MOVING FROM "THEY" TO "WE"- A QUALITATIVE CASE STUDY OF THE PERSPECTIVES AND INTERACTIONS OF TEAMS WHO SUPPORT CHILDREN WITH COMPLEX COMMUNICATION NEEDS TO CONTRIBUTE TO THE GENERALIZATION OF COMMUNICATION SKILLS

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PROFESSIONAL EDUCATION STUDIES

Children with complex communication needs (CCN) face many challenges in their daily life. They can struggle academically and socially if their communicative needs are not supported consistently by those who provide care for them. They frequently use Augmentative or Alternative Communication (AAC) systems or devices to communicate. The purposes of this qualitative case study were to 1) explore the types and meanings of interactions which occurred among the stakeholders as part of their participation on the federally mandated educational team that supports a child with CCN; and 2) to examine how collaborative communicative exchanges transpired among the stakeholders which could potentially support the child with CCN to generalize communication skills. The study is significant because, while much research has examined the efficacy of generalization training with children who have a variety of disabilities, no research has investigated the types and meaning of stakeholder interactions and their potential to influence the child's generalization of skills. This qualitative research design used an instrumental, collective, multiple case study of four teams of stakeholders (n=23) who provide support for children with CCN. Methods included individual interviews, observations in the home and school, and document analysis of IEP communication goals and objectives. Findings for the four cases showed a wide difference in the types and meaning of interactions among teams/stakeholders toward meeting the generalization goals of children with CCN. More specifically, the most cohesive teams were characterized by the consistent sharing of both personal/routine and clinical information among the stakeholders, engaging in informal peer coaching with each other, treating paraprofessionals as integral members of the team, and having IEPs with specific and measurable communication goals. The findings suggest that children are best supported by teams who engage I n collaborative interactive exchanges focused on supporting a child’s generalization goals. Further research should be conducted into the frequency and type of communication shared, possible peer coaching models in special education, increasing the roles of paraprofessionals, and clarity of IEP goals and objectives.

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CHAPTER I

Introduction

Background of the Problem

Children with complex communication needs (CCN), regardless of their cognitive strengths or needs, face many challenges in their daily interactions. These challenges can include communicating basic needs, such as hunger, thirst, discomfort, sharing their opinions, demonstrating their knowledge and understanding of an academic topic, and developing and sustaining relationships with both peers and adults. They may rely on a series of nuanced "gestures, vocalizations and eye-gaze as their primary means of communication" (Boers, Janssen, Minnaert, & Ruijssenaars, 2013, p. 120), and thus depend on parents and educational professionals to interpret their communicative attempts. Children with CCN struggle academically and socially if their communicative needs are not supported consistently by those who provide care for them in the home and school environments. The education team, which forms the Individual Education Program (IEP) team and who provides educational support and services to students with CCN, is typically made up of a group of stakeholders which can include but is not limited to parents, special education teachers (SPED teachers), general education teachers (GenEd teachers), school-based speech and language pathologists (S-SLPs), private speech and language pathologists (P-SLPs) and

Paraprofessionals (Paras). Prior to 1975, relying on the educational team members to work together occurred informally throughout educational settings and became a clear mandate through the passage of PL 94-142, now known as the Individuals with Disabilities Education Improvement Act (IDEIA), in 1975 (Harper, 2006). Formalizing the group's work can prove difficult if the members do not share common goals and do not communicate those goals clearly to each other. Each stakeholder, the parent included, brings prior knowledge and experience to the uniquely formed team. Respecting and maximizing the knowledge base of each member, as well as working together in an organized manner, is vital in order to develop teams that serve children effectively (Harper, 2006). If left with a group of stakeholders who have not formed a functioning community of practice, a student with CCN may be unable to consistently communicate the most basic of information to those around them.

Browder and Spooner (2011) emphasize the need to address communication skills by stating, "Teaching communication skills should be one of the most important priorities for students…because the ability to communicate affects learning in all other content areas, as well as overall quality of life" (p. 262). Unfortunately, most interactions and documented school-based goals and objectives continue to revolve primarily around academic activities. Effective interactions and collaboration among parents and educational professionals which address all areas of need, not just academic needs, are critical for the child with a disability to be successful in all settings (Jones, 2012).

Children with CCN frequently use an Augmentative or Alternative Communication (AAC) system or device to communicate. Regardless of the AAC device the child uses, stakeholders must receive training in and commit to implementing

the system or device across all settings and people to ensure that the child can generalize the skill to other contexts successfully. In educational settings which serve students with disabilities, generalization has a very different meaning and use. In education, generalization for students with disabilities refers to the ability to "apply skills in different environments or situations or under different circumstances from those they first learned" (Westling & Fox, 2009, p. 193). Students with disabilities frequently experience difficulties generalizing newly acquired skills to different settings, places and people. Difficulties in generalizing newly acquired skills arise from how the new experiences differ from those familiar to them. For example, a child with CCN can be taught to communicate his/her lunch selections in the cafeteria with familiar cafeteria staff, but need to practice the same communicative skills with staff that they are unfamiliar with or in a different cafeteria in order to ensure generalization occurs.

Systematically teaching generalization skills has been identified as a challenge in educational settings since the 1977 Stokes and Baer seminal article. When faced with these difficulties and challenges, the child who has not received consistent support in addressing the differences in the settings or people will not possess the requisite skills to adapt and will experience difficulties generalizing the newly acquired skill. Inconsistent communication and interactions among all stakeholders related to generalizing communicative attempts can be a challenging hurdle for the team to overcome for supporting the successful implementation of AAC systems across settings (Jones, 2012).

The use of technology in all aspects of our world has exploded in the past ten years. This explosion includes the development of technologies to assist children and adults with communication. Keeping up with the newest technologies amidst other

professional and personal responsibilities is challenging and time-consuming. Stakeholders who support and care for a child with CCN must stay up-to-date on the most current assistive technology (AT) devices, including AAC systems. Since the 1970's, there has been vast growth in the use of alternative and augmentative communication systems by children and adults who have CCN (Beukelman & Mirenda, 2005). Regardless of the type of AAC used, research and practice indicate the overwhelmingly positive impact of using AAC with children and adults who have disabilities (Henderson, Skelton & Rosenbaum, 2008). AAC devices and systems provide students with CCN a world of possibilities for increasing communicative skills and independence, and providing more opportunities for inclusion with their peers (Reichle, 2011). Planning for and providing students with these multiple opportunities requires increased interactions and effective communication among all communicative partners in the child's life (Boers et al, 2013).

Statement of Problem

Approximately 1.3% of all students experience communicative disabilities to the extent that they are unable to use typical speech abilities to express themselves (Beukelman & Mirenda, 2005). "Communication difficulties already make children with neurological impairments vulnerable" (Hunt, Mastroyannopoilou, Goldman, & Seers, 2003, p. 171). Students with CCN rely on others to provide supports for their efforts to communicate. Practicing newly acquired communication skills in different places and settings and with different people should increase the likelihood that students will generalize these new skills to untrained places, settings and people.

Stokes and Baer (1977) indicate that the "train and hope" method was the most common form of planning for and implementing the generalization of skills used by special education stakeholders. "Train and hope" refers to a general approach in teaching to train a child to perform a particular skill successfully in one setting without also intentionally training how to implement that skill in other settings or with other people and simply "hoping" that the training will generalize to other settings and people. Past and more current research continues to indicate that generalizing skills is vital to helping the child to successfully demonstrate newly acquired skills across settings (Gianoumis & Sturmey, 2012; Herriott & Firestone, 1983; Kashinath, Woods, & Goldstein, 2006; Westling & Fox, 2009). Almost 34 years later, Browder and Spooner remark, "If students are instructed to generalize, they will be able to use the skills taught in untrained contexts" (2011, p. 361). Despite the well-known and accepted knowledge regarding the importance of generalization of skills, in practice, little has changed since 1977. Initial information that I gathered through pilot interviews indicate that educators continue to use the "Train and Hope" method for generalizing communication skills for children with CCN.

The development of communication skills is imperative for students with limited communication abilities in order to reduce their vulnerability, so they are able to express wants, needs, socially interact with those around them and, within the school environment, develop and demonstrate their academic abilities. The challenge also may lie in how parents frequently develop unique communication systems within the child's home which rely on intuition and tend not to use AAC systems or devices. Educators also develop different communication systems within the child's school environment

which, depending on their level of AAC training, may or may not rely on a more systematic use of an AAC device or system. Parents and educational staff, however, can frequently misinterpret what the student wants or needs at a given time. Consistent, collaborative interactive exchanges between all stakeholders can help identify and resolve these misinterpretations. Yet there is little research on how educational stakeholders interact to support the communication systems and devices. Knowing how teams perceive their own group communication and interactions and communicate on behalf of the generalization mission can give us knowledge on behalf of the greater mission. When we know more about how team's communicate, we can work to ensure stakeholders understand how the child communicates and goals that the team is working on so that the child is able to effectively communicate their most basic needs with any person, especially with those with whom they are unfamiliar, student frustration decreases and they can experience the power of communication and language. They no longer need to rely on the intuition of others to interpret what they need and communicate for them.

Purpose of the Study

The purposes of this qualitative case study were to explore the types and meanings of interactions which occurred among the stakeholders as part of their participation on the federally mandated educational team formed by parents, SPED teachers, GenEd teachers, S-SLP's, P-SLP's and Paras, and to examine how collaborative communicative exchanges transpired among the stakeholders which could potentially support the child with CCN to generalize communication skills across different settings and people.

In educational case studies such as this one, a goal of the research is to understand the case in depth and detail (Stake, 1995) and for others to "use their findings to decide whether or not to try to induce change" (Bassey, 1999, p. 40). Each team of professionals was a case. Semi-structured individual interviews with all stakeholders who support and care for a child with CCN, observations in the home and school, and document reviews of current IEP goals and objectives for AAC and Speech/Language provided thick, rich, detailed descriptions about their experiences and interactions as teams. From these detailed cases, recommendations were generated regarding specific ways that stakeholders may interact to support the successful generalization of communication skills between school and home for children with CCN in the future. Lessons learned from pilot study interviews informed the current research study.

Research Questions

1. What are the types and meanings of interactions which occur among the stakeholders as part of their participation on the federally mandated educational team formed by parents, SPED teachers, GenEd teachers, S-SLP's, P-SLP's and Paras,?
2. How do collaborative communicative exchanges transpire among the stakeholders which could potentially support the child with CCN to generalize communication skills across different settings and people?

Importance of the Study

This study is important because there is a paucity of research detailing how teams go about the daily work of serving children with CCN. This study extends knowledge regarding stakeholders in particular as part of the larger body of research on

generalization for children with CCN. It extends knowledge through the elements that influence interactions between stakeholders and how entire groups of stakeholders potentially form relationships to support generalization of communication skills for children with CCN through examining in depth and in detail four unique teams of stakeholders, the elements that influence the interactions between the stakeholders and how partnerships either did or did not develop within the groups. Partnerships imply mutual respect among members and their willingness to work together. This indicates stakeholders share meaningful information, decision making responsibilities and accountability for outcomes. Establishing partnerships extends the expectations for each stakeholder from simply sharing a common goal and operating individually to being willing to work together as a team, negotiating personal and professional opinions, for the benefit of advancing the child's communicative abilities. The word 'team' can describe a group of people who come together for a common purpose connected specifically to the student's needs (Taylor, Smiley & Richards, 2009). Many factors can shape how the unique teams form partnerships, including differences in training, individual personalities, individual philosophies, commitment toward the communication goals identified for the child, the amount of time spent together as a group, power differentials related to education level, race or class, and the level and quality of communication which occurs between the stakeholders (Cramer, 2006).

In recent years, there has been an increase in the use and development of AAC devices and systems as a common element of generalization of communication skills with children who have CCN. This is a pressing and timely study to examine how teams address the need for planning and implementing strategies which increase the likelihood

that generalization of newly acquired AAC skills across settings and people will occur. The effectiveness of these interactions and partnerships affected the consistency and level of support provided for the child with CCN to generalize, or not, acquired communication skills and the use of AAC devices between all settings.

Scope of the Study

A pilot study was first conducted over the course of several semesters to develop questions and identify potential criteria for selecting cases between 2010-2012. I conducted semi-structured pilot interviews with a variety of stakeholders from different schools to determine educational teams' interactions and levels of participation in the implementation of AAC with students who have limited communication abilities. All of the stakeholders who participated in the interviews worked with or were parents of children with CCN. The goal of the semi-structured interviews was to determine the individual's unique role within the educational team and how the use of communication systems occurred within and between the school and home to support students with CCN. The stakeholders interviewed worked in different settings, across two different states and provided support for different children.

The data from the pilot study, described below, did not provide a full understanding of the interactions that occurred among all members of a team that supports the child; yet data were clear that stakeholders felt confused about who should be in charge of the process, that some divisions existed among team members, and that teams were not maximizing communication in ways that would support children in their care advance their communication skills across different settings and people.

The scope of the larger study provides insights from every member of four unique groups of stakeholders (the case) who support and care for children with CCN through semi-structured interviews, follow up interviews to clarify key points, observations in the home and school, and examination of IEP documents to review agreed upon communication goals and objectives. These teams included parents, SPED teachers, GenEd teachers (if they held an important role in the child's school day), S-SLP's, P-SLP's, and Paras. Because one child in the study was deaf and used a cochlear implant, one team of stakeholders also included a Deaf Education Consultant (Deaf Ed consultant).

All six interviews in the pilot study were conducted with IRB approval and audio-taped with permission of the interviewee. The tapes were then transcribed and the transcription was then segmented for further analysis. Content analysis was used to "search for recurring words or themes" (Patton, 2002, p. 453). Recurring words or themes led to the development of patterns within the data. Patterns and themes within the data were used to "construct typolog(ies) to further elucidate findings" (Patton, 2002, p. 459). I coded the data from the interviews by first classifying the information into different patterns and then labeling the patterns as themes (Patton, 2002). Convergence, figuring out which things fit together, regarding multiple themes occurred across several interviews.

Several themes emerged from the data that informed the development and direction of the current study and underscored the importance of studying interactions of entire teams that serve children with CCN. The themes included ones that were consistent with the literature while other themes were unexpected. By reflexively

examining data from interviews, I discovered themes that were "hidden dimensions in the data" (Gordon, 2005, p. 281). The first "hidden dimension" occurred in the first interview. My student's parent continued to refer to the educational professionals as "they" when describing the interactions. She never referred to a conversation with an education professional as "we" when referring developing goals to implement for her child within the home setting or school settings. This wording provides an example of what Emerson, Fretz & Shaw (1995) terms an "indigenous contrast," a contrast that members of a settings invoke, that can "provide useful insights into (their) perceptions and evaluations" (Emerson et al, 1995, p. 122). As the parent began to talk about her experiences with educational professionals, she began to use the term "they" when she described those people who came into her home to diagnose and work with her son. She made a pointed evaluation of their lack of success by stating that "they couldn't get him to talk either." The mother then switched and began talking about what "we" do at home for and with her child. She did not discuss generalizations of skills between home and school in this interview although she did admit, "I think they helped. I mean they gave me ideas and stuff." No specific examples of the "ideas and stuff" were provided.

Gordon (2005) states that "reflexivity is often portrayed as a solitary act" (p. 299), however, through interviewing others who may be "positioned differently" from each other, I learned an important part of why parents may choose not to implement communication devices and systems in their homes. Parents, including my own, may prefer to use intuition to communicate with their child rather than taking the time to set up and maintain a communication system or device. Another theme occurred as I was interviewing an Occupational Therapist, a person who routinely works with students who

struggle with fine, or small, motor abilities and who may also have limited communicative abilities, along with their families in a therapy type model. OT´s become involved in therapies for students with CCN, assisting in making informed decisions regarding the child´s motoric abilities to interact with the AAC systems and devices. The OT interviewed talked a great deal about educators needing to "sell the (AAC) program" and the need for getting parents to "buy into" a new AAC program. She also stated that educational professionals needed to get better at marketing their ideas to the "consumer." Convergence occurred when I interviewed the developmental specialist. She too discussed helping parents "buy into" new communication systems, using the same term as the OT. The OT and the developmental specialist work in two different states and have never met.

I interviewed a National Board Certified Pre-School SPED teacher with the goal of learning how she incorporates picture communication systems in her classroom and how she facilitates the generalization of these systems from school to the home. When asked about her classroom, the member described at length how she uses schedules with pictures to help parents learn about what occurred that day and described in detail all of the uses of pictures not only around her classroom but in her wing at her school to help children communicate within their school environment. The descriptions "highlight qualities (she) consider(s) special or unique" (Emerson et al, 1995, p. 114). Through the sheer length of the description, she provided a clear sense of how her investment in generalizing the use of pictures to communicate in her program and across varied settings for her students' success in communicating with others around them. It was only at the end of the lengthy description of all that she does to promote generalization across

settings, places and people at school that she realized that she does little to promote this generalization of skills between the school and home.

Two different realizations and power dynamics emerged from my pilot data. The first involves the special education professionals and their perspectives of who exactly is "in charge" of planning and programming generalization to occur between the school and home settings. The challenge regarding "territorial rights" dates back to the 1960's, when Wiederholt wrote "Historical Perspectives on the Education of the Learning Disabled." He stated that education professionals (specifically SLP's and special education teachers) were "concerned about the focus of responsibility for handling language disorders in the school" (Wiederholt, 1974, p. 147). The uncertainty regarding which specific person should be responsible for leading and implementing programs involving language and communicative skills, to include AAC devices and systems, endures today. SPED teachers may choose to emphasize their roles as educators with academic goals as their priority, and therefore, not view themselves as the lead person for communicative goals or excuse themselves from that role. The S-SLP's may choose to emphasize the limited amount of time they spend with the child, typically 40 minutes per week, as their reason for not taking on the lead role with regard to communication goals. It has been my professional experience that, despite the unbounded growth in the use of AAC devices over the past ten years, the struggle to identify the key person to be trained and oversee its implementation endures 50 years later.

When the S-SLP was asked about how generalization of communication skills occurred, including those in a child's speech goals and objectives that she was responsible for, the S-SLP echoed the OT and then provided her opinion of who was

actually the person "in charge" of generalization. "They (parents) communicate more with the SPED teacher because she has more contact with that parent everyday where I don't." Interestingly, the S-SLP relied on the level of communication between home and school to determine the responsible stakeholder, rather than a level of expertise in communication skills and devices. On the other hand, the parent mentioned only two types of professionals who worked with her son, "and they had like physical therapy and speech therapy coming out with him." Significantly, there appeared to be no consistency among the individuals I interviewed in the pilot study about whom on the education side of the equation should be responsible for ensuring that generalization of communicative goals occurs between the home and the school.

The second power dynamic came from the interviews with the S-SLP and the developmental specialist and revolved around the issue of who purchased and ultimately owned the communication device or system. In order to implement generalization between home and school successfully, the S-SLP and the developmental specialist agreed that educators must implement the same communication system in the school as in the home. "I liked it better when they had the same book between home and here personally because the kids knew their book then, they knew where the pictures were, the books were exactly the same, the pictures were exactly in the same place. The Individuals with Disabilities Education Act clearly states in the Regulations: Part 300 / B / 300.105 / b: "On a case-by-case basis, the use of school-purchased assistive technology devices in a child's home or in other settings is required if the child's IEP Team determines that the child needs access to those devices in order to receive a Free and Appropriate Public Education (http://idea.ed.gov/)."

A tension involving the use of school purchased communication systems exists between the school and the home which can lead to a school or district's hegemony over a parent or the parents over the school or district. The S-SLP supported this idea of the authority of the school's policy by stating, "If the school purchased the book, then the book stayed at school," in spite of the fact that the IDEIA states otherwise and she had personally experienced an instance when a communication book would go between home and school consistently and concluded, "it went back and forth and you know we've had that once and the child got so great with the language that she didn't need the book I mean it just worked wonderful. It was a great thing." The developmental specialist described a situation in which the power dynamic flowed in the other direction. The parent of an almost three year old child who used the PEC System to communicate would not share the book developed at home with the school because "the school might lose it." In both situations in the pilot study, the child's access to their communication devices was limited, not because they did not have the device, but because the stakeholders were in a power struggle over the device itself. A similar power struggle was found in Case B of the current study.

The pilot study involved semi-structured interviews which provided a glimpse into the perceptions held by the individual stakeholders, separate from their entire teams. While individual perspectives provided a part of the puzzle, they were unable to offer the complete picture of how interactions influence the team of stakeholders when supporting a child with CCN. Each interviewee brought unique experiences to the interviews which assisted in the development of the current research.

Methodology

The research problem of the current study was systematically examined using qualitative methods, specifically a Multiple Case Study approach. "Qualitative methods provide means whereby social contexts can be systematically examined as a whole…data are objects, pictures, or detailed descriptions that cannot be reduced to numbers without distorting the essence of the social meanings they represent" (Hatch, 2002, p. 9). Each case was examined holistically first as a unit to provide a more complete understanding of the meanings present within the case. Creswell (2007) defines the case as a qualitative approach in which the investigator "explores a bounded system or multiple bounded systems over time, through detailed, in-depth data collection involving multiple sources of information and reports a case description or case-based themes" (p. 73). Cross case analysis was then conducted because "to understand complex programs, it is often useful to look carefully at persons and operations at several locations (Stake, 2006, p. 5).

Qualitative case study research in special education has existed since Itard, the French physician, wrote "The Wild Boy of Aveyron" in 1806 based on his observations of Victor, a boy found in the woods and assumed to have some type of developmental disability (Itard, 1806). In the past thirty years, educational scholarship has increasingly integrated qualitative research following already established qualitative practices, including interviews, field notes of observations, document analysis, in other fields of study. The history of qualitative research is one of telling the stories, and understanding processes, perceptions and experiences of other groups of people who have been marginalized or oppressed. A key characteristic of current qualitative research in education is "the commitment to bring to the surface stories of those whose voices have

not been heard, those who have been oppressed or disenfranchised in schools" (Pugach, 2001, p. 443), specifically in this case, those with disabilities and the people who support them.

To be considered credible and trustworthy, qualitative research in special education must occur within the context of the inquiry, represent multiple voices, and reflect particular quality indicators. Recent qualitative research in special education has involved systematic inquiry into topics which tell the stories of the struggles within the field using qualitative approaches: semi-structured interviews of special education needs coordinators and their staff across three different primary schools (Evans, 2013), 50 interviews with different special education staff members working in residential care facilities for students with emotional and behaviors disabilities (Soenen, D'Oosterlinck, & Broekaert, 2014), and 27 focus groups leading to a subset of semi-structured, individual interviews with military parents, again primarily with the mothers, regarding the impact of mobility on their access to special education services (Jagger & Lederer, 2014) . Bacon and Causton-Theoharis (2013) recently conducted qualitative research examining school practices and parent advocacy, which followed a process similar to my current study. In their research, open-ended interviews with parents, primarily mothers, were conducted, observations occurred during the IEP meetings and document analyses of multiple sources of paperwork were completed, including student IEP's, student work samples, and reports from psychologists.

Qualitative research does not seek to generalize its findings but to provide information regarding certain contexts and people (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005). As a qualitative researcher, I looked for commonalities in

findings across the four cases (Stake, 2006); however these commonalities cannot be generalized across other cases involving children with CCN because each case exists in unique circumstances with distinctive stakeholders. Educators and parents may recognize the cases as unique; however, they may be able to see similarities with their cases. By telling these stories using qualitative methods, I give voice to the stakeholders involved and hope those who support students who have CCN might find illustrative similarities to their own positions and context.

A qualitative study based on the constructionist epistemology using the theoretical perspective of interpretivism, specifically symbolic interactionism, addresses the research problem. Constructionism has "no objective truth waiting for us to discover it. Truth, or meaning, "comes into existence in and out of our engagement with the realities of our world" (Crotty, 1998, p. 8). A constructionist epistemology informs the research problem through the researcher's engagement with the realities the stakeholders present in their interviews, engagement through observations of the child both in the home and school environments, and engagement through the examination of IEP goals and objectives involving AAC and communication needs involved with children who have CCN.

Interpretivism refers to the "attempt to understand and explain human and social reality" (Crotty, 1998, p. 66). Glimpses into understanding and explaining the reality of children with limited communicative abilities were offered using an interpretive lens, Symbolic Interactionism to view the data. Interviews with all stakeholders surrounding a child with CCN combined with observations of the child in both school and home settings and a review of school documents, specifically IEP goals and objectives related solely to the child's AAC and communication needs, provided a more complete, deeper

understanding and clearer explanation regarding the human and social reality a child may experience when trying to communicate with people in their lives. Taken together, the data gathered from each group of stakeholders provided a more "correct causal interpretation of a concrete course of behavior" leading in the end to an "explanatory understanding" (Weber, 1962, pp. 35, 40) of these four cases.

Symbolic Interactionism specifically searches for the understandings in the "meaningful matrix that guides our lives" (Crotty, 1998, p. 71). The constructionist epistemology using symbolic interactionism as a theoretical perspective in this research challenges researchers and readers alike to understand that "the meaning of such things is derived from the social interaction that one has with ones fellows" and "meanings are handled…and modified through an interpretive process" (Blumer, 1969, p. 2). Stakeholders within each case derive meanings from their interactions with each other as they support a child with CCN. This research expanded on the pieces of the puzzle emerging from the pilot study to examine a more complete, cohesive picture of the "matrix" supporting the life of a child with CCN. I presented the data as best is possible from the "standpoint of those studied" (Denzin, 1978, p. 99). The lens of Symbolic Interactionism and the meanings each stakeholder created emerged through their descriptions of the interactions, and their own unique experiences and perspectives regarding their roles and the child with CCN. Their described standpoints, the observations in the home and school settings, and the document analysis-both individually and across the data-provided a thicker, deeper understanding of the intricate, sometimes problematic matrix.

Researcher's Positionality Statement

Reflexively, I drew upon a "wide array of knowledge sources when framing this study" (Luttrell, 2010, p. 162). An awareness of the structure of relationships and sometimes problematic interactions between the home and school for students with CCN has been a part of my life since I was born. As the sibling to Michael, my older brother with CCN, I witnessed firsthand my parent's challenges, successes, and frustrations when discussing my brother's CCN with the school. Many AAC systems were tried and were ultimately unsuccessful, principally because educators did not seek my parents' input and opinions. My brother is now 55 years old, no longer receives any speech therapy services and uses no AAC device to communicate. Based on previous, unsuccessful experiences, my parents had no faith that AAC would help Michael and, therefore, chose not to pursue any AAC device or system. Michael has expressive verbal abilities, however, due to a severe articulation disorder and hearing loss, he can be difficult to understand unless the listener is familiar with his speech patterns. Michael's inability to independently communicate with others leaves him vulnerable and dependent on others to interpret his communicative attempts.

As a special education teacher of fifteen years for students with significant disabilities, most of whom experienced CCN, I experienced similar challenges, successes, and frustrations from a different perspective. I witnessed firsthand the frustrations students with CCN experience when trying to communicate with unfamiliar people in different settings. I was fortunate to have an S-SLP still assigned to a few of my students who recognized her limitations in meeting all of the communicative needs within my classroom and recognized my passionate interest in helping my students communicate.

This S-SLP encouraged and provided information regarding different training opportunities for AAC devices and systems. I spent thirteen years attending trainings for and implementing many different AAC systems for my students with CCN within the classroom. Acquisition of these AAC skills was a slow, but worthwhile, process for my students. The generalization of the communication systems throughout the school building and the local community on weekly field trips occurred as a planned, natural part of my in-school program. In my role as an educator, I also experienced difficulty generalizing the use of communication systems between the home and school for a variety of reasons: lack of time to implement an effective line of communication about the AAC system for each individual family, lack of interest and/or support from the family, and lack of support from other educational stakeholders, including the S-SLP's and OT's. In all of the education courses and professional developments I attended after becoming a teacher, I never received training on how best to communicate effectively as a team, leaving me to figure it out on my own through experience.

My goal for this research was to enter into a form of "advocacy for those things we cherish" (Stake, 1995, p. 136). As a family member and a staunch advocate for my students, I examined the experiences of complete groups of stakeholders who have active roles in a specific child's life. By gaining the different perspectives from a variety of stakeholders involved with the same student, I learned from their experiences, challenges, successes, and frustrations with factors which influence the interactions occurring within educational teams leading, or not, to the generalization of AAC systems between home and school for each child.

This study has implications for research, theory, and practice. Recent research has been conducted regarding the generalization of skills between schools and community settings (Davis, Frederick, Alberto, & Gama, 2012; Phillips & Vollmer, 2012); however no research has been conducted regarding how the interactions among stakeholders influences the generalization of communication skills between home and school, in spite of the IDEIA requirement to include parents in the development of IEP goals and objectives and the requirement within the PECS system for generalization to occur between settings (Chaabane, Alber-Morgan & DeBar, 2009). Possible implications for theory involve providing a new platform to look more deeply into the interactional challenges encountered by stakeholders which may influence the generalization of communication skills across settings and people of a child with CCN. Implications for practice indicated a need for stakeholders to become more systematic with how they communicate and be more purposeful with the information they share when interacting with each other.

