

Rep. Teresa Alonso Leon, Chair  
House Committee on Education  
900 Court St. NE  
Salem, OR 97301

March 23, 2021

SUBJ: Support HB 3183

To the members of the House Committee on Education,

Before I begin with this letter, I wanted to take a moment to be transparent that I work as a Director with Research & Resource Center with Deaf community (RRCDC) at Western Oregon University, Executive Director with Bridges Oregon, Inc., and serve on several state advisory committees. I am here only to represent my role as a Deaf Legislative Advocate with Oregon Association of the Deaf (OAD).

With a special thanks to parents, colleagues, and community for their support by helping me put together this letter to the House Committee on Education.

This Bill, HB 3183, have a dash two amendment where it asks ODE to set forth a requirement for a full transparency with all families that any school work with by offering full range of information. There are several schools that will tell you, they do not want the parents in our state to be given rights to learn about alternate resources that are readily available to the parents.

Since the IDEA law, there have been many interpretations of how this law should be applied, and some interpretations are harmful and utilized to the benefits of the school district, rather than the benefit of the child. While some schools have stated, that they don't determine placements by disability, that is not entirely true. The goals of the IEP/IFSP are created as a response to this disability and providing the child with all the opportunities to have an equal and accessible education. There are different perspectives on what "equal and accessible" means. We need to be careful with specific programs here in Oregon, because they are not being fully transparent, and utilizing the IDEA law as a rationale for providing the least restrictive environment. As of right now, a low number of deaf and hard of hearing children here in the state of Oregon has passed the Kindergarten assessments and many children struggle to access the full curriculum. Regional programs are unable to provide the full range of services for deaf and hard of hearing children, but still will not give parents full access to information. This violates the child's human right to have every choice made available to them.

Who gets to define what type of education is appropriate? There have been some school districts who have tried to become creative with their services, by stating that the IEP goals are tied to the funding abilities of the school and disregarding many parents with their requests for more IEP goals, simply stating there is no funding for more services. On top of this, many parents do not have the training or the education to know they have the rights for their child. While parents are given the procedural safeguards, they are not fully informed on their full rights, as some schools states "we do not need to include [this option of] the most restrictive." This concerns me, because Oregon School for the Deaf is one place where deaf and hard of hearing children could get all the services they need in one area, but their population is getting smaller, because school districts are keeping the deaf and hard of hearing children in their schools, and keeping the funding, while minimizing the services, stating "inclusion" as a reason for making sure these deaf and hard of hearing children are getting the equal chance to be in the same neighborhood schools.

Frankly, this is an equality versus equity issue. Many school districts push the idea of deaf and hard of hearing children can be equal to hearing children, just simply by attending the same schools as the neighborhood kids. They say that the most restrictive environment is taking the “equal chance” of deaf and hard of hearing children in making friends with the neighborhood children. However, many deaf and hard of hearing children report social isolation, feeling like they are the only ones in their neighborhood with a disability, and feeling ashamed of their disability. Many parents report that they would do it all over again, if they knew they had all of the information. Information or options regarding Oregon School for the Deaf is never given, because it is a “most-restrictive” option, but the question we have to ask- who is the audience in mind? Is it most restrictive, because it does not meet the “image” the parents have of their children? Is it “most-restrictive” because the school districts have to pay for each child to attend this school? Is it most restrictive, because parents and school districts want to deny the fact the child has a disability that should be shared with other students with the same disability? We have forced many children in social isolation because of their disabilities.

When said, it is inappropriate to ask IEP and IFSP teams to discuss a placement that is not appropriate for deaf child. This statement concerns me, because the question is- inappropriate for who? It implies that the IEP/IFSP team, which is composed of mostly, if not all hearing people, determining the fate of the deaf child. Most IEP teams do not allow a native-deaf specialist on the team, and they also tell parents that Oregon is a “IEP team” state, which means that parents can voice their concerns, but may not get all of the information they need. It is also concerning, that the IEP/IFSP team is asked to customize the services for the parents and child, instead of fully explaining the entire scope of what Oregon has to offer. Another concern is the statement that maximum information is “not needed.” If I was a parent, and I had to figure out my child’s future, I would want to ensure I explored every option possible. Many of these parents have never met a deaf or hard of hearing adult, so they do not get to see the possible “end result.” It is hard for these parents to imagine their child’s future, and school districts and educational service districts can use that to their advantage.

This should not be left at discretion to the school districts and the IEP/IFSP team. We need to have a law that states that parents have the right to ALL information presented to them to make the best decision for their children possible. In fact, I would rather have a deaf specialist on the IEP/IFSP team, to make sure there is a cultural voice at the table. I would compare this to a team of white people making decisions for one minority child. The minority child often does not have a voice at the table, and this is not a fair assessment.

It is important to consider the whole child, and the child’s well-being. It is important to provide as much information to parents to make a fully informed choice. Some schools comment invalidates the parent’s abilities to make the right decision for their child. Parents are either told by the IEP/IFSP team that there is one or other. There is “normal” or “not-normal.” Parents are already grieving the fact that their child is deaf or hard of hearing and will attempt to remedy the disability as much as possible. This is cruel to do to the parents. Parents should be told that their child will see the world in a different way, and there are so many resources out there to support the child. There are thriving communities in the sign language and oral deaf and hard of hearing world. No child deserves being isolated just for vanity.

The main question here is full access. We believe that parents should at least be fully informed at all the possible ways the child can access their education. Withholding information from parents under the assumption of “most restrictive environment” shows that the school districts are willing not to be fully transparent and honest with the communities they serve. This is concerning, because we want to be the state where parents can have all of the necessary information to make an informed decision. If you were a patient in the hospital, would you want to know about all the possible procedures that could be done to save your life, or only the process offered by the hospital? This is the same situation which is happening to families. They are only presented with information in the best interests of the regional programs, not the full picture.

We are not asking for a change in funding, and we are not asking for the requirement that all deaf and hard of hearing children will go to Oregon School for the Deaf. We are asking that all parents have access to all information, so they can make a fully informed choice, without the pressures of the school district making decisions for them. We often say that parents are an equal member of the IEP team, but if everyone else has all the information, and the parents are left in the dark about some schools, how is this equal access for all people? We ask you to allow the parents to have a continuum of services options.

Please vote “aye” with do-pass recommendation.

Sincerely,

A handwritten signature in blue ink that reads "Chad A. Ludwig". The signature is written in a cursive style with a large, looping initial "C".

Chad A. Ludwig, MSW, ADAC, OHCI, DI

Resources to consider:

Attachment One: Experiences of Culturally and Linguistically Diverse Parents with Deaf Children

Attachment Two: Teachers Perceptions of IEP Goals and Related Services

# Experiences of Culturally and Linguistically Diverse Parents with Deaf Children during the Individualized Educational Plan Process

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## Abstract

For effective educational and language planning for a deaf child, it is important that parents and the child, if they are old enough, understand their rights and the processes involved in developing an Individualized Education Plan (IEP). The IEP provides an important “road map” for deaf children to receive appropriate services for effective educational outcomes. This qualitative study focused on understanding the experiences, both positive and negative, faced by parents of deaf children going through the IEP process. To better understand parents’ experiences and perspectives, a grounded theory-based approach was used with a three-step systematic procedural analysis to identify themes, axial codes, and the core category. Based on the data analysis from the interviews, eight themes and three axial codes were identified, leading to the overarching theme of “giving parents a voice”. This study provides insights and recommendations to support parents, deaf children, and school personnel in regards to their understanding of an efficient IEP process.

## Keywords

Deaf, Parents, Individualized Education Plan, Grounded Theory, Experiences

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## 1. Introduction

An Individualized Educational Plan (IEP) serves as an important “road map” for services, evaluation, and placement, as required by the Individuals with Disabilities Education Act (IDEA) for all children with disabilities and their parents (Gartin & Murdick, 2005). The IEP mandate insures that all of these children with disabilities get a free and appropriate education, known as FAPE. To obtain the most effective outcomes for these students, educational specialists work to

include parents in the IEP process to improve their children's academic outcomes (Underwood, 2010). Therefore, it is important to know what parents understand about the IEP process; this information will lead to the development of strategies that allow parents to feel comfortable and confident about their involvement in the process. Then from the school personnel perspective, it is critical to understand barriers that tend to disempower parents in the IEP process.

The IEP team usually consists of parents, their child if appropriate, teachers, administrators, assessment specialists, and local educational agency representatives. Implementation of required parental involvement, was one of the measures the federal government used to ensure that the school personnel informed parents about IEP meetings through letters, phone calls, or emails. Parents may also participate in IEP meetings through teleconferences or videoconferences (More & Hart, 2013). Moreover, strategies to incorporate parents in the IEP goal planning, including how to prepare them to effectively participate in the process and ensure effective cross-cultural communication, are part of the recommendations for best practices to serve the needs of children with disabilities. These policies empower parents to advocate for their children (Lo, 2012) and be knowledgeable about their rights and responsibilities.

The concept of parental rights, including procedural due process, was established by the Education for All Handicapped Children Act (EAHCA) of 1975 (Maydosz & Maydosz, 2012). This crucial piece was maintained in all of the re-enacted laws, including the current 2004 Individuals with Disabilities Education Improvement Act (IDEIA; Maydosz & Maydosz, 2012). This policy is intended to help parents understand their rights as part of the IEP team. Procedural safeguards ensure that the decisions made by the IEP team protect parents' rights and provide an effective FAPE environment for their child. These rights are the appeal procedures available to parents if they disagree with the process.

Parents have the right to agree or disagree with the decisions established during the IEP process (Wright, Wright, & O'Connor, 2010). However, many parents do not receive the information needed to understand their rights, which are protected by federal laws (Knight, 2010). Often, parents have insufficient knowledge of these rights, including the fact that they have the ability to make the final decision on IEP changes. This process is frequently overwhelming for parents and may limit their motivation or willingness to attend IEP meetings.

Parents, who have children with disabilities, frequently report being highly dissatisfied with IEP meetings (Shah, 2012). Knowledge of the IEP process and the level of parental satisfaction are ongoing issues needing to be addressed in order to create a positive atmosphere between parents and schools (Shaffer, 2010). Addressing the needs of parents with deaf<sup>1</sup> children is even more complicated, and presents unique areas for consideration. But unfortunately, little re-

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<sup>1</sup>The term, "deaf", is being used in an all-inclusive manner to include people who may identify as Deaf, deaf, deaf blind, deaf disabled, hard of hearing, late-deafened, and hearing impaired (National Deaf Center on Postsecondary Outcomes, 2017). Deaf culture is capitalized, as are a few other ideas, to reflect positionality within a signing Deaf-centric community.

search has examined parents' experiences and knowledge of the IEP process for deaf children (DesGeorges, 2013).

### 1.1. The IEP Process in Terms of Least Restrictive Environments

IDEA focused on providing children with disabilities educational environments where they were able to be with their peers, who do not have disabilities, to aid in their social emotional development (Aldersley, 2002). This policy was referred to as the least restrictive environment (LRE) (Aldersley, 2002). This specific policy has led to many children being placed in general education, or mainstream placements, for at least part of the day (Hyatt & Filler, 2011). This placement is often a misguided, but well intentioned decision, which frequently violates the deaf child's civil rights.

In response to this placement, the Conference of Educational Administrators of Schools and Programs for the Deaf (CEASD) reframed LRE as a "language rich environment". This shifting of the lens was to provide educational placements that promote the social, linguistic, and academic development for all deaf children (CEASD, 2012). This campaign was called *Child First* (CEASD, 2012), which is the idea that general education often places a deaf child in an isolated environment, such as a mainstream program in the local public school. This placement limits their ability to become a healthy, cognitively, well-developed child. CEASD's perspective highlights a context which embeds the deaf child in a milieu of visual language which can be "overseen" from adults, peers, and staff who are using sign language. We know that "overhearing" language increases vocabulary develop (Hart & Risely, 1975, 1989); therefore LRE in the *Child First* campaign emphasizes this same natural benefit from a visually rich language environment. The *Child First* campaign advocates that the traditional definition of LRE deprives deaf children of the ecological niche that most benefits their linguistic and social emotional development (Ceci, 1990).

### 1.2. Parents of a Deaf Child and IEP Meetings

Debates about the best placements for a deaf child often leave parents extremely confused. Most deaf children are born to hearing parents (Karchmer & Mitchell, 2003), who have never met a deaf adult (Benedict, 2013). Therefore educational placements are critical but unknown territory for these hearing parents, who are trying to find appropriate information regarding their deaf child's development. Many factors are necessary for these parents to try to understand and this information impacts their child's placement goals.

Factors related to IEPs for deaf children include how to support their linguistic needs, the severity of their hearing loss, the potential for use of any residual hearing, the student's academic level, as well as their social, emotional and cultural needs. All of these issues are vital when deciding on the placement of a deaf child (Hyatt & Filler, 2011). The decisions related to school placement for deaf children may include public schools, private institutions, special classes, and

state schools for the deaf. These types of placements decisions occur during the IEP meeting between the school personnel and parents (Aldersley, 2002).

However, placement decisions were often perceived by Aldersley (2002) as unreasonable due to the interpretation of LRE, which differs from state to state. Even more, Aldersley (2002) argued that there is undue harm placed on deaf children through deprivation of their linguistic, academic, social, emotional, and cultural needs. For example, in *Hendrick Hudson Central School District v. Rowley* (1982) (McKay, 2013), a deaf student, through her parents, claimed she was entitled to quality education under the IDEA clause. Her parents filed a suit against the school district claiming that the district was in noncompliance with IDEA by not providing an education that was meaningful for their deaf child (Darden, 2009). The school district argued that the quality of interpreters, which were provided to the deaf child, were adequate but her parents disagreed (Darden, 2009). The question, as debated by Darden (2009), focused on the effectiveness of interpreting services provided by the school system; the issue at hand was whether these services were meaningful or merely pro forma to satisfy the legal requirements. This issue of appropriate services to satisfy FAPE continues to be controversial in the legal arena.

