
2-year-olds	21	5
3-year-olds	39	20
4-year-olds	31	39

Unfortunately, a child who is DHH can begin kindergarten and already be at a disadvantage when compared to their hearing peers because they have not received any services. A child who is DHH needs more preparation and services to become school ready. Forgoing these routes can make it very difficult for a child who is DHH to thrive in a classroom setting from the start.

In a perfect world, it would be mandated that a DHH certified teacher is included on a child's IEP team so that suggestions can be made based upon their expertise. There would also be more language-centered preschool programs available and accessible to all families that have a child who is DHH. Additionally, families should be encouraged by First Steps, audiologists, pediatricians, and other professionals to enroll their child in preschool and start (or continue) intervention services.

School Age

At age four or five children begin kindergarten and become enrolled in school fulltime. Once children enter kindergarten they are reevaluated to qualify for special education services. There is a possibility that a child who is DHH can test out of services, meaning that their hearing loss does not adversely affect the child's education enough for them to qualify for services. The Eligibility Determination Form determines a child's ability to test out during the Admissions and Releases Committee (ARC) meeting. All boxes on the Hearing Impairment (HI) Eligibility Determination form (See Appendix) must be checked for a child who is DHH to receive special education services. These boxes include whether permanent or fluctuating, the student has a hearing loss that meets one or more of the criteria (different hearing loss levels are listed), the hearing loss results in difficulty in identifying linguistic information through hearing, evaluation information confirms there is an adverse effect on educational performance, evaluation information confirms that lack of instruction in reading and/or math was not a determinant factor in the eligibility decision, and evaluation information confirms that limited English proficiency was not a determinant factor in the eligibility decision. These criteria are used to determine whether a child who is DHH is eligible to receive services. The third criteria, "Evaluation information confirms that there is an adverse effect on educational performance" must be checked as Y (yes) in order to be deemed eligible for services (Hearing impairment (HI) eligibility determination form, 2016).

Aspects of these eligibility requirements need to be changed because students who are DHH performing on grade level can test out of receiving services and then may immediately begin falling behind in the general education classroom and continue to be behind until reevaluation is done again. In spite of the fact that they are succeeding academically, students who are DHH should be eligible and receive services based upon their hearing status alone. Even if the student is on track, these services can continue to enhance the student's understanding and capitalize on his or her learning.

Aside from academics, there are other areas that students who are DHH should receive services and assistance. The "Kentucky Expanded Core Curriculum for Students who are Deaf/Hard of Hearing" (currently in draft

form) covers the non-academic skills and concepts with which students that are DHH should become familiar. The main categories of the Expanded Core Curriculum include: Audiology, which focuses on understanding their hearing loss, managing amplification, and managing their environment; communication, which focuses on social skills, developing ASL, and developing auditory skills; self-determination and advocacy, which focuses on self-determination, community advocacy, community resources and support, cultural awareness, sign language interpreters, oral interpreters, and transliterators; social-emotional development, which focuses on self-awareness, self-management, personal responsibility, decision making, and conflict resolution; and lastly, technology, which focuses on the skills necessary to access technology. If a child does not qualify for services through their evaluation based on their academic need, they also miss out on all of the Kentucky Expanded Core Curriculum life skills and concepts that they need to learn. Regardless of the evaluation results, a child who is DHH should be receiving services related to the skills outlined in this curriculum. It should not matter that these skills are not related to academics; this program represents the unique needs of a child who is DHH, and they should qualify for special education services.

With regard to classroom instruction, there are a variety of settings in which a child who is DHH could be placed. One of the guiding principles when considering educational setting is that the placement should always be in the child's least restrictive environment, or LRE. The U.S. Department of Education (2004) defines LRE as:

To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with non-disabled children; and special classes, separate schooling, or other removals of children with disabilities from the regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. (Section 300.114 LRE requirements)

In other words, the student will receive instruction in the setting that meets the child's needs while, to the extent possible, still being amongst peers without disabilities. There are a variety of settings that could be considered the LRE for a child who is DHH. Examples include a general education classroom, a general education classroom with resource room support, a self-contained classroom, a separate nonresidential school (that is public or private and/or out of child's home district), and a separate residential school (Gardiner-Walsh & Lenihan, n.d.).