Definition of Terms

Augmentative and Alternative Communication-"involves attempts to study and when necessary compensate for temporary or permanent impairments, activity limitations, and participation restrictions of persons with severe disorders of speech-language production and/or comprehension, including spoken and written modes of communication" (Beukelman & Mirenda, 2005, p. 4). It can also be defined as a set of procedures and processes by which an individual's communication skills can be maximized for functional and effective communication. This involves supplementing or replacing natural speech and/or writing (e.g., picture communication symbols, line drawings,

Blissymbols, and tangible objects) and/or unaided symbols (e.g., manual signs, gestures, and finger spelling) (ASHA, 2002, p. 98).

Clinical Information- (Merriam Webster, n.d.) in this research, clinical refers to work related to supporting the communicative needs for a child with CCN, including all aspects of their learning day, both academic and social.

Peer coaching- the process between two colleagues who work together towards several potential goals, including "reflect on current practices; expand, refine and build new skills; share ideas; teach one another; conduct classroom research; or solve problems in the workplace" (Robbins, 1991, p. 1).

Occupational Therapist-A professional licensed through the Bureau of Occupational Licenses who, in a school setting, is responsible for assessing fine motor skills, including students' use of hands and fingers and developing and implementing plans for improving related motor skills. The occupational therapist focuses on daily living skills such as eating, dressing, schoolwork, play, and leisure (Oklahoma State Department of Education, 2013, p. 31).

Paraprofessional-A credentialed individual who a district employs and who is appropriately trained and supervised in accordance with State standards to assist in the provision of special education and related services under the general direction and

supervision of a certified or licensed professional staff.(Oklahoma State Department of Education, 2013, p. 35)

Speech and Language Pathologist-A professional holding an Oklahoma Teaching Certificate who can assess and treat persons with speech, language, voice, and fluency disorders. This professional coordinates with and may be a member of the evaluation and IEP teams. (Oklahoma State Department of Education, 2013, p.36).

Stakeholder- a person who has an investment in something; in this research, it is a person who is invested in supporting a child with CCN (Dictionary.com, n.d.).

Team- the group of people who come together with a common aim of developing goals and objectives to assist a child with disabilities be successful within the educational setting (Taylor, Smiley & Richards, 2009).

Summary

With the passage of the Individuals with Disabilities Education Act in 1975, children with CCN must be served by a group of stakeholders who are mandated to meet yearly and work together throughout the year to identify the child's individual strengths and needs. The group, known as the IEP team, is tasked with developing goals and objectives to implement a program to meet the needs of the child. The effectiveness of the interactions within the team has not been the focus of a qualitative study in spite of the fact that these interactions influence the formation of partnerships and the level of collaboration which occurs between all members of the team. Generalization of newly

acquired skills between settings, places, and with different people is a widely accepted theory in education, which in concept and under some circumstances, is quite possible in the field of special education. Past and current research continues to build the body of knowledge regarding generalizing skills within different school settings and between school and community settings. Thirty-four years after the seminal Stokes and Baer article, generalization as a practice continues to provide challenges to all involved. By using semi-structured, focused interviews together with observations of the child in the home and school environments, in addition to document analysis of IEP communication goals and objectives, a more complete picture was obtained of the successes, challenges, potential barriers and possible solutions experienced by the different stakeholders.

CHAPTER II

A Review of the Literature

The examination of interactions between stakeholders on educational teams who provide support for the generalization of alternative or augmentative communication (AAC) systems between the home and school for students with complex communication needs (CCN) involves many moving and inter-related parts. The individual parts each impact the interactions among the stakeholders. Past and current research partially addresses many of the parts. This chapter provides a review of recent and important past research to better understand each of the parts. It is divided into sections focused on Alternative and Augmentative Communication, Collaboration resulting in partnership formation, Parental Involvement, Generalization, and Barriers to Generalization. This chapter provides the springboard for the current research that this study adds to how interactions among teams of stakeholders influence the generalization of communication skills for children with CCN.

Alternative and Augmentative Communication

The first section of the literature review focuses on Alternative and Augmentative Communication (AAC). Research in this area is important because, "Communication is such a complex phenomenon" (Thunberg, Sandberg, & Ahlsén, 2009, p. 112). Communication by a child with CNN includes many possibilities: spoken language,

vocalizations which have different meanings, non-verbal cues such as eye gaze and facial expressions and a variety of AAC devices and systems. AAC systems can be either high technology (computers, speech generating devices) or low technology (paper, pictures), depending on the system (Beukelman & Mirenda, 2005; Spencer, Peterson, & Gillam, 2008). There are pros and cons to using both high and low technology AAC. Due to the unique communication strengths and needs of each child, stakeholders must consider the abilities, needs and preferences of the student with CCN when choosing an AAC system. Students experiencing CCN may require intensive support implementing their AAC system or device for most of their day, whether at school, home or in the community (Kontu & Pirttmaa, 2008).

The use of assistive technology (AT), specifically alternative and augmentative communication (AAC) systems and devices is an under-utilized but vital support for students with CCN (Henderson et al, 2008). AAC devices are speech generating devices (SGD) ranging from low technology versions, such as printed and laminated pictures or icons to use in communication, to high technology versions computerized programs or applications that can be used on portable devices like an iPad (Beukelman & Mirenda, 2005, Katsioloudis, P. & Jones, M., 2013). Scholars argue that assistive technology is "implemented within educational environments in a less than optimal manner" (Beukelman & Mirenda, 2005) for many reasons, including funding, lack of knowledge and training, and concerns regarding the upkeep of the system or device. AAC systems and devices provide the supports and accommodations for students to make choices, indicate preferred items, make comments and ultimately be able to participate in conversations with others around them.

Service delivery of AAC systems and devices includes accessing training, assessing the needs and abilities of the child, implementation and adaptation, and on-going maintenance (Friederich, Bernd, & DeWitte, 2010). Because of its unbounded growth, service delivery of AAC systems and devices is becoming increasingly diverse. Some larger school districts employ AAC specialists who have extensive education and training in AAC and are available district-wide as a resource for all stakeholders. However, an important point relevant to the current study is that many smaller districts and schools have no designated AAC specialist. Educators and parents are left on their own to pursue the education and training needed to use AAC systems. Companies who manufacture and market their AAC devices and systems frequently provide training at no-cost to parents and districts that purchase or are interested in purchasing their AAC devices or systems. Universities who educate and train speech and language pathologists typically offer at least one graduate course in AAC systems to these future S-SLP's. There are no AT courses offered to pre-service GenEd or SPED teachers. Research indicates there is a strong need for "more training and increased awareness of AT (AAC) services in order to better implement the AT used by students" (Jones-Alt, Bausch, & McLaren, 2013).

Assessing the assistive technology needs of a child who has CCN, specifically the most appropriate AAC system or device which best will meet the child's needs and abilities, is a "complex process" (Desideri, Roentgen, Hoogerworf, deWitte, 2013, p. 4). Evaluating the individual child's communication needs is a multipart process, involving not only the evaluation of their cognitive abilities to understand the communication itself but also ensuring the child possesses the cognitive and the motor abilities to interact with

the low or high tech AAC device. AAC needs and student's abilities change over time. AAC evaluations should be an on-going process throughout the child's educational experience (Spencer et al, 2008).

Selecting the AAC system device to use first with a child who has CCN depends on many factors, with no one person or role within the stakeholders being formally or even informally designated as the AAC expert. Research regarding this role confusion dates back to the mid-1970's when Weiderholt discussed the roles of special education teachers and speech and language pathologists who found that neither role was willing to accept the responsibility to be designated as the person in charge of AAC for a child who has CCN. Unfortunately, this role-confusion continues to exist today. The IDEIA mandates that all IEP teams must clearly document any assistive technology or AAC devices or services the child needs to be able to more fully participate in the educational setting but does not specifically designate the person responsible for the documentation, leaving it up to the team of stakeholders to determine who will be responsible for documenting and implementing AAC devices and systems (Mittler, 2007). Mittler clearly makes the point that teams of stakeholders cannot choose from a list of preferred systems or AAC devices currently available to the district, but must document and base decisions on what the child needs. Again, the stakeholder responsible for this documentation is not formally designated and individual IEP teams determine who is responsible.

Many programs that serve children with CCN, both public and private, will make decisions regarding the AAC device or system based solely upon their particular philosophy or the training background of the provider/teacher (Stahmer & Ingersoll,

2004). The assessors must move from using "unsystematic clinical experience and intuition" to a more research/evidence based decision making process (Desideri et al, 2013, p. 11). Unfortunately, very few research studies have addressed which specific AAC systems or devices can meet the individual characteristics of each child, leaving most IEP teams to make their best guess based on experience with or preference for a specific AAC device or system (Stahmer, Collings, & Palinkas, 2005). This points to the need for studies, such as the current research, to identify how AAC systems and devices can work for children with specific abilities or needs. While this research may provide broad answers, it would benefit some children with CCN.

AAC devices and systems change and improve frequently. Stakeholders working with children who have CCN (specifically Autism) reported concerns about insufficient training in the use of AAC systems and devices (Stahmer et al, 2005) as they change. Frequently, educators and parents are left in the position of learning about the AAC systems or devices by chance or through informal ways (King et al, 2007). AAC systems and devices are often "prescribed and provided without the necessary training and support services being offered" (Copley et al, 2004, p. 231). Educators and service providers must be open to continually learning about the broad array of AAC systems and devices available and seek to work using an interdisciplinary model when making decisions about AAC systems (King et al, 2007). Educators must also balance their preferred philosophies or training with the families' view of their child's needs. Along with choosing AAC systems based on teacher training, expertise or preference, educators also may choose or be limited to choosing an AAC device based solely on the resources available to the school or district (Spencer et al, 2008).

In a small study, Stahmer & Ingersoll (2004) found that some educators relied solely on parents to determine specific AAC systems instead of investigating more evidence-based approaches. Educators should instead work together with parents to learn about the child's abilities and needs to better facilitate the child's communication needs across all environments (Kashinath et al, 2006). Kashinath et al's (2006) research indicates that when parents are included in the training for the AAC system or device, they learn to include the strategies within the home and family experiences, resulting in a positive impact on the child's communication abilities.

Informed decisions and correct implementation of the AAC devices relies on the on-going training for everyone involved with the child with CCN, including the Paras (Stahmer et al, 2005). Paraprofessionals, especially those assigned to work one-on-one with a child who has CCN, are frequently left out of decision-making processes or training opportunities available to other stakeholders. It is important to include everyone involved in the training and not rely on solely one person to receive the training and then be responsible for training everyone else. Research suggests that Paras are an underutilized resource for the team of stakeholders and for the child with disabilities (McKenzie, 2011).

Research indicates that, when given the opportunity to experiment with more than one form of AAC device, children will show a specific preference for one AAC system (Stahmer & Ingersoll, 2004). Individual learner characteristics may also determine the most appropriate system for the students (Spencer et al, 2008). Based on Stahmer and Ingersoll (2004) and Spencer et al's (2008) research, stakeholders involved in the decision making for selecting AAC device or systems must seek out the child's abilities,

needs, and preferences of AAC device. Teams must be well-informed of the many options and willing to provide opportunities for the child to experiment with more than one device or system.

Manual sign language is a low technology AAC system that helps the child communicate basic wants and needs. As stated above, research suggests the importance of educators and parents must consider the individual's abilities prior to recommending sign language as the AAC system to try. Both "motor and imitation skills are critical to the acquisition of sign language" (Spencer et al, 2008, p. 44). The cognitive and language skills of the child also influence the successful acquisition of sign language (Vandereet, Maes, Lembrechts, & Zink, 2011). If a student does not possess the required skills, they may feel frustrated and will not be successful using sign language. Research indicates that stakeholders involved with teaching sign and being communication partners must be trained in sign language and possess a more advanced understanding and ability level than the child (Vandereet et al, 2011). One reason for not using sign language as the primary AAC system is that not everyone the child who signs encounters in the school and community knows sign language which limits the pool of possible communication partners (Vandereet et al, 2011).

One popular AAC system special educators frequently use in schools is the Picture Exchange Communication System (PECS). PECS is a low technology, unique augmentative/alternative communication intervention package, a "promising system for enabling non-speaking individuals to communicate with a wide audience of 'listeners' (Sulzer-Azaroff, Hoffman, Bondy, & Frost, 2009). The system teaches discrimination of pictures and how to put them together in sentences. In more advanced phases, individuals

are taught to answer questions and to comment (Taylor, Smiley, & Richards, 2009). Because PECS uses easy to recognize pictures, a child is able to communicate with partners who are unfamiliar with the PECS system.

PECS is a six phase, evidence-based intervention for encouraging meaningful social communication for children with Autism Spectrum Disorder and those with CCN (Flippin, Reszka, & Watson, 2010). Since PECS was first created in 1994, most educators and professionals have accepted its effectiveness for teaching children with CCN to communicate requests and make statements to interact with others in their environment. One reason for its wide acceptance may be that it remains a focus of continuing research. Another reason may be its fairly low cost and low technology features.

Phase One begins by introducing the child to exchanging picture icons with a communicative partner seated close by. In Phase Two, which incorporates the idea of generalization between individuals and environments, the child begins to exchange picture icons with a communicative partner by standing up and retrieving the symbol from somewhere in the room (Chaabane, Alber-Morgan & DeBar, 2009). Phase Two is the only phase where generalization is specifically mentioned in the PECS training. Although the system recognizes the importance of systematically addressing generalization, PECS does not specifically mention or include generalizing to the home and including the parent. Phase two only provides training for the child to generalize between two educators within the clinic or school setting.

Most studies involving PECS revolve around the efficacy of PECS to increase communicative abilities for children with Autism Spectrum Disorder (Cannella-Malone,

Fant & Tullis, 2010; Chaabane, Alber-Morgan, & DeBar, 2009; Charlop-Christy, Carpenter, Le, LeBlanc & Kellet, 2002; and Yoder & Stone, 2006). One major challenges to determining the success of a PECS system lies in assuring the program is consistently implemented (Sulzer-Azaroff et al, 2009). While increases in communicative ability are sometimes small, the increases demonstrate improvement in the child's ability to make requests (Flippin et al, 2010). The ability to make requests provides the opportunity to improve the lives of children with CCN, and their communicative partners (parents, teachers, peers) by increasing understanding of personal needs between the two partners. The bulk of PECS research considers generalization of the communicative skills peripherally, if at all. Every one of the aforementioned studies specifically mentions the need for future research into the generalization of the skills across environments.

A consistent gap in research regarding the PECS system and generalization of communicative skills exists between the children and families who will benefit from it and the researchers who investigate its efficacy (Walmsley & Mannan, 2009). One parent included in the study suggested the complexity of unmet or mismatched needs between what the school views as important and what parents need, stating, "They offer you help you don't really want" and then went on to add that if the help needed is not on the "set menu" of services available, they are not provided (Walmsley & Mannan, 2009, p. 274). Although the study found that parents of young children feel they do not receive the support they need to help their child, Tadema and Vlaskamp (2010) found that parents valued the support educators provided. Parents want to be treated as the experts on their child (Walmsley & Mannan, 2009). Walmsley & Mannan (2009) evaluated the

efficacy of PECS and reported that the educators chose the items for the child to request with no parental input. When parents and educators fail to work together as a team, listening to each other and asking for meaningful information, it can lead to "One dismiss(ing) the other" (Walmsley & Mannan, 2009, p. 275). All team members should work together to prevent breakdowns which can impact the generalization of communication skills between home and school.

There is a strong need for formal PECS training for both the parents and the educators to ensure its successful implementation (Stoner et al, 2006). Training for proper implementation of PECS is fairly simple. Parents can be trained to effectively implement communication strategies in the home. Although the study did not investigate the generalization of how the skills learned in the home generalized into other settings like the classroom, one study trained two parents (each with only high school diplomas) to successfully implement PECS in the home (Chaabane, Alber-Morgan, & DeBar, 2009) and experienced positive results. Carre, LeGrice, Blampied, & Walker (2010) recognized the need for future research into the effects of providing explicit instruction for parents about PECS, understanding that merely briefing a parent on the progress of the child in school is insufficient when expecting generalization to occur. There is a well-established understanding in education, "Generalization should be programmed, rather than expected or lamented" (Baer, Wolf, and Risley, 1968, p. 97). To date, this has not been the case with alternative and augmentative communication systems.

The IDEIA

The Individuals with Disabilities Education Improvement Act (IDEIA) addresses the requirement for educational teams of stakeholders to work together collaboratively to

design and implement an Individualized Education Plan for every student who qualifies for services in several sections of the federal mandate. In Sec. 614(d)(5)(B)(iv)and Sec. 609(b)(4), the authors of the IDEIA specifically state the need for the team to: promote collaboration between IEP Team members. Sec. 662(a)(7)(D)continues the recommendation for collaboration and becomes more specific: promoting improved collaboration between special education and general education teachers, and with Sec. 662(f)(3)(B)identifying where the collaboration should occur: educating special education personnel to work together in collaboration with regular educators in integrated settings. The authors of the IDEIA emphasize that the educational team must work collaboratively, with no one person/position holding more weight or significance.

The IDEIA does not specifically address the term generalization; however, it does mandate each IEP team consider whether assistive technology is required to enable the child to participate in the educational setting. The IDEIA does address generalization of AAC systems indirectly: Part 300 / B / 300.105 / b: On a case-by-case basis, the use of school-purchased assistive technology devices in a child's home or in other settings is required if the child's IEP Team determines that the child needs access to those devices in order to receive a Free and Appropriate Public Education. By indirectly addressing generalization, the authors of the IDEIA recognized the importance of considering the planning and implementation of generalizing AAC devices and systems between home and school.

When the IEP team considers the need for AAC devices for a child with CCN, the team must also determine if the student needs to use equipment that the school owns in settings outside the school, specifically in the home (Oklahoma Department of Education,

2008). How the AAC technology should be used to help attain educational goals, specifically communication goals is not frequently described in most IEP´s (Copley & Ziviani, 2004). Unfortunately, educators do not commonly plan for generalizing communication skills learned in school into the home settings.

Collaboration Resulting in Partnership Formation

Effective interactions among stakeholders are essential to successful instruction and support for students with disabilities (Jones, 2012). The need for all stakeholders to participate actively in interactions which potentially may lead to the development of partnerships among the team members is vital to the success of the child with CCN. Some members of the team may need formal special education training; some may have extensive knowledge about the child; others may bring expertise in special education, specifically in the area of communication and AAC systems and devices. Power differentials can exist which shape the interactions among those who are viewed as specialists, known as the educational professionals and the parents, who are the true knowledge bearers regarding the child. Teams of stakeholders who surround a child with CCN should develop an attitude of "shared ownership" of the child's goals and objectives (Spencer, 2005, p. 299). Shared ownership of the goals may lead to much more consistent implementation of communication goals.

Power issues are at work in some of the dynamics. IEP meetings can include several educators who each bring their expertise and experience to the team and only one parent, who brings tacit knowledge of their child to the team. Parents can sometimes feel outnumbered at IEP meetings and, depending on how they are viewed by the educators, can also be perceived as a non-professional (Childre & Chambers, 2005). On the other

hand, by viewing themselves as the sole experts on their child, parents may view educators as providing more negative than positive support for the families. Parents also bring experiences from previous programs into their interactions with the new educators. Educators who establish supportive, positive, respectful relationships with parents may overcome many barriers to implementing new AAC devices or systems.

The concept of collaboration is "either specifically mandated or strongly implied" by the IDEIA when teams of stakeholders plan and implement services for a child receiving special education services (Friend & Cook, 2003, p. 19). Collaboration is defined in several ways. Collaboration can be "designing and using a sequence of goal-oriented activities that result in improved working relationships between professional colleagues" (Cramer, 2006, p. 4). Wiggins and Damore define collaboration as "a system of planned cooperative activities where" team members "share roles and responsibilities for student learning" (2006, p. 49). Prior to the passage of P.L. 94-142 in 1975, teams of professionals working together to meet the educational needs of students with disabilities were informal, less-structured, and not required by law. The subsequent re-authorizations of the Individuals with Disabilities Education Act continues to support the requirement for multi-professional coordination among teams of professionals and parents who meet formally at least once a year to discuss the progress and make plans for new goals and objectives which will best meet the needs of the child with disabilities (McGrath, Johns, & Mathur, 2010; Rupper & Gaffney, 2011; Individuals with Disabilities Education Act Regulations Part 665/b/2/G).

Collaboration between the different stakeholders as they implement the new goals and objectives provides for "many possibilities for challenge" (McGrath et al, 2010, p. 2).

No single approach towards collaboration works for every team (Cramer & Stivers, 2007). Unfortunately, if teams only meet annually, the meetings tend to be much more structured and not as collaborative, leaving little room for the stakeholders to develop partnerships (Spencer, 2005) and parents can frequently be relegated to a listening role during the meeting (Childre & Chambers, 2005). By not providing supports to form collaborative partnerships frequently and consistently, "problematic professional encounters are inevitable barriers" (Cramer, 2006, p. 6). Other barriers to effective collaboration which occur include stakeholders' lack of time, differing schedules and unclear goals. Another barrier may be the different characteristics of the stakeholders, such as socio-economic status and educational backgrounds. Differences due to socio-economic status and educational training between the educators and the parents may result in disagreements regarding the importance of daily routines, early intervention strategies and supportive child-rearing techniques (DeGangi & Wietlisbach, 2007).

Frequently, children with CCN are assigned a Para who provides assistance as the child moves through their school day. Using Symbolic Interactionism as a lens, the Paraprofessional's role in the larger system can be seen as the least professional category in the educational system, rather than as a specialist on the child with whom they spend the majority of the day with. Research has focused on the importance of including Paras as respected and appreciated members of the educational team (Giangreco, Suter, & Doyle, 2010). Educational team members must include the Para in interactions involving the decision-making with respect to communication systems and devices (McKenzie, 2011). When goals are unclear to any of the members of the team, especially to Paras who provide most of the daily support to the child with CCN, there is little group

direction, which in turn can interfere with progress. In recent years, Paras are increasingly taking on a more instructional role with their assigned student, which underscores the need to include Paras in every part of interactions related to providing a continuity of collaborative services to the student (Giangreco et al, 2010).

Currently, no specific individual member within a group of stakeholders is designated by the IDEIA to be in charge of developing partnerships and ensuring collaboration occurs. A goal for every team of stakeholders is for each stakeholder to feel they are an equal member of the team and to have "non-specialized participation by all team members" (Ysseldyke, Algozzine, & Mitchell, 1982, p. 308). Much of the responsibility for the coordination of the IEP goals and objectives, however, falls upon the special education teacher. The demands and responsibilities for supervising, managing to meet the needs of all students, their families, and the numerous related service providers may leave the special educator feeling overwhelmed and uncertain how to collaborate with all stakeholders involved (McGrath et al, 2010). By some accounts, teacher preparation courses do not adequately prepare new special educators with the needed communication skills to interact, collaborate and form partnerships with other adults on educational teams (Spencer, 2005). This lack of preparation can lead to novice special education teachers feeling more comfortable with paperwork or other logistical teaching issues and less comfortable with the interpersonal demands for collaborating with other team members, including parents.

Research indicates several factors which can increase effective collaboration and the formation of partnerships within educational teams. Educational teams are made up of a variety members/stakeholders: parents, special education teachers, general education

teachers, speech and language pathologists, occupational and physical therapists, administrators and Paras. Effective communication within formal and informal interactions is one of the many hurdles to overcome when trying to open lines of communication between stakeholders (Lamar-Dukes & Dukes, 2005). Because a multitude of team members are involved when working with a child who experiences CCN, a shared understanding of each team member's roles is essential for effective collaboration. Having a shared understanding of roles may reduce potential gaps or overlaps in services. Documenting and sharing each specific team member's roles and responsibilities on the IEP is one strategy to provide specific information to all members of the team and may lead to increased accountability (Giangreco, Prelock, & Turnbull, 2010). This documentation of roles and the specific responsibilities can reduce confusion which frequently occurs when the roles overlap.

Being valued, or highly respected and regarded to a team is an important concept in the current research. When team members and teamwork is valued, it can foster a sense of ownership of the goals towards increasing the child's communication abilities. When teams recognize they share a common goal, and each plays a fundamental role 0meeting and supporting the individual communicative needs of the child with CCN, the team can begin to work more effectively. Malone and Gallagher's research (2010) indicates that when team members have a sense of ownership toward the goals for students with disabilities, it results in increased levels of effort put forth into implementing the strategies the team suggests.

A significant factor applicable to the current study is the importance for educational professionals to respect the parent's contributions to the team. Research

shows that when the team of stakeholders recognizes and uses the parent's knowledge and expertise of their child, effective collaboration between the parents and the stakeholders is more likely to occur (Council for Exceptional Children, 2009). Parents come to meetings with educational professionals and have many stories to share (Wellner, 2012). Educators can begin to establish a trusting relationship by taking the time to meet outside of formal meetings and spend time listening to these stories (Eccleston, 2010).

Parental Involvement

Parental involvement in their child's education is a complex, multi-faceted issue which can directly impact the successful generalization of AAC systems between home and school. First and foremost, educators need to recognize and respect that parents are "experts when it comes to their children" (Harte, 2009, p. 24). In 2005, the U.S. Department of Education reported that of the 1 million infants and young children who receive educational services under the IDEIA, many spend most of their waking hours at home with their parents (Meadan, Ostrosky, Zaghlawan, & Yu, 2009, p. 91). School-based efforts thus must view parents as key voices and include them in the process of assessing, selecting and implementing AAC systems and devices.

The value of parental participation is widely accepted, but is "difficult to promote and maintain" (LaRocque, Kleiman, & Darling, 2011, p. 115). Numerous research studies indicate that parental participation is "important for student achievement" in the school (Muscott, 2002, p. 66). Student achievement can take many forms within the school setting: academics, the ability to get along with others, and communication abilities. If parents do not feel comfortable or welcome in the school setting, they tend to

become passive observers, rather than active participants (Muscott, 2002, p. 66). Parents of students with disabilities experience similar feelings and attitudes towards interacting with educators and participating in school activities as do other parents. Special education professionals understand that federal law requires a collaborative partnership with families of students with disabilities and they must actively pursue opportunities to collaborate with parents.

Reasons vary for why parents do not form partnerships with schools and participate in the education of their child. Historically, educators have been critical when discussing families who never come to school events or who do not demonstrate an interest in collaborating with the teacher at school. When educators view families through such a deficit lens, collaborative partnerships are almost impossible to develop. One study presented the idea of four barriers to parental involvement: parent and family factors, child factors, parent-teacher factors, and societal factors (Hornby & Lafaele, 2011, p. 37). Any of these barriers alone can prevent the development of collaborative partnerships. Families who have a child with a disability may experience more than one of the barriers Hornby and Lafaele describe, leading to even lower chances of parents pursuing collaborative partnerships with educators.

Research reveals that encouraging parental involvement in the school-based education of their child, especially when the involvement surrounds learning about and implementing AAC, can be challenging but is possible. Overall suggestions to increase parental involvement can also be applied to parents with children who have disabilities. Research by Muscott (2002) provides several suggestions to increase parental involvement: respecting the uniqueness of each family; understanding how each family

copes with the challenges of raising a child with or without a disability and then matching teacher strategies to this understanding; and looking for opportunities to maximize parental involvement. By choosing to make time a priority and get to know families as unique entities, the educator can then adjust their strategies for suggesting how to better incorporate school-based AAC systems into the home settings.

Two studies interviewed different groups of parents (parents of general education students and parents of students with disabilities) to generate ideas about building "positive home/school relations" (Finders & Lewis, 1994, p. 50). Interestingly, both research studies described the need for educators to listen to parents' voices. Parents of general education students in the Finders and Lewis (1994) study emphasized that teachers must recognize the following factors when interacting with parents: parents have diverse school experiences; they negotiate diverse economic and time restraints; and they have diverse linguistic and cultural practices. Each factor mentioned in Finders and Lewis' research can and perhaps does influence whether a parent of a child with CCN being served on an IEP have the same need to have their voices heard by educators.

Desideri et al (2013), in a study specifically about implementing various assistive technology strategies with students who have multiple disabilities, found that the role of the family members is central to the process. Educators must consider how parents view different AAC systems and devices. There is a strong parental need for educators to provide more "parent-friendly materials that describe these evidence-based strategies in jargon-free language" (Meadan et al, 2009, p. 102). The results from these studies indicate a strong need for educators to get to know the families and to spend time developing relationships with them. "Understanding and respecting parental goals for

their children" is a key to successfully working with parents (Meadan, Halle, Ostrosky, & DeStefano, 2008, p. 45). Educators have much to learn from parents if they are willing to spend the time, throughout the year, getting to know the parent, the family and the child with CCN.

Anderson and Minke (2007) were interested in studying "how parents decide to be involved in children's education" (p. 311). Research into the reasons why parents decide or choose not to be involved in their child's education is "limited" (Anderson & Minke, 2007, p. 323). Those surveyed included a high percentage (93%) of minority parents (African American, Asian, Latino, and Native American). Parents in their study reported that specific invitations from the teachers "had the largest effect" on their decision to participate in their child's education. Knowing this, educators working with children who have CCN must make the effort to invite the parent into the classroom or to trainings to be an active participant in the development of the AAC system which best serves their child.

A concern that parents consistently raise when discussing implementing AAC devices and systems is that if children begin to rely on an AAC device or system, they will not develop spoken language skills (Vandereet et al, 2011). This concern is not supported by any current research. Most AAC devices pair the use of the device to communicate with some form of spoken language (provided either by the person being communicated with or from the device itself). Stahmer and Ingersoll's preliminary research findings indicate that a child using an AAC device will not be inhibited in the use of spoken language (2004). The growth of usage of the AAC device and with spoken

language occurred in part due to the parental support and training the researchers provided.