Additionally, in 2000, the 11th Circuit Court found in favor of two students who had been placed in a local special education classroom without a teacher of the deaf (Easterbrooks, Lytle, Sheets, & Crook, 2004). The decision entitled the family to up to \$2.5 million dollars from the school system. The judge stated that these students were denied their legal rights and their case highlights the issues that can occur with the varying definitions of LRE. After 2004, the requirement for the IEP teams to consider the language and communication needs of the deaf child was not specifically part of the re-enacted IDEIA.

With the 2004 IDEIA, the school administration had the opportunity to redefine the multidisciplinary team to better identify deaf children's academic, linguistic, socio-emotional, and cultural needs (Easterbrooks et al., 2004). This team should include two or more members with extensive experience in the needs of deaf and hard of hearing students, as well as parents (Easterbrooks et al., 2004). These issues highlight the importance of parental involvement and their ability to comprehend IEP policies and procedures during meetings to be sure that their child's educational placement is the most effective and that the child's needs are placed before the budgetary concerns of the school.

Pittman & Huefner (2001) discussed that families who prefer a bilingual-bicultural education with the utilization of American Sign Language (ASL) and written English language were frequently denied this educational placement when IDEA was reauthorized in 1997 and additional amendments were added in 1999. They write, "however, as a result of the amendments in 1997 that no longer required a focus on language and communication, it has become more difficult to place deaf children in an appropriate linguistic environment" (Pittman & Huefner, 2001: p. 191). These issues continue even today but became more com-

plicated with the addition of the 2001 No Child Left Behind Act (NCLB).

### 1.3. NCLB

IDEA and NCLB are two of the most recent laws scrutinized by the circuit courts. These courts decisions focused on defining the legal standard for appropriate placements for the child's benefit, as well as the requirements related to the responsibility of the IEP team to provide strategies, placements, and assessments to insure the child's progress toward meeting specified goals (Etscheidt, 2012). IDEA was passed in 1990 but NCLB superseded this law in 2001 with modifications to the IDEA, which were then combined as a new law, IDEIA, in 2004 (Moore, 2005). IDEIA was implemented to measure academic progress towards state standards under NCLB (Moore, 2005). One major component of this change was how schools measure adequate yearly progress (AYP). Importantly, deaf students were then included in these mandated assessments. Moore (2005) determined that these new laws created conflicts in the area of deaf education and that AYP was an inappropriate measure for the success of students in deaf schools and programs. As noted by Steffan (2004), requirements for deaf students, who attend schools for the deaf, cannot be compared to students in public schools because they are a low incidence population. Therefore, many deaf programs were exempted from being included in the statistics required to be submitted by each school. Nonetheless, Moore (2005) credited NCLB for raising the expectations for deaf children, which led to the increased passing of standardized state-level criterion-referenced tests among deaf children.

Educators need to set aside the jargon of federal regulations and focus on each child's needs by identifying appropriate academic standards, such as vocabulary acquisition, reading, and writing. They need to define the desired outcomes of instruction, identifying instructional activities, and target specific objectives on the IEP so deaf children can academically, linguistically, socio-emotionally, and culturally thrive in and out of the classrooms (McBride & Goedecke, 2012). In this way, we are putting the child first. Diversity is also important for families with a deaf child, who may then be multilingual.

### 1.4. Parents and the IEP Process

Demographic data for parents and deaf children from culturally and linguistically diverse backgrounds present an alarming need for further research on the identification of barriers encountered during the IEP process. The cultural representations, values, and norms were variables explored by Trainor (2010b) to devise strategies regarding how to solicit more involvement from parents who are culturally and linguistically diverse.

Parents with culturally and linguistically diverse backgrounds may identify themselves with one, two, or more cultures and languages (Peralta, 2013). These parents maintain communication with their children in their home language and value their traditional cultures, but they experience problems with the school



personnel due to barriers in language and a lack of diverse cultural knowledge on the part of school personnel. These parents wanted the best for their children, but insufficient collaboration from school personnel is a barrier (Peralta, 2013). The challenge for these diverse parents is that they have limited English proficiency. As a result, the information about procedural safeguards, the whole IEP process, and the selection of educational goals can be inaccessible to these parents. Interpreters typically are involved to provide interpretation for parents during the IEP meetings; but the system frequently does not take into consideration the cultural approach that parents with these kinds of backgrounds need (Jung, 2011).

Parents' perceptions, different communication styles, and ethical issues with interpreters, as well as structural values imposed by school professionals' attitudes were identified as barriers for diverse parents (Jung, 2011). Insensitivity towards parents' values and beliefs led to miscommunication, lower expectations of academic achievement, and incorrect diagnosis of disability (Jung, 2011). Many parents are unaware of their rights to bring an advocate during the IEP meetings. As the role of an advocate was not defined in IDEA, school personnel are not required to inform parents that they can bring advocates to the IEP meetings. The definition on the role of an advocate needs to be diligently re-evaluated in the IEP procedural safeguards and clearly stated with language that parents from diverse backgrounds can understand.

### **1.5. Parents' Appeal for Advocacy**

Advocacy skills among parents are of great concern in IEP meetings (Trainor, 2010b). Evidence of parent satisfaction occurred when the IEP team respected parents and their values of focusing on their child's welfare as their top priority and their child's disability as a secondary emphasis (Byington & Whitby, 2011). Also, they became more comfortable during IEP meetings after they were educated about the laws and regulations (Byington & Whitby, 2011). Parents' roles as advocates, disability experts, strategists, and promoters of systematic changes were some of the most frequent themes identified by Trainor (2010a). However, cultural and linguistic barriers inhibited parents from fully assuming these roles during IEP meetings. Trainor (2010a) stressed advocacy as an opportunity for parents with diverse cultural and linguistic backgrounds to assist in the evaluation of the disabled child's abilities to meet IEP goals.

### **1.6. Parents' Levels of Satisfaction with the IEP Process**

Shaffer (2010) identified the need to improve the IEP process with increased participation from parents in order to promote a positive atmosphere and a chance for students with disabilities to excel in academics. They investigated overall levels of parental satisfaction with the IEP process, as well as the effects of federal laws on parental involvement during the IEP process (Shaffer, 2010). Shaffer (2010) noted that parental levels of satisfaction were higher when they

were more involved with the IEP process but noted that parents felt that the IEP teams focused more on the child's disability rather than the whole child. This led [Shaffer \(2010\)](#) to recommend a need for open communication and collaboration between parents and educators.

[Cawthon & Caemmerer \(2014\)](#) investigated parental expectations of their deaf children's education and assessed their levels of satisfaction of the IEP process. They found that 36% of the parents expected their deaf child to successfully complete a bachelor's degree, while 6% did not expect their deaf child to achieve more than a vocational rehabilitation placement ([Cawthon & Caemmerer, 2014](#)). Following up on these expectations, they asked about parental satisfaction with the IEP process. Parents' were not highly satisfied in terms of understanding their legal rights, had low involvement in the meeting, but reported that they comfortable during IEP meetings. These parents reported that they could find resources to help their child but felt that the IEP team was competent.

### 1.7. The Conundrum of Communication within Deaf Education

As mentioned earlier, most deaf children (90%) have hearing parents ([Karchmer, & Mitchell, 2003](#)). As noted by [Solomon \(2012\)](#), this difference frequently creates issues with identity, as most hearing parents want their children to grow up with their own values, including their home language. [Solomon \(2012\)](#) discussed this conflict as one of vertical (from parent to child) versus horizontal (from deaf community to deaf child) identity development. Initially, the conflict leads to a crisis for the parents in trying to make a decision about their child's language "choice"; should they use hearing technologies like digital hearing aids and cochlear implants and focus on spoken language, or should they select a sign language. In attempts to bridge this divide, many types of communication modalities and strategies have been developed and implemented in various ways.

The choice of communication options or strategies can be thought of as a continuum that ranges from a natural sign language, i.e., ASL, to a natural spoken language, i.e., English. The continuum can be closer to ASL, which is a pidgin that is a grammatically simplified strategy for communication among groups that do not share a common language, or closer to English, using invented codes to create English on the hands ([Belt, 2013](#)). This continuum ranges from ASL to Pidgin Signed English, to Simultaneous Communication, to Total Communication, to Signed English, Sign Supported English, Cued Speech, and ends with Spoken English ([Leigh & Andrews, 2017](#)).

Given this wide variation in communication methods, as well as two natural languages, it is not surprising that hearing parents have a difficult time understanding the best practices to use with their newly born deaf infant. They frequently make choices based on advice from individuals in the medical profession, including doctors, audiologists, and speech and language specialists. Typically they are told that they MUST make a language choice and if spoken English

is not effective, as their first choice, they can switch to ASL later. A more effective way to help these overwhelmed parents is to discuss language preferences rather than choices; then they have an “and” rather than an “either/or” decision regarding their child’s language acquisition (Benedict, 2011).

Scant peer-reviewed research has demonstrated which of these methods has a better “track record”, even though there are 100 s of publications claiming one to be better than the other. Unfortunately, deaf education tends to be based on philosophy rather than evidence-based practices. Recent research has shown that beginning early with signing prior to the activation of a cochlear implant actually leads to better speech later (Davidson, Lillo-Martin, & Pichler, 2014; Hassanzadeh, 2012). Therefore, it may be best to begin with providing both natural languages to the deaf child and permitting the child to decide on which language is more effective for their use. To support this hypothesis, recent peer-reviewed research has shown that an ASL/English bilingual approach leads to higher levels of academic performance (Freel et al., 2011; Hrastinski & Wilbur, 2016).

### 1.8. Purpose and Research Questions

Given all of the issues with choice of language for deaf children, legalese within the IEP system, and some resistance from some school officials (Olivos, 2009), it is imperative that parental perceptions of IEP meetings are investigated. Therefore, the purpose of this qualitative research study was to discover experiences faced by parents of deaf children going through the IEP process. The research questions that guided this study are:

- 1) What were parents’ experiences during the IEP process?
- 2) What barriers did parents perceive or experience during the IEP process?

### 1.9. Positionality of the Researchers

A deaf/hearing collaborative team, which consisted of three researchers, two Deaf and one hearing, completed this research. The primary researcher (Trahan) is a Deaf woman born to hearing parents who is strongly embedded in the Deaf community. She uses ASL as a first language and is also a former K-12 teacher in deaf education. She values a Deaf epistemology. Moreover, her personal experiences impact her perspectives and her understanding of the results. Therefore, the first author bracketed her personal experiences when interviewing parents. Her own personal experiences provided her with insights into the results obtained from these interviews. This author has experienced being on IEP teams and observing parents’ levels of participation during these meetings. She has extensive experience with drafting IEP goals, facilitating IEP meetings, and communicating with parents about deaf children’s progress and IEP goals. While Glesne (2006) discussed the role of the researcher, as a learner, due to novel perspectives, which may arise during the data collection, the first author acknowledges that she is also a learner because she gained new and unique perspectives from interviewing deaf and hearing parents.

The second researcher (Wolsey) is also Deaf, uses ASL as her primary language, and was raised by hearing parents. She has an interest in supporting and empowering the lives of Deaf, Deaf Blind, and hard of hearing individuals in different contexts. In addition, she has extensive research experiences with collaborating and publishing qualitative studies.

The third researcher (Clark) is hearing and a developmental psychologist, who has been immersed in ASL and Deaf culture throughout her career. She has extensive experiences and knowledge with publishing research in the areas of cognition, reading, literacy, and Deaf culture.

## 2. Method

### 2.1. Recruitment and Participants

1) Recruitment and sampling strategy. After obtaining Institutional Review Board (IRB) approval, participant recruitment began using purposeful sampling. Purposeful sampling was used to identify and select participants based on the criteria, sample size, availability, and having experienced a phenomenon of interest (Creswell, 2013). Therefore, the primary researcher utilized purposeful sampling to investigate common experiences among deaf and hearing parents. This type of sampling or technique can “purposely inform an understanding of the research problem and central phenomenon in the study” (Creswell, 2013: p. 156). In order to effectively recruit and select participants, the primary researcher used email to distribute an invitational letter with a demographic questionnaire. They were sent to parent-teacher associations at mainstream schools and schools for the deaf in the Southwest region of the United States. In order for participants to be eligible for this study, they had to have a deaf or hard of hearing child, and a culturally and linguistically diverse background.

2) Participants. After a two-month recruitment period, eleven questionnaires were returned. Out of these eleven responses, six families (twelve parents) were selected based on their linguistic and cultural diversity. These twelve parents received a letter inviting them to be participants in the study. From the twelve parents, seven were interviewed; both parents in one family wanted to participate in the project. There were five ASL-signing parents and two Spanish-speaking parents. Four parents were hearing and three were deaf. The names of all parents were changed to maintain confidentiality and are pseudonyms in this paper. **Table 1** summarized the demographic information of parents, as well as which parents (shown with a\*) participated in the interviews.