Being taught in a general education classroom means being taught in a classroom that is alongside typically developing peers. General education instruction must adhere to the student's IEP but does not necessarily provide the specified special education instruction. Typically a child who is DHH in a general education classroom would still receive services from a DHH

teacher and/or a special education teacher; however, a DHH certified teacher is the best option because of the specific instructional strategies that are part of their training. The DHH teacher and/or special education teacher visits the child in the general education settings, co-teaches the class with the general education teacher, or just collaborates with the general education teacher (Gardiner-Walsh & Lenihan, n.d.).

A child who is DHH being taught in a general education classroom and a resource room is being taught alongside their peers in the general education classroom for part of the day and then being “pulled-out” at various times or for certain subjects to receive instruction with a DHH teacher and/or special education teacher. For example, a student who is DHH could receive most of his or her instruction in a general education classroom but may be “pulled out” for reading because this student may learn better through one-on-one instruction with a DHH teacher. Instruction with a DHH teacher and/or special education teacher would be more individualized. Pull-out instruction is either done in small groups or one-on-one with the student (Gardiner-Walsh & Lenihan, n.d.).

If the LRE for a child who is DHH is a self-contained classroom, then the child is receiving instruction in a special education classroom setting with other children who are DHH. This is a class with significantly fewer students than a general education classroom so more individualized instruction can be given. Students can either spend the entire day in a self-contained classroom or split their time between a self-contained classroom and a general education class depending on what is determined in the IEP (Gardiner-Walsh & Lenihan, n.d.). This setting is determined as the LRE when the student does not learn well in the general education classroom because they are significantly behind their hearing peers or the student may benefit from learning alongside peers that are DHH and learn in similar styles. Students who are deaf and have an additional disability, which is sometimes referred to as “Deaf Plus,” are typically in this type of classroom setting.

A separate nonresidential school means a child’s LRE is a private school or a school outside of the child’s district. If there is not an appropriate public school in the district for the student to attend, a child would go to a school like this. The child leaving the district or attending a private school would be at no cost to the child’s parents if the public school system in the child’s district cannot provide the appropriate educational setting for the child (Gardiner-Walsh & Lenihan, n.d.). Lastly, a separate residential school is a public state school that is residential, meaning that the students can live there. Living at the school is an option because students often travel from across the state to attend this type of program. Typically schools like this have an emphasis on using sign language (Gardiner-Walsh & Lenihan, n.d.).

Kentucky’s residential school is Kentucky School for the Deaf in Danville, Kentucky. It is a K-12 school, which had a total enrollment of 91 students for the 2017-2018 school year. Some students are residential students, meaning that they live on campus during the week in the dormitories. Other students go to KSD but stay the night back at home; these students are considered “day students.”

There are a variety of reasons why someone might choose to send their child to a residential school. For instance, parents may want their child to be fully immersed in ASL; perhaps other educational settings have not worked for the child; or, the child may want to find their identity in Deaf culture. Sending their child to a residential school to take part in the residential program is a huge sacrifice that some parents make in order for their child to receive an education in the setting that is deemed fit. It is not easy for parents to give their child up for five nights a week.

Regardless of the school setting that is determined to be best for the child, it is important that these settings have a DHH certified teacher to aid in instruction. Unfortunately, this is definitely not always the case. In Kentucky, for the 2016-2017 school year, 61 of the 125 school districts had a student that was DHH and did not have a certified DHH teacher. This lack of certified instructors left 166 DHH students without a teacher of the Deaf (T. Peavler, personal communication, May 9, 2017).

Schools in Kentucky that do not have a DHH certified teacher to teach students who are DHH are supposed to fill out a waiver stating that another teacher (i.e. general education teacher or special education teacher) will serve the student(s). 58 of the 166 students without a DHH teacher were being served under a waiver; a teacher that was not DHH certified was teaching the remaining 108 students, and there was not a waiver in place. Fifty-six districts did not apply for a waiver for their student(s) to be served by a non-DHH certified teacher (T. Peavler, personal communication, May 9, 2017).

Many factors can contribute to this immense shortage of certified DHH teachers, one being that it is such a specialized degree program aimed at teaching for a disability that is considered low-incidence. There are not many DHH teacher preparation programs in the country. There are fewer than sixty DHH college education program in the United States (Deaf education teacher preparation programs, n.d.). Typically there is only one college or university in each state that has an accredited DHH education program. Eastern Kentucky University is the only DHH education program in the state of Kentucky.