Generalization

A great deal of quantitative research has been conducted on strategies for planning and implementing generalization of skills across settings and people within school and community settings. Generalization of communication skills is the "demonstration of skills with different people, using different objects or materials, in different settings and at different times" (McLeskey, Rosenberg, & Westling, 2010, p. 125). Generalization must be an integral part of the planning and implementation of AAC devices and systems, however, generalization of these skills can remain a weakness for students who have limited cognitive and communicative abilities for a variety of reasons. While the Individuals with Disabilities Education Improvement Act (IDEIA) does not specifically address the term or concept of generalization, the authors of the IDEIA indicate the need for Individualized Education Program (IEP) teams to consider the conditions under which implementation of the AAC systems between home and school can and will occur (http://idea.ed.gov/).

Research into generalization of a newly acquired skill by individuals with disabilities was the focus of the Stokes and Baer's seminal article in 1977. The authors reviewed the structure of generalization and divided the concept of generalization into nine general headings: Train and Hope, Sequential Modification, Introduce to Natural Maintaining Contingencies, Train Sufficient exemplars, Train Loosely, Use Indiscriminable Contingencies, Program Common Stimuli, Mediate Generalization and Train to Generalize (Stokes & Baer, 1977). Their research reviewed current and past

practices involving generalization of learned skills across different settings, with various people, and time with people who have significant disabilities. Stokes and Baer found that generalization has remained a "passive concept" (p. 349), finding that "Train and Hope" was the most frequently used method for generalization.

Unfortunately, most educators practiced and continue to practice training a student in a new skill, making no plans for or implementing specific instruction to ensure a student can perform the newly acquired skill across different settings or with different people. "The need actively to program generalization, rather than passively to expect it as an outcome of certain training procedures, is a point requiring both emphasis and effective techniques" (Stokes & Baer, 1977, p. 350). Past and current research continues to indicate a clear need for educators to plan for and implement generalization into all areas of instruction. When teaching any AAC system, in this case sign language, researchers strongly recommend that teams and children use the system consistently throughout their daily routines, not solely in isolation (Vandereet et al, 2011). Teams must plan and provide multiple communication opportunities between the student and all those who interact with them throughout their day (Harte, 2009).

Links between what Stokes and Baer reported regarding generalization practices in 1977 and in today's practices still exist. One study reviewed 54 research articles that involved generalization procedures with students who have developmental disabilities and found the prevailing generalization procedures used were: "use of common stimuli, using sufficient exemplars, and mediated generalization" (Gianoumis & Sturmey, 2012, p. 623). Most, but not all, of the research articles reviewed "incorporated some strategy to promote generalization of newly acquired direct-care skills" (Gianoumis & Sturmey,

2012, p. 624) and few studies evaluated more than one type of generalization method. Overall, generalization occurred successfully to some extent when it was promoted as part of the learning process. Students with disabilities need to practice their newly acquired skills across a variety of settings, places and with different people in order to consistently demonstrate the skill. Special educators and all stakeholders involved with students who experience CCN must accept the challenge and responsibility for addressing generalization of newly acquired skills.

Research into the generalization of a variety of skills with children who have disabilities continues to demonstrate promise. Another study dealt specifically with children who experienced speech disorders, teaching them to use a sequence of pictures to complete tasks. Their results "indicate that the acquisition of both stimulus control by the prompts and the generalized repertoire can be relatively rapid" (Phillips & Vollmer, 2012, p. 53). When provided multiple opportunities to practice the tasks across settings, students demonstrated the effectiveness of planning for generalization. Davis, Frederick, Alberto and Gama (2012) researched the impact of Functional Communication training on students with emotional and intellectual disabilities. While the research did not focus specifically on generalization, the researchers found that generalization of on-task behaviors occurred in another educational setting and with other instructors. One student's results were reported as remarkable, demonstrating on-task behavior 100% of the time, with zero inappropriate behaviors, with different instructors. Research in these small, quantitative studies continues to remind educators that generalization works when individuals and teams spend time planning and implementing activities that support the generalization of the newly acquired skill. Further research is needed to focus

specifically on the use of AAC systems and determine factors which influence the generalization of newly acquired AAC skills between the home and school.

Barriers to Successful Generalization

Research has found multiple barriers to successful interactions among stakeholders which impact the implementation of AAC systems and devices. First, Copley and Ziviani (2004) found that stakeholders can feel reluctant to fully commit to the AAC system or device. Researchers have pointed to another challenge, which is the need for consistent initial and on-going training for all stakeholders, as well as selecting the most appropriate AAC system or device and parental concerns regarding the child not developing verbal language if they begin using an AAC system or device (Dunst & Dempsey, 2007). Parents of students with disabilities sometimes resist or completely ignore educator recommendations, regardless of how well the child is doing within the school setting using an alternative/augmentative communication system. One reason for this resistance may be because of "negative support," support provided by educational professionals that the parent views as negative or counter-productive (Dunst & Dempsey, 2007, p. 307).

There are many barriers to the effective use of and generalization of AAC devices and systems. Some of these barriers include: a lack of information regarding the many devices and systems available on the part of both parents and educators, limited access to high quality, personal training to implement the device/system effectively, and when referring to high tech devices, the cost of and the complexity of the device or system may be prohibitive (Stoner et al, 2006). The reasons for the barriers must be addressed and overcome if the child is to be successful using an AAC system to communicate across

different settings and people. In order to overcome the barriers, educators and private trainers must develop a relationship of trust with the families and the student with CCN, be sensitive to the wishes, priorities and any concerns of the family (King, Baxter, Rosenbaum, Zwaigenbaum, & Bates, 2009). Effective partnerships are formed when the service providers (either public school educators or private therapists) "work strategically and effectively…ascertaining and paying attention to their beliefs about what is important" (King et al, 2009, p. 62). How this process unfolds and works is the focus of the current research.

Training parents to implement a wide variety of AAC systems within the home has been the focus of several studies, yielding similar results. Kent-Walsh, Binger and Hasham (2010) trained parents of children using AAC methods as communication partners while reading storybooks with their children. Parents participated in brief training sessions, in which researchers observed them reading and interacting with their children; then teachers provided feedback to the parents. Every student using AAC systems increased the number of times they initiated or participated in communication opportunities during the story time with their parents. To generalize the increased use of AAC with a child, authors recommended keeping training sessions brief but comprehensive, reinforcing that educators must be available to observe and provide feedback to the parents regarding the interactions with the child.

Thunberg et al (2009) investigated combining a minimum of one half day of direct parent training for implementing a communication system with their children who experience CCN, combined with personal guidance provided by trained facilitators following the completion of the training. Their research indicated that all children

involved in the study demonstrated improved skills across all domains. Thunberg et al (2009) recommended the need for more research in the area of training the facilitators to provide appropriate levels of personal guidance after the initial training. The increased understanding regarding how to best provide guidance may lead to increased generalization of communication devices across people and settings.

A family education component consisting of up to two one-hour long home visits twice monthly can reinforce the AAC techniques used in the classroom with the hopes of generalizing the techniques to the home setting (Stahmer & Ingersoll, 2004). Working together with the parents to develop goals that are meaningful and important to the parents/families can better support the needs of the child within the home setting. The researchers suggest that one factor connected to successfully generalizing the AAC skills may be the parent training provided in this study which resulted in higher parental skill levels related to the AAC device or system. Parents in this study were, for the most part, well-educated, middle income and two parent households. These resources might provide a type of cultural capital as described by Pierre Bourdieu (Jenkins, 2002) that enhances the success of the child to use the AAC device across settings.

The need for highly qualified AAC practitioners is vital if students with CCN are to be successful, regardless which AAC system they use. Staff attitudes towards assistive technology, specifically using sign language as the AAC system, can influence whether educators introduce it within the classroom at all (Nam, Bahn, & Lee, 2013; Vandereet, Maes, Lembrechts, & Zink, 2011). Education professionals, teachers and OTs identified the "necessity of more extensive training and continuing support" in order to have a more positive influence on staff attitudes towards assistive technology (Hutinger, Johnason, &

Stoneburner, 1996, p. 17). The AAC systems and devices used to help students communicate are "becoming more technologically advanced" (Katsioloudis & Jones, 2013, p. 31). As technology improves, educators working with students who rely on AAC devices to communicate must stay abreast of the upgrades and changes within the field of AAC.

Collaboration among the trained education professionals can result in better support for the families and the children using AAC systems to communicate (Desideri et al, 2013). Alternatively, the lack of collaboration among the assessors/evaluation team and SPED teachers may increase teacher frustrations for those who are being asked to implement a system when they were not a part of the decision–making process (Nam et al, 2013). Many students with CCN are being served in general education classes. In spite of the fact that the use of assistive technology is increasing within the special education settings, there is a continuing need to plan for integration of the AAC systems into general education classrooms (Reichle, 2011). Successful integration of AAC into general education classrooms means collaboration with and training of the general education teacher must be considered by all stakeholders.

Another potential barrier to the use of AAC involves parental resistance to either beginning or consistently implementing the use of an AAC system or device. Parents frequently use their intuition as a communication strategy to know what their child wants or needs. Parents "used knowledge of their children (to) follow their cues" (Harte, 2009, p. 26). Stakeholders, and the child, may abandon AAC systems entirely. Abandonment, according to Desideri et al, may be due to the "inadequate adaptations to the situation and routine" (Desideri et al, 2013, p. 4) needed for the child to be successful. Educators

could recognize the needed adaptations if they maintain a consistent, open, working relationship with the family and the child.

Research indicates some special education teachers report a hesitancy to include AAC in their classrooms or a "low usage of assistive technology" (Nam et al, 2013, p. 365). Nam et al found that special education teachers report several concerns for using assistive technology and AAC systems within their classrooms: the training time involved with learning new AAC systems, the cost and inconvenience of upgrading the software with each system, the servicing of the equipment when it breaks down, regular maintenance required, and the time involved with monitoring the student's use of the AAC system.

Summary

This chapter reviewed research addressing the many factors influencing stakeholder's interactions and the partnerships which are developed as they care for and work with a child with CCN. These factors include: the need to collaborate; the IDEIA mandates which govern how the team of stakeholders must address AAC; the many different types of AAC devices and systems; the importance of parental involvement; and barriers to successful generalization of newly acquired communication skills across different settings and people. Each of these factors provides a piece of the foundational puzzle for beginning this research study focused on the interactions between and partnerships formed by stakeholders. The literature reveals strong evidence that generalization of newly acquired skills, communication skills in the current research, can occur across settings and people if stakeholders work together. Collaboration is challenging but possible, and the IDEIA mandates that teams work together to address

the AAC needs for each child on an IEP. The literature also revealed insufficient knowledge in how specific teams of stakeholders can interact and form partnerships to support the communicative efforts of children with CCN.

This study is designed to extend and complement existing knowledge regarding the factors influencing how teams of stakeholders interact and form partnerships. This research continues the call from the 1970's: to do more than simply "train and hope" that generalization of skills (specifically communication skills in this research) occurs and to have teams of stakeholders work together to actively plan for and implement generalization strategies. Thirty years of research still suggests that we are working to generalize skills, however there continues to be gaps in the practice, knowledge and effort that prevent actualizing the potential of the teams established to assist children's development of communicative abilities across different settings and people. This is the springboard for my study, to examine how interactions among stakeholders who support a child with CCN form partnerships to ensure generalization of communication skills occurs across different settings and people. We still need to know how teams of stakeholders work or don't work together, hence, my study.

CHAPTER III

METHODOLOGY

This chapter provides a review of the problem statement, purpose of the study, research questions, and discussion of the epistemology and theoretical perspective which informed the study. A detailed discussion of the methodology of the study is included in this chapter with a description of the research participants, settings, and methods of data collection, and analysis.

Statement of the Problem

Students with complex communication needs (CCN) rely on teams of stakeholders to work together to determine and implement appropriate goals and objectives related to the use of Assistive and Augmentative Communication (AAC) systems in order for the student to consistently communicate effectively across different settings with others around them. Communication among the stakeholders is vital for the student if all stakeholders plan to and provide opportunities to practice newly acquired communication skills in different places and settings and with different people. "If students are instructed to generalize, they will be able to use the skills taught in untrained contexts" (Browder & Spooner, 2011, p. 361). When communication and collaboration occurs between stakeholders, it is likely that students will generalize these new skills

across different settings and people.

Generalization of AAC skills provides students with the ability to become more independent and demonstrate self-determination in a variety of untrained contexts in addition to not continuing to rely on those who know them well to communicate for them. Self-determination is defined as making choices regarding all aspects of one´s life without undue pressure from others and the ability to demonstrate acts of self-determination is considered fundamental by educators for all children and adults (Westling & Fox, 2009). Without the ability to communicate and make choices about their needs and wants, the student may withdraw or demonstrate behaviors that express their frustration. These behaviors can range from the most subtle (flapping hands quietly) to socially inappropriate (yelling, throwing objects). Providing students with the devices or systems to effectively and functionally communicate might increase the student's independence and ability to make meaningful choices and lessen their feelings of powerlessness or learned helplessness (Henderson et al, 2008; Stoner et al, 2006), but such tools require a team to support their use, effectiveness, and generalization potential.

The IDEIA mandates teams of stakeholders meet yearly to review goals and objectives for a child with a disability. Collaboration is an unspoken, unwritten goal for each IEP team of stakeholders. Collaboration is a "strategy that advances inclusion and enhances the likelihood of success" (Conderman & Johnston-Rodrigues, 2009, p. 235). Teams of stakeholders do not automatically form collaborative relationships and inevitable barriers may exist which prevent the team from working together effectively (Cramer & Stivers, 2007). When barriers exist between the stakeholders on an IEP team, little progress on IEP goals and objectives may result. If goals and objectives are unclear

to members of the team and communication between the stakeholders is minimal or absent, collaboration cannot follow and little progress may be made toward reaching the goal of assisting the child with generalization.

Generalization of skills is widely accepted within the special education community as a vital step in the acquisition of new skills for students with disabilities. Research continues to indicate generalization of newly acquired skills is possible and holds promising results for successfully generalizing skills between settings and people (Davis, Frederick, Alberto, & Gama, 2012; Phillips &Vollmer, 2012); however, there is a lack of research involving how the education teams work together to support generalization. Based on my pilot study involving initial interviews with different individual stakeholders, a variety of barriers continue to exist which prevent generalization across settings including lack of communication among stakeholders (both between the home and school, and among the school professionals), lack of funding for and training on AAC devices, rigid ideas for each person's roles, transience in stakeholders, and failure of members of the team of stakeholders to take ownership for ensuring that generalization of AAC systems and devices is planned for and implemented across people and settings. While these findings reveal key barriers, insufficient research exists regarding how interactions among entire team members influence generalization of skills. After completing my pilot study, I realized I needed the complete picture, rather than individual pieces.

Purpose of the Study

The purposes for conducting this research study were to (1) to explore the types and meanings of interactions which occurred among the stakeholders as part of their

participation on the federally mandated educational team formed by parents, SPED teachers, GenEd teachers, S-SLP's, P-SLP's and Paras, and (2) to examine how collaborative communicative exchanges transpired among the stakeholders which could potentially support the child with CCN to generalize communication skills across different settings and people. The research explored both successful strategies and potential barriers to developing more effective interactions impacting the generalization of communication skills between the school and the home using case study methods. Recommendations were generated regarding specific ways to more successfully generalize communication skills between school and home for educators and parents to consider in the future.

Research Questions

1. What are the types and meanings of interactions which occur among the stakeholders as part of their participation on the federally mandated educational team formed by parents, SPED teachers, GenEd teachers, S-SLP's, P-SLP's and Paras,?
2. How do collaborative communicative exchanges transpire among the stakeholders which could potentially support the child with CCN to generalize communication skills across different settings and people?

Epistemological Stance and Theoretical Perspective

A qualitative study based on the constructionist epistemology using the theoretical perspective of symbolic interactionism addressed the research problem. Crotty (1998) states epistemology is "a way of understanding and explaining how we know what we know" (p. 11). The constructionist epistemological stance proceeds from the

understanding that "truth, or meaning, comes into existence in and out of our engagement with the realities in our world" (Crotty, 1998, p. 8). Using the lens of constructionism, the design of this research involved choosing a theoretical perspective in line with this theory of knowledge and choosing a methodology that allowed me to explore how team members who provide support for a child with CCN interact and understand their roles and experiences. Under the epistemology of constructionism, meanings are "not discovered, but constructed" (Crotty, 1998, p. 9). These constructions are not achieved "in isolation but against a backdrop of shared understandings, practices, and language" (Schwandt, 2000, p. 197). A constructionist epistemology informed my perspective as the researcher through the engagement of the realities of four groups of stakeholders' experience who were involved with children who have CCN.

Constructionism, as defined by Crotty (1998), has no objective truth waiting somewhere for us to discover it. Truth, or meaning, "comes into existence in and out of our engagement with the realities of our world" (p. 8). Crotty (1998) explains that, in this theory of knowledge, the researcher assumes that "different people may construct different meaning in different ways, even in relation to the same phenomenon" (p. 9). The research problem required a methodology that would allow me to explore the experiences of a variety of different stakeholders involved in the same phenomenon and their constructions of their interactions which might influence and shape how well the children with CCN generalize the communication systems. The meaning of a phenomenon is not discovered; I approached the research with this understanding. Meaning is constructed by each individual. Because this research interviewed multiple people involved in the life of a child with CCN, comparisons were made to "bring into

prominence what is common to (this) group of phenomena" (Crowley, 1994, p. 56) Factors which influenced the stakeholders' construction of meaning included the types of communication shared (personal/routine versus clinical), the perceived role of the Paras, whether peer coaching occurred and how clearly the IEP goals and objectives were written.

The interpretivist theoretical perspective, specifically symbolic interactionism, best addressed the complex phenomena regarding the interactions among stakeholders and possible partnerships that were the focus of the research. The interpretivist stance was aligned with the methodological "need for an applied qualitative approach that would generate better understandings of complex…phenomena" (Thorne, 2008, p. 26). Blaikie states that interpretivism regards social reality as "the product of processes by which social actors together negotiate the meanings for actions and situation" (1993, p. 96). Symbolic interactionism is "an examination of perspectives and reference groups" (Charon, 2010, p. 38) that may include people, objects, and other aspects of social contexts.

By using a collective case study approach, the perspectives and meanings of four different groups of stakeholders who support and care for a child with CCN were examined to understand their interactions and roles in the communicative processes of children with CCN. The interpretivist lens is "oriented towards an uncritical exploration of cultural meaning" (Crotty, 1998, p. 60) and accordingly, this research study "seeks associations, relationships and patterns within the phenomenon (Thorne, 2008, p. 50).

Symbolic interactionism "explores the understandings abroad in culture as the meaningful matrix that guides our lives" (Crotty, 1998, p. 71). Examining how

individual team members described the interactions between and among each other provided a glimpse into the "meaningful matrix" that is their lived experience with the team who all support and serve a child who depends on them. Blumer (1969) postulates that symbolic interactionism has three "simple premises:"

1. "Human beings act toward things on the basis of the meanings that the things have for them.
2. The meaning of such things is derived from, or arises out of, the social interaction that one has with one's fellows.
3. These meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things he encounters" (p. 2).

Symbolic interactionism best informed this research study because it aligns with a qualitative methodology which approaches how participants understand their interactions with other team members and how the meanings they brought to the interactions shaped their actions, they acted toward each other, meanings they bring to the interactions. The study approached interactions as they arose from a shared interest in supporting and caring for a child with CCN and, interpreting their interactive exchanges as part of a broader interpretive process in which they engaged with other stakeholders. As part of my stance as a researcher, I approached stakeholder perceptions and interactions as encounters of meaning making, in which, intentionally or not, stakeholders engaged. Together, the stakeholder's perceptions of their actions and interactions were part of the meaning making system influencing whether the child was able to consistently generalize communication skills and systems across settings and with other people.

Blumer also states, "Symbolic interactionism is a down-to-earth approach to the scientific study of human life and human conduct" (1969, p. 47). Symbolic interactionism emphasizes how we as humans "go about the task of assembling meanings" (Plummer, 1996, p. 223). This study was designed in a way that is consistent with Blumer's definition and Plummer's statement regarding symbolic interactionism. The methodology I used was a multiple case study, drawing data from the semi-structured interviews of the stakeholders, combined with observing them as they supported the communicative attempts of the child in natural settings (both in the home and school), and document analysis of the communication goals on the IEP. These data provided a glimpse into the meanings stakeholders brought and derived from the interactions. Plummer emphasizes that the interactionist's focus is on meaning which emerges from "joint acts" (1996, p. 224) through which lives are organized. The interactions stakeholders on the IEP team describe consisted of joint acts which, positive, neutral or negative, ultimately had implications for the level of support provided to the child with CCN.

Overview of the Design of the Study

This study was implemented using a qualitative research design using an instrumental, multiple case study as the method. Qualitative research in special education has been valuable for understanding people's perspectives as they work within the special education areas. This research parallels the overall drive to "achieve equity across traditionally disenfranchised groups" (Pugach, 2001, p. 444). As with all qualitative research, the research design is ideographic, in this case involving the specific perspectives of four groups of stakeholders who all provide support for children with

CCN. The value of qualitative methods is in the stories, perspectives, and process this research tells of the human struggles involved in the day-to-day work educating students with CCN. My research helps explore team members' perspectives and the processes of involvement in a team. It is unique because of its focus on individual perspectives and how they provide insights into the team.

"Qualitative methods provide means whereby social contexts can be systematically examined as a whole" (Hatch, 2002, p. 17). The research problem proposed necessitated a qualitative design to examine the interactions, experiences, and thoughts among whole groups of stakeholders who care for a child with CCN and how such interactions and relationships may have shaped the generalization of communication skills between home and school. Following Hatch's definition, such processes cannot be reduced to numbers but must be examined as a holistically. Qualitative research in the special education arena often captures "involved people's perspectives" and adds "to our understanding of discourses that shape social life in schools and society" (Brantlinger et al, 2005, p. 202). The rationale for this specific study was to seek stakeholder's perspectives to understand how they influence interactions among and between each other.

Qualitative research can be a "powerful tool for understanding the social realities experienced by people with disabilities" (Murray, Anderson, Bersani, & Mesaros, 1986, p, 17). Qualitative methods "permit context-based analyses that can uncover the unique overt and covert workings of a particular context" (Crowley, 1994, p. 57). Each group of stakeholders was positioned in a unique team and context and provided an understanding of their particular overt and covert workings. Qualitative research is not conducted with

the sole purpose to generalize the findings to other circumstances or settings, however, special educators may realize there are "similarities to their situations and judge the relevance of the information produced to their own circumstances" (Brantlinger et al, 2005, p. 203). Qualitative studies can this be informative for considering similar phenomenon in other contexts.

Using an educational case study design, this research was concerned primarily with "the understanding of educational action" (Stenhouse, 1988, p. 50). This research gave a voice to the parents and stakeholders who have been "historically silenced or marginalized" (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005, p. 199) and sought to "enrich the thinking and discourse of educators" (Stenhouse, 1988, p. 50). Multiple case studies can draw conclusions and highlight commonalities in a group of phenomena (Ghesquiere, Maes, & Vandenberghe, 2004). Creswell describes a case study as a qualitative approach in which the investigator

> "explores a bounded system or, in this research, multiple bounded systems over time, using detailed, in-depth data collection involving multiple sources of information, in this research, interviews and documents, and reports a case description or, in this research, case-based themes" (Creswell, 2007, p. 73).

In this case study, I considered each team as a case. Each case represented different manifestations of the phenomenon of team perspectives on interactions supporting a child with CCN. I focused on how participants perceived and understood interactions; and represent the spectrum of case interactions in my findings. Surfacing within the data, as in the case study, were power struggles that provided insight into how particular events or devices became sites of struggle that shaped interactions between the stakeholders when

addressing the communication needs of the child. These insights can inform and influence future decisions made by education practitioners and parents who care for children with CCN. Sturman (1994) emphasizes that "the distinguishing feature of case study is the belief that human systems develop a characteristic wholeness or integrity and are not simply a loose collection of traits" (p. 61). The collective case study approach examined and explained possible "operational links" within and among the cases (Yin, 2009, p. 9).

Participants

Purposeful sampling of stakeholders occurred. I used Stake's three main criteria for selecting the cases (Stake, 2000, p. 23):

1. Is the case relevant to the quintain (the phenomenon to be studied)?
2. Do the cases provide diversity across contexts?
3. Do the cases provide good opportunities to learn about complexity and context?

The participants who comprised the four cases met Stake's main criteria. All cases involved the stakeholders who provide support for a child with CCN. The phenomenon which linked each case is the strong need of the child with CCN to depend on their stakeholders to communicate among themselves to help the child communicate across settings and people. There was diversity across the cases. Students attended schools in three different settings (rural, urban and suburban), were different ages and in different grades, were different genders, and were identified with a variety of disability categories which impacted their communication abilities. All four cases provided excellent opportunities to learn about the complexities within and across cases.

Once IRB approval was obtained, I used professional contacts across the state of Oklahoma to identify and contact parents whose children have CCN and are served through IEP's within public school settings. The students whose teams were the focus of this study represented the following grades/ages during the school year that the research was conducted: one kindergartener/five years old, one second grader/nine years old, one third grader/nine years old, and one fourth grader/ten years old. The cognitive level of each child was not a factor in choosing them to participate in the research, however, all students with CCN in the study also experience developmental delays.

While I use the gender neutral term 'parent' throughout this document, the current study involved interviewing all four mothers, with two fathers participating in interviews together with the mother. In the United State society in general and especially when parenting a child with disabilities, mothers are largely viewed as having primary responsibility for their child and with the relationship with educational professionals (Cole, 2007; Turnbull, Turnbull, Erwin, Soodak, & Shogren, 2011). This pattern was evident in the current study.

Depending on the needs of a specific child, another vital member of some educational teams was the Paraprofessional (Para), who was not included as part of the original pilot study. Frequently, students with CCN have a Para assigned to them to assist in a more dedicated, consistent manner than the teacher or other related service providers. Paras provided important perspectives to the generalization of communication systems between the homes and school because they tend to have daily contact with the student's parent. All four students with CCN in this study had a Para assigned to them for most of their day at school. These Paras were also included in the interviews.

Methodology

A strength of case study research is its openness to various methods. The specific methods in this study were interviews with individual stakeholders about their perspectives, single select observations within the home and the school, and document analysis of IEP goals and objectives related to communication. Extensive interview data was the primary source of information foe the study. Together, these methods and the data they provided formed a collective case study of four groups of stakeholders who provide support for children with CCN. The detailed descriptions stakeholders provided resulted in a deeper understanding of their experiences more than mere numbers could provide.

Interviews

I conducted semi-structured, focused interviews with individual stakeholders in four separate teams that each serve a child with CCN. The interviews were conducted separately to represent their multiple voices and demonstrate their varied perspectives. By interviewing each stakeholder, I focused on their individual perspectives, free of any professional or personal dynamics that might have shaped group interviews. Such an approach provided descriptive information to help inform my "understanding of individuals with disabilities, their families, and those who work with them" (Brantlinger et al, 2005, p, 196). Each interview conveyed participants' own distinct experiences and views at that "particular moment in time" (Emerson, Fretz & Shaw, 1995, p. 117). I designed the semi-structured interview protocol by intentionally using open-ended questions to encourage stakeholders to "use their own language and concepts in responding to them" (Emerson et al, 1995, p. 114). Each interview lasted between fifteen

and forty-five minutes and were conducted in a variety of settings (classrooms, a library, coffee shops, and homes). Some were characterized by brief responses with little to share, others by lengthy sharing of stories and perspectives. Two interviews, Cases A and C, involved both mother and father. While I originally planned to interview the parents separately, neither case wanted to participate separately. In both Case a and C, the mother was the primary responder to all questions with the father interjecting supporting information when the mother either paused or indicated for the father's to add additional comments. In Case B and D, both fathers are in the military and were unavailable to participate in the interviews because of their work responsibilities. Six follow up interviews occurred; two in Cases A, B and C. The follow up interviews were brief, expanding or clarifying information that was not available in the original interviews.

Each stakeholder was interviewed individually providing a glimpse into "the nuances of each individual personality" (Angrosino, 1997, p. 100). Twenty-three total semi-structured interviews were conducted. The interviews were taped with the permission of the stakeholder, and then transcribed verbatim, an approach which enhanced analysis. Interviews incorporated "issue oriented questions" (Stake, 1995, p. 65) regarding the individuals experiences interacting with the team of stakeholders to support the use of communication systems by the child in the home and school settings and included elements of if, and how, partnerships formed among the interviewee and other stakeholders. The open-ended questions (Appendix B) provided an opportunity for the stakeholders to describe the elements of the interactions they perceived as influential to the process of generalizing communication skills between home and school and how

partnerships were formed. Probing questions were used as "follow up questions to go deeper into the interviewee's responses" (Patton, 2002, p. 362).