### 2.2. Materials and Data Collection

Data was collected from multiple sources including the demographic questionnaires and interview responses from parents. All data was documented and analyzed on the primary researcher’s personal laptop utilizing Microsoft Word and Excel. The interviews were conducted using FaceTime, a video communications application, and audio on an Apple MacBook laptop. All interviews were

**Table 1.** Demographic information of parents and children.

Parents/ Participants	Hearing Status	Language at Home	Educational Level/Placement
Jose*	Deaf	Primary: American Sign/Sim-Com Secondary: Spoken/Written English Third: Minimal Spoken/Written Spanish	High School Graduate Mainstreamed
Ana*	Deaf	Primary: American Sign/Sim-Com Secondary: Moderate Spoken/Written English	High School Graduate Mainstreamed
Lorena*	Hearing	Primary: Spoken/Written Spanish Secondary: Spoken/Written English	N/A Public School
Xavier*	Deaf	Primary: American Sign Secondary: Written English/ Minimal Spoken English	Attended College Mainstreamed
Kiara	Hard of Hear- ing	Primary: American Sign Secondary: Written English/ Moderate Spoken English	Mainstreamed
Carlos*	Hearing	Primary: Spoken/Written Spanish Secondary: Spoken/Written English	College and High School Graduate in Mexico
Isabella	Hearing	Primary: Spoken/Written Spanish Secondary: Spoken/Written English	Immigrated from Argenti- na
Irina*	Deaf	Primary: Ukrainian Sign Secondary: Written Ukrainian/ Minimal Spoken Ukrainian Third: Moderate Russian Sign Fourth: Minimal Spoken/Written Russian Fifth: Moderate American Sign Sixth: Moderate Written English/ Minimal Spoken English	High School Graduate in Ukraine School for the Deaf
Dima	Deaf	Primary: Ukrainian Sign Secondary: Written Ukrainian/ Minimal Spoken Ukrainian Third: Moderate Russian Sign Fourth: Minimal Spoken/Written Russian Fifth: Moderate American Sign Sixth: Moderate Written English/ Minimal Spoken English	High School Graduate in Ukraine School for the Deaf
Julia*	Hearing (CODA)	Primary: American Sign Secondary: Spoken/Written English	High School Graduate
Biological Father	Hearing	Primary: Spoken/Written Spanish Secondary: Spoken/Written English	High School Graduate in Colombia
Stepfather	Hearing (CODA)	Primary: American Sign Secondary: Spoken/Written English	College Graduate High School

NOTE: \*Seven parents participated in the interviews.

video-recorded via iPad and saved in a password-protected folder by the primary researcher. The primary researcher had sole access to the videotapes and destroyed them, as well as field notes, at the completion of the final report.

1) Demographic questionnaires. To obtain an adequate sample of participants and establish rapport during the interviews, participants completed a demo-

graphic questionnaire that was adapted from Ruppap & Gaffney (2011). The questionnaire consisted of eight close-ended and structured questions that utilized a five-point Likert scale (Vogt, 1999). Questions focused on participants' background including, gender, hearing status, communication/language used, education, cultural and linguistic background, and interaction levels with other parents about the IEP process. These questions became the inclusion criteria to select participants for this study; therefore, participants were pre-screened prior to being selected. The questionnaire was provided in English and Spanish text to meet the linguistic needs of participants.

2) Interviews. Fourteen interview questions were originally piloted and shared with one deaf participant and one hearing participant, who were not part of the study, to obtain feedback regarding the clarity of the questions. Their feedback led to the questions being revised for clarity. The final set of interview questions included fourteen open-ended questions. Each participant (e.g., one parent) with the exception of two parents from one family completed videotaped interviews. Interview questions were drafted and adapted from Ruppap & Gaffney (2011) and Fishman's (2012) Cultural Autonomy Theory. Questions asked about the participant's child's identity, interaction levels between participants and school staff, participants' knowledge about the IEP process, their interaction with other parents, and their experiences of navigating the IEP process.

The primary researcher interviewed four ASL-signing participants in ASL while two Spanish translators, who are hearing and hard of hearing, interviewed two Spanish-speaking participants. All videotaped interviews were transcribed to English text from ASL by the primary researcher. To transcribe spoken Spanish to English text, the hearing translator first listened to the Spanish audio recording and typed the transcript in Spanish text. Second, the hard of hearing translator reviewed the transcript in Spanish and double checked the audio recording of the interview for accuracy. Finally, the Spanish transcript was then translated from written Spanish to English text. All data was de-identified.

### 2.3. Procedures

1) Informed consent and confidentiality. After participants were recruited and selected, they confirmed their participation, and signed an informed consent that was available in English and Spanish text, as well as in ASL. The informed consent was electronically sent to participants via Survey Monkey. The demographic questionnaire was also provided in English and Spanish text using Survey Monkey. The informed consent and questionnaire were completed prior to the interviews.

2) Interviews. On the day of the interviews, the primary researcher conducted interviews through FaceTime, using an Apple Macbook. An iPad was used to record the interviews. To effectively interview two Spanish-speaking participants, the primary researcher consulted with two other colleagues who are bilingual in spoken and written English and Spanish. A hearing translator, who

spoke with the participants via telephone, was an educator with a Masters Degree. The second translator, who used the speakerphone to ask questions, was a hard of hearing doctoral graduate in the field of deaf education. An iPad was also used to record the telephone conversation. The interviews took place away from the school premises at a location that allowed participants to feel more at ease with sharing their IEP experiences. Participants answered all of the questions with integrity and compassion, which was an assumption of the primary researcher. Individual interviews took between 45 minutes to two hours and a half; on average, the interviews were one and a half hours in length.

#### 2.4. Data Analytic Plan

1) Grounded theory. Since Fishman's (2012) Cultural Autonomy Theory dissects power and phenomena within a sociolinguistic model, grounded theory was an ideal qualitative method to understand the IEP experiences of participants from diverse backgrounds. Strauss & Corbin's (1990) grounded theory approach with the method of constant comparative analysis (CCA) (Fram, 2013) was used in this study to analyze the specific phenomenon and understand the rich corpus of data. A theory was developed through the phenomenon of interest that emerged from the data (Creswell, 2013; Strauss & Corbin, 1990). Therefore, participants' interview responses provided rich data, insights, and recommendations to better understand their experiences during the IEP process.

2) CCA method. A three-step systematic coding process (e.g., open, axial, and selective coding) was used to reduce the data and find emerging themes and categories from interview responses (Creswell, 2013; Strauss & Corbin, 1990). A process of memoing and analyzing the data by hand took place during the coding process where the researchers jotted down notes and ideas (Creswell, 2013; Strauss & Corbin, 1990).

Through open coding, the interview responses were reviewed and analyzed to identify similarities and differences (Creswell, 2013; Strauss & Corbin, 1990). Second, through axial coding, the themes were connected, compared, and categorized to establish categories (Creswell, 2013; Strauss & Corbin, 1990). Last, selective coding was used to determine the overarching theme or core category to represent the central phenomenon, which was influenced by the categories found in axial coding (Creswell, 2013; Strauss & Corbin, 1990). Therefore, a theory was developed from participants' experiences and perspectives to build a story (Creswell, 2013; Strauss & Corbin, 1990).

3) Validation strategies. Member checks were used to ensure accuracy of participants' interview responses (Creswell, 2013). Participants read and approved the English transcripts to determine that they accurately reflected their interview responses. A certified ASL interpreter double checked the transcripts that were translated from ASL to English text. Two Spanish translators also reviewed the transcripts for accuracy from spoken Spanish to English text. An independent researcher had several opportunities to review the data in which the inter-rater



reliability was 80%.

### 3. Results

#### 3.1. Open Coding

During the three-step coding analysis, common themes from participants' interview responses were identified first through open coding. Eight shared themes were found in participants' responses regarding their experiences and perspectives during the IEP process. These themes included: 1) *rapport*, 2) *feedback*, 3) *diversity*, 4) *parent preparation*, 5) *procedural safeguards*, 6) *action*, 7) *network*, and 8) *advocacy*.

1) Theme one: Rapport. The first theme, *rapport*, identified the relationship between parents and school personnel, where the majority of the IEP team members were hearing. Parents had both positive and negative experiences with rapport that included respect, accessible communication, and support during the IEP process. While the majority of participants expressed frustration with their interaction with the IEP team, they also had some positive experiences.

Some positive experiences that three participants experienced were when they valued the level of expertise offered by each member of the IEP team. Ana, a deaf participant, shared that, "the Assessment Intervention specialist, who came to see us, knows sign language". This accessible communication developed a positive rapport between the participant and the specialist. A deaf participant, Xavier, commented that "since the school interpreter already knew about Deaf culture and ASL, the translation process was much smoother". Other participants also felt that they had respect and support from the IEP team. An example shared by Jose, also a deaf participant, was that "they offered us what we requested. They offered a FM system and I said no. They highly respected us". Another example of support was mentioned by Julia, who is a hearing Child of Deaf Adults (CODA). She shared, "Oh really yes, as I went along. This [experience] really woke me up because of the vice-principal's support. That led me to understand the IEP process much more than before".

On the other hand, some participants had several negative experiences such as communication frustration and disagreements with the IEP team. An example was when a deaf participant (Xavier), stated, "My wife and I used ASL interpreters during IEP meetings, but when it boiled down to negotiations, my wife used spoken English with a vocal tone to express her concerns instead of sign language". An example of a negative experience with a lack of respect was shared by a young, hearing participant and a CODA (Julia) who commented, "I was looked down upon (inferior) by the IEP team members... [as a] young mother and they treated me differently because I didn't have a college degree". When Julia observed several more IEP meetings as an ASL interpreter, she learned how to navigate through the IEP process and became knowledgeable.

Another participant, Irina, who is a deaf mother of three deaf children, disagreed with having an IEP meeting with the team before observing one of her



children's classrooms. Irina commented, "At the meeting, I pointed out to them that I prefer to see what was going on in the classroom first before I say something. That was my concern. So at the meeting we could discuss what I observed [in the classroom]". Irina commented:

I insisted that I wanted to be able to observe Andrey in the classrooms but the staff prevented me for some perplexing reasons I did not understand. Some staff members at the school for the deaf found me annoying but I knew that I had my rights as a parent to observe my children in classes. Since I felt that I was discriminated or oppressed due to my relocation from another country and not fluent in English, I had to fight my way through and do what I felt I needed to do. I convinced the principal to transfer my older son to the Class A (advanced level) from the Class C (average level) for one week, just to see how he would do. As a result, he stayed in the A group for the rest of the school year.

Another disagreement that Irina had was with the principal and the IEP team about her older child's class placement. She initially agreed with the IEP team to "hold [her older son] back one grade level so he could acquire English vocabulary words at the mainstream school". This decision was due to the fact that her family emigrated from Ukraine and was still learning English as their fourth language, but she disagreed with placing him in the lower level class rather than the more advanced class. After the discussion, he stayed in the advanced class again for the rest of the year.

Parents are not seeing school personnel as meeting them halfway. They want to work closely with the school, but are not getting open communication to become a partner with their child and the school to support academic success. When parents felt respected by school personnel, they were more satisfied with the outcome of the IEP process. They also reported a feeling that school personnel did not see them as equals, but as rather someone that did not have the necessary background to know how to work with teachers and the IEP team. Therefore, parents desired a connection to their child's school through a feeling of *rapport*.

2) Theme two: Feedback. The second theme, *feedback*, focused on parent providing feedback and advice across several areas. They included providing; a) advice to other parents who are from culturally and linguistically diverse backgrounds on how to navigate through the IEP process or understand IEP meetings, b) advice for school personnel, and c) feedback in regards to teaching strategies.

Several parents shared examples of feedback or advice that they provided to other parents from culturally and linguistically diverse backgrounds. Ana (deaf parent) shared, "The AI [Assessment Intervention] specialist really helped us by giving us [Jose and I] feedback before the IEP meetings". For example, Ana was able to ask the AI specialist about what she could request at the IEP meeting and

asked questions, to which the AI specialist provided the answers. This feedback provided Ana with the opportunity to be more prepared with asking appropriate questions and requests at the IEP meetings. Other deaf participants, Jose and Xavier, shared similar advice and advised “parents to ask many questions and speak up for their children”. They need to ask “whatever they want for their deaf children... [it] won’t hurt to ask”. Xavier emphasized, “I want parents to be persistent with their requests, even when the school districts may see differently”. Irina, also a deaf participant, shared the following advice to other parents:

I advise parents to ask their children to explain. If they can’t then parents need to ask teachers and assistants to explain more until they understand. I suggested that parents request tutoring if their children did not understand class/homework. I encourage parents to follow up on homework and provide extra instruction to their children at home, such as practicing spelling words and asking them what words mean, rather than leaving them alone.

A hearing participant, Lorena, commented that the best advice was “to always go to the ARD<sup>2</sup> [Admission, Review, and Dismissal] meetings. I encourage them to personally go to the meeting and avoid meeting through the phone... when we go to the meeting, we can understand more things”. Another hearing participant, Julia, urged parents to make sure that interpreters were fluent in ASL in their children’s mainstreamed classrooms at public schools. Jose and Ana (deaf participants) advised parents to fight for their deaf children’s rights, and network with other parents and deaf role models to better support their children.

In regards to the participants’ advice for school personnel, Julia (hearing participant) asserted, “I want the IEP team’s perceptions of deaf students to be based on their minds, not their deafness”. Julia also added that the IEP team needs to “respect the parents. Trust that we want the best too”. A deaf participant, Jose, emphasized:

Feedback, feedback, feedback. Give a lot of positive feedback. Be positive about and [around] [the] deaf child. A[ny] negative vibe makes parents feel resistant. Always point in [a] “POSITIVE” direction that will benefit the child’s future. Encouragement! Again be positive and mention things now that will encourage them and enlighten them about what will happen with their child. Inspire them. This will make the parents be in tune and want the same outcome.

Xavier, also a deaf parent, advised school personnel “to comply with parents’ requests for resources for their children... urged school districts not to underestimate or try to diminish the concerns of parents, as if their concerns are not important enough”.

Some feedback in regards to teaching strategies was shared by a deaf parent, Irina, who asserted the importance of teachers and parents to have higher ex-

<sup>2</sup>Admission, Review and Dismissal (ARD) is used in the state of Texas, which is similar to IEP in other states (Texas Education Agency, 2014).

pectations for deaf students. Irina also discussed ineffective teaching strategies during the IEP meeting based on her observations in her three deaf children's classrooms. Julia (hearing parent) shared:

I felt like sometimes they limit it, not willing to assess any further and only provide the minimum as required by law. They should look at what is the best for the child. If we really understand the child's unique individual needs, [then we should] not use the cookie cutter approach.