Increasing awareness that programs like this even exist is crucial to getting more people interested in pursuing a degree in deaf education and ultimately becoming DHH certified teachers. Principals should encourage teachers that are going back to school to complete their Masters or Rank 1 to pursue certification in deaf education to help fill this void in the school system. DHH education programs complements any educational certification that teachers may have already earned. There will always be students who are deaf, so it is somewhat likely that they will have them in their general education or special education classroom at some point in their career.

Increasing accessibility to these programs would also be very beneficial in increasing the number of people with DHH education certification and would ultimately diminish the immense shortage of these teachers. Eastern Kentucky University has put their DHH education graduate program online so that it is accessible to those interested in the certification, regardless of where they live. If more colleges followed suit, then ideally

more people would become interested in the program and achieve this certification.

The fact that 56 school districts did not apply for a waiver for a non-DHH certified teacher to teach a child who is DHH is astonishing. This fact exemplifies the immense lack of accountability that there is within Kentucky's public school system to ensure that students who are DHH are receiving the appropriate education. There needs to be more accountability in place to ensure that all students are getting the best education possible.

Ideally, a certified DHH teacher would teach all students who are DHH. Someone unfamiliar with deaf education might believe that teaching students who are DHH does not differ greatly from teaching hearing students. This simply is not true; aside from obvious communication differences, students who are DHH learn differently than their hearing peers.

Students who are DHH are often visual learners, meaning that they need more visually based instruction to learn as best they can. They also rely on direct, meaningful, explicit instruction. These are just a few ways in which DHH children learn differently; all of these instructional differences are taught in deaf education programs.

At Eastern Kentucky University, a Deaf Education major completes 39 hours of specialized coursework in addition to the required courses for general education majors. There are 30 hours of special education courses and nine hours of American Sign Language courses. Many students in the program choose to add an ASL minor, adding even more hours to the course load. The degree typically takes 4.5 years to complete.

In addition to the plethora of knowledge that someone who earns a deaf education degree receives about educating DHH students, they also are prepared for a variety of responsibilities that a DHH educator may have. Anderson (2017) lists many of these responsibilities "Role Comparisons: Supporting Students Who are Deaf or Hard of Hearing:"

When possible, distinguish learning issues related to hearing status from learning or performance issues due to other conditions beyond just the hearing loss/deafness; facilitate regular interactions between students with hearing loss for self-identity and advocacy, to provide emotional support to children who are deaf or hard of hearing (including facilitation through technologies such as chat and Skype); plan/provide general education teachers with appropriate teaching strategies; assess classroom acoustics; make recommendations to improve school listening environments; and teach student about use of amplification and troubleshooting malfunctions.

In conclusion, students who are DHH are being underserved across all age levels in the state of Kentucky. From birth to three, a child's parents are on their own to make language decisions and find services although they may be unaware of just how critical this period of a child's life is for language development. For ages three to five, parents are unaware of what services are available, the importance of receiving early intervention

services, and the importance of being enrolled in preschool. For school age, students are often left without a certified DHH teacher, and students can be deemed ineligible to receive services because of imperfect evaluation methods.

All of these flaws in the system can leave a DHH child having never received intervention services, receiving instruction from a non-certified DHH teacher, and ultimately not having the ideal educational experience. Every child should be guaranteed the best educational experience possible; right now the system is failing DHH students. More attention needs to be given to children whom are DHH starting at birth to beginning school age so that they are not already behind when they walk into school on the first day.

A push for parents to understand the criticalness of developing their child's language immediately, to work with First Steps, to receive as many early intervention services, and not only to enroll their child in preschool but in a special preschool program that is language centered would help students be better prepared for beginning school. This can all be addressed by investing more resources in educating parents in these areas because they are currently being left on their own for a lot of these decisions. Once they are enrolled in school, DHH students would be better equipped to achieve at the same level as their hearing peers if they were allowed to receive services just based on hearing loss alone and had a certified DHH teacher providing instruction or at least had a DHH teacher their IEP team. These issues can be handled by investing in gaining awareness on these issues and encouraging people to pursue this field of education.

A child who is DHH is guaranteed the same quality of education as any other any child, but the follow-through is not currently successful. The students are being looked over and their families are the uneducated on the matter, forcing them to figure out how to handle the overwhelming decisions that come along with raising a child who has a disability with very little help and information. Addressing the issues outlined here could make a large impact on the educational experience and facilitate learning for students who are DHH across the state of Kentucky.

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