The semi-structured interview questions provided the stakeholder with an "order on the flow of experience to make sense of events and actions in their lives" (Riessman, 1993, p. 2). I actively listened to the responses and formed appropriate probing questions to deepen the understanding of each response. Brief field notes were taken during the interviews to help me when analyzing the transcript later. These field notes included facial expressions, tonality of voice, body language, additional thoughts for further questions and other pertinent information. To ensure confidentiality, the data from all of the interviews were assigned alphabetical letters with no identifiers. The goal in presenting the data and documents was to be "accurate, complete and dated" (Ghesquiere et al, 2004, p. 177).

Study Sites

The sites for the interviews were chosen based on stakeholder preferences. Interview sites included the home of the parents, local coffee shops, a local library, school classrooms and break rooms within the school buildings while the education professional was on plan or break. Observation sites included the homes of the children, a physical therapy session with the family and the child, and the child's special education classrooms. No observations took place in general education classrooms. This was due to the limited time the child spent in the general education class, time constraints and the preference of the educational professionals involved with each child.

Follow-up Interviews

Once the initial interviews were conducted and transcribed, a few follow up questions were identified for some of the stakeholders. Member checking in the form of follow up interviews was requested with specific individuals. Six total follow up interviews were conducted. The follow up interviews were brief and included targeted questions to clarify the initial interview responses. Interviewees were informed during the initial interview that a brief follow up interview may be requested after the initial interview had been transcribed if there were issues that required further discussion or for clarification of a topic.

Observations

Individual observations of the child within the home and school settings were used as a second data collection method in order to provide a deeper understanding and "capture the context within which people interact" (Patton, 2002, p. 262). To develop a broader perspective of the phenomenon and look at how it performs across different locations, observations of the child communicating with others in the natural environments of the home and school settings were needed (Stake, 2000; Stake, 2006). Occasionally, I also had the opportunity to observe, informally, an interaction between stakeholders. While interviews provide a wealth of data from involved stakeholders, observations of the child communicating with different stakeholders in the home and school setting provided a fuller understanding of "the complexities of (the) situations" (Patton, 2002, p. 21). I observed each child in both home and school settings and then immediately recorded while sitting in my car outside of each observation. The scheduling of each observation involved assuring the convenience of the stakeholders involved in the request and were challenging to schedule. Only one observation of the

child in the home and school settings occurred due to time constraints on the parents and the school schedules. By observing the child communicating in more than one setting, I was able to establish stronger meanings to the observations, interviews and document analysis, and learned how a child communicates firsthand, rather than in a different way (Stake, 1995).

Observations of the child with CCN were scheduled at convenient times for the parents and the education professionals. All four observations within the school setting took place while the child was receiving educational services in the special education classroom. Observations with three of the families occurred within the child's home, all three occurring immediately after the school day ended. Two of the three included observing the child getting off the bus and returning into the home, with the third one arriving at home with her brother in her mother's car. The remaining family observation occurred with the entire family participating in a physical therapy session/routine after school. The fourth family was in the process of moving to Colorado and living in a temporary hotel at the time of the observation so the parent preferred to be observed in a setting familiar to the family and specifically comfortable for the child with CCN. Each observation lasted approximately thirty minutes long and field notes were written immediately after completing each observation. I included impressions and feelings experienced during the observations as part of the field notes to provide a better understanding of the observed settings and all of the people observed within that setting (Patton, 2002). These brief field notes are significant because "the text is not autonomous of its context" (Riessman, 1993, p. 21).

Document Review

Document analysis was used as a third qualitative case study technique. With permission from the parents, I reviewed only the communication goals and objectives on the child's current IEP. The communication goals and objectives appear in different parts of the IEP including Current Assessment Data, Objective Statements, Considerations of Special Factors, Annual Goals, Short-Term Objective/Benchmark and Related Services. Only the information related to communication abilities and goals for increasing communication skills were reviewed. The purpose for reviewing the communication goals and objectives was to better understand specific goals the school and parent have formally, legally agreed upon as school-based communication goals for the child with CCN. I requested to review the current IEP with the parents present and jotted field notes regarding any pertinent information on the IEP's regarding communication goals and objectives. No other information from the IEP was requested or reviewed. One of the parents provided a copy of the IEP; all identifying information on the IEP's was blacked out and replaced with corresponding identifiers which maintains confidentiality.

The diverse experiences and views added to the overall story about how four different teams of stakeholders interacted to support the generalization of communication skills with a specific child who has CCN and provided details into how they developed partnerships among other stakeholders involved with the child. "Stories are not separate from theory; they make up theory and are, therefore, real and legitimate sources of data and ways of being" (Brayboy, 2005, 429). The stories generated from the interviews are legitimate sources of data to inform the research questions. Using semi-structured interviews with all involved stakeholders provided a platform for them to tell their stories and gave access to the "human voice" behind the experiences (Crowley, 1994, p. 57).

Data Collection: The Cases

I collected data from the following clusters of stakeholders. The specific information about the four groups (participants, observation locations and document reviews) are listed below:

Group A-Autonomously Independent

Case A was comprised of stakeholders who support a second grade young lady (pseudonym: Amy) who is nine years old and attends school in a rural Oklahoma setting. I interviewed the following stakeholders: Parents (both mother and father), Special Education Teacher, General Education Teacher (2nd grade), Paraprofessional, School-based Speech and Language Therapist, and Private Speech and Language Therapist. I conducted follow up interviews with-the Special Education teacher, School-based Speech and Language Therapist, and Private Speech and Language Therapist. I observed stakeholders interacting with Amy in the home with both parents and older brother present and in the school during center time in special education classroom while working with Paraprofessional. I conducted a document review of the IEP, making notes of the communication goals and objectives from the document.

Group B-Uncoordinated Interactions

Case B was comprised of stakeholders who support a third grade young lady (pseudonym: Bella) who is nine years old and attends school in a suburban Oklahoma setting. I interviewed the following stakeholders: Parent (mother), Special Education Teacher, Paraprofessional, School-based Speech and Language Therapist, and Private Speech and Language Therapist. I conducted follow up Interview with the Parent. I observed stakeholders interacting with Bella after school in a therapy session with mom

and sister present, and in school during center time in special education classroom while working with Paraprofessional. I conducted a document review of the IEP, making notes of the communication goals and objectives from the document.

Group C-Passionately Involved

Case C was comprised of stakeholders who support a fourth grade young man (pseudonym: Carver) who is ten years old and attends school in an urban Oklahoma setting. I interviewed the following stakeholders: Parents (mother and father), Special Education Teacher, Paraprofessional, School-based Speech and Language Therapist, and Private Speech and Language Therapist. I conducted follow up Interview with the Parent (mother) and Special Education Teacher. I observed stakeholders interacting with Bella in the home, first walking from bus stop to the apartment. I observed after school rituals including snacks and television time, the school at lunch time, and then receiving one-on-one reading instruction class with special education teacher. I conducted a document review of the IEP, noting the communication goals and objectives.

Group D-Meeting of the Minds

Case D was comprised of stakeholders who support a kindergartener (pseudonym: Danny), a young boy who is five years old attending school in a suburban Oklahoma setting. I interviewed the following stakeholders: Parent (mother), Special Education Teacher, General Education Teacher (Kindergarten teacher), Deaf Education Consulting Teacher, Paraprofessional, and School-based Speech and Language Therapist. There were no Follow up Interviews. I observed stakeholders interacting with Danny in the home, as child arrived at the home on the school bus, during after school rituals including television time, and in school during individual and large group instruction with

Paraprofessional and special education teacher. I conducted a document review of the IEP, making notes of the communication goals and objectives from the document.

Data Analysis

Qualitative research can be a "powerful tool for understanding the social realities experienced by people with disabilities" (Murray et al, 1986, p. 17). I transcribed all interviews, which is an important technique for immersion in the data and initial analysis. I listened to the recordings, and then re-listened at least twice after the transcription was completed to ensure accuracy and to become immersed in the data. By spending extended time immersed in the data, I gained a fuller understanding of their experiences.

Content analysis, reducing and making sense of qualitative data, was used to reduce the vast amount of qualitative data provided in the 23 initial interviews and the six follow up interviews to "identify core consistencies and meanings" (Patton, 2002, p. 453). I took the transcript as a whole and broke the words and phrases into "important units" (Gee, 1986, p. 391) of information, in order to "identify, code, categorize, classify and label the primary patterns in the data" (Patton, 2002, p. 463). Categories of meaning were determined from the data (Crowley, 1994). As each reading of the transcript occurred, I used different colored pens to make notes in the margins to differentiate the dates of the readings. All transcriptions were formatted for ease in coding and determining themes which emerged from the data. Each coded piece of data was indexed. Themes were identified as they emerged from the analyzed coded data.

Emic issues from each interviewee emerged throughout the interviewing process (Stake, 1995). These individual issues were presented as they described their experiences forming partnerships and working to address and meet the needs of the child who uses

communication systems or devices. Time was devoted specifically to immersing myself first in individual interviews, then from the cluster of interviews, and then across all of the cluster data. Each case was studied to better understand the "particular entity as it is situated (Stake, 2000, p. 40). I identified etic issues, as well, based on immersing myself into the data and differentiating issues not identified by the stakeholders themselves. Thematic analysis was used to determine how the data were linked to the larger concept of the interactions which occurred between and among the stakeholders that impacted the generalization of communication skills between different people and settings.

Correspondence according to Stake (1995) is the search for patterns and consistency, with important meanings reappearing again and again in individual interviews and across the different interviews. Data from the interviews was analyzed to establish the separate parts, then to determine possible relationships to the parts. Cross referencing occurred between the interviews of each cluster of stakeholders and across cases to determine possible themes within the data. Yin (2009) refers to cross case synthesis as a process in which "each case is treated individually and then analyzed as an entire collection" (p. 156). The process of cross referencing or cross case analysis allowed the researcher to determine whether the different individuals and/or clusters of stakeholders have similar or varied experiences and found common relationships across all four cases (Stake, 2000). I produced layers within the case reports, taking the hundreds of pages of transcriptions to integrate the data. I slowly and deliberately honed and refined the hundreds of pages to capture the essence in the individual case reports.

A final step in the analysis process was to write up each of the cases holistically, "looking for common themes which transcend the cases" (Yin, 2009, p. 156). I

reflexively evaluated the data from and across the interviews to ensure that, based on knowing what I think I know (Pillow, 2003), I presented the stories from each of the stakeholders as their own (Pillow, 2003; Gordon, 2005). I spent hours and hours reducing the original case reports to best represent the stories. Because of my many years in the classroom working with students who have CCN, having a sibling with CCN and having completed the pilot interviews, I entered this research with my own personal and professional experiences with students who rely on others to help them communicate with different people in a variety of settings. As the data was processed, I reflexively took the approach to interpret the meanings within the data. Reflexivity is required in qualitative studies to accurately tell the research story, separate from our own views and experiences.

Data analysis was iterative. In searching for meaning within the data, I moved forward and backward, repeatedly through the data (Crowley, 1994). I used both analysis and synthesis to segment the interviews apart and put them back together to gain a clearer understanding of the meanings within and among the interviews. I used "direct interpretation of individual instances and through direct aggregation of instances until something can be said about them as a class" (Stake, 1995, p. 74). The very nature of case study anticipates that the experience will be "progressively focused" (Stake, 1995, p. 133) and will provide thick detailed descriptions of each case.

Triangulation is a research method used in qualitative research which "minimizes misperception and invalidity of our conclusions" (Stake, 1995, p. 134) and clarifies "meaning by identifying different ways the case is being seen" (Stake, 2000, p. 37). Data triangulation involves using more than one source of data to address the construct validity

of the research (Yin, 2009, p. 116). Triangulation occurred through examining the transcripts from the semi-structured interviews, the observations made within the home and school settings and the data regarding communication goals and objectives in each child's current IEP. I observed natural communication during authentic settings. School observations were made during center or individual teaching times. Home observations occurred after school for each of the children. The focus of the observations was solely on the communication which occurred between the child and the people supporting them at that time. This focused attention on communication included both formal communication attempts and the "informal interactions and unplanned activities" which naturally occur in the child's day (Patton, 2002, p. 286).

Another form of triangulation used was negotiating for access to the IEP, a confidential document and reviewing the physical artifacts of the IEP related to the research purpose. Review of IEP goals and objectives involving the student's communication skills can "link the documents with other sources" (Patton, 2002, p. 499). Establishing the additional link through the review of IEP goals and objectives provided an opportunity to develop a deeper understanding of the process and the formal/legal expectations of the stakeholders regarding the development of communication skills for the child. It also provided a data source to compare with individual stakeholders' perspectives of goals. Reviewing the physical artifacts of the IEP goals and objectives provided the formal/legal representation between the stakeholders regarding the child's communication needs. While no IEP is all inclusive (listing every goal and objective the child will work on during that school year), the current IEP reviews revealed if and how

the communication needs of the child were being addressed within the school setting as part of a legal, binding document all stakeholders sign.

To "increase the reliability of the information in the case study," a clear chain of evidence was maintained (Yin, 2009, p. 122). A list of case study questions was maintained through the interviewing process. All coded data was recorded in separate files. The files were annotated to indicate the exact location in the interview for each quote or statement for future reference. Maintaining a clear chain of evidence allows outside observers to follow the flow of the research and locate specific quotes or statements easily within the extensive amount of data.

I provided appropriate and sufficient "evidentiary warrants" (Erikson, 1986) from stakeholders, descriptions from the observation field notes and examples from the review of IEP documents in the analysis, interpretation and conclusions (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005). I strived for "believability, not certitude, for enlargement of understanding rather than control" (Stivers, 1993, p. 424). Conclusions and recommendations for future research were directly linked with current and past research related to working with students who have disabilities.

Summary

Prior to the beginning of this research, initial interviews were conducted as part of a pilot study regarding individual perceptions and experiences with the interactions among themselves and other members of the IEP team which impact generalizing communication skills with a variety of stakeholders in different settings provided individual stories about individual experiences. While these pilot interviews provided information about individual experiences and perceptions, they did not provide the

complete picture from all of the stakeholder's who care for a child with CCN. Interviewing entire clusters of individuals who served and cared for a child with CCN provided each of their unique perspectives into the complex process of how the child uses communication systems in the home and in the school, and how interactions formed between the stakeholders as they support the child. These clusters of interviews, accompanied by the observations in both home and school settings and reviewing physical artifacts offered a clearer picture of what elements influenced the interactions between stakeholders which then impacted generalization of communication systems between home and school. The findings from data analysis suggested new connections between the various elements which influenced the development of partnerships between parents and educators and then ultimately influenced the generalization of communication systems between home and school.

Past and current research continues to build the body of knowledge regarding influences and factors which impact how IEP teams interact. Qualitative research can shed light on such interactions and perspectives. This study examined how these interactions impacted the generalization of communication skills for children with CCN. By using semi-structured, focused interviews together with observations in the home and school settings and document analysis of IEP communication goals and objectives, a more complete picture was painted of the successes, challenges and potential barriers experienced by the different stakeholders.

CHAPTER IV

CASE REPORTS- CAPTURING A SENSE OF THE CASE

"It is often by telling stories that educators, as well as the public at large, have come to understand the needs of persons with disabilities" (Pugach, 2001, 439).

This chapter presents a review of the four cases that constitute this study. The chapter presents each case based on a synthesis of data sources of the stakeholders' interactions from the transcribed interviews, observation field notes, and document review of the Individualized Educational Plan (IEP) goals. Stakeholders in each case are involved in "matters of degree and interpretation rather than absolute distinctions" (Patton, 2002, p. 457) in supporting the child with complex communication needs (CCN). The chapter presents the four cases individually. The cases were organized from A to D in terms of the order the cases were studied. The names of the children have been changed to maintain confidentiality. The purpose of this chapter is to convey through data units a holistic sense of the characteristics of each case.

Case A: Independent Stakeholders

"Our window is getting very small," Amy's mom told me when asked why it is so important to her that Amy learn to communicate more successfully with others now as opposed to earlier in Amy's life. Mom is fearful that if we don't "push hard right now," Amy may never be able to tell someone she doesn't like mustard on her cheeseburger or that she knows the answer to that history question in class or that she likes her friends

to swing with her at recess. Amy has a group of people, both in and out of school, who all are trying to help her learn different ways to communicate, but they aren't talking to each other about what they are trying, what's working and, most importantly, what's not working. And, with the exception of the Private Speech Therapist, no one is helping teach mom about their attempts. Mom ended our interview resignedly with, "You almost have to train your parents to be mini-speech therapists if you want to keep progressing outside of the office."

I spent time with stakeholders from Case A, who support a nine year old young girl with Down Syndrome, a congenital and chromosomal abnormality that causes intellectual disabilities (Beukelman & Mirenda, 2005). The student in Case A will be referred to as Amy, not her real name. Amy is a happy-go-lucky, friendly child whose favorite things include popcorn, watching the Disney Channel, going to McDonald's and being with her family (a mom who attends college, a dad who works full-time, and an older brother). During the in-home interview, I met Amy's mom, dad and brother. My first impression is that Mom is the guiding force in Amy' school life and takes charge of all aspects of her life. While she is a college student, Mom's life revolves around her children. Amy's mom did the most sharing during the interview, with dad and brother sharing only when mom invited them into the conversation or they added an idea. Dad typically works long hours and is not as active in Amy's school and therapy; however, during our interaction, he was at home recovering from back surgery. When asked to describe her daughter, Mom laughingly shared that Amy is an "opportunist," "very much running for mayor," "loud," "very cunning," and "a Marine; she learns, she adapts, and she moves on." Others in her life shared that, as is typical of most children her age, Amy

likes to "feel like a bigger kid," (SPED teacher, who has worked with Amy for two years). The GenEd Teacher sees Amy only briefly each day, but agreed that she "always wants to do what the other children are doing," including eating lunch with her peers, playing with them on the playground, and completing the same worksheets in the GenEd classroom that her peers do. As far as being able to communicate, there is an overall agreement that Amy "has way more to say than what that (a lower technology AAC device) would allow her to say," School based -Speech and Language Therapist (S-SLP); and she "knows more words to say than what she's saying" (Para).

Amy's brother came into the world with no disabilities and the family has no other close relatives with disabilities. As happens with most children with Down Syndrome, Amy was diagnosed while still in utero, allowing both the medical practitioners and her parents to be as prepared as they could be when she was born. Mom recalled how difficult the first few years were after Amy was born with major concerns for swallowing and walking. Dad quietly added, "That whole time from birth to five is a blur." Amy received educational services under the IDEIA, Part C, Early Intervention Services for Infants and Toddlers, from birth. For the first three years, therapists worked within their home on strengthening her jaws and tongue so Amy could swallow, and developing muscle control, so Amy could sit, stand and ultimately walk. The therapists were "Johnny on the spot," and "an awesome resource." Amy's parents didn't wait for help, though, to get Amy communicating. They enthusiastically learned and still use sign language, even offering to loan me a book for parents of a child with DS. Mom views the book as "the most awesome-est book ever!" Mom recognizes "she (Amy) is still very limited with the sign," but, based on her intimate knowledge of Amy, she prefers this

communication method. Amy signed frequently as I visited with the family in the home, using signs like popcorn, coke, grandma and mom.

Mom now reports that "speech is the only thing holding that child back." Amy receives speech therapy both at school and privately, paid through Medicaid. They began private speech therapy because "there is not a lot of communication from the speech therapist at school, and we just weren't seeing anything." Mom presents herself as a dauntless advocate for her daughter, but when I asked if she shared her concerns with the S-SLP, mom quietly responded, "just kind of feel like it would be a waste of my time." Mom and Dad know that developing her ability to communicate will make Amy's life easier but they don't have a lot of confidence in the school- based speech services and aren't willing to push their concerns.

There is much love and laughter in Amy's home as she went about her afternoon routine, dropping her backpack in her room, coming out without her glasses on, sighing dramatically when mom told her to go put her glasses back on, and as she shared her snack with her brother as they watched a Disney show during the observation. A strong relationship with her family enables mom to effortlessly understand many more verbalization attempts from Amy than other stakeholders might recognize. "*You* might not know what she's saying, but we know." Amy clearly used four words verbally to communicate with her family that afternoon, "Yes," "No," "Eat," and "Da" (for dad).

Amy spends almost seven hours each day in the second grade at a rural school. Her educational stakeholders have worked with Amy for at least three years, which is unusual for most young children, with the exception of the GenEd teacher, who has had Amy in class for one year. As happens in all four of the cases in my research, Amy

spends most of her school day with a one-on-one Para, who accompanies and supports her in all school settings. Amy's para knows her better than all of the educational stakeholders. Although information on IEP's should provide each of the stakeholders with a very detailed, specific picture of the child, information on Amy's IEP is limited at best: "deficits in articulation, a severe articulation delay and expressive language delay."

The S-SLP carries a heavy case load of serving up to 72 students per week. One of her goals is to have the children practice their speech goals at home so she does the best she can by sending notebooks home weekly with "homework." Amy's mom is frustrated with the notebooks because Amy is "awful with her folders. I finally broke her of getting her backpack open and throwing her papers out the window," and "we didn't know how to reinforce it if she got it home." My one observation began in the driveway, as Amy's mom pulled in after picking Amy and her brother up from school. Amy charged out of the family van, after being picked up from school on a cool afternoon with her brother, carelessly swinging her backpack in a large circle, which was open with lots of papers falling out. Mom followed behind, scooping up the papers and fussing at Amy to stop!

Mom wants as much guidance in how to help Amy develop her communication abilities being practiced in the therapies, both at school and home, as she can get. She only hears from the S-SLP "typically at the IEP meeting," which is a formal meeting to solely discuss yearlong goals, not the time or place to get specific guidance in speech therapy strategies. Because mom drives Amy to private therapy and watches each therapy through a one-way mirror, mom talks regularly to the Private Speech and Language Therapist (P-SLP), an opportunity not available for Amy's speech therapy

sessions within the school setting. Mom indicates "when we see her working with the letter B (with the P-SLP), we know *that's* what we're supposed to do when we go home." Mom provides a copy of the limited IEP goals to the P-SLP with the hopes of having them all on the same page for Amy's speech goals. The P-SLP tried to establish communication with the S-SLP, but, for reasons unknown, it didn't "gel." Parents can invite anyone to attend IEP meetings. While mom is a dauntless advocate for Amy, she has not thought to invite the P-SLP to an IEP meeting, leaving the P-SLP wishing she could attend one, but waiting for an invitation.

Like many students with CCN, Amy has been subjected to a 'Try this' and then 'Try that' method for communication systems and devices as all stakeholders attempted to find the perfect communication device or system based on her current abilities and interests. A few years ago, the school began using a "Go Talk," a lightweight, portable communication device and continues to use it sporadically. Mom and dad were excited about the possibilities the Go Talk might provide so they purchased one to use in the home, hoping Amy would be able to communicate more successfully with it. The S-SLP discussed the goal of "making our pictures the same" between home and school, but follow through did not occur in part because, according to the P-SLP, the parents did not receive training to program the Go Talk. Mom repeatedly mentioned that Amy became bored quickly with things and the Go Talk was no exception. Unfortunately, without the needed training, Amy's parents didn't have the skills to expand Amy's use of the Go Talk, which has multiple screens and increasing levels of difficulty, but only if you know how to use it.

Picture Exchange Communications Systems (PECS) have been tried and are still used in some settings today to help Amy communicate. Mom reports that they did try using PECS in the home, however they only used it as a "little board that had a picture of juice and cereal and apple. " Once again, without more training in how to expand the system, Mom and Dad did not find the PECS system very useful. "She kind of lost interest in it. It becomes old and it's not so fun anymore." Mom reports "they (the school) went back to using the picture thing because we've been having some behavioral issues at school." During the one observation in the school, Amy made her daily schedule using Picture Communication System (PCS), which is similar to PECS, but did not use it as a communication tool.

All stakeholders mentioned that Amy exhibits some challenging behaviors within the school settings, but no one was specific in describing the behaviors, only that they were there and were a concern. The P-SLP believes Amy's behaviors come from frustration with everyone, stating, "You people have been around me and not understood me for five years and I'm sick of it." When asked to expand on this thought, the P-SLP stated that Amy had become frustrated and angry on a recent school field trip when they stopped at a McDonald's. The P-SLP wondered, "What child has a melt-down in McDonald's? One who doesn't like mustard on her cheeseburger but can't tell you that."

Amy is expected to communicate in a variety of ways throughout her day, depending on the setting and the expectations of the people in the settings, some of which are contradictory. Amy uses an iPad with a speech-generating communication app at private speech therapy and demonstrates great promise with it. Through a series of trials and errors, the P-SLP found that "she just did the best with the Proloquo (a

communication app) so that's the one I chose." Amy's parents cannot afford to purchase an iPad at this time. Amy's father works but was home on disability at the time of the observation and interview and her mother is currently in school. They are barely making ends meet. An iPad with the LAMP app costs around $1000, putting it out of the parents' reach financially. The P-SLP is "in the process right now of submitting an application-grant thing for her to get one." While waiting for her iPad, Amy's parents prefer to use sign with her and limited speaking because they are most comfortable with these systems. Amy's SPED teacher disagrees, Amy "really doesn't use sign language much" and "she wants to use the words."

During the one school observation in the SPED room, Amy worked one-on-one with the Para, communicating minimally using words, "Yes," "Dat" ('what's that?'), and "Did" (indicating she had completed an activity). Amy signed to the Para asking for a preferred break time activity, the Para understood her sign and responded verbally, "Not time." In her limited time in the GenEd classroom, the GenEd teacher "encourages her to use her words because I don't know sign language" and would have to "get to guessing." The S-SLP has been "working a lot on verbal in here lately because she's just started to talk." The P-SLP knows sign language and only uses it with Amy to "request things in the room."

Training in various AAC devices and systems is limited among the stakeholders which complicates actualization of communication goals for Amy. The S-SLP attended the three day PECS training years ago but is not that familiar with the iPad and communication Apps that have emerged in recent years. Technological advances prove challenging to this team for meeting Amy's communication needs. The SPED teacher

has received no formal training in the use of AAC. For "sign language, I have learned mostly on the job." The GenEd teacher relies on the Para to interpret but the Para did not receive any specialized training to assist Amy to communicate. The P-SLP completed her Master's degree in Speech and Language Disorders and "took one class as part of my coursework in grad school (related to AAC)" but otherwise has learned it through use and asking other therapists.

Informal interactions are vital to supporting Amy's participation in school activities. The stakeholders communicate frequently using texts, phone calls and emails and all seem to perceive these tools as important devices to facilitate communication. The focus of the school interactions involve Amy's behaviors, daily routine and increasing independence rather than clinical types of information, such as how each stakeholder communicates with Amy. The IDEIA provides no clear guidance regarding which stakeholder should be responsible to coordinate and disseminate information concerning how Amy communicates within their settings, leading to no one stakeholder taking charge of Amy's communication goals. Communication between classroom and home is best described by the Para as, "I just wave (to dad) but every so often he'll come in." The wave developed over time because the family has developed a sense of trust with the Para and the desire to give Amy opportunities to "be like a bigger kid." While this trust is important, waving removes the opportunity to exchange both personal/routine or clinical information.

Interactions of sharing clinical information regarding communication goals for Amy occur only at the yearly IEP meeting and involve global discussions rather than specific exchanges of information. Communication goals on the current IEP include

increasing overall communication by saying her name and producing sounds in isolation. The P-SLP reports that her goals for Amy include "working on the phonemic production" of sounds, and "really hit hard on signs," having her "sign sentences for what she would want" as a reinforcement. The SPED teacher has "a clipboard that has her IEP objectives on it" for reference. Her classroom clipboard does not show communication goals, but are "a little more on the academics."

The GenEd teacher is required by the IDEIA to attend the IEP meeting each spring but is not an active stakeholder within the team. The GenEd teacher did not mention any routine communication and relies on other stakeholders, specifically the Para, to communicate with Amy's family. The Para, who is assigned to support Amy throughout her school day and has worked with her for the past three years, receives limited information from the SPED teacher, "(she) tells me some of the goals, her academic goals and what they're doing." The Para leaned in towards me and quietly shared, "there are goals I have set for Amy," such as, "making sure she is interacting with friends."

After spending much time with everyone who supports Amy, her stakeholders clearly are trying their individual best to support Amy's communicative attempts. However, no collaborative, interactive exchanges occurred among any of the stakeholders regarding Amy's communicative attempts. Amy was unable to consistently communicate across people and settings.

Case B: Uncoordinated Interactions

"If Bella doesn't want to work, she closes her eyes and completely shuts down because that's her control. That's the only control this child has. Bella notices the little

things that show respect and not a lot of people do that." Mom desires more meaningful communication with everyone who touches her daughter's life throughout the day, because her sassy, funny daughter now has such limited means to communicate. "And it doesn't have to be an IEP, it can be a let's put our heads together and see how she's doing, tell funny things about her, what have you seen at home, what do you like that she's doing, what do you not like that she's doing, I think that should be, I think that would help everybody."

I spent time with stakeholders from Case B, who support a nine year old young girl with Rett Syndrome, a rare, progressive, neurodevelopmental disorder "in which the child develops normally until about 6 to 18 months" (Taylor, Smiley, & Richards, 2009, p. 363) and then rapidly regresses. The student in this case will be referred to as Bella, not her real name. Bella is a curly-headed, happy child who uses a push-wheelchair with inserts for positioning and mobility and relies on others for all self-care needs. While dad was invited to attend the interview, as an active duty military service member, his schedule would not allow it. Mom and I met at a base library. Bella's two month old baby brother accompanied mom and peacefully slept throughout the entire interview. Mom reflected that he is her easiest baby yet, adding with two older sisters, one with significant needs, "he better be." My first impression is that Mom values her daughter for the role she plays in their family as the big sister, "red-headed, sassy, and stubborn, with a funny sense of humor." Bella is the big "sissie" to her younger sister and infant brother. Bella loves America's Funniest Home videos, especially the video clips of people walking into doors or falling, a part of her personality that mom laughingly said is just like her dad. Bella loves the "Wiggles" show and will do almost anything to be able

to watch it. As a family, they have traveled near and far to see the Wiggles in concert and have even met them in person.