The idea of *feedback* focused on these parents providing advice to other parents as well as school personnel. This type of sharing empowered other parents to attend IEP meetings face-to-face and not be afraid to ask questions. In addition, parents gave advice to school personnel, much like in the theme of *rapport*, believing that they should be involved in their child's education. This foreshadows parents' desire for collaboration.

3) Theme three: Diversity. The third theme, *diversity*, referred to the parents' home language and culture, experiences of oppression, and strategies to attain equity. Access to the language preferred by parents and deaf children was a common theme. Three parents (both hearing and deaf) placed their deaf children in mainstream programs because they thought that their deaf children were intellectually equivalent to their hearing peers. Four parents (one hearing and three deaf), who were fluent in ASL, felt that their deaf children had a strong foundation in ASL from their child's elementary years at schools for the deaf. This foundation in ASL led to their academic success both at the school for the deaf and later in their mainstreamed program at a public school during high school years.

A hearing and Spanish-speaking parent, Lorena, whose first language is Spanish, shared that, "because sometimes some things are different in Spanish but... I do not know how to tell you... they are labeled different, so I do not understand, but I ask as well... so they explain [to] me and I finally understand what they are referring about". Another hearing and Spanish-speaking parent, Carlos, commented that while language is important, "English for parents may be difficult to understand what the [IEP] program is [about]... because some words are different to understand so we need certain, more advanced, concepts to understand some topics". Carlos recommended that parents ask for a Spanish translator if the IEP meeting is not 100% in their first language. As a deaf Ukrainian, Irina experienced oppression from the IEP team due to her immigrant status and having inadequate fluency in English.

Given the purposeful sampling, it is not surprising the *diversity* became a theme for these participants. IEP meetings can be complex with a variety of languages all needing to be managed to have vital information conveyed in ways that ensure that it is comprehensible to all members of the team. Parents are suggesting that it is easier to either not attend the meeting physically or to simply accept the school personnel's decision for many families. But those families

who wanted their voices to be heard strongly disagreed with this idea. They were strong advocates for completely accessible information and understanding of the plans for their child's education. This theme naturally connects to the next one.

4) Theme four: Parent preparation. The fourth theme, *parent preparation*, described how participants did not understand the IEP process. This lack of understanding was the result of not receiving information in advance of the meeting. Parents shared that this lack of preparation also included not providing them with agendas, progress reports, or classroom observations prior to the IEP meeting. The IEP team seemed not to see a need to prepare them prior to the meetings. School personnel were inconsistent about contacting them to schedule meetings and frequently did not send progress reports. Parents reported these experiences as negative. Several examples of this lack of preparation were shared by parents.

Two participants stated that they were prepared with information prior to IEP meetings, but four other participants explained that the information was presented to them during the meetings. For example, two deaf participants, Jose and Ana, explained that the school personnel prepared them for the meeting by assigning an Assessment Intervention specialist to work with them and their deaf children. In contrast, other participants arrived at the meeting with no information about the process or what would be discussed. All six parents emphasized that attendance at the IEP meetings in person greatly benefited them with receiving more information about their child's educational progress. Parents, who were well prepared, experienced strong collaboration with the school. Lorena emphasized that she wanted to know the agenda ahead of time to know what topics would be discussed. That way, she could "be ready to ask what [she] want[s] to obtain more answers to [her] questions". As a result, parents can be more involved in the IEP meetings and support their children.

According to Irina (who is deaf), the team provided her with a written explanation of her children's progress and wanted to schedule a meeting with the teacher before the actual IEP meeting. However, she wanted to observe her children in the classroom first. Irina "prefer [red] to see what was going on in the classroom first... so [that] at the meeting, we could discuss what I observed". Irina and her husband had seen some areas that needed improvement during their observations in the classroom. Like Irina, several other participants advised other parents to observe their children in the classroom, then discuss issues with them at home to find strategies on how to maximize their education. These strategies were then listed as IEP goals during the meetings with the school personnel.

The emphasis on needing more information within the theme of *parent preparation*, points to problems that these parents have experienced in the past. Here they are connecting what they have fought to access under this idea with earlier themes of *rapport* and *feedback*. These groups of parents has taken the time and put in the effort to obtain information. Now they want to tell school personnel

the importance of helping other parents to be prepared for IEP meetings. They also want to help prepare these parents themselves and to encourage other parents to become strong advocates.

5) Theme five: Procedural safeguards. The fifth theme, *procedural safeguards*, looked at how well participants understood procedural safeguards. The majority of parents reported that either they had no idea about these safeguards or did not fully understand them due to the complexity of the IEP process, the terminology used, and feeling that there was too much information on the papers they were given. Several participants reported that they were given “high stack of papers”. However, they signed the form anyway because they wanted to go ahead with the IEP meetings. Three participants stated that the procedural safeguards document could be summarized into fewer pages. Other parents, such as Xavier (deaf), felt that he was presented with a “business proposal” when he saw the thickness of the procedural safeguards documents. Xavier reported that there were “too many pages [and that] it’s silly... I was forced to look through too much”. These five participants often asked for clarification due to the complexity of the procedural safeguards and other documents such as assessment reports and progress reports with IEP goals. Two deaf parents, Jose and Ana, reported that the “[school] would summarize what the papers meant”.

Understanding the procedural safeguards of the IEP process was also difficult for Latino participants due to the “complexity of concepts and topics”. A deaf participant, Irina, reported that she understood some of the information but “if there [was] something [that] [she] object [ed], [she had] the right to bring it up”. However, Irina understood her rights and did not give up even if the IEP team thought differently, but she still did not fully comprehend all of the procedural safeguards. Irina reported:

I [made] sure my rights are acknowledged but I don’t understand some of it... yes it was complicated even as they explained it to me. I just nodded along because I didn’t understand what the words meant. I just had to follow the routine and sign my name on the procedural safeguards document. I also didn’t understand the other documents. But it was fine. I just followed the routine.

All six participants stated that they understood their child’s present levels of academic performance and goals. However, five participants stated they struggled with understanding IEP procedures, as it was too much information to read and understand all at once.

The theme of *procedural safeguards* found that parents felt that the terminology, complex concepts, and number of pages used in procedural safeguards did not allow them to effectively understand the IEP process. The majority of parents had difficulty understanding the concepts due to the advanced terminology and English not being their first language. They wanted to comprehend and be aware of what they were reading and signing to better advocate for their child-

ren's academic success.

6) Theme six: Action. The sixth theme, *action*, focused on how parents were active in ensuring that their deaf children's services needs were met, including extracurricular activities. This theme also included how participants took action to request services such as ASL interpreters, addressed school personnel's lack of fluency in ASL, and worked with their child at home to meet educational goals. When participants wanted to meet their children's educational goals, deaf parents, Jose and Ana, requested an Assessment Intervention specialist to provide assistance for their deaf children to meet academic expectations. Jose and Ana also ensured that their request was met by having a counselor who was fluent in ASL, even if it meant using someone from another school district to provide the service at their children's school.

While four parents fought for qualified ASL interpreters to be provided for their children who attended mainstreamed programs in public schools, only three succeeded in having this need met. In addition, four parents requested increased quality of instruction, both at the mainstreamed programs and at schools for the deaf. However, three participants were not satisfied because the IEP team did not comply with their requests. These participants stated that they will continue to address the quality of instruction for their deaf children at the next IEP meeting.

A hearing parent, Lorena, reported that she paid attention to what was happening during her deaf child's education but if there was something that was not done, she took action and talked with the school who "[explained] why things [were] not done and what they [were] doing". Another hearing Spanish-speaking parent, Carlos, shared an experience he dealt with during an IEP meeting. There was an inexperienced member of the IEP team who did not have the ability to understand the IEP process. As a result, he petitioned the school board to have this member replaced and only use members who had experience and knowledge about IEPs.

Several parents shared examples of how they help their children meet educational goals at home. One example was that our deaf parent, Irina, interacted with her three deaf children daily, as they did homework assignments at home. Irina explained, "I placed vocabulary words on strips of paper all over the walls at my child's eye view levels in my house. Since I have three deaf children, I wanted to provide a print-rich environment for them to see everyday". Irina added that she read books, and talked and played with her deaf children to foster a close relationship with them, just like their siblings and friends. She also used dramatic play by impersonating characters in the books they read. Another example was with Julia (a hearing parent) who asked her younger son questions and looked for appropriate responses to monitor her son's comprehension. Julia elaborated:

It helps me notice if something is off or [if] something is wrong, or if the IEP goals were followed... it is for me to pretty much guess what was on

grade level or higher but I can monitor him based on my younger son's conversations, knowledge and ability to answer questions. Sometimes I played "dumb" and pretended not to know what a certain word meant by saying to her younger son, "never heard of that word. What does it mean? It really worked!"

Again, parents show their strong involvement in their children's education. They did not simply permit the school to make decisions. They had high expectations for their children and wanted the school system to provide the services that would permit their children to thrive. Their actions connect strongly to the next theme.

7) Theme seven: Network. The seventh theme, *network*, referred to how participants networked with other parents, deaf role models, and deaf mentors to better understand the IEP process and support their children. One example was shared by a deaf parent, Xavier, who reported:

Whenever I asked for [an] interpreter for school events, I became more connected with other parents, teachers and other people there because I would be a part of the community. At my son's elementary school, we always participated in the community events.

Julia (hearing parent) shared another example and reported, "I really think it is important as parents to interact with each other and it is sad that we don't". Julia added, "for [parents] to become culturally and linguistically aware, they need to partner with ASL mentors and deaf role models".

A deaf parent, Irina, was "fortunate [to be] part of a deaf family and [be] aware of educational options for [her] deaf children" when the topic of cochlear implants were discussed. She was approached by an audiologist twice who tried to persuade her to get a cochlear implant for her youngest child, but she declined. Deaf parents, Jose and Ana, also shared a similar experience. They added, "the IEP team treats us fairly. They realize [that] we know more. We are grateful for our friends because they advise us before IEP meetings. Based [on] the Assessment Intervention specialist's and my friends' advice, I can request services when we meet with the IEP team". Carlos (hearing parent) commented that he has "had [a] lot of support from the university. We do know how the system works. [With] experience and time, we know how the system works so we [did not] have to make other process[es]".

The synthesis of parents' involvement is again reflected here in the theme of *network*. Connecting with other parents and deaf role models allowed them to be more aware of educational options and opportunities for their deaf children. In addition, networking allowed participants to understand the IEP process better and support their children's academics when they interacted with other parents for advice or support.

8) Theme eight: Advocacy. The last theme, *advocacy*, focused on how participants advocated for their deaf child during the IEP process, as well as how they



fought and negotiated for their child's rights to get the necessary services. Results found that the majority of participants were aware of ASL interpreting services available for their deaf children, but stated that their children had insufficient access to interpreters and support personnel with ASL fluency. One example was when a deaf parent, Xavier, fought to get access to ASL interpreters for his child's mainstreamed classes. Xavier explained to the IEP team at the meeting several incidents where his son had missed information during the class, and requested interpreters to meet his son's educational needs. Two other deaf parents, Jose and Ana, called for an IEP meeting and requested a speech therapist who was fluent in ASL for their child. The school district denied their request because a speech therapist with fluent ASL skills was not available at their child's school. With determination, Jose pointed out that there was in fact a speech therapist fluent in ASL available in a school district nearby. Irina always advocated for her children and one time she refused to allow the school to place her child in the average classroom; she expressed these concerns to the school and they moved her child's placement.

All six parents reported that negotiating with the IEP team was something that they experienced, and that clearly informing the team of their expectations and requests were not always met with success. One example was with a deaf father, Xavier, who stressed the importance of ASL interpreters for his hard of hearing son who uses both spoken and sign language. Xavier and his wife thought that their son's academic performance was average compared to his hearing peers until he had two deaf classmates who utilized ASL interpreters for History and Science. Their son realized that he missed information when he was able to compare the curricular content with spoken English, used by his teacher, and ASL, as conveyed by the interpreter. He informed his parents about the benefits he had with the use of an ASL interpreter, which was an accommodation given to his two deaf classmates. As a result Xavier and his wife fought to get ASL interpreters in their son's classroom by calling for several IEP meetings, but they were unable to convince the school district that their son needed ASL interpreters.

When parents developed advocacy skills from friends who are deaf educators, this skill helped these parents to effectively support and advocate for their children. As a result, the IEP team promptly addressed and honored Jose and Ana's (deaf parents) requests. Jose recalled from one of his IEP experiences:

It all goes well, they [The IEP team] treat us fairly. They realize [that] we know a lot... they know that we know what we are talking about and [they] can't ignore our requests.

The majority of parents expressed the need to have an advocate during IEP meetings. They believed that if they had an advocate, they would ask for more information prior to IEP meetings and not experience barriers to understanding the IEP process.



Four parents experienced resistance from the IEP team. An example of this resistance was found in a hearing mother's, Julia, comment. The IEP team did not immediately honor her request for a real time note taker in the classroom, which would be recorded on a screen for her son to read. This request was initially denied as it was not seen as related to her son's hearing loss. This kind of accommodation supported her son's visual learning style. As a result of finally obtaining this support, he received a high school diploma and went to college. Julia also felt that her younger son was smart but was not reaching his full academic potential. She believed that the school provided instruction based on what they already had at the school district; yet they would not go beyond the minimum standards to maximize her child's academic potential. Through her advocacy, Julia emphasized to the IEP team that they needed to look at what was best for the child, not use the "cookie cutter" approach. The IEP team cannot force parents to follow one particular approach, which may work for others.

Another example of how a parent advocated for her three deaf children was when Irina (who is deaf) observed them in their classrooms. After her observations, she discussed their progress with their teachers and suggested other strategies. She also met with the principal to discuss performance reviews for her children's teachers if she felt that they ignored her suggestions. She reported that her motivation related to these experiences was to ensure that her children received the highest quality education.

The last theme, *advocacy*, clearly showed how parents were their children's best educational advocate whether they needed to negotiate or overcome resistance from school personnel. Parents ensured that their children had access to appropriate accommodations such as ASL interpreters and notetakers. As well, their advocacy skills enabled them to ensure that their children achieved positive educational outcomes. One can see the logical interrelationships among these themes.

### 3.2. Axial Coding

The eight interconnecting themes identified in open coding were reduced into three larger categories during axial coding; 1) *collaboration*, 2) *comprehension*, and 3) *expectations*.

**Axial code 1: Collaboration.** Under the first code of *collaboration*, three themes were included, *rapport*, *feedback*, and *diversity*. *Collaboration* focused on how participants interacted with school personnel and other parents, as well as which strategies were seen as the most effective. Strategies included developing relationships between participants and members of the IEP team, ensuring that participants thoroughly understood what was expected of them during the IEP process, and establishing a mutual understanding and respect among participants and members of the IEP team.

A common finding was on how to foster positive relationships between families and members of the IEP team participants; parents emphasized that school

personnel should have expectations for high performance based on the deaf child's minds, not the fact that they were deaf. Parents wanted this collaboration to ensure their deaf children's educational progress, both at school and home. Interviewees advised other parents to invite other personnel who are familiar with Deaf culture or deaf education to the IEP team to become a support system for the family. They recommended Assessment Intervention specialists and deaf advocates, as examples to support the family and their decisions. Under the category of collaboration, parents encouraged others to ask a lot of questions about the IEP process. A vital part of this collaboration was the emphasis on physically attending IEP meetings, not using either an audio phone call or a video conference to substitute for their presence at the meeting. In order to believe that there was mutual understanding and respect among participants and members of the IEP team, participants felt the need to be "heard" and to have their ideas incorporated into the IEP. This collaboration happened when parents were able to ask questions freely. Collaboration was seen as involving respect by the school personnel, regardless of the families' race, sexual orientation, education, or religion.

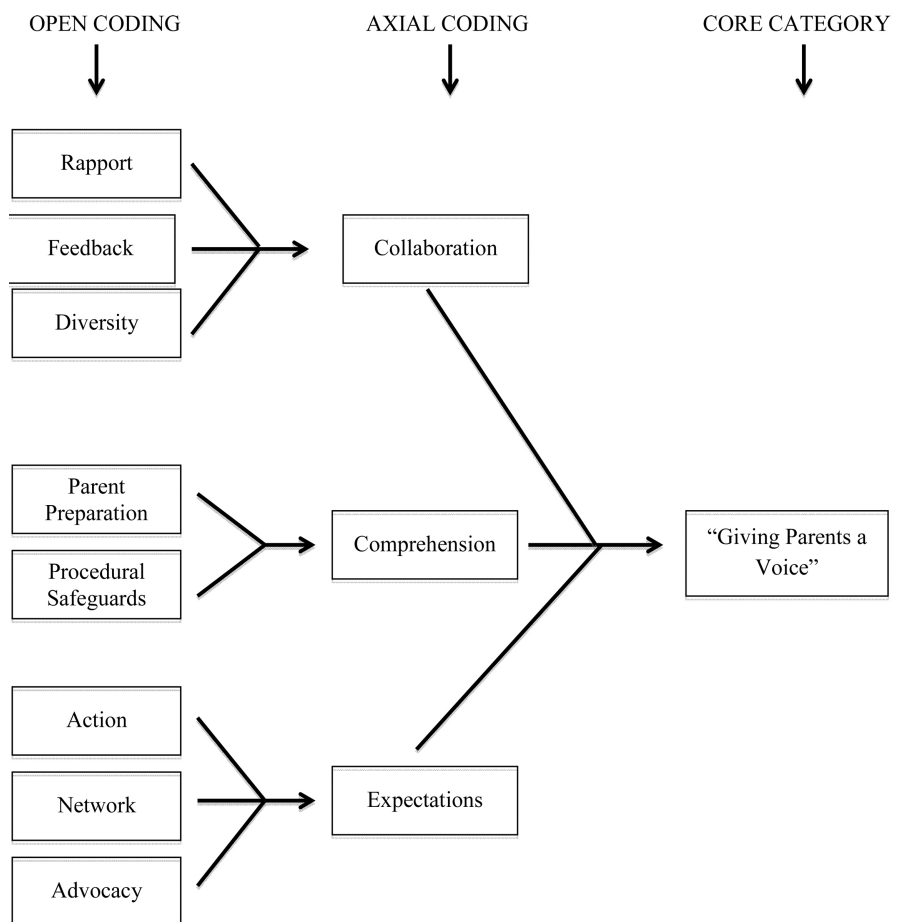
**Axial code 2: Comprehension.** The second code, *comprehension*, included the themes of *parent preparation* and *procedural safeguards*, relating to knowledge of the IEP process and parental rights. *Comprehension* focused on what participants needed to know about the IEP process to effectively prepare for meetings. IEP documents are written in "legalese", which is difficult for lay people to understand. Participants commented on this issue and would have liked to have a translation of the procedures that was more "parent friendly". Common findings included interviewees encouraging other parents to gain knowledge of the IEP process by observing their deaf children in the classroom to help set appropriate goals. They encouraged parents to contact the IEP team in advance for the agenda, progress reports and evaluations.

**Axial code 3: Expectations.** The third code, *expectations*, included the last three themes of *action*, *network*, and *advocacy*. This code related to utilization of resources, which provide leverage to help deaf children receive appropriate services. It helps parents understand what is happening at school and how to support their child at home. Several participants monitored their deaf children's educational progress at home by frequently interacting with them to check for comprehension. They also following up on their homework assignments; thus setting high expectations for their children. The majority of the participants were aware of the interpreting services available for their deaf children; however, some participants wanted direct communication in ASL at school rather than indirect communication through interpreters for their children. Deaf educators served in the pivotal role of advocate, speaking up for deaf children. Additionally, parents wanted the IEP process to be specific for the needs of their child. They stated that using a "one size" or cookie cutter approach to meet all students' needs does not work for all deaf students. Parents wanted school person-

nel to share these high expectations.

### 3.3. Core Category

The three axial codes were synthesized to determine the core category of “*Giving Parents a Voice*”. All parents, even Julia who works within the school system, felt that they were “visitors” in their children’s education and that school personnel took control. Parents wanted to collaborate and understand the processes involved in their children’ education. All parents wanted the school personnel to have high expectations for their children and not see them as “broken hearing children”. Parents wanted to provide insights and recommendations to better support other parents who would go through this process in the future. Their hope was to “teach” school personnel how to collaborate for the benefit of the child. When participants have a “voice” during the IEP process and IEP meetings, it empowers them to be an equal team member and positively supports their deaf children’s education. A visual diagram is shown in **Figure 1** to



**Figure 1.** A grounded theory analysis is represented in a visual model. Open coding consists of eight themes while axial coding consist of three categories; collaboration, comprehension, and expectations. Each category contains either two or three themes from open coding. The core category of “giving parents a voice” was determined by the shared themes found in participants’ experiences during the IEP process.

summarize the results.

In summation, this core category showed participants' diverse experiences and perspectives of the IEP process. In addition, participants provided advice for other parents on how to navigate through the IEP process more efficiently and to better understand IEP meetings for the support their deaf children.

#### 4. Discussion

The overarching findings here highlight the importance of “giving parents a voice” during the IEP process. When parents are seen as an equal member of the IEP team, they have a better understanding of this process. As well, they are more prepared and better informed about their children's educational progress. This collaboration needs to be equal and school personnel need to listen to parents and value their suggestions. If parents and school personnel follow the CEASD idea of *Child First*, more synergistic IEPs could be developed to be implemented for both school and home. Parents and school personnel then work together for more effective outcomes, as noted by Underwood (2010). Therefore, the issue of “giving parents a voice” was a critical component and overarching theme for participants to feel like an equal team member during IEP meetings, be respected for their opinions and concerns, be their child's best advocate, and achieve positive educational outcomes.

*Child First* (CEASD, 2012) discusses that each deaf child has unique needs and all of their needs and these specific needs should be the focus on the IEP. This idea in conjunction with IDEA supports the critical importance of parents' ability to comprehend IEP procedures (Easterbrooks et al., 2004). Easterbrooks et al. (2004) highlight that two or more members with extensive experience in the needs of deaf children are required in the new IDEIA regulations. This policy is an attempt to include parents in the decision making components of the development of the IEP. Underwood (2010) points out that not fully having a voice and understanding their parental rights disempowers parents in the IEP process. Therefore, what this study points to is the need for transparency in the legal process so that parents are able to advocate for their children while also providing the kinds of linguistic and academic support at home that will help their children succeed. However as noted by Knight (2010), parents frequently do not receive the necessary information to understand their rights. This lack of understanding leads parents to be dissatisfied with IEP meetings (Shah, 2012) and blocks parent-school personnel collaborations.

*Child First* (CEASD, 2012) attempts to reframe LRE from “least restrictive environment” into meaning a “language rich environment”. The purpose of this shifting is to highlight that parents and their deaf children need to be heard when making decisions about what will best serve the family. Importantly, CEASD (who historically focused on sign language) and the OPTIONS schools (who have historically focused on spoken language) have come together in an attempt to provide the best for each child without arguing epistemology. These

meetings have been ongoing for about three years and collaborations are developing that help parents avoid needing to “choose” between sign or spoken language when their child is identified as deaf. More work is ongoing and these meetings show great promise for deaf education and hopefully better collaborations between parents and school personnel.

When going deeper into the data, the results suggest limited, if any, collaboration between parents and school personnel. Parents did report some positive experiences with the IEP process, but they clearly had to work to get feedback and develop rapport with school personnel. Parents reported the importance of open communication and wanting to be involved with their child’s education, rather than being a passive recipient of received knowledge from school personnel. As noted by [Peralta \(2013\)](#), parents desire for high academic achievement for their child is frequently blocked by insufficient collaboration with school personnel.

Parents also saw issues of diversity as problematic when trying to develop collaboration with school personnel. This study intentionally recruited families with signing children as well as some families where English was not the first language of the parents to better understand their perceptions of IEP meetings. Importantly, these parents felt that as English was not their native language they were either ignored by school personnel or seen as not equal partners. They reported a lack of respect and a feeling that school personnel “looked down on them” due to either the home language or their lack of a college education. Parents internalized these frequent non-verbal slights from the school personnel at IEP meetings and were concerned as they felt that they should be seen as an equal partner within the process.

Some parents explained that a positive rapport was established when they were provided with accessible communication, such as having a specialist who signs or an interpreter who was familiar with Deaf culture and ASL. This accessible communication allowed the IEP process to be smoother when there was mutual respect and support. However, there were miscommunications, frustrations, and disagreements between the IEP team and parents. As mentioned by [Aldersley \(2002\)](#), school placement decisions often happened during IEP meetings between parents and school personnel, but these decisions were not always appropriate to meet the linguistic and academic needs of deaf children.

Parents expressed the belief that if they had effective collaborations with the IEP team and were involved with their children’s school, they could better support their children’s educational outcomes. [Shaffer \(2010\)](#) found that the overall satisfaction levels of parents were higher when they were actively involved in the IEP process. Therefore, it is critical that parents and school personnel have open communication and a strong collaboration. According to [Mislán, Kosnín, Jiar, Said, & Hamid \(2011\)](#), Malaysian parents’ voices were highly valued by the IEP team because in their culture there is a strong belief that extensive support at home encourages children to be successful. Therefore, collaborations with educational specialists who include parents can improve academic outcomes for children ([Underwood, 2010](#)).

Given the importance of collaboration, school personnel need to actively listen, support, and collaborate with diverse parents regardless of cultural and linguistic backgrounds. Jung (2011) called attention to the importance of parents' voices who are from diverse cultural and linguistic backgrounds. Unfortunately, structural values and attitudes from school personnel act as barriers, lowering expectations for their children's academic achievement. One participant (Julia) shared that the IEP team needs to "respect parents".

Given that some of our parents were deaf ASL users, they were able to easily understand the needs of their children. This state of affairs is not the norm, because the majority of deaf children are raised by hearing parents (Karchmer & Mitchell, 2003) who have never met a deaf individual until their own child (Benedict, 2013). Accordingly, these hearing parents were most likely to feel that school personnel were more aware of best educational practices. Unfortunately, school personnel do not always make the best decisions with appropriate class placement at mainstream schools for deaf children, if they hold a pathological view of deaf children. This approach often views deaf children as needing to be fixed and made normal (Benedict, 2011). In contrast in this study, parents perceived that school personnel did not understand how to best serve deaf children; this belief leads them to provide advice and support to other parents with deaf children.

One important piece of advice was that parents must understand the procedural safeguards in place through the law. They also stated that parents need to be prepared and strongly encouraged them to physically attend the IEP meeting so that they could take an active role. These parental suggestions were also found in Trainor (2010a), who noted that a deaf advocate was beneficial to parents and provided cultural and language mediation between deaf children, hearing parents, and school personnel. With input from deaf advocates and deaf mentors, parents can speak up to the IEP team and request specific services for their deaf children.

In a similar way, parents strongly emphasized that they must be proactive in understanding all of their legal rights (Easterbrooks et al., 2004). As noted by Maydosz & Maydosz (2012) these policies and procedures need to be provided to parents in an understandable format. Lo (2012) stressed the importance of involving parents in the IEP goal planning with the consideration of their knowledge level and cross-cultural communication preferences. Accordingly, these documents need to be translated into more everyday language so that parents do not feel that it is a "business proposal" with complex concepts and topics. In a similar finding, Cawthon & Caemmerer (2014) when investigating parental satisfaction found that a major issue was their inability to understand all of these legal rights. Providing more accessible information will increase parents' confidence and allow them to become more effective collaborators. Possible solutions for the complexity of these documents are to develop parental workshops with take home materials to help prepare them to become active advocates for their

children.