Bella's family consists of a mother who does not work outside of the home, a father in the military, a younger sister and a newborn brother. When Bella was born, "everything was normal." We knew "something was wrong around a year. She used to walk and talk and use her hands to play, and then within a matter of two months, she stopped doing everything." When Bella was two years old and at a local park, Mom sat Bella in a sandbox with other children her age and mom kept thinking how 'bad' the other children were because they were running around, throwing things and not listening to their parents while Bella sat happily playing in the sand. Mom then reflected that this was the moment she had a sick feeling in her stomach that maybe the other children weren't bad, but that perhaps there might be something 'wrong' with Bella.

Unlike the other children in this research, Amy's first therapy was private speech therapy, which began "pretty quick" around her first birthday when the doctors at her twelve month check-up asked mom about what words Bella was saying. Mom reflectively responded, "She used to say mom and dad but she hasn't lately." Because Bella is the firstborn and mom did not work outside of the home, her parents didn't have other children to compare Bella's development with. This changed once she entered her first therapies. Because the therapists are trained in identifying important milestones in typical child development, they immediately recognized that Bella demonstrated significant delays. Like Amy, Bella has been subjected to a 'Try this' and then 'Try that' method for communication systems and devices. Because for almost two years, they did not know what Bella's diagnosis was, they "started with sign language, they started with

communication cards (PCS) and Big Mack switches (an AAC device)," most were unsuccessful.

Bella was diagnosed with Rett Syndrome just prior to three years old. Around that time, Bella's family moved and began her school career in her present district. Unlike most of her peers, Bella has spent three years in the new classroom with her current SPED teacher because the SPED teacher progressed up in grades each year as Bella did. Bella has received school-based speech services from the same S-SLP for her entire school career. Three months prior to the interview, Bella received a new Para at the mother's request. Mom shared that Bella "excelled in first grade, did awesome, ever since then, she's just kind of plateau-ed." Rett Syndrome is a slow but sadly progressively debilitating disease, which may in part explain the plateauing of her skills.

Bella communicates in a variety of ways, depending on the setting and the person's expectations of her. Starting with the very first therapists and continuing today, everyone was trying to establish a "yes/no solid" to help Bella consistently respond to others when asked yes/no questions. Her SPED teacher in the previous school noticed that Bella would consistently look at a person for 'yes' and look away for 'no.' Mom, and everyone who continues to work with Bella at school, will forever be grateful to this teacher for taking the time to notice this very important step in how Bella communicates. Bella now primarily communicates using her eyes. Reflecting on this method of communication, mom strongly defended her daughter's occasional stubbornness to communicate. "Bella's consistent if she's comfortable with you," adding quietly that when someone pushes Bella too much, "her control is to close her eyes." Something I had never thought about when working with students who rely on eye gaze to

communicate, but definitely something to remember, "Looking in your eyes is so personal." Mom defensively added, "That's the only control that child has."

After trying several other devices, "we were introduced to the Tobii eye gaze communicator," a different kind of high technology AAC device they heard "was working really well with girls with Rett Syndrome." The Tobii is a very expensive, speech generating device that offers a wide array of communication platforms and a high level of personalization. "We thought her motorical disabilities would progressively get worse," so the P-SLP wanted to try Tobii because it uses eye tracking, not an infrared dot on the forehead, to select messages on the screen. While Bella's father is in the military and the cost of the communication device is not necessarily prohibitive, Bella was fortunate to receive a Tobii at no cost. Bella's stakeholders continue to grapple with the complexity of the Tobii, resulting in the unrealized potential of this AAC device. Not one of the stakeholders supporting Bella has received formal training in how to use this complex device nor are they communicating their concerns and successes with it. The parents feel, "It's an awesome device," however they "have no guidance." The SPED teacher reported that she hasn't "gone through any training when they got the Tobii device." The P-SLP's experience with the Tobii involved no formal training, her interactions with the Tobii were "just trial and error." Neither the Para nor the S-SLP received training on the Tobii.

Overall, stakeholders report several limitations to actualizing the potential of the Tobii: it is "pretty big and heavy" and "it's very, very expensive." When asked if the cost is a concern, the SPED teacher responded *emphatically*, "ABSOLUTELY." A somewhat typical response of untrained professionals in the Special Education field, the

S-SLP reports she prefers low technology to high technology AAC devices because "it's not going to fail me." The S-SLP reported that, when Bella brings the Tobii to school, she "does a nice job on it." However, "she likes to click out and go to the games."

All stakeholders supporting Bella use some form of communication strategies with her depending on the situation, their expectations of her, the setting and the people involved. Mom prefers to not use any kind communication device "or anything" at home. Based on my own experiences as a sibling of a brother with CCN and retired teacher of students with CCN, Bella's mother's response is not unusual. While Bella's mother recognized the potential and promise of the Tobii, it was easier to rely on her intimate knowledge of Bella's vocalizations rather than taking the time to set up the Tobii. Bella "just tells us everything. It's yes/no and we know her different sounds." Mom understands her child's vocalizations, "when things are important" and "her different cries mean different things." The one observation with her family in the home affirmed mom's report that the family does not use the Tobii but relies solely on and uses the yes/no solid for communication. No communication device was present during the observation. Bella solely used eye gaze to interact with her sister and her mother throughout the home observation. Bella's sister teased her throughout the observation about the new Wiggles singer, a female character. Bella really likes the male singers and demonstrates a definite opinion about the new Wiggles addition, clearly indicating her opinion by looking away when asked teasingly by her sister if she wanted to meet the new member.

The SPED teacher primarily "uses eye gaze" for Bella to respond to questions. Eye gaze can be looking at different pictures (PCS) in response to questions about them

or using her iPad that she brings from home. Mom "sends the iPad every day," so they use it frequently. The iPad is used in the classroom to display two different pictures on the screen, asking Bella to use eye-gaze to select the correct response. The iPad does not currently have the ability to access an AAC app so it is not used as a speech-generating communication device, although I cannot imagine that someone, somewhere is not developing eye gaze capability for the iPad. At some point in the near future, this will hopefully be available as another AAC option. The S-SLP works with Bella in the classroom for one speech therapy session per week and uses an eye-gaze board in both therapy sessions and when she provides therapy in the classroom. The adult working with Bella, either the Para, S-SLP or SPED teacher, places the pictures on different sides of the eye gaze board and then sits behind the board, watching to see which picture Bella looks at for her responses. The Para confirmed Bella looks at a picture which is the answer, however, "sometimes she (Bella) refuses to communicate."

During the classroom observation, Bella seemed much more interested in other students in the room rather than the lesson in front of her. Bella responded to questions using eye gaze by looking at a picture of the correct answer (from two choices) when held up in front of her by the Para. For many of the requests, she responded inconsistently, and a few minutes before the end of center time, Bella clearly communicated through closing her eyes that she no longer wanted to participate, confirming mom's observation that, "If you ask her a question that she doesn't think deserves an answer, she won't give you an answer." When they changed centers, the Para held up two books and asked Bella to choose the next book she read. Bella opened her eyes, smiled and clearly indicated her preference by looking at a specific book.

The S-SLP is flexible and uses "whatever type of communication device is working on that day," depending on what device was sent from home, how Bella was feeling and her level of motivation. Speech therapy sessions occur twice a week for 40 minutes total and at the mother's request, one session occurs in the therapy room and another in the classroom. The S-SLP's speech goals for Bella solely supplement the academic goals that the SPED teacher is working on in the classroom. No specific communication goals are added to the classroom goals. The SPED teacher confirmed that she and the S-SLP communicated "often" about Bella's academically oriented goals in speech therapy sessions. The S-SLP reports that she "always incorporated the eye gaze" because "she was very effective with it" and "eye gaze is most consistent." She reported that she "didn't get to work with the Tobii as much because it was not brought to school," the school therapist predicts, "as she gets more efficient with that and with making sentences, she's going to be hard to shut up. We're not going to get her to stop talking."

In private speech therapy, Bella communicated using many different devices and systems. The P-SLP, who has worked with her for the past 4 years, describes Bella as "a very smart girl," who if "you gave her the moon, she'd shoot for the stars." At first, the P-SLP tried to use "a PECS symbol type of thing" but "that was way below her." When they began using the iPad in private speech therapy sessions, "the motivation started going up." The Tobii added a whole new level of social communication to the private speech therapy sessions. "We started off just with basic steps, I would request that when we came in, turned it on, I would address her with a greeting and I would expect her to greet me back," emphasizing to Bella that when "someone says hi to you, you have to say

hi back." These opportunities for social interactions were the only ones any stakeholder mentioned. The P-SLP challenged Bella to use the Tobii for more academically based activities but they were not the sole focus on their time together.

Interactions and communication between and among the stakeholders occurred regularly using texts, phone calls and emails, however, the information communicated revolved exclusively around personal/routine information regarding Bella's behavior, activities, and any issues of concerns with her health or eating routines or upcoming school or home activities. Mom affirmed that she was very happy with the level of communication (regarding school related activities or daily routines). During the interview in fact, Mom even received a text from the SPED teacher about an upcoming field trip, at which time mom smiled and said that these types of communication were "small but important." The SPED teacher reported sending home daily folders in which she would "write little notes" about the day. The Para assigned to Bella communicated personal and routine information verbally and in person with the mom every day at drop off and pick up time and the SPED teacher would occasionally rely on the Para to deliver messages to the mom. Communication between the mom and the S-SLP was limited, according to mom, to "seeing her at the IEP and occasionally in the hallway. I'm not satisfied with it but I don't push it either."

Clinical information about how Bella was communicating, including new, changing or different responses being seen by each stakeholder, was not shared throughout the school year. Mom wistfully expressed her wish for everyone to "get together and make sure they are on the same page. More than once a year and it doesn't have to be at the IEP." While mom shared this frustration with me in the interview, she

did not advocate for these meetings with the other stakeholders, leaving them unaware of mom's desire for additional meetings. Given the fact that she drops off and picks up Bella daily, Mom added that "it would have been very easy for her (the S-SLP) to communicate with me." The S-SLP is aware that Bella "also receives communication services out at (private therapy)" but did not act interested in what was happening in the private therapy or in contacting the P-SLP when we spoke. The S-SLP did describe at length the ongoing communication between her and the SPED teacher and conceived her role as supplementing the SPED teacher's classroom activities. The S-SLP described the Para globally as "very good with (Bella) and patient" but did not include the Para in any of her therapy sessions.

The P-SLP also works part-time in the local school district so she brings a unique perspective to her private therapist role. Private speech therapy is "an ideal situation" because mom "was with me at every single session," watching "everything we do with their children" (through a one way mirror) and "they can actually take it home and model the same things we're doing." Based on her experiences in the schools, the P-SLP confirmed "we see a lot faster progress here at the center than we would at schools." And yet, in spite of having a foot in both camps (private and school settings), the P-SLP has never taken the initiative to communicate with the S-SLP. The P-SLP got the impression from mom that "maybe the therapist (S-SLP) didn't know Bella like we know Bella."

Bella's IEP reports that her limited verbal ability necessitates AAC devices to increase her ability to communicate using multiple modalities, but does not provide specific information regarding which AAC devices are necessary. Her IEP goals for speech therapy indicate she responds to questions using eye gaze, switches, scanning and

low technology devices. The goals include that Bella will communicate using "switches, scanning and low tech devices." Specific information concerning how Bella responds when using eye gaze or AAC devices are not provided and left open to interpretation by the stakeholders. The P-SLP received a copy of the IEP from mom and felt the communication goals were "mediocre."

The two pairs of stakeholders (mom and the P-SLP, S-SLP and SPED teacher) participated in collaborative, interactive exchanges. Their exchanges were not coordinated or shared between the pairs or other stakeholders and their expectations of Bella's communicative attempts were diametrically different (social communication versus academically based expectations). Bella was unable to consistently communicate with different people across different settings.

Case C: Passionately Involved

"This is Carver's life and we don't just need help now, we need help to get to forever. I have hopes just like every other parent that he will lead a happy, healthy life but more than any other parent, I need your help because I don't know how to do this." Teaching Carver to communicate his wants, needs, preferences and especially his personality is so important to his parents. "A part of me feels like communication is the biggest because if you don't understand language, language fits into all of, everything." While there is a lot of literature available, mom affirmed, "With Autism, there is so much that we don't understand," and she has pursued a team of stakeholders to help support her desire to have Carver be able to communicate.

I spent time with stakeholders from Case C who support a ten year old young boy with Autism, a disorder "characterized by behavioral deficits in three broad categories:

social interaction, communication, or repetitive behaviors" (Taylor, Smiley & Richards, 2009, p. 361). The student in case C will be referred to as Carver, not his real name. Carver experiences deficits in all three of the broad categories identified in the definition of Autism. Mom and dad describe Carver as an outdoorsy kid who loves the water. Students with Carver's needs qualify for door-to-door bus service, however his parents have asked the bus driver to please pick him up and drop him off at the front of their apartment complex so that he can enjoy the twice daily walk outdoors. The walk back to his apartment during the home observation took almost 45 minutes, with Carver happily, repetitively patting many surfaces, including tree branches and trunks, sidewalks, and sides of the buildings. He spent several moments examining cracks, the longest time on a newly discovered crack. Mom and dad specifically chose this apartment complex because it has an outdoor pool, allowing Carver to swim throughout the summer and have a scholarship for Carver to swim at the local Y during the winter.

Carver's family consists of a mother who does not work outside of the home, and a father who does not work outside of the home due to a work-related injury. Carver is the only biological child for his mother. Carver's needs and interests are the primary guiding force in both of his parent's lives. Mom and dad both participated in the interview, explicitly asking to be interviewed together. Mom dominated the conversation, with dad adding supporting comments to mom's ideas. The family lives in a small, two bedroom apartment.

Carver was identified as having developmental delays as early as six months old and began receiving services, beginning the family's journey into the "Try this and then Try that" world. When Carver was around 18 months old, he "had a vocabulary of about

20 words," but "shortly after the MMR (shot), he quit talking." An array of therapists provided services in both the home and their offices prior to him entering school, mostly addressing fine and gross motor abilities in the beginning.

Carver's current IEP identifies his speech and communication needs as: delayed in speech and language, relies on Assistive Technology, specifically a voice output device, to communicate. The overall goals are to increase his receptive and expressive language skills and to increase communication with school peers. He received school-based speech therapy from his S-SLP for 900 minutes per semester. Communication is one of Mom's biggest concern. The SPED teacher emphasized the importance of supporting Carver's use of AAC across all settings, "if they have a device, it's their voice. And they will never use it effectively if they are not made to use it *at all times*."

Mom's comments throughout the time we spent together hint at the challenge of turnover and change in SPED position, reporting that the first SLP "was really, really good. She introduced PECS, but she didn't stay very long." "The one we got after that wasn't so good. She didn't really know PECS and was determined that sign language was the way to go." The turnover led to the "Try this, Try that" experience. Yet, Carver has "motor planning difficulties" which impact his ability to make the signs, "so sign language didn't work for him." Carver began receiving private speech and language therapy around the age of three. His P-SLP has worked with Carver for five years. Mom observed the challenge of generalizing abilities, "It got to where he could do it (the speech goal) in a clinic, but he couldn't do it in the home. Nothing was transferring." Mom wasn't satisfied with Carver being able to only communicate in only one setting

and wanted the group to work together consistently to support his communication attempts.

Negotiating devices proved to also be a challenge. The current private therapy company was "instrumental in getting an AAC device" for Carver. The first one recommended by the P-SLP was a Dynavox, a complex, high technology, speech-generating communication device. The Dynavox came with many challenges. First, it cost ten thousand dollars, paid for through medical insurance. Carver's first pre-school teacher (from age three until kindergarten) "did not want him to bring it to school" because the SPED teacher told her "that costs as much as my car. I don't want to be responsible for that." While at the first school, the S-SLP told mom that she was "adamant that he wasn't ready for it," however in private speech therapy and in the home, "he picked it up so quickly. It made a huge difference for him to be able to tell us what he wanted." However, no one at the school knew "how to teach with it." These interactions left the parents feeling very frustrated. In his current school setting, Carver now successfully uses an iPad with the LAMP application to communicate. LAMP is an augmentative and alternative communication (AAC) application created by the Prentke-Romich company specifically for students with Carver's abilities and needs. Unfortunately, I was unable to observe Carver using his iPad in his home because it was being repaired on the day I observed him. Carver had attended the state Special Olympics the week before the home observation, a yearly event that Carver is only now beginning to enjoy. While at the Special Olympics, Carver spotted the Jump House from a distance, his absolute favorite activity at the games. He took off in a dead run and, after his mother shouted for him to take his iPad off, he swung it off over his head and it

landed with a thunk on the ground, shattering the screen. The Dynavox (now the back-up to the iPad) was completely "dead" when he got off of the bus. Mom and dad shared this was a frequent occurrence when using the Dynavox. Due to such AAC challenges, Carver was left without his "voice" during the only observation in the home.

In Carver's current placement, he is served by a collaborative team of stakeholders who communicate both personal/routine and clinical information mostly using text, emails and phone calls. Each stakeholder is aware of how Carver communicates and require him to "use his voice" to communicate. Three passionate members lead the team: the parents (specifically mom), the SPED teacher, and the P-SLP. When asked about her training with this complex device, mom shared that she learned to program the device informally, "on my own by taking courses over the internet. The P-SLP has been a great resource for help, but for the most part, I have made calls to tech support and visited help pages on the internet." Mom is the primary programmer of the iPad. Laughing, Mom added that the dad's only interaction with the speech-generating devices (both the iPad and the Dynavox) is when he listens to it. Mom and the SPED teacher communicate via text, email or phone about how to generalize the communication skills between home and school, "I can tell the SPED teacher that he's doing this at home, we're working on asking things. The SPED teacher has permission to program but it's usually easier for her to tell me what she needs," and then mom programs the iPad. The SPED teacher is grateful, "you couldn't ask for a better parent with follow through; if I ask her to create a page, she'll do it."

The one school observation occurred prior to the Special Olympics incident so the iPad was working and on a sling around Carver's neck. Carver used his iPad to request

his choice for lunch from the lunch lady who responded to him with a smile. He also "read" several sentences accurately from his assigned English reading lesson that day. Mom is pleased that "he's still making progress academically" and she reports "he's made huge progress behaviorally." The SPED teacher also sends homework for Carver to complete using his iPad communication app. The SPED teacher shares:

> "I gave her (mom) the list of words, and she'll use those, she'll make him tell her those words. And then if he's doing well, she went to the next word before we had even finished the other activities, so we got there and he knew it!"

The SPED teacher is a passionate supporter of using AAC with students who have CCN. The SPED teacher strongly advocates for *everyone* to view the speech-generating devices as his "voice." The SPED teacher encourages generalizing the use of the communication device when Carver gets home, stating they need to "ASK HIM!" about his day. If the parents are unsure about his response, they can and do text her to ensure the accuracy of his responses.

When asked about her training in assistive technology (AT), the SPED teacher replied that she relies on mom and the P-SLP as a resource. The SPED teacher has informally been trained and her attitude towards AAC shaped by a friend who was an SLP. The SPED teacher summed up the informal training with, "it's not the official training, but it was my *knowledge* training." The S-SLP reflected on using AAC by suggesting, "You just really have to dive in with it" and included that the P-SLP is "really helpful, she came and gave us a run-down on it." In spite of a lack of formal training, the S-SLP s able to use the iPad with the LAMP application successfully.

The stakeholders in Case C encourage Carver to use the AAC device to communicate in different settings and with different people. During the school observation, the SPED teacher said multiple times, "Please use your voice." Mom assured me that, "he takes the iPad with us everywhere. We go bowling every Saturday with a bowling league and he takes it with him so he can order his French fries." Mom knows that Carver uses the iPad throughout his school day, then thought for a moment and added "except while he's at PE, which, after the Special Olympics incident, is probably a good idea." The SPED teacher affirmed the parent's role in this effort, "They are really good in making sure he has access to (the iPad) at all times and they consider it his voice. He has spontaneously asked to go to the bathroom using that device (the iPad)."

Support is also strongly consistent in private speech therapy sessions. The P-SLP meets with Carver twice a week for 30 to 45 minutes each time. She works in the home with him on any communication concerns they have there, providing both the therapist and the parents with unique opportunities to learn and share from one another. The P-SLP is willing to work in the community with them, too. The P-SLP provides support to the families when working with the schools, "I go to all of the IEP's with my parents." When asked about what training she had received in AAC, she shared that when she first became a P-SLP 22 years ago, she knew nothing about AAC. "In the last five years, I've been getting AAC experience. I've gone to tons of trainings, hours and hours of trainings," based on the AAC needs of her clients. "I see they need it and it's like nobody *knows*" about AAC. The P-SLP bragged about the team of stakeholders who support Carver, "we work together; this is a perfect example a team." The P-SLP communicates

frequently with the SPED teacher about goals for using the iPad with the LAMP program within school. While they sometimes have to agree to disagree when debating academics versus communication needs, "the SPED teacher learns from me and I learn from her and I love that she is so passionate."

When asking how the P-SLP works with the current S-SLP, "We have a pretty good relationship. She (the S-SLP) listens to me; she is so overwhelmed. I try to be cognizant and ask her what she thinks because she's a smart girl but she has no experience." The P-SLP was willing to share materials and "recommended trainings for her." Mom's interactions with the S-SLP are "basically through the IEP, the report card (every nine weeks). We don't have as much experience with this one but she really works with him. When she (the S-SLP) has questions she calls the P-SLP. We give them permission to interact," and they do.

Carver's Para has worked with him for the current school year. When asked about Carver's Para, mom smiled and shared, "She has been really good with him." The SPED teacher explained that the Para attends the yearly IEP meetings and "is extremely important regarding input. She is his primary teacher and I depend on her input." When asked how Carver communicates with her (the Para), she replied, "He's back to his iPad now, he's had a Dynavox, too." The Para said that she had not received any formal training on how to use the Dynavox or iPad communication devices, "it was really kind of on-the-job training." The Para follows the SPED teachers' lead with regards to communication with the parents. They share phone numbers to assist with questions or concerns throughout the day, including both personal/routine and clinical information. Because of her positive experience as a Para, she has made the decision to return to

school to become a special education teacher so she will not be working with Carver next year.

In spite of the relative strength of the team, the IEP has fairly vague speech and language goals on the IEP: to increase receptive and expressive language skills and increase communication with peers using Assistive Technology (specifically voice-output device). The stakeholders discuss the speech and language goals prior to the IEP to be sure "that we're all on the same page, too, to get her stamp of approval." The S-SLP described their goals as "putting two words together with his device to make phrases," a goal that mirrors those of other stakeholders. Communication regarding the sharing of clinical communication between the stakeholders occurs informally yet all members regard it as "a really good thing, big collaboration."

Stakeholders in Case C are passionately involved in collaborative, interactive exchanges supporting Carver's communicative attempts across all settings and people. Carver is able to consistently communicate between different settings and people.

Case D: A Meeting of the Minds

Children are not born with a manual; however, in her brief five years as Danny's mom, the learning curve has proven to be especially steep. Based on his outside appearance, the school didn't "feel like there was much there because of his physical handicaps. They didn't know that he was so smart, so that's what I had to fight for those first two years. I know I'm a little bossy but I felt like in the IEP meetings, I wasn't the one in charge at first. I feel like I am now." As Danny's primary advocate, cheerleader and person who believes in him most, she now feels that "it's nice to be in a different place now."

I spent time getting to know all of the stakeholders from Case D who support a five year old boy with cerebral palsy, is deaf, has bilateral cochlear implants, and cortical vision impairment (CVI). The student in case D will be referred to as Danny, not his real name. Danny experiences quadriplegic cerebral palsy, a condition which "affects a broad range of fine and gross motor movements" (Taylor, Smiley, & Richards, 2009, p. 327). He uses a push-wheelchair for mobility and relies on others for all self-help needs. Danny's "vision is his strength," in spite of the CVI, which is defined by Roman et al (2015) as "impaired vision that is due to bilateral dysfunction of the optic radiations or visual cortex or both."

Danny's family- mom who does not work outside the home, dad who is in the military and older brother- have lived in the same town since he was two months old. Danny "loves school, loves social interaction, some videos, he loves sight words lately and loves swimming," Extended family lives in a neighboring state and a favorite activity to do when they all visit is to spend time outdoors, camping, fishing and four-wheeling. Danny's family includes him in every activity, including four-wheeling, not letting his physical limitations get in the way. Danny's SPED kindergarten teacher describes him as having "such the quirky personality, and so ornery at times and so boy!" Danny attends a GenEd kindergarten class part time with peers with typical abilities. His GenEd teacher views Danny as "*his* student" first, and laughingly added that he only shares Danny when necessary. In his classroom, Danny is "very vocal," "loves sight words," "loves centers," and "doesn't have the limitations that you might think he does." Just as all of his peers, Danny has an assigned place at a small group table and thoroughly enjoys being with peers of his own age. Danny's Para is assigned to work with him

across all settings and spends the bulk of the school day with him. He is "a sweet boy, very smart, more than people give him credit for and can be very stubborn." They have a strong relationship and she knows him very well. She can recognize when he is "playing possum" and calls him on it, insisting that he give his absolute best.

Danny was identified at birth as being deaf which "then led the pediatrician to kind of look for other things and then we found out he had cerebral palsy." He received early intervention services under the IDEIA-Part C from birth to three years old. The early intervention program focused on many skills, communication being one of them. "It started a lot of the choice making in the eye gaze and yes and no." As Danny grows and develops, stakeholders continue to work on developing a firm yes/no solid. No definite yes/no solid has been identified, although stakeholders continue to work together to identify the most consistent response. Danny's entry into the school system at the age of three was a difficult one because, "they just didn't know him." On the outside, Danny has significant physical disabilities that might, and in his case did, lead people to assume he was also cognitively delayed. With many meetings and mom's strong advocacy, Danny was moved from a classroom for students with severe cognitive delays to his current SPED kindergarten classroom with students who still struggle academically but do not have severe intellectual disabilities.

Communication involving both personal/routine and clinical information within the team is frequent and important. Mom "now texts his teacher, she can text me, she sent me pictures of him doing things during the day, we communicate back and forth with the communication device (notebook), we talk every day." The SPED kindergarten teacher maintains open lines of communication, "texts mom on a regular basis if I have

any problems, if Danny does something that is just dynamic or awesome, I'll take a picture and send it to the parents." She emphasized that, "it has to be a team." The Para sees Danny's mom every morning when she brings him to school and "we have open communication at all times." The S-SLP "emails back and forth if something comes up or if she needs something," and agrees that "communication is essential."

The team works on understanding vocalizations in all settings. The current communicative strategies for the team involve identifying and agreeing on a consistent yes or no indication from Danny. Mom reports that it is still "hard for him but he can shake his head no…he'll look at you for yes or he'll look away for no" and the Para also tries "to get him to vocalize." Mom states that he 'can kind of sometimes say an, 'Ahhhhh,' or 'Ohhhh'." The "yes' "no" communication strategy works well at school, in spite of the challenge.

Mom is the force behind looking into various AAC devices; it has "all been on me. We tried a Dynavox and I didn't like it so much. He was too young for it and it seemed so robotic and so not friendly and not fun." The family next tried the Tobii, another complex communication device. While the first try was unsuccessful, they didn't give up completely on the Tobii, and experienced a different result on the second try. One difference may have been that the first "rep (for the Tobii company) wasn't really educated well in it" and the family, Danny included, was left unimpressed. They tried the Tobii for a second time with a different speech therapist who "knew what she was doing and it was a completely different experience." Mom now feels that the Tobii is the obvious choice for Danny based on his successful trials with it.

Because the Tobii is such a complex device, Mom began working with a speech therapist that specializes in AAC as part of an outreach program at a university in a different city. Once the Tobii is purchased, the university-based SLP will "teach his teachers and me how to use it (the Tobii). She said she'd come twice a year and teach them." The SPED kindergarten teacher is so very excited about the potential of the Tobii, "I watched him do the Tobii. I was amazed!" She, too, wants to be trained: "I'm supposed to have an open line of communication with the person that is going to be the rep, so if I have any questions, I can ask them about it." The S-SLP is supportive of and "familiar with the concept of it (the Tobii)" though she has never really used it. She shared her concern with me about over-reliance on technology, "Technology is fickle, if you are out somewhere and you don't have internet connection or the battery dies, he won't have a way to communicate." Her goal is "to be able to have the skills to communicate without that as well," but is willing to support the use of the Tobii once it arrives.