As stated in the special education laws children are entitled to a free and appropriate education, also known as FAPE (Gartin & Murdick, 2005). For this reason, parents have the right to ensure that expectations for their children will lead to high levels of academic achievement. All parents want to see their deaf children have positive educational outcomes and be successful. Cawthon & Caemmerer (2014) asked parents about their own expectations for their children's educational outcomes and more than one third of their participants responded that they expected their children to complete a bachelor's degree. Unfortunately, about six percent of these parents only expected their children to get a vocational degree. This cycle of low expectations is all too often a major issue within deaf education (Santini, 2014; Simms, 2014). Parents in this study were committed to avoiding these types of expectations and were strong advocates for their children. As is common in Deaf culture (Holcomb, 2013), these parents wanted to support others—reflecting the communal nature of deaf people. They worked to develop networks to share their knowledge, and encouraged and supported others to take action in the education of their own children.

One possible solution to the low expectations of deaf children is to shift away from the pathological view and move to a Deaf epistemology (Holcomb, 2010) that focuses on visual access, visual language, and visual learning. Deaf children are visual learners and need access to visual language in a Deaf-centric learning environment, both at home and at school. Deaf children need to “see” what hearing children “hear” (Holcomb, 2010). When parents view deaf children through the lens of a Deaf epistemology, they can effectively support their children's visual learning styles (Hauser, O'Hearn, McKee, Steider, & Thew, 2010), achieve positive educational success with their children (Holcomb, 2010), and reframe deaf children as positive with having multiple opportunities (Benedict, 2011).

## 5. Recommendations

The results of this study leads to several recommendations from parents on how to improve the IEP process. First, parents are often overwhelmed by the large number of school personnel at the meeting. To bring more balance, it is suggested that the IEP meetings include Deaf mentors and advocates who are used to being in this type of high stakes meeting. Deaf advocates with extensive training in the IEP procedures and professional mediators can advise parents on which step comes next. This change allows parents' confidence and their voices to be heard.

Parents are supposed to make the final decision on any changes the IEP team may recommend (Wright et al., 2010). But given the larger number of school personnel on the IEP team parents do not feel that their voice has equal weight. Therefore, if a consensus cannot be reached, parents should not sign the IEP until they are completely satisfied. Having the Deaf mentor or advocate can help



with this issue as they can remind the parent(s) that if they are not satisfied, they do not need to sign. This inability for parents to obtain the accommodations that they feel are necessary should trigger an automatic appeal which must be resolved within a month of the original meeting. If these mechanisms cannot be implemented within the school's IEP policy, the National Association of the Deaf should be contacted to help the family and the school resolve the need for the requested accommodation.

Next, documents should be provided in simple and plain language that is easily understood by parents (Mandic et al., 2012) at an average reading level of sixth grade, rather than that of a ninth grade reading level. Additionally, the use of twelve point font, as opposed to seven to eight point font will make the documents easier to review (Fitzgerald, 2006). Parents in this study suggested a summary of only one or two pages to be developed and shared with parents to help them with their comprehension of the policies.

If school resources could be share more widely, rather than only having district resources available, parents could request more specific types of accommodations for their children. Each district will not be able to provide low-incidence resources but these could be leveraged from nearby districts. Identifying mechanisms that could permit schools to exchange goods and services would be beneficial to children, their families, and school personnel.

## 6. Limitations and Future Research

There were several limitations in this study including the sampling strategy, sample size, and criteria of participants. Only six parents with ten deaf children who resided in the Southwestern part of United States were included in this project. Therefore, this sample is not representative of all parents of deaf children across the United States. In order to have a diverse sample, other parents were not included; this choice allowed Spanish-speaking parents to be included. It is possible that parents whose first language is not English may have additional needs that were not detected in this study.

Moreover, the study was a qualitative study and therefore is not generalizable to larger populations. Given these findings, future research can use quantitative methods to strengthen these initial findings. Surveys would give more generalizability but would still only have descriptive and correlational data. Another possibility is focus groups with parents after IEP meetings in order to allow them to create additional resources that could be used for future IEP meetings.

It is worth developing the translations of these materials into parent-friendly language to encourage them to become equal partners in the IEP process. These materials could be converted into trainings to allow school personnel to help prepare parents to be effective advocates for their children. Parent-teacher associations could provide workshops with role-plays and scenarios so parents can develop negotiating skills and present evidence to demonstrate their deaf children's strengths (Trahan, 2016). This action would assist the IEP team in recom-



mending goals to measure deaf children's abilities in a holistic approach, rather than solely based on test performance scores (Trahan, 2016). If procedural safeguards could be revised, using simpler language, parents would be able to participate more effectively during IEP meetings.

## 7. Conclusion

In conclusion, there are two important findings from this study. First parents, regardless of how much they work with schools, do not fully understand the IEP process. Next, parents' voices are frequently not "heard" when they request accommodations for their deaf child. Future research needs to clarify how to obtain collaborations between parents and school personnel, which place the *Child First*. Parents need to be seen as valued and equal partners with school personnel so that deaf children can maximize their linguistic, academic, and socio-emotional development.

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# Teachers' Perceptions of Individualized Education Program (IEP) Goals and Related Services

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**Abstract** The rationale for developing an Individualized Education Program (IEP) is to identify appropriate goals to ensure that children who have disabilities are successful at school. This study focused on investigating teachers' views of the most important IEP goals for their young deaf students, as well as to ask them which services students were receiving. Our purpose was to identify the most prevalent IEP goals guiding early childhood education (ECE) programs and to determine whether services provided were appropriate for addressing the students' most critical needs. The participants included 118 young deaf children, ages 3–5, participating in the VL2 Early Educational Longitudinal Study (EELS). Results found that the IEP goals focused on three main areas: 1) improving school readiness; 2) improving communication (both sign communication and speech communication); and 3) improving pre-academic performance in targeted areas. Additionally, associations between specific IEP goals listed and related services were explored in relation to educational setting and school language philosophy. Recommendations for educational practice and further studies are provided.

**Keywords** Deaf children · IEP · Special needs services

Prior to 1975, children with special needs were often unable to access free and appropriate public education. This changed with Public Law 94–142, which was passed by the United States Congress in 1975. This law was a legislative milestone in the history of education of students with disabilities and provided the opportunity for students with disabilities to be integrated into public schools near their family homes. Parents of children who were cognitively challenged pioneered the law, but it has

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greatly impacted the lives of all children with disabilities, including those who are deaf. The law was initially titled the Education for All Handicapped Children Act, but was later changed to the Individuals with Disabilities Education Act (IDEA) in 1990 (U.S. Office of Education 2004).

One important characteristic of IDEA was the requirement that each child receiving special education services must have an Individualized Education Plan, referred to as an IEP. An IEP is an education document for children ages 3 to 21. The IEP specifies the goals and services a child needed to be successful in school. As such, an IEP is an important aspect of special education as it lists annual goals and the corresponding required services for every student enrolled in a special education program. The enumeration of specific goals and services enables both parents and educators to monitor students' progress to ensure expected learning outcomes are met. Additionally, the annual IEP review provides educators with feedback about the effectiveness of the services provided to the students.

A typical IEP will include the following: (a) an assessment of the child's present level of performance (PLAPF); (b) a list of measurable goals and objectives for the coming year; (c) a schedule of when the child's progress toward meeting the annual goals will be measured and a specification of what assessments will be used to assess progress; as well as (d) a prescription of specially designed instruction and related services deemed necessary to meet the goals.

Although IDEA mandates the components of the IEP, the federal law allows individual states to decide procedures, formats, and other additional details that are to be included in the IEP. Some IEPs require goals and objectives that focus on student's special needs as well as the state's curriculum standards that are to be met. According to Smith (1990), the goal of implementing an IEP was to attend to the specific and distinctive needs of each child, as well as to develop goals and strategies to meet the challenges posed by the student's disability. Furthermore, the IEP outlines a set of services and adaptations that are designed to ensure the successful accomplishment of these goals (Grisham-Brown and Hemmeter 1998, Pretti-Frontczak and Bricker 2000).

Past research on IEPs of young children in early childhood education (ECE) programs has focused primarily in three areas: a) descriptions of goals and objectives (Kwon et al. 2011; O'Connor and Yasik 2007); b) evaluations of IEP quality (Barton et al. 2012; Boavida et al. 2014; Ruble et al. 2010; Ruble and McGrew 2013; Scarborough and McCrae 2008); and c) investigations of parents' perceptions of and participation in the IEP process (Dabkowski 2004; Fish 2006; Li et al. 2003; Lo 2012). Previous studies of the IEPs of young children with disabilities noted that IEP goals were designed mainly to address the children's deficits in language, literacy and social-emotional development (Kwon et al. 2011; O'Connor and Yasik 2007; Ruble et al. 2010; Giangreco et al. 1994). Additionally, students' IEP goals were aligned with specific professional human service areas, e.g., physical therapy, occupational therapy, speech/language pathology, or ophthalmology. Giangreco, et al. investigated how effective IEP documents were in addressing communication needs and in providing appropriate interventions for students with multiple disabilities. Their findings suggest that, more often than not, IEP goals and objectives were vague, broad, inconsistent, and ineffective in attending to children's educational needs.

According to the report from the Commission on the Education of the Deaf (COED; Commission on Education of the Deaf 1988), the areas of concern that should be



included in the IEPs for deaf children were related to communication, language, academics, social and emotional health, as well as the use of residual hearing. Yet the inclusion of a communication plan in a deaf student's IEP has not been universally adopted. (Examples of state departments of education that include communication plans in their IEPs for deaf students include Colorado, Iowa, Maryland, Nebraska, New Hampshire, New Mexico and West Virginia). Deaf student' IEPs often do not include fully developed language and communication access plans; rather they focus primarily on the students' hearing disability, and as noted above, are more oriented toward providing medical and rehabilitation services than in specifying communication strategies that ensure access to learning materials. Further, IEP objectives often fail to provide adequate descriptions of how deaf children's needs are both identified and addressed in the services prescribed by the IEP. In other words, there are often mismatches between the child's needs and the related services that are provided. Additionally in recent years, there has been an increased focus on school accountability brought about by the No Child Left behind Act (NCLB) 2001. This accountability from NCLB has led to a growing emphasis on linking IEP goals to state content standards in order to improve academic performance.

Now focusing on the educational achievement of deaf students, research shows that their academic achievement is frequently lower than that of their hearing peers (Allen 1986; Antia et al. 2009; Cawthon 2008) and it is evident that poor language skills contribute significantly to the noted achievement deficits. Research shows that these deficits are related to the need to receive comprehensible language input as early as possible (De Houwer 2007; Hart and Risley 1995, 1999; Snow 1994). A lack of complete access to language, both at home and school, can impact deaf children's cognitive and social development (Mayberry, Mayberry 2002a, b; Schick et al. 2007), leading to these lower academic levels. Given the relationship between language and cognition (McCune-Nicolich 1995; Piaget 1962; Vygotsky 1962), it is important to understand and attend to the language needs of young deaf children; it would be logical that these needs be reflected in the deaf child's IEP.

For many young deaf children, language and social interaction has been noted as a significant concern (Farran et al. 2009; Lederberg and Mobley 1990; Meadow 1981; Meadow-Orlans et al. 2003; Morford and Mayberry 2000; Musyoka 2015; Schick et al. 2003, Schick et al. 2007; Wedell-Monnig and Lumley 1980). Hence meeting their language and communication needs is critical for academic success (Esera 2008; Siegel 2000; Freel et al. 2011; Myers et al. 2010). Additionally, deaf children vary considerably with respect to their communication and language choices and backgrounds. They may arrive at school with varying communication backgrounds that include the use of spoken language, American Sign Language (ASL), Cued Speech, or "Total Communication," which is a form of manually-coded English or sign-supported speech, (e.g., Signed English or Signing Exact English) (Li et al. 2003; Meadow-Orlans et al. 2003). Thus, the heterogeneity of young deaf children presents additional challenges for creating IEPs that are customized to each child's communication needs.

Critically, language and communication are two different issues and it is necessary to understand the difference between the terms to understand deaf students. Language is a socially shared, conventional system that uses a set of rules and arbitrary signals (voice sounds, gestures, or writing) to represent ideas (Owens 1996). Unlike language, which is symbolic and rule based, communication is a social interactive system to

express one 's self. Based on the definition of language and communication, ASL has been identified as a language that has a shared linguistic code. ASL uses arbitrary visual signals and a linguistic structure that follows specific set of rules that defines its' grammar (Baker-Shenk and Cokely 1980; Valli and Lucas 2000; Liddell 2003). Communication can occur regardless of the language used (Kretchmer and Kretchmer 1978). Hence, with deaf students communication is a form of expression that does not necessarily use language, as can be seen in the development of home signs (Mylander and Goldin-Meadow 1991). Deaf students may use various communication systems to express themselves, but still be deprived of language access and its use.

Deaf native signers' language development, as well as their vocabulary development, is similar to that of hearing children (Allen et al. 2014a, b; Calderon and Naidu 2000; Williams 2004). Additionally, these deaf native signers have the language foundation necessary to support early literacy (Cunningham and Stanovich 1997; Hart and Risley 1995). This situation unfortunately is not the case for most deaf children. Research shows that most deaf children arrive at preschool with limited language to facilitate literacy development (Benedict 2013; Erting 2003; Kuntze 1998). Therefore, IEPs for deaf students need to be written to facilitate the learning process and to meet their educational needs. Early intervention is critical for deaf students in order to address the continuing gap in their language and literacy skills. The current study investigated teachers' perceptions on the IEP goals considered to be the most important and the related services provided to young deaf and hard of hearing students.