The GenEd teacher is a self-proclaimed "tech person." While at first he was unfamiliar with the Tobii, he has begun "looking, researching" training videos on line. The GenEd teacher is looking forward to finally being able to ask Danny questions that require more than a yes/no answer. While yes/no questions are important, the GenEd teacher wants to ask questions that require Danny to think more deeply about things and be able to share his thoughts. The S-SLP echo-ed this sentiment, "I feel like I get more cognitive information if I am asking him other questions than yes or no questions." The Para was particularly excited about the Tobii, "I cannot wait; I am so excited, it's gonna open up doors of how smart he is." The Para observed Danny using the Tobii with "eye

gaze, and he would get it!" and "he would just keep going! This will be his world!" She isn't intimidated by the Tobii. "I love computers. They're our world."

In the beginning of his school years, the Deaf Ed consultant shared, "there was no (clinical) communication" occurring among the therapists. The Deaf Ed consultant first implemented a communication book with the goal of increasing communication among team members. The book would travel with Danny with the intent that each adult would read what previous ones had written and add new information. She "put a checklist on" the book with questions like, "Did you hear any new sounds?' The book was "kind of big and cumbersome," and they shared, they "really don't want to do it." The Deaf Ed consultant then suggested that they meet instead. The first meeting went so well that she suggested, "Let's meet again next month." They continue to meet monthly during the school year.

The meeting is now named "Meeting of the Minds," which speaks to the cohesion of the team toward a common goal. The Deaf Ed consultant captured this cohesion, "it was awesome, let's get on the same goal, get him having consistency." The meetings are "collaborative, it's just kind of a brainstorming." The meetings include all of Danny's therapists and stakeholders- OT, PT, S-SLP, Deaf Ed, Vision Consultant, SPED teacher, mom, Danny and (eventually) the GenEd teacher. Initially, the Deaf Ed consultant forgot to invite the Gen Ed teacher. He is so glad to now be a part of these meetings because, "I am involved in it (Danny's life)." His reaction to finally being invited was, "Well, it's about time." Mom stated, "She (the Deaf Ed consultant) plans it and lets them all know and I just bring cookies and drinks…we just sit down and everyone's relaxed and we just discuss it and what's working for one person and what's not working for another person

because Danny is so complex." The Deaf Ed consultant takes notes then emails the synopsis to everyone. Mom is pleased, "I think it's gotten everyone on the same page." Mom reflected she now feels that her relationship with the stakeholders has changed from "Tell the parent everything; the parent doesn't know anything," to feeling "like it's 50-50." When asked to describe the meetings, the current SPED kindergarten teacher shared,

> It was just a way for everybody that works with Danny to come together and say, I saw him do this, is he doing this in your classroom? And how are you helping him to do this and that, let's all be on the same page so we are using the same techniques with him so that he wasn't getting confused, like answering yes and no and, um, making choices and using the choices and using the choice board and how he looks at picture symbols and how long he'll take to choose an answer.

The GenEd teacher enthusiastically told me, "We talk about how we can incorporate him more into the regular ed classroom, how we can help him more." The GenEd teacher shares what "pertains to my role, what we could try, what you would like to see in my room." He learns so much in the process through the "positive interaction." The Para thinks that the meetings have, "just been amazing; it's wonderful." The S-SLP remarked that having the Para in the meetings was "kind of nice because a lot of times at the meetings the Paras don't get to come to the meetings because they are with the kid."

The S-SLP indicated that because of the monthly meetings, "we're all kind of on the right path doing the same things with him." She emphasized that "it takes a team. It's imperative that if we do something great here at school, and they don't know about it at home, what good is that doing Danny?" She goes on to support a key part of

generalizing skills between settings, “So what if he can do it in my therapy room? That does nothing for me or for him. I want him to, you know, go do that when he’s at McDonald’s or when he’s at grandma’s house.” The meetings were ideal because “a lot of our goals overlap, so it just seemed that it really helped us feel more like (pause) we all know what each other’s doing.” Dialogue was key; “We get to bounce ideas off each other, what we’re having success with and then other people can kind of try.” She ended with an important statement about generalization, “I think that our biggest problem is consistency because, if you find something that works, we all should use it.”

The results of the collaboration during the “Meeting of the Minds” were evident in both observations. The observation began on a warm spring day with mom, Danny’s two large dogs and me waiting at the end of his home’s driveway. The bus pulled to a stop in front of us, opened the swinging door and, as they usually did, Danny’s two large dogs jumped on the bus to greet everyone. Danny was then lowered by the lift with the dogs riding along. The bus driver and his assistant laughed and talked with mom then fare-welled Danny. When inside, mom lifted Danny out of his chair, positioned him into his molded chair and sat in front of him on the coffee table so that he could see what she was doing. Danny’s brother attends a different school and had not arrived home yet and dad was working. Danny has two very large, very affectionate dogs who eventually had to be put outside because they were so excited to see Danny. Mom pulled out a wrapped gift addressed to her from the back pack. Mother’s Day was the upcoming weekend. Mom teasingly asked Danny if she can open it right then and Danny’s response was to frown and look away, clearly indicating no. Mom then asked if she has to wait until Sunday, Danny smiled, dropped his chin while looking at her. Mom laughed, said ok and

put the gift away. Danny then chose a preferred DVD using eye gaze to watch when mom showed him several to choose from.

During the one school observation, Danny was in the SPED kindergarten teacher's morning classroom during summer school (referred to as Extended School Year or ESY). When the observation began, Danny was working one-on-one on sight words with the Para, alongside several other students with disabilities working with other paras. The Para would hold up two pieces of paper with a word on each, asking him to use eye gaze to indicate which word she said. Danny was correct in five out of five words shown. The SPED teacher called everyone to the carpet for circle time and provided Danny two choices of words asking that he eye gaze at the correct one she named. Once he did so, she held up the one he selected and ask him to indicate using eye gaze, "Is this blue?" He looked at her to respond, "Yes" and she asked him to vocalize "Yes." She was firm but encouraging, accepted his approximation of yes. Danny consistently demonstrates communication strategies shared in the "Meeting of the Minds."

The IEP document review described his speech and communication needs in a detailed way: He is non-verbal, uses eye gaze with pictures or objects to communicate needs and wants, has a communication book to use for expressive communication using eye gaze, however, he has made it clear that it is not his favorite thing to do. His specific speech and communication goals include identifying answers to questions regarding a story, and identifying symbols and words needed to read predictable/pattern books, participate in activities during kindergarten learning times. The goals listed are common for all of his school settings. The IEP considered communication needs as a "special factor," reporting he needs to use AAC, picture symbols or an augmentative device to

communicate. The team has worked hard to try to establish a consistent yes/no indicator. Danny is able to communicate using yes vocalizations and can shake his head no. He receives speech services "campus wide" for 360 minutes per quarter.

When asked how the most recent IEP meeting went, mom smiled and shared, "The IEP was the easiest IEP I've ever gone to" and "we're all on the same page." The SPED teacher stated the Meeting of the Minds "is a little less formal than the IEP meeting. We still talk about the same types of things we would at an IEP." The GenEd teacher said, "Your normal IEP meeting is more of a stressed, structured setting." The Deaf Ed consultant added, "It's too bad IEP meetings can't be more like the monthly meetings. They are less collaborative."

The high level of collaborative, interactive exchanges communicating both personal/routine and clinical information among all stakeholders emerged over time. These exchanges occurred in part using computer-mediated communication and in the Meeting of the Minds meetings. Danny is consistently able to communicate both academic abilities (spelling sight words) and his wants and needs (being hungry) across different settings and people.

Summary

Chapter Four provided a glimpse into the interactions among stakeholders and how partnerships potentially formed (or didn't) within four separate cases. Each case involved educators and parents who provide varying kinds and levels of support to a child with CCN. The cases were organized from A to D both in terms of the order the cases were studied, and organically, how the cases emerged from least cohesive, least effective to most cohesive to serve the students with CCN. The data presented in this chapter

showed the types of stakeholder interactions that have implications for supporting the child's ability to generalize their communicative attempts across different settings and people. Data interwoven through the cases included stakeholder's statements from semi-structured interviews, follow up interviews, individual observations in both home and school and reviews of IEP documents. The stories of these four cases contained in this chapter provide the depth and detail necessary to capture the case and offer a better understanding of the needs of these specific children with disabilities.

CHAPTER V

FINDINGS

Chapter five reviews the purpose of the study and presents the patterns and findings that emerged from analysis across cases. The conclusions presented are "substantiated by quotations from participants, field notes of observations when appropriate and evidence of documentation inspection" (Brantlinger et al, 2005, p. 202). Examples from the data corpus are provided demonstrating the kinds and frequency of interactions among stakeholders who support the child with CCN's communicative attempts across settings and people and how the collaborative communicative exchanges occurred within cases.

Purpose of the Study

The purposes of this qualitative case study were to explore the types and meanings of interactions which occurred among the stakeholders as part of their participation on the federally mandated educational team formed by parents, SPED teachers, GenEd teachers, S-SLP's, P-SLP's and Paras, and to examine how collaborative communicative exchanges transpired among the stakeholders which could potentially support the child with CCN to generalize communication skills across different settings and people. The research uncovered participants varied perspectives about their

interactions, patterns of interactions, and meanings they ascribed to such interactive exchanges. It also uncovered elements of the interactions that seemed pivotal to supporting their child with CCN's communicative attempts across settings and people.

Patterns and emerging themes were compared and contrasted across the cases to understand how teams perceived their interactions and how the case functioned in terms of the actualization of communication systems or devices across different settings and people.

Theme One: The type of communicative exchanges among the team members varied in terms of their intentional orientation towards generalization

Through semi-structured questioning, stakeholders described how they communicated and how often they communicated. A significant theme that emerged in analysis is that interchanges among stakeholders were often not intentionally oriented toward the goal of generalization. Participants understood the term "communication" in different ways; and two different types of communications among team members surfaced in their descriptions. The first was personal and routine information, the second was clinical. Yet participants' descriptions of their communication revealed that in general, they were not aware of these differing levels of communication and often did not intentionally orient their communicative exchanges towards generalization. This was particularly true with Cases A and B.

To understand the interactions among the stakeholders, I must first understand what they believe about their world and their interactions which informs how they support the child with CCN (Charon, 2010). Considering what "communication" means is an important part of serving children with CCN. Children with CCN have difficulty

communicating basic information, including information regarding upcoming field trips and spirit days, lunch menus, how they feel, how hard they worked that particular day, how their day unfolded, and what and how much they ate for lunch. Personal and routine information was shared frequently among all stakeholders; however, this type of communication, while important, does not contribute to the generalization of communication skills across people or settings.

Subcategory: Participants communicated personal and routine information to stay connected and build relationships

Using the lens of Symbolic Interactionism to analyze exchanges uncovered the different meanings participants gave to their interchanges. Stakeholders' valued communicative exchanges about personal and routine matters, because they intentionally planned for and made time to participate in this kind of interactions. However, these types of exchanges do not directly support the child's generalization of communicative attempts. These exchanges did contribute to a high level of comfort for all stakeholders and to building relationships among the team members. Stakeholders in all four cases were not only comfortable, but reported being satisfied with the level and frequency of personal and routine information. Because a child with CCN cannot communicate messages easily, the sharing of personal and routine information supports the development of relationships among stakeholders by the very nature of consistently sharing this more social type of information.

Stakeholders are involved in on-going social interactions, "which leads us to do what we do" (Charon, 2010, p. 28). Because personal and routine information were on-going, predictable social interactions, stakeholders may feel more comfortable

communicating in this way. Personal/routine information were viewed by stakeholders as significant and necessary to keep all stakeholders informed regarding what's happening in the daily routine of the child who cannot communicate this information without support. For example, Bella's SPED teacher summed up her view of the importance of sharing such information by saying, "I think it's very important that the teacher communicates with parents so they know what's going on." Bella's mom shared that, right before our initial interview began, the SPED teacher had called her, "asking me about lunch. Small things but important things." The view of these small but important things not only seem like an "important" form of communication to stakeholders but also contribute to building and maintaining relationships, an overarching common goal of helping the child be successful in their school and home settings.

All cases used a wide variety of ways to communicate personal and routine information with each other. Stakeholders relied on the Paraprofessional assigned as the primary educator/care-provider with the child to interact daily within the different school settings and with the parent. All of the Paras accompanied their assigned student in each case throughout their school day routines. Moving with the student throughout the day provides a unique opportunity for them to verbally share information between the educational professionals who interact with the student within the school setting. Participants reported that opportunities for communication with the Para occurred several times per school day as the child changed settings, varying each day depending on the child's schedule.

Information was shared among parents and Paras in Cases A, B and D for several minutes each day at pick up and drop off, and again among SPED teachers and S-SLP's

and other related service providers periodically throughout the school day. Case A's SPED teacher relies on the Para to be the point of contact with the parent. Case A's SPED teacher reported "with Amy, it's mostly (the Para). We do text with mom as well or phone calls if we need to." Case B's mom confirmed that the SPED teacher "does have a communication book, but we text, we can text her questions and she texts back."

Based on the responses provided in all of the semi-structured interviews, computer-mediated communication (CMC) was another kind of communication used to convey both personal and routine information and, in some cases, clinical information. CMC symbolized the quickest, most efficient way to ask questions and to touch base and was fast-becoming the preferred method for communicating among the stakeholders. Such patterns are increasingly common in contemporary education. CMC can include using texts and emails to communicate important information (Hamilton & Scandura, 2002). Using CMC "offer(s) a highly efficient means of communication, not dependent on participants' location, and avoiding the necessity of schedule congruence" (Muller, 2009, p. 25). Education stakeholders across all cases sent and welcomed texts and emails with parents throughout the day, with each team finding CMC an effective method. Based on the data provided, Cases A and B used CMC solely to provide personal/routine information.

Subcategory: The sharing of meaningful clinical information toward the goal of generalization of communication skills varied among stakeholders.

Using the etic approach to examine the communicative exchanges among all stakeholders, I differentiated a second type of communicative information that they shared: clinical information. The different types of communicative exchanges-personal

and clinical- were not identified by the stakeholders themselves. They perceived most interactions of any type as positive.

Yet, the implications of sharing clinical information is different from personal and routine information in terms of meeting the generalization of communication goals. Such information includes how stakeholders used different communication devices, systems and strategies in each setting, the methods they and the child preferred for interpreting the child's vocal and eye gaze attempts at communicating, and expectations of communication within each setting. Stakeholders in Case A and B did not share clinical information effectively. Case C and D successfully shared clinical information frequently.

Stakeholders who share the common goal of supporting a child's communicative attempts must intentionally move beyond personal and routine information and begin to share clinical information on a frequent basis in ways which are viewed as meaningful to all team members. Clinical information was shared in all four cases annually at the mandated IEP meeting. IEP meetings are generally viewed by most stakeholders as formal, more stressful communicative exchanges, involving reviewing annual goals and objectives with little time spent sharing common experiences, specific ideas and suggestions for others to use. Because children with CCN's needs and abilities change throughout the year, sharing clinical information frequently throughout the year provides stakeholders with important information needed to make adjustments in communication systems and devices more often than once a year.

Clinical information was shared inconsistently, if at all, in Cases A and B. Based on the comparisons in the interview data, participants for the most part shared such

information only annually. In Amy's case, the S-SLP did attempt to share some clinical types of information in the form of a weekly notebook with Amy's parents. They never discussed the notebook, how to use it or how it was viewed by the family. The notebook held different meaning for the parents and for the S-SLP. Amy's parents viewed the notebook as ineffective for two reasons: Amy did not value anything placed in her backpack so papers frequently were lost, purposefully thrown away or mixed up by the time the backpack made it home and the instructions for her speech 'homework' were unclear to the parents. Amy's mom shared that she was very willing to implement any speech lessons in the home if it would help Amy communicate more clearly. Daily or weekly folders sent home in the child's backpack were a promising vehicle for clinical information only if perceived that way by all team members.

Bella's SPED teacher reported she sent home daily folders with completed work, homework, flyers regarding upcoming school events and a completed daily behavior chart. Bella's SPED teacher required that parents initial the folder daily and return it to school. She added that, while Bella's mom always did, she has several parents who never check the folder. Bella's SPED teacher stated that she used daily folders so parents "know my expectations of them and what we are doing in class." The professionals viewed these as sensible vehicles for communication with parents.

However, none of the folders contained information regarding how Bella communicated that day. Bella's mom reported that a folder system for communicating was not a successful means to communicate between home and school. Bella's mom added that she "spoke with the teacher every morning and then the para brings her out every afternoon" but the information shared involved solely personal or routine

information. In contrast to the school workers, Bella's mom did not view this form of communication as a meaningful way to convey clinical information.

Clinical information was shared more successfully in Cases C and D. Stakeholders in Case C and D regularly shared clinical information among one another, which provided consistent information and expectations among all stakeholders and supported the child's communicative attempts across different settings and people. In addition, Danny's SPED teacher also sends home a daily folder, "that the parents have to initial that I know that they read it and they send it back or if they have any concerns, they can document it there." Danny's mother viewed the notebooks as helpful but not central to the communications between home and school. Clinical information was shared using texts, emails, phone calls, video-chats and using photos. All stakeholders viewed these types of communicative exchanges as an integral part of their daily communications. These examples point to the varying symbolic meaning of objects such as notebooks for teams, and within teams, who work with children with CCN. They also reveal differing perspectives on the meaning of certain kinds of communication.

Paras were a central figure in most communications. While Carver was the one child who ride the bus daily, his Para communicated both personal and clinical information frequently via text messages with the mother. Carver's Para shared an example of when she would text the parent's immediately after Carver had gotten on the bus when he was upset about a change in the classroom routine at the end of the day. This level communication was viewed by the parent as a vital connection between the school and home and helped the parent understand why her child got off the school bus feeling frustrated that day. The Para in Case B reported that mom "asks if Bella worked

today," an opportunity to share more clinical types of information but, due to her short time on the job and perhaps viewing herself as a less than professional, she reported telling mom, "well not today or yes, a little bit."

Case C and D were very successful at sharing clinical information using CMC, which speaks to the potential value that the sharing of clinical information brings to the cohesion found in both Case C and D. By intentionally and systematically communicating with the intended goal to support the generalization of the child's communicative attempts in all settings, stakeholders were able to better understand the child's unique communication abilities. Case C's Para states that they choose to use texting because, "I have got their number. We've texted with them. I would take pictures of him at different events so I feel like I have a pretty good communication with her." Case C's S-SLP stated that she sees the parents "throughout the year" and "if she ever needs to pass on a message she could go through the SPED teacher as well." The parent, SPED teacher, Paraprofessional, S-SLP and P-SLP communicate using CMC to ask questions about important technology matters such as programming the iPad that Student C uses to communicate, as well as working collaboratively to add new vocabulary to the device throughout the year based on assignments and upcoming school events.
Case D's stakeholders used CMC to share all types of information between home and school. By sharing both kinds of information, stakeholders developed a more complete understanding of how the child communicates most effectively across settings and people. The SPED teacher shared, "I text mom on a regular basis if I have any problems. I always program all my parent's numbers in my cell phone because I always like to, if they do something that is just dynamic or awesome or something." Case D's SPED

teacher provided an example of working with Student D when he was having difficulty communicating with her. The SPED teacher texted mom and sent a picture via text of how he was positioned in his wheelchair. Student D's mom was able to respond quickly with suggestions for re-positioning him to increase his comfort so he could focus on the activity more effectively. The sharing of clinical information regarding how a child uses communication devices, systems or strategies is imperative if the child's communicative attempts will be understood across settings and people. Sharing clinical information can assist in supporting the shared, specific goal of assisting the child with CCN to communicate.

Subcategory: The frequency of sharing clinical information varied among stakeholders.

The frequency of communication, whether personal or clinical, varied across cases. In contrast to Case A and B's educational stakeholders, Case C and D shared clinical information regularly with their parents throughout the school year. Carver's SPED teacher stated that she does "most of my communication through phone calls and text, and I give everyone my cell phone." When asked how she works with parents to share clinical information, Carver's SPED teacher shared, "I get really involved, if you've got a problem, and you've shared it with me" and she offered suggestions and asked questions such as "what about this and what about that?"

Parents viewed interactions which included clinical information as informational. The communications provided them with enough examples of how to work with their child within their homes. Children in Cases A, B and C attended private speech therapy twice weekly. The settings were best described by Bella's P-SLP as "the perfect

scenario," because at least one parent drove the child and stayed at the speech office, talking with the P-SLP prior to and after the sessions and observing their child work with the P-SLP through a one-way mirror. All three parents reported in the semi-structured interviews feeling very satisfied with the amount of clinical information that was shared weekly in face-to-face interactions by the P-SLP during the private, one-on-one, weekly speech and language therapy with the students. All parents reported understanding what their child was doing in the private therapy and were pleased with the progress the student was making in the private speech therapy sessions.

This type of frequent, on-going, face-to-face communication was an important reason why stakeholders developed relationships centered on working collaboratively on communication goals for the child with CCN. Amy's mother stated, "When we see her working with the letter B, you make big lips, we know that when we go home, that's what we're supposed to do, you make big lips to make a B, and can reinforce that." Bella's mother shared, "I utilized our private ST (speech therapist) more often and communicated with her bi weekly." Carver's P-SLP provides speech and language therapy within their home and, when requested, will go into the community with them to assist with using the communication device (in his case, the iPad with LAMP app on it). When asked how this level of interaction impacts sharing clinical information with the parents, the P-SLP reported, "when you go into the home, it changes the dynamic of everything and you get to know their problems really quick."

The frequent sharing of personal and routine information occurring consistently across all four cases is an indication that the stakeholders view this type of information as valuable and not as difficult to communicate as clinical information might be. The

successful scaffolding of the personal and routine information which included sharing clinical information occurred in only two of the four cases. The frequent sharing of clinical information depended on the stakeholders being intentional and willing to share experiences in their world supporting the child with CCN's communicative attempts. The stakeholders recognized the importance of clinical information that frequent sharing of clinical information is required because the child's needs and abilities change, sometimes significantly, in the 12 months between IEP meetings.

Subcategory: Obstacles to communication were identified in the sharing of both personal/routine and clinical information among stakeholders.

A number of obstacles to communication surfaced. One was the use of limited information shared in daily folders. Another was the limited kinds of information shared throughout the school day by the Paras with stakeholders in Cases A and B. AS described above, daily folders were a frequently used, convenient way to communicate among all four cases. However, the folders presented obstacles to communication among the teachers and parents because the daily folders had limited information about how to specifically help their child and was not viewed by the parents as a meaningful way to communicate concerns. Amy's parent reported that, on the occasions that she receives the folder and it hasn't been carelessly tossed from Amy's backpack, "we didn't know how to reinforce it when she got home." Bella's mom reported that her only interaction with the S-SLP occurred "at IEP and occasionally in the halls" and added, "I took and picked up (my child) daily and it would have been very easy for her to communicate with me….School was disappointing." The folders were used by SPED teachers in Cases C

and D, and while the folders contained similar kinds of information, they were not the sole source of the sharing of personal and routing and clinical information.

Another obstacle to communication had to do with the limited kinds of information shared throughout the school day by the Paras with stakeholders in Cases A and B. Information was relayed to stakeholders by the Para's across all cases. The relaying of this information relied on routine communicative exchanges throughout the day which could be opportunities but were also obstacles to communication if the opportunities for these exchanges were reduced. For example, Amy's Para accompanied her to all therapies and different classroom settings, providing multiple opportunities for sharing both personal/routine and clinical information. An unofficial goal for Amy which shaped the communication between home and school involved increasing Amy's level of independence. The stakeholders allowed her to walk independently between school settings. The S-SLP in Case A reports they use walkie talkies in the school and the Paraprofessional now frequently just waves to the parent as the student arrives and departs school each day. While increasing independence is a noble goal, it reduced the opportunities and amount of both kinds of information passed between the stakeholders.

In sum, at first glance, communication was occurring frequently among all stakeholders. Participants described the type and frequency of communication. When examined at a deeper level, the communication which occurred differed. I noted two different types of communication: personal/routine information and clinical information. The personal/routine information which occurred seemed to support the building of relationships or serve as a friendly, comfortable interaction among all of the stakeholders. Cases A and B seemed to lack the awareness that their communicative exchanges were

primarily personal/routine information that do not cumulatively support the generalization of communication attempts by the child with CCN. The most successful pattern of communication occurred within the teams of stakeholders in Cases C and D. Both teams communicated personal and routine information and included clinical types of information specifically regarding how the child communicated across settings and people.

Theme Two: Cases which utilized peer coaching among stakeholders were more cohesive teams.

The four cases illustrated varied supportive interactions and relationships that reflect what I am referring to as peer coaching (described below) to articulate a characteristic I am seeing in the data. Stakeholders did not refer to their collaborative exchanges as peer coaching. The least cohesive cases, A and B, reflected the least substantial degree of peer coaching. Case A and B struggled to form collaborative teams with a shared goal involving communication and were not implementing peer coaching throughout the team members. The cohesive cases, C and D, reflected the most substantial degree of interactions that could be described as peer coaching. Case C and D were successful, albeit unintentionally, in implementing peer coaching among all stakeholders, including the parents.

I draw the concept of peer coaching from the field of literacy education, which Miller & Stewart (2013) argue is a key aspect of effective communication and collaboration. Peer coaching is defined as the process between two colleagues who work together towards several potential goals, including to "reflect on current practices; expand, refine and build new skills; share ideas; teach one another; conduct classroom

research; or solve problems in the workplace" (Robbins, 1991, p. 1). In literacy education scholarship, peer coaching refers to a student-focused, collaborative process which directly impacts the training of the coaches and the implementation of shared goals and objectives (Miller & Stewart, 2013). Because each of the stakeholders brings different levels of experience and knowledge to the team, peer coaching can support learning which will lead to more collaborative interactions (Learning Forward, 2011). Peer coaches should not be viewed as the 'expert' in AAC but as an equal partner, sharing their knowledge and remaining open and flexible to learning from each other (Jewett & MacPhee, 2012).

Case A and B were marked by limited peer coaching, solely between the parents and the P-SLPs regarding communication goals. Case B's S-SLP and SPED teacher participated in peer coaching solely in regards to actualizing her academic goals, for example, using eye gaze to answer comprehension questions from a read aloud. Peer Coaching did not occur in relation to how Bella communicated. All stakeholders in Case C and D worked together as peer coaches. The Peer Coaching relationships required mutual respect for each another's knowledge base and experiences. Case C and D's stakeholders worked collaboratively as complete teams, participating in consistent peer coaching regarding the use of communication devices, systems and strategies.

The intentionality with which participants engaged in this specific type of collaborative exchange is significant in Case C and D because each team member seemed to be viewed as an integral, respected member which empowered them to bring his or her own knowledge and experience to the coaching. For example, when Carver's class was planning to go on a field trip to buy pumpkins, the communication among the team

members moved from sharing just the routine (date, time, what was needed to attend the field trip) to peer coaching each other on what Carver needed to communicate during the trip and get the most out of the experience (what new vocabulary was required on the communication device, where it would be on the device, and how each team member could reinforce the new vocabulary). The collaborative peer coaching roles were not always equal among the stakeholders. There seemed to be a constant shifting of expertise, depending on the formal or informal training of the coach. For example, the decisions regarding the new vocabulary was made by the SPED teacher, where it would be located on the device would come from the P-SLP, mom would ensure the vocabulary was placed in the correct screen on the iPad and all stakeholders participated in the peer coaching regarding how to reinforce the new vocabulary across the different settings and people. Peer coaching is emerging organically within teams C and D, with team members acting toward each other on the basis of the meaning they bring to the process as a source of expertise and collaborator.

In Case A and B, peer coaching occurred primarily between the P-SLP and the parents before, during and after each private speech therapy session through the shared experience of the therapy session, a key to successful peer coaching. Unlike the school settings, Amy and Bella's parents remained with the child during the therapy sessions, observing the therapy using a one-way mirror. The P-SLP in Case B shared that this arrangement of watching speech therapy sessions provided opportunities for her to share techniques with the parent that they could then use in the home. She also learned a lot from Bella's mother about how to engage Bella in activities, sharing the tools and methods with the P-SLP. The SPED teacher and the S-SLP from Case B collaborated

together occasionally, with the SPED teacher reporting, “Yes, I communicated often with the S-SLP about Bella's therapy sessions. She would also do her therapies in the classroom,” working solely on supporting academic activities. The key reason the Peer Coaching was not particularly successful was that information shared during these Peer Coaching sessions was not shared with other stakeholders. Other stakeholders could have both provided and benefitted from sharing information regarding each other’s experiences with Bella’s communication systems and strategies, making the peer coaching a more meaningful experience for the team.

In order for teams of stakeholders to work effectively to support children with CCN, there must be more than two stakeholders working together on the shared communication goals. Amy and Bella’s parents are passionate about helping their child in any way they can. The challenge that occurred in both Case A and B is that only two stakeholders described working together at any one time to support the communication goals and objectives for the child with CCN.

Stakeholders in Case C and D described consistently worked collaboratively across all team members, and most referred to examples of exchanges of information and peer coaching as they shared the common goal and worked together to achieve it. Effective peer coaching occurred in a variety of collaborative ways among all stakeholders in Cases C and D. As Carver continued to progress in his communicative attempts using the iPad, the stakeholders continually peer coached each other, discussing the value of adding different vocabulary, how/where on the communication app the new vocabulary would be placed and how to model using the new vocabulary with him. The S-SLP described the interactions as, “A really good thing, a big collaboration.” All

members of Carver's team were included in the peer coaching, with the SPED teacher, mother, and P-SLP having the most influence as peer coaches. Their enthusiasm for interacting and mutual learning was reflected in the P-SLP's comment that, "she learns from me and I learn from her and I love it that she is so passionate" and with the S-SLP, "I've recommended trainings for her; I've given her all this information." Danny's mom shared, "if we want to see how they are working with them on this or that, the school is always willing to let us come observe and watch what they are doing."