## Methodology

### VL2 Early Educational Longitudinal Study (EELS)

The data used in this study was drawn from an extant dataset comprised of information collected during the first year of a three-year study called the Early Educational Longitudinal Study (EELS) conducted by the Science of Learning Center on Visual Language and Visual Learning Center (VL2). Designed to track the academic growth over a three-year period, EELS is made up of four subsets of data including: 1) direct assessments of the children's language, communication, and cognitive skills; 2) surveys of parents regarding family background characteristics; 3) surveys of teachers regarding classroom characteristics; and 4) surveys of program administrators regarding school and policy characteristics (Allen et al. 2014a, b). The current study focused on data from surveys of teachers regarding classroom characteristics.

### Participants

Participants included 118 young deaf children, between the ages of 3 to 5. A total of 32 programs from 25 states agreed to participate in the EELS study. Participating programs included early childhood education (ECE) programs. They included elementary schools (17 %), preschools in an elementary school (53 %), early childhood or preschool



centers or nursery schools (26 %), child care centers (2 %), child development centers (1 %) and home based programs (1 %). Participating deaf students were from diverse backgrounds and included White (87.9 %), African American (9.3 %), Native American (3.6 %), and Asian (5 %) children. These proportions do not reflect the overall distributions of deaf children across the United States and should be considered when generalizing findings. The home languages identified included English (65.8 %), Spanish (8.2 %), ASL (67.7 %), and Signed English (15.2 %). Over 28 % of the participants had a cochlear implant. The communication primarily used in the schools varied, with spoken language representing 18 % of the programs, sign language representing 31 % of the programs, sign supported language used in 43 % of the programs, and spoken language with cues used in 8 % of the programs.

## Research Questions

The following research questions guided the current study.

1. What three IEP goals were considered by teachers to be the most important?
2. What types of services were provided to deaf children to support instruction?
3. What is the relationship between the IEP goals identified and related services provided?
4. What is the relationship between the IEP goals identified and the educational setting of the child as well as these goals and the mode of communication primarily used to teach the child?
5. What is the relationship between the type of services identified and the educational setting of the child as well as the relationship of those services to the mode of communication primarily used to teach the child?

## Data Collection

Data reported here was collected from two teachers' questionnaires, the Early Childhood Teacher Questionnaire or the Kindergarten Teacher Questionnaire, depending on the age of the child. Both questionnaires included a set of questions about individual child's IEP goals and services for meeting these goals.

Questions in the survey that focused on the students IEPs addressed the following:

- The total number of preschoolers with IEPs for special education services;
- The three most important IEP goals for the child;
- How the child's IEP goals and objectives were addressed in the general education classroom;
- The amount of progress the child made during the school year with regard to the goals specified in the IEP; and
- The type of services provided to the child in support of instruction through the school system during the current school year.

Survey responses from the teachers of 118 of the sample students were returned to VL2.

## Data Analysis Plan

The data analysis plan included descriptive statistics and Chi-squares. Graphs were also used to display the data set. These descriptive analysis include a summary of the frequencies for each variable, to describe the following: (a) IEP goals reported as the most important; (b) teachers' perceptions of the progress of each child on the goals stated in their IEP; and (c) the percentage of students receiving related services. Chi-squares were computed to test the degree of association between variables. Alpha was set at 0.05 and adjusted with a Bonferroni correction as needed.

## Results

Descriptive statistics showed that almost all deaf and hard of hearing children in ECE placements had IEP goals (98.4 %). Therefore, schools were in compliance with federal laws requiring IEPs for children receiving special services.

### **Research Question 1: What Three IEP Goals are Considered by Teachers to be the Most Important?**

Teachers were asked to identify the three most important IEP goals for each child from a list of goals. This list included the following **in no particular order**; school readiness, pre-academic performance in a specific area, social skills, appropriateness of general behavior, adaptive behavior or self-help skills, speech/communication skills, fine motor skills, gross motor skills, and sign communication. School readiness refers to language, cognitive, social, emotional, physical and motor skills and behaviors that make the child ready to learn at school entry (Scott-Little et al. 2006; Wesley and Buysse 2003). On the other hand, pre-academic skills refers to information learned in the child's environment prior to the start of formal schooling which is relevant to school adjustments and academic success. Pre academic skills include qualities of academic readiness such as exposure to mathematics (counting, adding and subtracting objects), reading (recognizing of letters) and writing (scribbling, drawing and coloring, (Palermo et al. 2007; Wesley and Buysse 2003). The teacher was also allowed to include any other focus areas not included in the survey. Table 1 shows the teachers' responses on all the IEP goals from those selected as the most important to the least important.

According to the teachers' reports, the overall three most important IEP goals for students focused on improving school readiness (63.6 %), improving sign communication (46.6 %), and improving speech communication (41.5 %). Improving pre-academic performance and improving social skills were also reported about one third of the time.

### **Research Question 2: What Types of Services are Provided to the Deaf Children to Support Instruction?**

On the question, "Indicate the following services provided to this child in support of instruction through the school system during the current school year." teachers reported

**Table 1** The three most important IEP goals for the children as designated by teachers

IEP Goal	Students % (n = 118)
Improve school readiness	63.6 % (n = 75)
Improve sign communication	46.6 % (n = 55)
Improve speech/communication skills	41.5 % (n = 49)
Improve pre-academic performance in a specific area	32.3 % (n = 38)
Improve social skills	28.8 % (n = 34)
General behavior	20.3 % (n = 24)
Adaptive behavior or self-help skills	15.3 % (n = 18)
Improve fine motor skills	7.6 % (n = 9)
Improve gross motor skills	5.9 % (n = 7)

a wide range of related services. The percentages of students receiving each type of special education related services are reported in Table 2 if they were above 5 %.

As can be seen in the table, the majority of the children were provided services related to communication. Some services were reported infrequently, in less than 5 % of the children. One that was surprising to note was that less than 1 % of the children received remedial ASL services as most of the children (about 90 %) are from hearing families. Sign language instruction as related services referred to having a *teacher of the deaf and hard of hearing* who uses sign language as opposed to having an itinerant teacher or a sign language interpreter.

ASL remedial services referred to specific instruction of ASL as a class to support the student development of the ASL. Other services with low frequencies included deaf-blind interpretation (0.8 %), CI mapping (3.4 %), tutoring (0.8 %), Oral/Aural AVT (1.7 %), Vision/O&M services (2.5 %), counseling/rehabilitation (4.2 %), and psychological services (2.5 %).

**Table 2** Services Reported in Children’s IEP Documents by Teachers (n = 118 students)

Services	% of those who received services
Speech & language training	84 %
Audiology	50 %
Transportation	46 %
Sign language instruction	43 %
Classroom paraprofessional	36 %
Occupational	36 %
School nurse/medical	21 %
Social work services	21 %
Adaptive PE	7.6 %
Signed transliteration	6.8 %
Recreation, therapy	6 %

### Research Question 3: What is the Relationship Between the IEP Goals Identified and Related Services Provided?

The associations between the services offered to the child and the child's most important IEP goal was then analyzed. Significant associations were noted as follows. There was a significant association between those who received sign language instruction services and had improving pre-academic performance as their most important IEP goal ( $\chi^2 = 4.220$ ,  $N = 115$ ,  $p < 0.05$ ). Next, a significant association was noted between those who received sign language instruction services and had improved sign communication as their most important IEP goal ( $\chi^2 (1, n = 115) = 6.849$ ,  $p < 0.05$ ). Then, a significant association was noted between those who received classroom paraprofessional services and had their most important IEP goal as improving social skills ( $\chi^2 (1, n = 115) = 5.898$ ,  $p < 0.05$ ). There was also a significant relationship between those who received speech-language pathology services and had improving speech/communication skills as their most important goal ( $\chi^2 (1, n = 115) = 12.981$ ,  $p < 0.05$ ). Occupational/physical therapy services were noted to have a relationship with improving fine motor skills ( $\chi^2 (1, n = 115) = 16.971$ ,  $p < .05$ ), and improving gross motor skills ( $\chi^2 (1, n = 115) = 7.780$ ,  $p < .05$ ) as the most important goals.

**Educational Setting** Another important discussion relates to where students are in terms of educational setting. Fig. 1 shows that a supermajority of the students attended three main educational settings, including elementary schools ( $n = 34$ ), preschools in elementary schools ( $n = 85$ ), and preschools ( $n = 27$ ). We will relate both IEP goals and types of services to these educational settings.

**Language Choice** Language choice also is an important component in educational settings. Within the EELS project three philosophies dominated, with a fourth showing an extremely low frequency, that of spoken language and cueing (see Fig. 2). Figure 2 shows that three communication modes that were primarily used to teach the child including Spoken language only ( $n = 22$ ), sign language only ( $n = 64$ ), and sign supported spoken language ( $n = 57$ ).

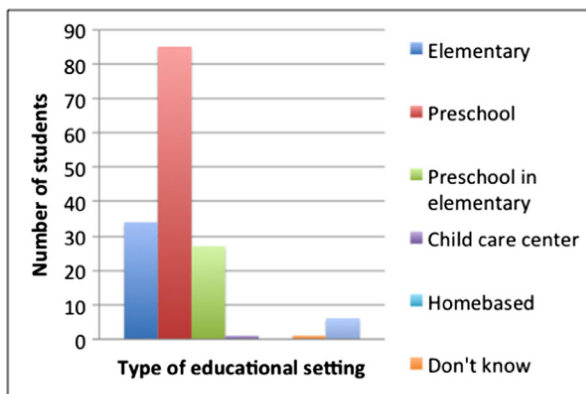


Fig. 1 Educational settings the child attends

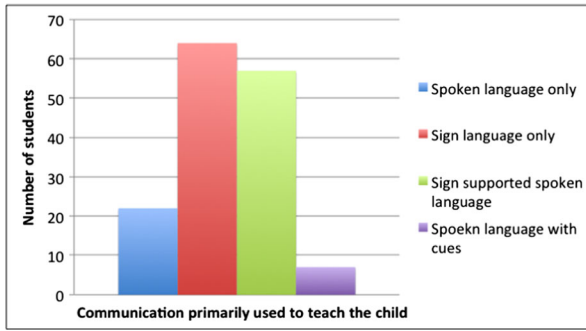


Fig. 2 Communication mode primarily used to teach the child

**Research Question 4: What is the Relationship Between the IEP Goals Identified and Educational Setting of the Child as Well as These Goals and the Mode of Communication Primarily Used to Teach the Child?**

**What is the Relationship Between IEP Goals and the Educational Setting of the Child?** The next analysis focused on the three most frequent educational settings. In Table 3 a chi-square analysis showed there was no significant association between any of the IEP goals selected and the three main educational settings.

**What is the Relationship Between IEP Goals and the Mode of Communication Primarily Used to Teach Each Child?** This analysis focused on only the three main modes of communication used to teach each child from Fig. 2. A Bonferroni correction was used to correct for the total number of analyses completed in this section. Given an initial *p* value of 0.05 *p*-value, to show a significant association the new *p*-value needed to be 0.006. Therefore, no significant associations were observed between IEP goals and the primary mode of communication used with the child. However, trends can be seen between those had their most important IEP goal as improving speech communication skills and their primary mode of communication was either spoken language or sign supported spoken language (see Table 4).

Table 3 Number of students in each educational setting with each IEP goal reported

Educational setting	Elementary (n = 16)	Preschool in elementary (n = 40)	Preschool (n = 12)	$\chi^2$ value	<i>p</i> -value
Improve speech communication	6(37.5 %)	20(50 %)	4(33.3 %)	1.412	0.494
Improve social skills	6(37.5 %)	13(32.5 %)	3(25 %)	0.491	0.783
Improve sign communication	6(37.5 %)	15(37.5 %)	5(41.7 %)	0.073	0.964
Improve pre-academic performance in a specific area	3(18.8 %)	14(35 %)	3(25 %)	0.1.590	0.452
Improve overall school readiness	14(87.5 %)	23(57.5 %)	8(66.7 %)	4.597	0.100
Improve gross motor skills	0(0 %)	3(7.5 %)	2(16.7 %)	2.799	0.247
Improve fine motor skills	1(6.2 %)	3(7.5 %)	3(25 %)	3.432	0.180
Improve general behavior	3(18.8 %)	4(10 %)	2(16.7 %)	0.911	0.634

**Table 4** Number of students in communication setting with each IEP goal reported

IEP	Spoken language only ( $n = 9$ )	Sign language only ( $n = 27$ )	Sign supported spoken language ( $n = 34$ )	$\chi^2$ value	$P$ -value
Improve speech communication	5(55.6 %)	6(22.2 %)	21(61.8 %)	9.885	0.007
Improve social skills	2(22.2 %)	10(37 %)	10(29.4 %)	0.812	0.666
Improve sign communication	1(11.1 %)	9(33.3 %)	16(47.1 %)	4.212	0.122
Improve pre-academic performance in a specific area	3(33.3 %)	8(29.6 %)	11(32.4 %)	0.069	0.966
Improve overall school readiness	2(22.2 %)	18(66.7 %)	25(73.5 %)	8.268	0.016
Improve gross motor skills	2(22.2 %)	2(7.4 %)	1(2.9 %)	1.993	0.136
Improve fine motor skills	1(11.1 %)	4(14.8 %)	2(5.9 %)	1.348	0.510
Improve general behavior	1(11.1 %)	6(22.2 %)	4(11.4 %)	1.408	0.495
Improve self help skills	3(33.3 %)	2(7.4 %)	4(11.8 %)	4.120	0.127

### Research Question 5: What is the Relationship Between the Type of Services Identified and Educational Setting of the Child as Well as the Relationship of Those Services to the Mode of Communication?

**What is the Relationship Between the Type of Service Identified and the Mode of Communication Primarily Used to Teach Each Child?** Chi-square analyses of the three main educational settings and types of services did not identify any significant associations after a Bonferroni correction, setting the  $p$ -value at 0.003. Again, trends were noticed between those who received social work services in preschool (see Table 5). Adaptive PE also was more likely to occur in preschool while counseling and rehab services seemed to identify students in elementary school that were having difficulties (Table 6).