Peer coaching in Case D also occurred among all stakeholders with a monthly "Meeting of the Minds." Stakeholders, including Danny, attended a brief (20 minute) monthly meeting to discuss common concerns regarding what is working, what is not and how they can best work with Danny to have him be able to communicate in all settings and across all people he encounters in the school setting. A common goal developed during this first meeting was to, "get him (Danny) having consistency" in all settings." She now receives positive feedback about what is working with Danny's communication strategies through emails from other stakeholders, "that say I'm so glad you did this, this works so well. You know we should do this with all our kids." In this case, as in Case C, it appears from the way the participants discuss interactions that no one person is considered the expert among the stakeholders and all are respected for their individual roles. Based on their responses in the semi-structured interviews and the observations, all stakeholders in Cases C and D are committed to the peer coaching process and both students are successful communicating across settings and people.

Subtheme: Stakeholder's attitudes and willingness to pursue AAC training varied across the four cases.

Various attitudes towards learning about new communicative technologies emerged throughout the semi-structured interviews with all of the stakeholders. The key to successful peer coaching is the knowledge and experience of the coach (Jewett & MacPhee, 2012). Training, both formal and informal, is one of the factors that empower stakeholders to help develop and support communication goals that meet the individual child's needs. Training can provide the stakeholder with the knowledge base to then peer coach other team members in how best to use the communication device or system. Students with CCN depend on those who provide support to have training and knowledge regarding AAC systems and devices.

Cases A and B have not yet actualized the team's communicative potential and peer coaching because the stakeholders reported having minimal or no training in using AAC to support a child with CCN. A few of the stakeholders in Case A and B have informal AAC training. Even more significant, no stakeholders indicated in their comments they recognized as an option or felt interested in pursuing training, in spite of Amy and Bella's struggles with communicating. Amy's parents have read a book on sign language and Bella's SPED teacher attended training long ago. Overall, the stakeholders in case A and B are trying to support the communicative attempts of the students with limited or no training in AAC devices, systems or strategies and demonstrate no indication of a plan to pursue training at the time of the interviews.

In Case A, the GenEd teacher has no AAC training. The Paraprofessionals in Case A and B have had no formal or informal training. When asked about training, Amy's S-SLP stated, "I attended the PECS training five, six, maybe seven years ago and have the full training from the picture exchange place." It does not appear that training

symbolizes a central and intentional aspect of their role. The SPED teacher in Case A similarly had not had training specifically for AAC, mentioning that, "Sign language I have learned mostly on the job. I have also been to Autism Registry Training where picture schedules are discussed & examples provided." The SPED teacher did not indicate how long it had been since she attended the training. The P-SLP has been certified for a few years and her AAC training included a specific course in graduate school and then peer coaching with her colleagues.

In Case B, the SPED teacher, who has taught Bella for several years stated, "I haven't gone through any training, well, when they got the Tobii device, a representative came up after school and met with us for a couple of hours to kind of show us how to set up different pages on her device." The S-SLP shared, "Well, not specifically on the Tobii however other, on the Dynavox, they are very similar," perhaps indicating the perception that further training is not required. The school-based therapy sessions did not include using the Tobii or the iPad on a regular basis. Bella's mother shared, "We don't have much guidance with the Tobii as her communication device" and "nobody here knows how to work a Tobii so it's trial and error and we've been trying to learn but we have no guidance." Bella's P-SLP shared that she has had minimal training, a one day training on a previous device and has worked with the Tobii by trial and error. Case B's stakeholders did not perceive the need for further training, in spite of the Tobii's high level of complexity.

Stakeholders in Case C and D all perceived AAC training, both informal and formal, as vital to supporting their child with CCN and peer coaching each other. They all have a variety of AAC trainings, both formal and informal, and indicated strong

interest in continuing to pursue the most up-to-date information on communication devices. Stakeholders in Case C and D pursued a variety of opportunities for training, both informal and formal and have significantly more training than the two previous cases. These trainings appeared to make a difference in the amount of peer coaching which occurred within each case. Carver's Para received frequent on-the-job training from the SPED teacher and the P-SLP. The SPED teacher described receiving informal training early in her teaching career. An S-SLP who worked with the SPED teacher years ago, "shared the knowledge, and because we were friends, she would like haul me around, but she gave me uh my knowledge base. I credit her, it's not the official training, but it was, that was my knowledge training." Because of the increasing number of children needing to use AAC to communicate, Student C's P-SLP has attended "tons of trainings, hours and hours of trainings" and been "sent to a Master class because I was passionate about it." The S-SLP was a new graduate with a Master's degree in Communication Disorders and described her participation in the training as "you just really have to dive in with it, his other speech pathologist (the P-SLP) has been really helpful gave us a run-down on it." Carver's mother shared that she was "self-trained," in that, "I have learned (both devices) on my own by taking courses over the internet. The P-SLP has been a great resource for help but for the most part I have made calls to technology support and visited help pages on the internet for both devices."

The orientation to training as a central aspect of serving Danny was evident among other stakeholders. Danny's GenEd teacher mentioned that he is, "already a technology person anyways so I am always looking (and) researching." Similarly, the Case D SPED teacher also shared, "before we actually decided to try it, I was looking

stuff up on the internet, cause I'm like there's got to be more stuff than just the switch that I can use with him." Stakeholders in Case D are all familiar with Danny's current communication strategies because of the peer coaching that has occurred. The monthly "Meeting of the Minds" built on the effectiveness of the peer coaching, allowing all stakeholders to share in person the information they learned through both informal and formal trainings. When discussing the possibility of Danny acquiring a Tobii in the near future, all stakeholders shared their experiences, the current trainings and their commitment to learning about the Tobii and receiving further training to use it most effectively. At the time of the last interview, the Tobii representative had already spent one day in the school. Stakeholders' attitudes in Case D indicate they are all oriented around the device as a significant object in their world.

Stakeholders across the four cases demonstrated varied levels of AAC training and interest in pursuing training to better support the child with CCN. Stakeholders in Cases A and B had limited training and expressed no interest in pursuing additional trainings. In both Cases C and D, stakeholders had already received AAC trainings, both formal and informal, and consistently demonstrated interest in learning all they can through different training opportunities to be able to support the communicative attempts of their student. Unlike the other cases, they were proactive about training and information, acting toward training as a meaningful aspect of their professional role. Effective Peer Coaching relies on the training of the coaches. Stakeholders in Cases C and D were able to more successfully Peer Coach each other than the stakeholders in Cases A and B.

Theme Three: The degree to which cases perceived the Paraprofessional as an integral team member varied across cases.

Paraprofessionals are one type of support used inconsistently or consistently, effectively or ineffectively in the various cases. In Case A and B, the Paraprofessionals were perceived as an under-utilized resource in the development of communication skills for the students with CCN. In Case C and D, the two teams that functioned as the most effective partners, paras were viewed and encouraged to be integral conduits of information and contributors to the actualization of generalization for Carver and Danny. The roles of Paraprofessionals have increased in the past 60 years due to an increasing shortage of special education teachers and the need to serve increasing numbers of children in special education classrooms especially in early childhood programs (Westling & Fox, 2009). Paraprofessionals generally provide educational support to teachers within the classroom, working individually or with small groups of children. There is no federal definition detailing the specific role of a Paraprofessional which can, and in Cases A and B did, lead to an ambiguity in their roles (Ghere & York-Barr, 2007). The Special Education teachers play an important role in the professional development of paraprofessionals (Ghere & York-Barr, 2007). Across all four cases in this study, the Paraprofessional's role was to provide one-on-one support, both academic and self-care, to the child with CCN's across all educational settings. However, stakeholders relied on the four Paraprofessionals in a variety of ways. In Case A and B, stakeholders did not dedicate time to develop relationships of mutual respect and shared common goals with the Paraprofessionals; in case C and D, the paraprofessionals were included in informal

and formal trainings, all meetings and decisions regarding Carver and Danny's goals and objectives. Stakeholders viewed them as an integral part of the team.

A complicating feature in contemporary classrooms is the high turnover of many professionals, and in the field of special education. This broader context shapes the conditions of any given case. Paraprofessionals accumulate explicit and tacit knowledge of their assigned student and this knowledge is lost if the Paraprofessional leaves the position (Droege & Hoobler, 2003). Research indicates that turnover is reduced when Paraprofessionals are viewed as respected members of the team which supports the educational goals of the child with disabilities (Ghere & York-Barr, 2007). This research points to the importance of understanding how Paras in particular were incorporated into team dynamics and how they felt about being perceived as a member of the team. In Cases A, C and D, Paraprofessionals had been there for several years and in Case B, the Para was new to working with the child with CCN. The length of time a stakeholder spends daily with the student did not appear to have an effect on how stakeholders perceived their role on each team. Amy's Para had worked with her for several years, yet was not perceived by the team to be an integral member.

When considering the dynamics across cases, neither Para in Case A nor B were included in the development of IEP goals and objectives, nor were they invited to the IEP meetings to share their experiences or learn from the other stakeholders. Amy's educational stakeholders depended heavily on the Para to interpret her communicative attempts because the expectations differed in each environment. For example, when Amy attended the GenEd teachers' classroom and tried to communicate using sign language with the GenEd teacher, she depended on the Para to interpret. The GenEd

teacher's response was, "I would look at (the Paraprofessional), now, what does this mean?" rather than learning sign language to directly communicate with the student. In Case A and B, the Paras were expected to implement teacher planned activities with minimal guidance or inclusion in the decision-making process. Both Amy and Bella were brought to school by their parents and were met by the Para in the morning and afternoon. The teachers and S-SLP's relied on the Paraprofessionals as the conduit to share daily information and be the primary source of communication with the child's parents. When asked if she was aware of or provided specific information regarding the goals and objectives for her assigned student, Amy's Para shared

> "Not really. (The SPED teacher) tells me some of the um, what do you call them, the goals, you know, her academic goals and what they're doing and that's pretty much it. But there are goals that I have set for Amy, just like saying help. I mean just like her, you know there's other ones, there's milestones that she's reached like going into the classroom by herself, making sure that she's interacting with friends, those kind of things. Those are my kind of goals."

While she was not informed of the goals, Amy's Para demonstrated a strong interest in helping her succeed throughout her day and established her own, 'unofficial' goals. Bella's Para had only worked with her for three months prior to the interview and was learning how to work with Bella by watching other Para in the room and through her daily experiences.

Carver's Para also provided support throughout his school day. She was included in all IEP meetings and reported, "I have sheets for Carver and the other kiddos I work with that are um, as goals within the IEP. The other Paraprofessional does too and so we

make notes on those and I think that's great." Stakeholders described including Danny's Para in all aspects of the planning and implementation of his educational goals and objectives in every setting. The GenEd teacher works collaboratively with the Para to ensure that Danny was an active member in the Gen Ed setting. The Gen Ed teacher reported,

"The Paraprofessional and I are trying to find a way for him to do a spelling test with us,

> she can help him communicate, we will do flash cards so there's basically an A-B choice with eye nodding of you know, to the left is yes or to the left and up is yes or right to up right will be no so he can eye nod. And he got 7 out of 8 right on his test last week. He knows his sight words."

The GenEd Teacher in Case D continues, "I always have enough for Danny to do and the Paraprofessional incorporates it for him." When asked about attending Danny's monthly meetings, the Para shared that the team members told her, "'I want you here, I want your input, I value your input,' and so, that makes me feel really good."

One-on-one Paras hold a unique position on the team of stakeholders because they are the one person who accompanies the child throughout their school day. Stakeholders on each team relied on the paras to meet the basic needs involved in supervising the child; however, team members viewed the paras who supported Amy and Bella as occupying the least professional role on the team and, because of this, opportunities to actualize the generalization of communication skills for the students were lost. The paras assigned to Carver and Danny were viewed as integral, contributing members of the teams and were included in all decision making and training opportunities. Their integral

roles in Cases C and D helped the teams actualize the generalization of communication skills for Carver and Danny.

Theme Four: Documented IEP goals, objectives and current level of performance related to communication varied across the cases in terms of their clarity and the amount of information provided to team members.

The most cohesive cases reflected the clearest and most detailed documentation of IEP goals and objectives concerning communication. The most cohesive cases viewed the IEP document as an important, guiding document. In Case A and B, IEP goals, objectives and the child's current level of performance regarding communication were vague, unclear and provide little concrete information for stakeholders, perhaps viewing the document as a less important, perfunctory duty to be written once a year. Case C and D provided stronger communication goals and objectives, including specific information regarding each child's current communication systems, devices and abilities. Stakeholders are mandated by the federal act to develop and implement the IEP goals and objectives. Information related to communication skills, which impact all areas on the IEP, are documented in several places within the document, beginning on the page. When IEP goals, objectives and current levels of performance related to how the child communicates are clearly documented in the IEP, stakeholders have a clear plan for the next twelve months of the child's school life. Most importantly, when the child transitions to new programs or new stakeholders begin to work with the child with CCN, well written IEP's provide a clear road map for those who did not attend the IEP meeting or are not familiar with the child (Knowlton, 2007).

Research suggests that SPED teachers and S-SLP's should write quality IEP goals and objectives, clearly, succinctly, and provide accurate information regarding the student's present level of performance (Knowlton, 2007). Annual goals and objectives should provide a strong connection between the student's communication needs and the skills, devices and systems that the student is expected to work with and accomplish during the next twelve months of educational instruction (More & Barnett, 2014). Vague goals, objectives, and connections led to different interpretations by stakeholders in Case A and B which contributed to pursuing goals and objectives they deemed most appropriate with little collaboration between them. When the IEP goals, objectives, and connections among the child's needs and what they are to achieve are clear, all members of the IEP teams in Cases C and D had a strong idea regarding what they should accomplish during the next school year.

When reviewing the four IEP's, the clarity of the goals and objectives varied greatly, as did the knowledge each stakeholder held about the goals. Communication goals on Amy's current IEP included increasing her overall communication by saying her name and producing sounds in isolation. Amy's current levels of performance were generically described as "deficits in articulation, and expressive language delays. "The P-SLP reports that previous IEP goals for the school included naming shapes and colors, skills the P-SLP stated "are limited." I did not observe any of these communication goals in either the school or the home observations. The SPED teacher indicated that she keeps "a clipboard that has all of her IEP objectives on it" close by for reference as she works with Amy in class. While the SPED teacher does have a copy of the speech goals, the

goals on her classroom clipboard (worked on daily) are not communication goals, but are "mostly the things that she works on are a little more on the academics."

Another example of a disconnect within a team of stakeholders in the sense of being unaware of IEP communication goals and objectives occurred in Case A. Amy's GenEd teacher is required by the IDEA to attend the IEP meeting each spring but had no knowledge of what the communication goals were and, when Amy uses sign language in her class (not identified as a speech goal); she is unable to communicate with her. Related to theme three, the importance of including the Para, another disconnect occurred because the Paras assigned to support Amy and Bella throughout their school day were not included in the IEP meeting and were unaware of the goals, objectives or current level of performance related to communication.

Other potential team members were not included in IEP meetings, as well. The P-SLP found that Amy has done well using the iPad to communicate during private speech therapy session and is currently pursuing private funding for the iPad and communication app for Amy. The P-SLP in Case A was not invited to the IEP meetings nor included in the development of goals and objectives involving the communication systems/devices used. When asked if she attends the IEP meetings, Case A's P-SLP shared," I've never been. I would. I've never been invited to one. I would be more than, more than willing." Mom believes that the iPad will be more successful than the Go Talk (an AT device previously tried at the school) because Amy "likes to use it" and she "thought it was cool" and yet there are no current plans at school to incorporate assistive technology as a communicative strategy.

The IEP goals and objectives for Case B were somewhat clearer and included responding to questions using eye gaze, switches, scanning and using low technology devices, however, Bella's needs were vaguely described as "needs AAC due to multiple modalities." No AAC devices or systems were mentioned in the IEP, a clear disconnect. The goals and objectives did not address the fact that Bella used Tobii and an iPad, high technology communication devices, to communicate. During the school observation, I did observe Bella using eye gaze to answer questions using a low technology device within the school. The parent reportedly provides the Tobii and iPad for the child to use in school; however neither was used during the school observation. Bella uses the Tobii in every private speech therapy sessions and is reportedly making great strides both academically and communicatively in that setting. When asked if she attended the Bella's school IEP meetings, the P-SLP shared, "I said well, so, there was no communication between me and the school. Um, I did get a copy of her IEP and I did get to look at that, um, and I saw what goals they were working on." Without input from the P-SLP's in Case A and B, the communication systems and strategies will continue to be uncoordinated for both students across settings.

When IEP goals, objectives and current levels of performance are clear and concise, team members can use the IEP document as a starting point and reference throughout the year when addressing the shared communication goals for the student with CCN. As indicated in both Case C and D, when all stakeholders are included in and are aware of the development of the IEP goals and objectives, the student with CCN can communicate more clearly and consistently. For example, Carver's goals and objectives were clear and concise. The goals and objectives for Carver included increasing both

receptive and expressive language skills while also increasing communication with peers using voice output devices. The IEP specifically listed using a Dynavox, however the student received an iPad after the IEP was written. The Dynavox is now used as a back-up when the iPad is not available. I observed a clear understanding of the goals and objectives for Carver in both the school and home observations. Carver used his iPad while interacting with the SPED teacher and Para at school and came into the home carrying his Dynavox due to the iPad having broken on a recent school trip. When describing how she develops the communication goals and objectives, the S-SLP shared, "I want to make sure that we're on the same page, too. I always have her (the P-SLP) go over my goals, too. And she, get her stamp of her approval." Carver's SPED teacher shared

> "Yes, the para attends the IEP as a participant. In fact, when class size is as large as it has been the last few years, the para is extremely important regarding input because she is the primary teacher and I depend on her input."

The SPED teacher played a strong role ensuring the Para was included in all IEP meetings.

Danny's goals and objectives were clear and concisely written. Consistent with Case C, Danny's goals included working on self-help, personal/social skills, communication, and cognitive skills. Danny also used his cochlear implant to hear. Danny does not currently use an AAC device. The IEP description of Danny's needs provided a detailed connection between his needs and the goals for the year. The description stated,

> "He is an extremely intelligent young man. Although he is non-verbal, he uses eye gaze to communicate his needs and wants. He has a communication book that he can use for expressive communication using eye gaze, however he has made it clear that it is not his favorite thing to do. The team has worked hard to try to establish a consistent yes/no indicator for him, however we will brainstorm monthly to determine what is best for him. He is able to communicate using yes and no vocalizations and can shake his head no to answer. He loves to socialize with his peers."

All stakeholders in Case D were involved in the development of the IEP goals and objectives. The description of his needs was so comprehensive that any new members of the team would begin working with Danny with a good understanding of this young man's needs and abilities. I clearly saw these goals and objectives while observing in both the home and school. Danny used eye gaze and yes/no vocalizations and was consistently understood in both settings.

Team members perceived the importance of the clarity and detail that should go into developing IEP goals and objectives differently across the four cases. Implementation of IEP goals and objectives are mandated by the IDEIA. When IEP goals and objectives are vague and unclear, as they were in Cases A and B, implementing the goals becomes a challenge and the lack of clarity can lead to confusion among the stakeholders. Implementing clearly written goals based on the detailed description of the child's current level of performance was more successful within Cases C and D. Stakeholders were able to use the IEP document as a road map when the goals, objectives and current levels of performance related to communication were clearly documented.

Summary

Stakeholders across four cases demonstrated both strengths and weaknesses in how they interact and participate in collaborative communicative exchanges to support children with CCN. Cross case analysis resulted in identifying four major themes and four sub-themes within the multiple case study. Because the research questions involved exploring the types and meanings of interactions which occurred among the stakeholders as part of their participation on the federally mandated educational team and examining how collaborative communicative exchanges transpired among the stakeholders which could potentially support the child with CCN to generalize communication skills across different settings and people, the types of communication and the issues that were the focus of communication among the stakeholders became a prevalent theme. Stakeholders used a variety of communication techniques, including verbal interactions, newsletters, notebooks and computer-mediated communications. All stakeholders engaged in personal and routine communications with each other. Sharing clinical information regarding how the child with CCN communicates was limited in some of the cases. For the two cases where communication consistently exchanged clinical information, the students with CCN were more successful in their communicative attempts.

Stakeholders participated in varying degrees of peer coaching depending on their understanding of and level of AAC training. When stakeholders were well trained, regardless if the training was informal or formal, students with CCN were consistently more successful communicating with different people across several settings. All cases had a Paraprofessional assigned to provide one-on-one support for the child throughout their school day. When the Paraprofessional was viewed as a respected member of the

team, included in decision making and provided opportunities to participate in peer coaching, they were more successful in meeting the communicative needs of the child.

IEP goals and objectives for communication varied in the level of clarity and amount of information they provided regarding the needs of the child with CCN. The more detailed the IEP and the stronger the connections between the needs of the child and what was expected of the child in the next year, the more successful the teams' were at working toward the communication goals and objectives.

Embedded within all of the above mentioned themes and sub-theme is the concept of a shared commitment to the same communication goals and objectives for the child with CCN. Stakeholders in Cases A and B interactions and communicative exchanges did not demonstrate a shared intentional commitment to helping the child generalize communication skills across settings and people with the various methods available-viewing technology awareness and training as a key component of the generalization process; developing and consistently referring to the IEP as a core document in goals and plans; emphasizing clinical rather than personal information; and including the Para's role as an integral member of each team. The most cohesive cases reflected consistent collaborative communication exchanges involving both personal and clinical information, peer coaching centered on actualizing the generalization of communication skills for the child with CCN among all stakeholders, inclusion of the Para in communications and meetings when making decisions about the child and clearly written IEP goals and objectives.

Cases C and D were more successful in sharing the commitment to common goals and objectives for the child they supported. By sharing the same goals, stakeholders

actively communicate clinical information regarding the systems or devices the child uses. Peer coaching among stakeholders demonstrate benefits to the child with CCN when there are shared goals. Shared goals, by their very nature, imply that they are shared with the Paraprofessionals on the team. Clearly written IEP goals and objectives are easily communicated both during the IEP meeting and within the written document. Conversely, in Cases A and B, the children were less successful communicating across settings and people, perhaps due in part to the team of stakeholders lacking a shared commitment to a common communication goal.

CHAPTER VI

DISCUSSIONS AND IMPLICATIONS

This chapter will list my findings, discuss how the findings tie to the literature, extend parts of the literature, and emphasize the significance of the nuances I found in the data. I will present three separate sections: implications for research, for theory, and for practice. I will substantiate the conclusions using sufficient quotations from stakeholders, field notes from observations in the home and school settings and evidence from the child's IEP documentation when appropriate (Brantlinger et al, 2005).

Implications for research, theory and practice are based upon initial and follow-up semi-structured interviews with stakeholders, observations of the stakeholders supporting the child's communicative attempts in the home and in the school settings, and document review of the IEP goals specifically related to communication and AAC. This chapter will also discuss the limitations of the research and provide suggestions regarding additional research that must be conducted, including the next steps.

The current research was conducted to explore the types and meanings of interactions which occurred among the stakeholders as part of their participation on the federally

mandated educational team formed by parents, SPED teachers, GenEd teachers, S-SLP's, P-SLP's and Paras, and to examine how collaborative communicative exchanges transpired among the stakeholders which could potentially support the child with CCN to generalize communication skills across different settings and people. There were four cases, based on between five and seven stakeholders within the cases, examined from different geographical settings in one state. The teams of stakeholders are a foundational component of serving the child with CCN. The teams are assembled, responding to the IDEIA mandate. Merriam Webster (n.d.) defines a team as "a group of people who work together." When referring to an IEP team, the concept of "team" refers to the group of people who are mandated by the IDEIA to come together with a common aim of developing goals and objectives to assist a child with disabilities be successful within the educational setting (Taylor, Smiley, & Richards, 2009). As members of the team, stakeholders bring their expertise, knowledge, experience and commitment to help plan for and implement the agreed upon goals and objectives (The IEP Team, n.d.).

This study revealed an important series of findings from the close investigation of each of the cases, analyzing how stakeholders interacted and collaboratively communicated with each other, and experienced their roles and their work on behalf of the child with CCN. The primary themes were: different kinds and frequency of communications among the stakeholders in each case, varying degrees of peer coaching among the stakeholders; varied perceptions of the Paraprofessional as an integral team member; and IEP goals, objectives and current levels of performance varied in clarity and amount of information provided across the cases.

The study was revealing in many ways. While some of what I found resonated with my experience in the field working with stakeholders and children with CCN for over 15 years, other findings demonstrated key contradictions to or extensions of the generalization of newly learned skills across different settings and people. As Chapters 4 and 5 documented, the 'feel' of each of the teams differed significantly. Cases A and B reflected a lack of cohesion (not sharing common communication goals, interactions limited solely to personal and routine information, no clinical information exchanged regarding how the child communicates except at the yearly IEP meetings, and partnerships limited to two stakeholders in each case). The stakeholders in Cases C and D reflected cohesion, commitment to, and intentional acts toward achieving shared communication goals. The cases essentially helped me explore the types and meanings of interactions which occurred among the stakeholders as well as how collaborative communicative exchanges transpired among the stakeholders which could potentially support the child with CCN to generalize communication skills across different settings and people.

Implications for Theory, Research, and Practice

Implications for theory, research and practice are described below.

For Theory

A qualitatively based research study provides a platform to investigate a research problem in depth and detail. It can provide thick, rich descriptions of the issues experienced by the stakeholders and greater understanding of the daily processes at work in a phenomenon. "Qualitative research is not done for purposes of generalization but rather to produce evidence based on the exploration of specific context and particular

individuals" (Brantlinger et al, 2005, p. 203). Other stakeholders may read this research and understand that the cases involved particular individuals in specific contexts different from their own. "The real business of case study is particularization, not generalization" to other cases (Stake, 1995, p. 8). They may, however, realize there are similarities between this study and their own educational experiences with communication systems that allows them to consider the illustrative relevance of these findings in their own professional contexts. Interactions between team member's impact whether communication systems are, or are not, successfully generalized from home to school. The findings in this study may provide specific examples to learn from for other stakeholders with similar situations.

The concept of "teams" is under-theorized in regard to IEP teams and needs to be more clearly understood and defined to benefit children with CCN. When examining how teams or groups of stakeholders interact as they support children with CCN, I learned or re-learned two important concerns. My data in the current research provided strong examples in Case C and D of how teams of stakeholders can work together to support the communicative needs of a child with CCN. Based on data from Case A and B, the long held theory of generalization of skills across different settings and people is still not being planned for and implemented by the IEP teams. I discovered multiple interrelated characteristics that were associated with cohesive teams.

The original IDEIA, called the Education for All Handicapped Children Act, was passed in 1975 and has been re-visited and modified several times since then. The IDEIA mandates the members of the team that must attend the yearly IEP meetings but remains vague on several important issues regarding the concept of what a team looks like and

how it functions. When considering how important the role of these IEP teams are, we must more clearly theorize the concept of team to counter the vagueness of the IDEIA's mandate. More organically, in context, we must develop a clearer understanding of the over-arching responsibilities of team members when addressing communication needs for the child with CCN, what communication among the stakeholders should strive for between the yearly IEP meetings (other than report cards every nine weeks) and how to recognize the inherent value each member of the IEP team brings to the group.

Symbolic Interactionism contributes to the understanding of the interactions and dynamics of teams in its "down-to-earth approach to the scientific study of human group life and human conduct" (Blumer, 1969, p. 47). Because participants on teams view different aspects of their role as significant-for some folders with instructions is important, for others being included in IEP meetings-team members need to be aware of those fluctuating and different meanings.

For Research

Future research using more observations of the interactions among stakeholders should occur to watch the intricacies in practice, rather than only analyzing the interactions described in the interviews. My data shows that the most significant finding theorized from the various themes was the conceptual significance that cohesive interactions among stakeholders seemed most consistently able to support the actualization of generalization goals by a child with CCN. Research into the effectiveness and success of generalization has primarily involved quantitative methods focusing on a variety of strategies for training the child with disabilities and has not focused on interactions of the stakeholders providing the support for the child

(Gianoumis & Sturmey, 2012). Research into generalization addresses specific tasks, for example, the ability to use money in the cafeteria at school, in a pop machine and at a store in the community. While using money is an important skill, being able to consistently communicate across different settings and people is a skill that impacts every part of a person's life.

This qualitative research uniquely addressed how the interactions support and shape the collaborative communications among the stakeholders and, ultimately, in turn, influences the team's ability to support the child with CCN to successfully generalize communication skills across settings and people. In order to more successfully generalize communicative skills across settings and people, stakeholders from Case C and D communicated in a variety of ways, sharing not only personal and routine information but also sharing specific clinical information about how the child communicates. For example, cases discussed vocabulary Carver used on his iPad at a pumpkin patch and how Danny vocalized yes or no. This has implications for future research examining other cases of stakeholders to determine what kinds and frequency of interactions they have, how the components of their interactions are perceived, and how their interactions influence generalization of communicative attempts of children with CCN in different settings and with different people.