**What is the Relationship Between the Type of Service Identified and the Mode of Communication Primarily Used to Teach Each Child?** Chi-square analysis focused on the three main modes of communication primarily used to teach the child. Again, related to the number of individual analyses, after a Bonferroni correction the  $p$ -value was 0.003. Even though there were no significant associations, some trends can be identified in the data. Sign supported spoken language tends to have more reported services than having either spoken or signed language as the language of instruction. Services that were more likely, even if not significantly associated included: social services, classroom paraprofessionals, sign language instruction and audiology services. Interestingly, social work services were highest in spoken communication only. Only one child had Deaf-blind services and was in the spoken language group.

## Discussion

In this study, it is not surprisingly that almost all of the children had an IEP, as they were receiving special education services. Currently, deaf children are not simply sent

**Table 5** Type of services identified and educational setting

Educational setting	Elementary ( <i>n</i> = 16)	Preschool elementary ( <i>n</i> = 40)	Preschool ( <i>n</i> = 13)	$\chi^2$ value	<i>P</i> value
Signed transliteration	0(0 %)	4(10 %)	0(0 %)	3.078	0.215
Social services	2(12.5 %)	6(15 %)	7(53.8 %)	9.747	0.008
Speech language pathology	12(75 %)	36(90 %)	12(92.3 %)	2.672	0.263
Transportation	10(62.5 %)	16(40 %)	(46.2 %)	2.327	0.312
Classroom paraprofessional	6(37.5 %)	10(25 %)	7(53.8 %)	3.837	0.147
Sign language instruction	6(37.5 %)	12(30 %)	8(61.5 %)	4.156	0.125
Adaptive PE	1(6.2 %)	1(2.5 %)	3(23.1 %)	6.211	0.045
Adaptive services	7(43.7 %)	18(45 %)	7(53.8 %)	0.367	0.833
CI mapping	1(6.2 %)	1(2.5 %)	1(7.7 %)	0.817	0.665
Counseling & rehab	1(2.5 %)	1(2.5 %)	0(0 %)	6.823	0.033
Deaf blind interpreting services	0(0 %)	1(2.5 %)	0(0 %)	0.736	692
Itinerant	0(0 %)	0(0 %)	1(2.5 %)	4.371	0.112
Occupational therapy	5(5.3 %)	13(32.5 %)	5(38.5 %)	0.198	0.906
Oral/Aural (AVT) services	0(0 %)	0(0 %)	1(7.7 %)	4.371	0.112
Psychological services	0(0 %)	1(2.5 %)	0(0 %)	0.736	0.692
Recreation	0(0 %)	1(2.5 %)	2(15.4 %)	4.863	0.88
Remedial ASL services	0(0 %)	2(5 %)	0(0 %)	1.493	0.474
School nurse/medical services	1(6.2 %)	7(17.5)	2(15.4 %)	1.177	0.555
Vision services/O/M services	0(0 %)	31(91.2 %)	3(4.2 %)	3.409	0.182

to traditional educational programs, rather they are receiving early interventions that targeted the needs perceived to be the most important for this group—that of language, communication and to a lesser extent social development. These issues have been noted as key barriers to their achieving their academic, linguistic, and social-emotional potential (Szymanski et al. 2013). It is typically noted that these needs can explain the low academic achievement of deaf students when compared to their hearing peers (Allen 1986; Antia et al. 2009; Cawthon 2008).

Critically, the data showed associations between the children's IEP goals and the related services they received. Of particular interest was a significant association between language instruction services and improving both sign communication and pre-academic performance. The findings dovetail with what has been learned from research on the relationship between language and literacy (Dickinson et al. 2003; Roulstone et al. 2011; Snow and Dickinson 1991; Storch and Whitehurst 2002).

Additionally, recent studies consider the relationship between competency in ASL and English literacy (Hoffmeister 2000; Padden and Ramsey 2000; Strong and Prinz 1997, 2000). In particular Roulstone et al. (2011) suggested that, children's language (words and sentence construction) as early as 24 months had an impact on their school entry and performance. Furthermore, Storch and Whitehurst (2002) showed that, by age four, language skills had a large indirect effect on comprehension in later grade levels.



**Table 6** Type of services identified and mode of communication primarily used to teach each child

Services	Spoken language only ( <i>n</i> = 9)	Sign language only ( <i>n</i> = 28)	Sign supported spoken language ( <i>n</i> = 34)	$\chi^2$ value	<i>P</i> value
Social work services	4(44.4 %)	1(3.6 %)	11(32.4 %)	10.120	0.006
Classroom para professionals	1(11.1 %)	1(3.6 %)	16(47.1 %)	6.054	0.048
Speech pathology	8(88.9 %)	23(82.1 %)	31(91.2 %)	1.155	0.561
Transportation	1(11.1 %)	13(46.4 %)	17(50 %)	4.519	0.104
Sign language instruction	2(22.2 %)	7(25 %)	18(52.9 %)	6.275	0.043
Signed transliteration	0(0 %)	1(3.6 %)	3(8.8 %)	1.412	0.494
Adaptive PE	0(0 %)	0(0 %)	5(14.7 %)	5.853	0.054
Audiology services	2(22.2 %)	9(32.1 %)	23(67.6 %)	10.476	0.005
CI mapping	1(11.1 %)	32(94.1 %)	3(4.2 %)	2.520	0.284
Counseling & rehab	0(0 %)	3(10.7 %)	0(0 %)	4.810	0.090
Deaf blind interpreting services	1(11.1 %)	0(0 %)	0(0 %)	6.987	0.030
Itinerant teacher	0(0 %)	0(0 %)	1(2.9 %)	1.104	0.576
Occupational therapy	3(33.3 %)	6(21.4 %)	14(41.2 %)	2.738	0.254
Oral/Aural (AVT) services	0(0 %)	0(0 %)	1(2.9 %)	1.104	0.576
Psychological services	0(0 %)	1(3.6 %)	0(0 %)	1.558	0.459
Recreation	0(0 %)	3(10.7 %)	1(2.9 %)	2.360	0.307
Remedial ASL services	0(0 %)	1(3.6 %)	1(2.9 %)	0.321	0.852
School nurse/medical services	1(11.1 %)	4(14.3 %)	5(14.7 %)	0.078	0.962
Vision services/O/M	0(0 %)	31(91.2 %)	3(4.2 %)	3.409	0.182

A strong association was found between receiving speech-language pathology services and improving speech/communication skills. Previous work confused speech with language. Language involves the words we use and the rules we use to organize them together to communicate a meaningful message. Language can be transmitted auditory or visually. Speech is an auditory form of language that involves sounds that make up words and sentences. Not all deaf children can access auditory form of language. Studies with deaf children document continued challenges in regards to speech and spoken language development, irrespective of advancements in technology (Geers 2006; Fitzpatrick et al. 2011; Nittrouer 2010). This finding explains why Moores (2010) noted that, most deaf students tend to be provided with sign language option only upon failure to acquire spoken language.

The three most identified IEP goals were improving school readiness, improving both sign and speech communication, with improving pre-academic performance close behind. The most important of the IEP goals reported was improving school readiness; the area that previous research has shown impacts pre-academic skills and future academic achievement (Hess et al. 1984; Rimm-Kaufman et al. 2000). According to the National Association of State Boards of Education (1991), school readiness involves children's interaction with families, early environments, schools, and communities.

Often, the lack of access to language, both at home and school, can impact Deaf children's development, particularly, cognitive and social development (Freel et al.

2011; Mayberry 2002a, b; Myers et al. 2010; Schick et al. 2007), which then impacts their school readiness. As language is a critical element in interactions with other people and environments, the issue of school readiness directly relates to the ability to develop language, as one cannot be ready for academic language if one does not have a well-developed L1 and social language.

Again, related to school readiness, more than half the states conduct a school readiness assessment on children in order to track trends in children's school readiness over time, and identify those at risk and requiring support (Daily et al. 2010). The finding here points to a need for further research to understand the exact nature of school readiness issues for young deaf children, as well as a stronger understanding of how to address this issue. Given these goals, future research should focus on more individual differences to determine the connections between family background characteristics and school readiness. Interestingly, the choice of these three IEP was not associated with the communication primarily used with the child or the child's educational setting.

The second and third most important IEP goals were improving communication, both sign and speech. Therefore, these children were not coming to early educational programs ready to learn. Therefore, we see a strong connection between communication and the other top IEP goals that teachers within this study see as important. Those in the sign language context were more likely to have improved sign skills as a goal as well as to improve their pre-academic skills. Therefore, it appears that these children were delayed in their language development and therefore not ready for school. Given that language is a strong predictor of school readiness and pre-academic skills (Prior et al. 2011; Fiorentino and Howe 2004; Forget-Dubois et al. 2009; Palermo et al. 2007; Wesley and Buyse 2003) identifying strategies to support early language is critical. Consequently, initiatives to improve language and to support communication through play and activities like educational drama could have the potential to promote deaf children's school readiness and this issue should be explored in future studies.

The IEP goal that followed closely these first three was improving children's pre-academic skills. Research shows that children's pre-academic skills in the classroom play an important role in the ways in which teachers adapt their instructional practices to the needs of a particular classroom (Pakarinen et al. 2011). These findings suggest that the gap of achievement noted between deaf students and hearing students (Allen 1986; Antia et al. 2009; Cawthon 2008) can be attended to in early childhood education by developing IEP goals and adapting classroom instruction to meet the deaf children's pre-academic skills needs.

The data in the current study found that although the deaf young children received a wide selection of related services, most of the services focused on supporting communication. Both speech and sign language skills were identified. Data analysis showed that there was no association between the selected related services and educational setting or mode of communication primarily used to teach the child. Analysis of the services indicated a possible trend between audiology services and students whose primary communication supported use of sign supported speech. Also, the analysis showed that almost one third of the students whose primary mode of communication was sign only were reported to be receiving audiological services. This finding is interesting because 50 % of the children's IEP indicated audiology services, which suggest that even though some deaf children primary goal was improving sign communication, they still received audiological services.

This findings points to the dominance of spoken language skills and suggest that services are often not matched within the IEP goals. This finding is not surprising because most deaf children are born into hearing families that naturally use an auditory rather than visual language (Mitchell and Karchmer 2004a, b, 2005). While speech and audiological services can facilitate early communication between children and their parents and teachers, they may not provide support for later academic language for these young children (Baker 2011). This focus on speech only would then deprive a deaf child of the opportunity for early social interaction and linguistic input (Lederberg and Spencer 2001).

Another possible trend noted was between social services students whose primary communication involved spoken language only or sign supported spoken language. Esp (2001) conducted a national survey on social work services in schools for the deaf and identified those three main problems as child abuse, student's behaviors, and emotional and physical issues. Additionally, Bat-Chava and Deignan (2001) argued that delay in development of spoken language skills among deaf children impede them in establishing and sustaining social relationships. Also, speech impairment has been reported to impact social cognition or emotional competence that might negatively impact social interaction (Rieffe and Terwogt 2006). Hence, challenges to communicate or use language adequately to express self or receive information may escalate these three main problems identified leading to a need for social work services. Future studies need to investigate the nature and reasons for social work services among this group of students so as to attend to the issues early.

### **Limitation and Directions for Future Research**

A methodological limitation in the current study was in the use of teacher's responses to survey questions on their students IEP goals as opposed to conducting a content analysis of each student's IEP goals. Analyzing individual students' IEP goals would have provided more information on the student's present level of performance, the specific goals and objectives in each student's IEP, how they were addressed in the classroom and the related special education services provided. Future studies should focus on this type of analysis. Additionally, the current exploratory study focused on each child's three most important IEP goals and the related services provided to attend to those three goals. Consequently, the data used in this study does not reflect the entire child's IEP with all its goals and objectives. The child may have other IEP goal/s to be addressed, that may/may not affect the three most important goals provided. Moreover; therefore, they are not representative of all deaf ECE students. There is a need to investigate the nature of IEP goals in other preschool settings.

### **Implications for Practice**

Although the current analysis of deaf students' IEPs does not reflect the full content of the IEP, the results have several practical implications for educators and parents. This study indicates that deaf children's educational needs in early childhood presented in their IEP goals were mostly on language, communication and school readiness. In fact, the results reiterated previous findings that most deaf children arrive in preschool classrooms with limited language skills (Erting 2003; Johnson et al. 1989; Kuntze

1998). The delay of early language access affects their communication (sign and speech), which is critical in classroom learning and generally in educating deaf students. The IEP team for any preschool deaf child should be aware of the importance of language and communication for the child and ensure the child's language is assessed appropriately and the information used in the development of the child's IEP. Also, not only the classroom teachers but also other teachers (such as music, art and PE), parents and paraprofessional should be aware of the language and communication needs of the deaf child and work together to support the child to achieve language and communication objectives successfully.

In summary, teachers' responses on young deaf children IEP s showed that, despite the heterogeneity among deaf children, the educational setting and the mode of communication primarily used to teach the child, most of them identified three focus areas on IEP s (school reading, communication and pre-academic skills). Additionally, communication skills and, in particular, those related to sign communication that involved providing sign language instruction, had an association to the children's' goal for improving pre- academic skills. Thus, the study concurs with previous work that emphasized the role of language in the education of deaf children.

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### Compliance with Ethical Standards

**Ethical Approval** All procedures performed in this study were in accordance with the ethical standards of the institutional review board and with the 1964 Helsinki declaration and its later amendments. The Gallaudet University Institutional Review Board (IRB) for the Protection of Human Subjects has approved VL2-EELS.

**Informed Consent** A statement of informed consent was obtained from the parents, teachers and administrators who participated in the study.

**Conflict of Interests** The authors declare no conflict of interest.

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