Symbolic Interactionism indicates the stakeholders act towards each other based on the meanings they attribute toward each other in the role they have and the feelings they bring to the interactions. My data showed that stakeholders in Case A and B were reluctant to move outside the boundaries of what they perceived as their role and interacted towards each other based on their own idea of what each other's role should

be. Stakeholders in Case C and D viewed their roles as integral to the process of supporting the child's communicative attempts. This varying perception of "role" and its implications merits more research. Implications include future qualitative research delving more deeply into the effects of role perceptions of stakeholders, both personal and of others, on the likelihood of the stakeholder becoming more (or less) flexible with the changing demands and needs of the students with CCN who are served by the stakeholders.

One research study involving PECS mentioned that the parents who were successfully trained in using PECS were well-educated, middle class parents (Stahmer & Ingersoll, 2004). Socio-economic class is an important familial characteristic and contextual force that can shape any given case. The data from my research included four sets of parents, two of whom were well-educated, middle class parents (Case B and D) and two who were not formally well-educated and who lived close to or below the poverty line (Case A and C). The socio-economic status of these four parents did not appear to be a significant factor in how teams interacted within this study. Implications for further research could examine the possible influence of the socio-economic status parents bring to the teams of stakeholders to better understand interactions with other stakeholders.

My data from the four cases all resided within one state, however, their settings were quite different. Case A lived and attended school in a rural setting. Case B and D lived and attended schools in suburban settings and Case C was in an urban setting. Rural school communities tend to have fewer resources than a suburban or urban setting. Rural schools employ fewer SPED faculty based on their lower numbers of students with

special needs. In my professional experiences working with SPED teachers across our state, Special Education services within rural settings require both SPED teachers and S-SLP's to serve students with a wide variation in ability levels due to the fewer number of students they serve. While Case C's family lived below the poverty level, the fact that they live in an urban setting definitely provided them with more options than if they lived in a rural setting. Implications for further research is needed into how socio-economic, as well as settings (rural, suburban and urban), might influence the interactions among stakeholders.

The theory of generalization of skills between different settings and people is a long-held, well recognized theory in special education. Research into generalization theory dates back to 1977, two years after the IDEA was passed. The existing body of research regarding the generalization of skills between settings, places and with different individuals continues to quantitatively demonstrate the importance of planning for and implementing generalization techniques when working on newly acquired skills with students who have disabilities. Much research has been conducted regarding the successful generalization of skills between schools and community settings (Phillips & Vollmer, 2012; Davis, Frederick, Alberto, & Gama, 2012). No current research has been conducted qualitatively regarding the generalization of communication skills between home and school. My data from this research adds to the body of knowledge regarding the elements (both successful in Case C and D and less successfully in Case A and B) that influenced how stakeholders interact together which influenced generalization of communication skills between home and school, as well as elements that influenced the partnerships among the stakeholders, ultimately impacting the generalization of these

important skills. Implications for further research could utilize a mixed-methods approach into how educators theorize how generalization might happen within the 2015 classroom, with its more in-depth understandings of children with disabilities, and may provide a new perspective into what is working and what needs to occur to optimize outcomes rather than relying on seminal articles that are almost 40 years old.

My data shows one of the elements that made a difference across the cases in terms of communication and the collaborative communication exchanges was when stakeholders all shared a commitment and were intentional about actively supporting the child with CCN's communicative attempts across various settings and different people. The embedded theme of sharing a commitment to and making the time to provide active support for a child's communicative attempts is significant to the stakeholders because it results in consistent expectations and services across all settings and people. A greater context involved with sharing a commitment is the amount of time it takes to make the commitment a reality for the child. In today's educational system, there exists intense demands on teachers and related service providers. How each stakeholder perceives the importance of using their time to support the common goal of generalizing communication skills for the child determines how much time amid their many responsibilities they will systematically devote to the goal.

The most successful cases, C and D, were distinguished by recognizing the need to work together as a cohesive team to actively support the communication goals and objectives to actualize generalization of communicative attempts by the child with CCN. I observed both Carver and Danny successfully communicating in their school and home settings. This over-riding theme is significant to the study because it demonstrates the

need for all stakeholders to take an active role supporting the communication goals and objectives of a child with CCN, regardless of their 'assigned' role on the team. The different roles on an IEP team can be defined by some of the stakeholders as having a hierarchical nature, viewing the "professionals" (SPED teachers, S-SLP's) as having more knowledge than the "non-professionals" (parents, Paras) on the team. The role matters less than how the person sees their role. The expertise of the stakeholders can be from informal or formal trainings. Both informal and formal expertise is important and must be respected by the other stakeholders. The assigned roles in Case C and D mattered less than the way the stakeholders carried out their roles as an integral part of the team. For example, parents and Paras hold just as much responsibility to support the goals and objectives as do the educators and speech and language therapists. Educators in Cases C and D spent time interacting with parents, extending Meadan et al's research (2008) indicating that a key to working with parents is to understand and respect the goals for their child.

The willingness to embrace each role as important to the team and treating each other with respect, regardless of the hierarchy of roles, seemed essential. What is significant about my research is that Case D clearly demonstrates there was an understanding by each stakeholder that everyone on the team played a vital role, regardless if they were in a professional or nonprofessional role. The external definition of role mattered far less than how they understood and acted toward each other as components of the IEP team. Wiederholt (1974) identified that stakeholders often experienced and demonstrated role confusion, specifically between SPED Teachers and S-SLP's, as they determined who should take the lead in teaching communication skills

to the child with CCN. Little progress in clarifying this role confusion has occurred in the past forty years. Wiederholt stated that education professionals (specifically SLP's and special education teachers) were "concerned about the focus of responsibility for handling language disorders in the school" (Wiederholt, 1974, p. 147).

Roles between stakeholders continue to be a "matter of degree and interpretation rather than absolute distinctions" (Patton, 2002, p. 457). When left to interpretation, the role confusion continues. Pilot interviews of stakeholders indicate they view 'other' stakeholders as being responsible for supporting the child's communicative attempts, not themselves. For example, the S-SLP in the pilot interview strongly stated that she only saw the child twice weekly for twenty minutes, indicating that she could not possibly be responsible for supporting the child across settings and people. In my experience in the public schools, I observed this deflection of responsibility beyond "official" role understanding frequently and, if I had not been mentored by my S-SLP when I first began teaching my students with CCN, I may have followed that course. The S-SLP assigned to work with a very few of my students with CCN recognized that she could not hope for generalization of communication goals without help. The S-SLP peer coached me in communication systems and encouraged me to attend trainings once she realized my interest in learning about AAC. Her peer coaching led me to pursue multiple trainings and I, in turn, began to peer coach my Paras and team teachers.

Stakeholders in Case A and B were much less successful in demonstrating a shared commitment to the child generalizing communication skills across settings and people, perhaps due to their view of their own role within the group of stakeholders and their unwillingness to venture outside what they viewed as the parameters of their roles.

When asked how she communicated with Amy, the GenEd teacher responded that she relied on the Para to communicate with the child. These two stakeholders, along with others in Case A and B, could not envision their role as integral to the team of stakeholders. The S-SLP in Case A provided weekly notebooks with goals and objectives for parents to work on at home, however the goals were more related to articulation disorders, rather than language challenges like Amy experienced. The S-SLP's vision of her role may not have matched the needs of Amy.

Some of these circumstances involving their roles were tied to the transient nature in education. The GenEd teacher in A was not a strong stakeholder, perhaps because she saw Amy for a small fraction of each day and would only be her GenEd teacher for the current school year before the student moved on to the next grade. Flexibility and adaptability towards individual roles is a necessary disposition for all stakeholders. Stakeholders in Case A and B lacked the flexibility to change their idea of what their role could be and had no clear support from other professionals or mentors to think through what their roles might be. This lack of flexibility limited interactions among the stakeholders and no true formation of partnerships occurred when addressing communication goals and objectives for the child with CCN.

Implications for future research could examine the uncertainty in stakeholder's roles related to communication skills which remains a challenge today, resulting in the child with CCN not being able to generalize communicative skills across settings and people, and ultimately leading to frustration for the child and for the stakeholders. For stakeholders today, those in this study and those in the field, this finding indicates a strong need for all stakeholders to assume an active role of responsibility regarding the

communication needs of a child with CCN. As Wiederholt identified as occurring in 1974, stakeholders continue to adopt the "One-Two-Three, Not me" attitude regarding who should be involved in ensuring that the communicative needs of a child with CCN are met. Taking an active role does not mean one stakeholder become in charge of all communicative needs; instead it means each stakeholder must accept responsibility within their role to ensure the child with CCN can generalize their communicative skills across settings and people. This also does not mean that all stakeholders must completely agree with the goals and objectives, but what seems to matter in the data is that they are willing to support them. Case D was successful in forming a true partnership to support Danny's communicative attempts, in spite of the fact that the S-SLP preferred to use low technology systems with him to communicate and did not completely share the passion the rest of the team of stakeholders had for the Tobii, a high technology communication device. Implications for practice include encouraging stakeholders to not abdicate their role in the child's communicative attempts, but instead work together as a team to learn about and support the consistent use of communication systems and devices for the child with CCN.

Using the lens of Symbolic Interactionism, the stakeholders act towards each other based on the meanings they have and feelings they bring to the interactions. Viewing the data through this lens, relationships among the stakeholders formed based on whether the stakeholders shared the common goal of supporting the child with CCN to communicate effectively between settings and people. The interactions among participants in the study seemed to symbolize variously promise, trouble, challenges and triumphs. This translated in Cases A and B to a few individual stakeholders who were

passionate about supporting the communicative attempts by the students with CCN. The stakeholders as a team in Cases A and B did not recognize or emphasize the need or importance of planning for the generalization of communication skills nor share common communication goals for the students with CCN; therefore they did not bring a shared meaning or passion regarding the importance to support the generalization of communication skills or systems. Passion for supporting a child doesn't matter if their interactions are not oriented toward the object. In both Case A and B, there were two stakeholders (Mom and P-SLP in Case A and SPED Teacher and S-SLP in Case B) who shared a commitment to the goal, however the two stakeholders were not enough to support the child with CCN across all settings and people.

Cramer (2006) indicated that collaboration must include goal-oriented interaction, a finding that is extended in this study to include the inductive understanding that stakeholders in Case D formalized their goal-oriented interactions during their monthly meetings. The partnerships among stakeholders on Case C and D began forming when interactions included the sharing of both personal/routine information and purposively sharing clinical information regarding how the child communicates using eye gaze, AAC devices and systems. All stakeholders in Case C and D were passionate regarding the need to receive training in AAC and supporting the use of both high and low technology systems with each student. By having this shared understanding and passion for supporting the students with CCN, the stakeholders in Case C and D were able to develop partnerships regarding the importance of supporting the communication goals and objectives. As stated above, a shared commitment does not necessarily indicate that every stakeholder equally supports the goal and objectives. This has implications for

future research to examine how stakeholders interact to potentially develop a shared commitment to come to a consensus about the goals and objectives and a willingness to support them across all settings and people.

Technology based communication strategies continue to develop at a fast pace in our world today. Stakeholders perceive the use of devices (either cell phones, computers or communication devices) in different ways. My data shows that all stakeholders used a variety of technology based communication strategies: texts, emails, and sending photos and videos on cell phones. Research within business settings and e-mentoring situations indicates both positive and negative factors regarding the use of computer-mediated communication strategies. With the explosion of computer-mediated-communication strategies being used to exchange personal and routine information, future research could provide more information regarding how to use CMC effectively among stakeholders supporting students with CCN. In order to support on-going collaboration between stakeholders, implications could include future quantitative research which would provide a broader sample of stakeholders and examine how computer-mediated communication techniques are currently being used and how using technology could potentially support the exchange of clinical information and support the possible formation of partnerships among stakeholders.

For Practice

Building on Cramer's (2006) research, the level and quality of communications among stakeholders can shape the interactions and collaborative exchanges. The sharing of not only personal and routine information but clinical information is conceptually important to the team because clinical information involves specific information

regarding how the child communicates, regardless of whether he or she uses a high or low technology device, eye gaze, or a yes/no indication. By sharing this information, the stakeholders are not left to guess how and what the child is communicating and learn how the child uses the communication device.

The conceptual import of sharing not just personal and routine information but clinical information, too, is the recognition that there are different kinds of information to share and that clinical information specifically benefits the communication goals and objectives. At first glance of all four cases in this study, there appears to be many incidences of communication among the stakeholders. Upon closer evaluation, however, there are two levels of communication, both important for different reasons. A child with CCN has difficulty communicating both kinds of information. As evidenced in this study and my experience in the field, most educators are skilled at keeping parents informed regarding personal and routine information. Stakeholders must become more skilled at sharing clinical information because this form of communication benefits the child's ability to work on goals and objectives across different settings and people.

As stated in chapter 5, every stakeholder in each case reported a satisfactory level of communication regarding personal and routine information: lunch choices, how the child was feeling that day, and upcoming school events. Stakeholders had different opinions about which method of communication they chose to use the most, with computer-mediated communication methods identified as the quickest form of interaction between the stakeholders. Using computer-mediated communication was successful within all cases because it was not dependent on where the stakeholders were and did not necessitate the scheduling of a meeting (Muller, 2009). Regardless of the method of

communication used, stakeholders in all of the cases were able to communicate personal and routine information. However, what is significant about this finding is that, while personal and routine information is viewed by all stakeholders as "small but important things," that kind of information does not assist stakeholders in a clear understanding of how the child with CCN communicates. Clinical information was only shared during the IEP meetings for Case A and B. Without the on-going, consistent exchange of clinical information, stakeholders in this study and in the field are left to using intuition if they know the child well or guessing what each mannerism, gesture or utterance by a speech generating device means if they do not. In 2010, McGrath et al found that SPED teachers are not adequately prepared in their undergraduate classes with the needed skills for communication with other adults, which may be why they do not recognize the importance of sharing clinical information throughout the year, rather than solely at the IEP meeting. Personal and routine information was the only type of information shared among stakeholders in Cases A and B.

Yet, unlike A and B's more routine sharing of information, Cases C and D extended the kind of information exchanged in their interactions from personal and routine information to also include clinical kinds of information. The significance of sharing clinical information is that this information is more substantial and includes information regarding how to interpret different vocalizations, how to correctly identify yes or no, and where to look on a communication device to find new vocabulary. Case C's stakeholders reported being "on the same page" when working on communication goals with Carver. Case D's stakeholders reported that the sharing of clinical information benefited them all when working with Danny. Stakeholders in Case C consistently

communicated clinical information using computer-mediated communication regarding new vocabulary to add to Student C's voice generating device, sharing what is working in school and in the private speech therapy sessions. Case D's stakeholders used computer-mediated communication frequently to communicate clinical information and also scheduled monthly meetings of all stakeholders to share clinical information in person. Stoner et al (2006) found that implementation of communication systems is more successful when parents and educators share clinical information about the system. By intentionally taking the time to share clinical information, each student in case C and D were more successful communicating with different people and across different settings in the home and school.

Participants understood the term "communication" in different ways; and two different types of communication s among team members surfaced in their descriptions: personal and routine, and clinical. This is significant because interactions for relationship building might enable and support an environment for clinical information but the participant's awareness varied about the types of communication they were having and the different information they best needed to communicate to support the child in actualizing generalization of communication skills across setting and people.

My data shows that all stakeholders communicated personal and routine information with each other on a regular basis, "Small but important things." At first glance, the sheer amount of communications appear to be impressive. However only Cases C and D communicated clinical information regarding how the child was communicating, asking questions regarding what different communicative attempts look like or mean, and share important information if they observe new or different

communicative attempts. To better meet the needs of the child with CCN, implications for future research include determining how stakeholders reflectively and purposively plan to exchange clinical information related to the child's communicative attempts on a consistent basis throughout the year, not just when they gather annually for the IEP review. Educators must become more systematic in the kinds of interactions and communication we use throughout the school year between IEP meetings. By determining what dynamics are involved in establishing a child's communicative strengths and needs, a prescriptive template can then be developed for what clinical information to exchange. There exists a definitive need to teach pre-service and current teachers these skills. I earned a Bachelor's degree in Special Education and a Master's degree in Early Childhood Education, both from prominent education programs. Only as a doctoral student did I finally take my first course in how to collaborate with parents and colleagues, long after I needed to know these skills. Teacher preparation programs and professional development workshops post-graduation must consider the need to teach effective communication skills with parents and other educators as an integral part of their required courses at the undergraduate level.

Teams of stakeholders who provide support for a child with CCN are required by the IDEIA to meet annually to discuss the progress of and develop the new year goals and objectives. Other than the required meeting, the IDEIA provides no specific guidelines regarding the on-going interactions among the stakeholders. But based on this data, one meeting is clearly not enough. Needs change daily, weekly, monthly in the lives of children with CCN. In addition to determining who should be responsible for ensuring communicative needs are met, decisions made regarding the who, what, where when and

why's of communication among stakeholders and how they form partnerships is left up to the stakeholders on each team. This ambiguity can, and did in two of the cases in this study, result in limited or no on-going, consistent communication regarding the goals for communication and result in limited or no partnerships forming among the stakeholders.

My data shows that Case D, involving Danny and the Meeting of the Minds, was the most successful case in the current research for actualizing the generalization of Danny's communicative attempts across settings and people. Implications for future research should investigate how best to maximize successful practices in the actualization of communication skills for children with CCN. Specifically, future qualitative research should examine the elements occurring within several of the Meeting of the Minds monthly meetings. By examining the meetings qualitatively, a broader understanding may emerge which could provide more information regarding the context of sharing both personal and routine, as well as clinical information among persons involved in supporting a child with CCN (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005).

Another theme identified from the data which directly impacted the formation of relationships involved Peer Coaching in Cases C and D, which occurs when people begin working together toward a common goal, in this research, towards supporting the communicative attempts of a child with CCN across settings and people. In the case of this study, I see peer coaching as a not yet identified strategy that Case C and D are informally implementing. No stakeholders in Case C or D referred to their interactions as Peer Coaching or training; nonetheless, Peer Coaching was occurring. Peer coaches in Case C were the three passionately committed stakeholders: mom, SPED teacher and P-

SLP. These three stakeholders shared their knowledge of communication strategies using the iPad with LAMP application with all other stakeholders.

All stakeholders in Case D stepped into the informal peer coaching role during their monthly "Meeting of the Minds" as they shared what they had learned through informal trainings, initial experiences with the Tobii and low technology communication strategies to support Danny being able to communicate across settings and people. Peer coaches are not viewed as the experts in the situation; however they share their knowledge of communication strategies with each other, learning what works with each stakeholder in their settings and use the information to implement new ideas. Each stakeholder brings their own unique experiences and knowledge to the team. They are each valuable and the work of supporting a child with CCN negotiating the varied complexities of different settings and people is a work in progress for both teams of stakeholders. Yet, in the case of the least cohesive, comfortable and happy case, Case A, and slightly more cohesive Case B, peer coaching did not occur because each stakeholder in Cases A and B implemented their own goals and objectives for communication for the student with CCN as individuals, rather than as integrated parts of the whole.

Stakeholders in Case C shared information and peer coached each other regarding Student C's progress with communicating and discussed the new vocabulary each stakeholder wanted to add to his speech generating device. Student D did not yet have a high technology device, therefore stakeholders in Case D peer coached each other regarding his use of eye gaze, agreeing on a yes/no solid response and ways to help position him so that he could focus on communicating without becoming uncomfortable in his wheelchair. Research of peer coaching indicates successful results for children in

the area of literacy (Jewett & MacPhee, 2012; Robbins, 1991) which potentially could be successful when peer coaching with children who have CCN.

My data showed that no peer coaching related to supporting communication skills occurred between stakeholders in Case A and B. Peer coaching did occur informally between Amy's SPED teacher and S-SLP, however the peer coaching sessions were not shared among the other stakeholders. Informal peer coaching occurred within Case C, mostly using CMC to coach each other; and peer coaching occurred informally in Case D and was more formally implemented at the monthly Meeting of the Minds, with written notes of the meeting sent out to all stakeholders, both in attendance and those absent. Current research related to successful peer-coaching has primarily involved literacy activities with young children (Jewett & MacPhee, 2012; Robbins, 1991). Given the required make-up of IEP teams of stakeholders, peer-coaching could be a natural progression for the teams following the identification of the child needing special education services. Implications for future research examining ways in which peer coaching in literacy is effective should be considered and applied explicitly and intentionally to teams of stakeholders that support children with disabilities. These strategies may provide ideas for more systematic strategies for all stakeholders to become proactive, developing as peer coaches and partners to better support the child with CCN, so they can be more successful generalizing their communicative attempts between settings and people.

A sub-theme which impacted the formation of partnerships through peer-coaching involved the willingness of stakeholders to pursue training in AAC and assistive technology. Stakeholders in Cases A and B did not pursue, nor saw the need to pursue,

additional trainings involving how to assess, select and implement AAC devices and systems for the child with CCN. While the reasons for not pursuing training were not explored, a fear of change or lack of time to devote to the training may be some of the reasons. Peer-coaching can indicate a need for change, and some stakeholders may view their need for more training as an admission of being ineffective (Miller & Stewart 2013). Stakeholders in Cases C and D enthusiastically pursued both informal and formal trainings for AAC device and systems that the child with CCN was using or was going to be using in the near future. Once they received the different trainings, they shared the new information with each other using peer-coaching.

The IEP symbolizes the road map of goals and objectives for the next year and, when most of it is written and pre-determined prior to the meeting, can signal a lack of cohesion within the team. In the perfect IEP meeting, blank IEP forms are brought to the meeting and the IEP is written when the team meets, taking information from all stakeholders during the meeting. Reality is a little different. To save time, most IEP's are written by the SPED teacher, with the different therapists bringing their goals and providing information to the SPED teacher. Parents are asked to contribute their concerns during the meeting, to be included within the IEP document. Case D's IEP was developed based on information shared in the Meetings of the Minds occurring prior to the IEP meeting. Danny's mom reported feeling much less stressed at the current IEP meeting because she knew, prior to the meeting, that all of the stakeholders were on the same page. In Cases A and B, there was little to no communication prior to the yearly IEP meetings. Both parents in A and B reported feeling that their input was not highly respected by the professional stakeholders. These perceptions may be why the IEP goals

and objectives in both Case A and B were vague and the document symbolized a clear disconnect among the stakeholders.

If a child is identified with a disability involving CCN, communication goals and objectives must be documented yearly on the child's IEP. The child's present level of performance must be clearly described on the IEP to indicate where they currently are performing. The goals and objectives must be linked directly to the present level of performance so that all stakeholders and the child know where they will be going in the next school year. During the IEP document reviews, Cases A and B did not have clear descriptions of current levels of communicative performance. Additionally, the goals and objectives listed were vague. By not having a document detailing clear, common goals, the stakeholders in Cases A and B were left to their own devices to implement unofficial goals. This lack of clear, common goals became clear through the interviews and observations. How the document is viewed by stakeholders matters, as well. If stakeholders are not orienting themselves towards achieving the goals, they are not meaningful. The IEP goals and objectives in Case C were clearer than A and B. Case D's IEP goals, objectives and his current level of performance were clear, detailed and provided specific information for all stakeholders to read. Stakeholders in both cases successfully implemented the goals through clinical interactions and peer-coaching throughout the year.

Necessary communication skills are not limited solely to interactions among stakeholders but extend to the need to clearly document the child's current level of performance, and communication goals and objectives on the IEP. As stated above, little pre-service and post-graduation education is spent teaching communication skills, and

this includes writing clear IEP goals and objectives. My data shows that Cases A and B's IEP goals and objectives for communication were so vague, it was impossible for any stakeholder, or outside researcher, to determine what the child was working on within the educational settings. Case C had slightly more information on the IEP than A and B, and Case D, by far, provided clear, complete descriptions of current abilities and needs, and specific goals and objectives regarding communication. This finding has implications for further research regarding how to train new and current special educators in the importance of and the skills needed to produce clearer, more complete information on the IEP's.

My data indicated that each child in the four cases received one-on-one services by a Para throughout their entire school day. How a Para is perceived by the team of stakeholders determines the role the Para plays when working with their assigned child or children. In my experience as a SPED teacher, I viewed my Paras as integral members of my team, possessing unique experiences and information that I, as the SPED teacher, did not have due to all of the demands put on me. I could not have been an effective teacher without my team of Paras and their work with our students. I occasionally observed Paras not being regarded as respected members of other educational teams, being treated as solely the care provider, and excluded from meetings and decisions directly impacting the educational services provided to their assigned child. Research indicates some reasons for Para's being side-lined as a member of the team: the opinion that the Para's lack of higher education teaching degrees indicate a lower status, being viewed as 'caregivers' rather than educators, and the frequent turn-over of Paras leading to them being viewed by other team members as temporarily a member of the team (Ghere &

York-Barr, 2007). The significant amount of time the Para spends daily with the child provides a unique opportunity for the Para to become a strong advocate and support for the child with CCN in the interactions between all of the stakeholders.

The Paras in Case A and B were expected to meet all needs of their student with little information regarding their communication goals, no training and not being included in any meetings regarding the child's progress or goals. This may be related to Amy and B having limited communicative attempts with peers and adults within the different school settings. Stakeholders in Cases C and D viewed their Paras as integral members of the team and included the Paras in all meetings, trainings and important decisions regarding their assigned students. In both Cases C and D, stakeholders recognized that, by virtue of the amount of time the Paras spent with the students, they developed a tacit knowledge of their assigned student (Droege & Hoobler, 2003). The tacit knowledge of each student enabled the Paras in Case C and D to better support the generalization of the communication skills between all stakeholders across the different settings within the school than was possible in A and B.

Larger contextual forces involving the role of Paras shape the cases as well. Transience in the profession shapes the ability for teams to form relationships and develop understanding. When Paras leave their positions, the tacit knowledge of the child is lost. Implications of this research on practice when this tacit knowledge is lost include affecting the delivery of educational services, including supporting communicative attempts and requiring the remaining stakeholders to provide peer coaching for the new para regarding clinical information vital to support the child with CCN. Research indicates that, when Paras are treated as integral members of the team

and provided training to meet the needs of the child, they will stay in the position longer than if they are not (Droege & Hoobler, 2003). In the broader context, educators and parents must realize that paras tend to be over-worked, under-paid and (sometimes) under-appreciated. Implications for future practice would be to consider Paras as an integral, respected part of the team of stakeholders, so they may overcome the previously mentioned challenges and remain on the job, providing a continuity of services for the child with CCN for a longer period.

Limitations

Even when the study is done well, the research questions will not be answered entirely (Stake, 2000). Limitations of the current study include the limited number of cases, the similarity in ages and state of residence of the children with CCN and the limited number of observations in both the home and school settings. Observations are a key way of studying nuances in interactions that interviews, however robust and carefully compared within a case, cannot fully provide. While Stake (2000) indicates a multiple case study must have a minimum of 4 cases, the results of this research provide a glimpse into the interactions of just four groups of stakeholders, primarily relying on interviews. Because I relied on professional contacts throughout the state in which I live, all cases involved in this research are from one state. I planned to include a wider variety of ages within the cases, however the four who were willing and available to participate in the cases were between the grades of Kindergarten and third grade, all in early childhood settings. Scheduling observations in the home and school proved to be exceptionally challenging due to time constraints, concerns regarding disrupting instructional time and

personal preference on the part of the parents. Due to these issues, I observed in home and school settings only once per case. Future research will extend observations.

Final Thoughts

If a child cannot communicate their wants, needs, opinions and thoughts to those around them, communicating about what they have learned academically becomes secondary. Children with CCN depend on their stakeholders to work together to help them be successful communicators across all settings and people. Cases like this are dynamic. The child with CCN's needs are dynamic. Their communication skills are developing, in process and on-going and should be considered more than once a year. In the pilot interviews, I discovered a parent of a student of mine describe educators as 'them,' inferring that she, the mom, did not think she was a member of the team of stakeholders making decisions about her son who had CCN. As an educator, I realized then that I had much work to do to help the parent become a valued member- a highly regarded, respected 'we'- of our team who provided many different communication strategies for her son throughout the school setting. I developed a goal to peer-coach the parent, teaching her about how we used different AAC systems to help her son communicate. By continuing to interview different stakeholders from around the state, I realized I was only getting pieces of an intricate puzzle. Overall, the current research provided a more complete picture of how elements within the interactions between stakeholders impact the child's success in communicating by including all stakeholders from each team.

Teaching can be a solitary venture (Miller & Stewart, 2013). Professional isolation occurs when educators do not make the time to collaborate with others around them

(Jewett & MacPhee, 2012). Cases A and B demonstrated what occurs when stakeholders isolate themselves from clinical interactions and only meet annually to discuss communication goals and objectives. Ultimately, neither child in Cases A nor B were able to generalize their communicative attempts across settings or people and experienced frustration in many settings. Cases C and D established how two teams of stakeholders consistently interacted, sharing clinical information and forming successful partnerships in two very different ways to support children with CCN. Case C used C-M-C effectively to communicate clinical information and peer coach one another. Case D's stakeholders found time in their very busy, over-worked and over-scheduled days, to meet once a month, understanding that the time was well-spent sharing and peer-coaching each other. The children in Cases C and D had very different abilities and needs; however, the teams of stakeholders were successful in helping them be able to generalize their communicative attempts across settings and people regardless of their differences. The support provided for Carver and Danny was, for the most part, informal at best. We, as educators, must move to formalizing what works both formally and informally in Case C and D.

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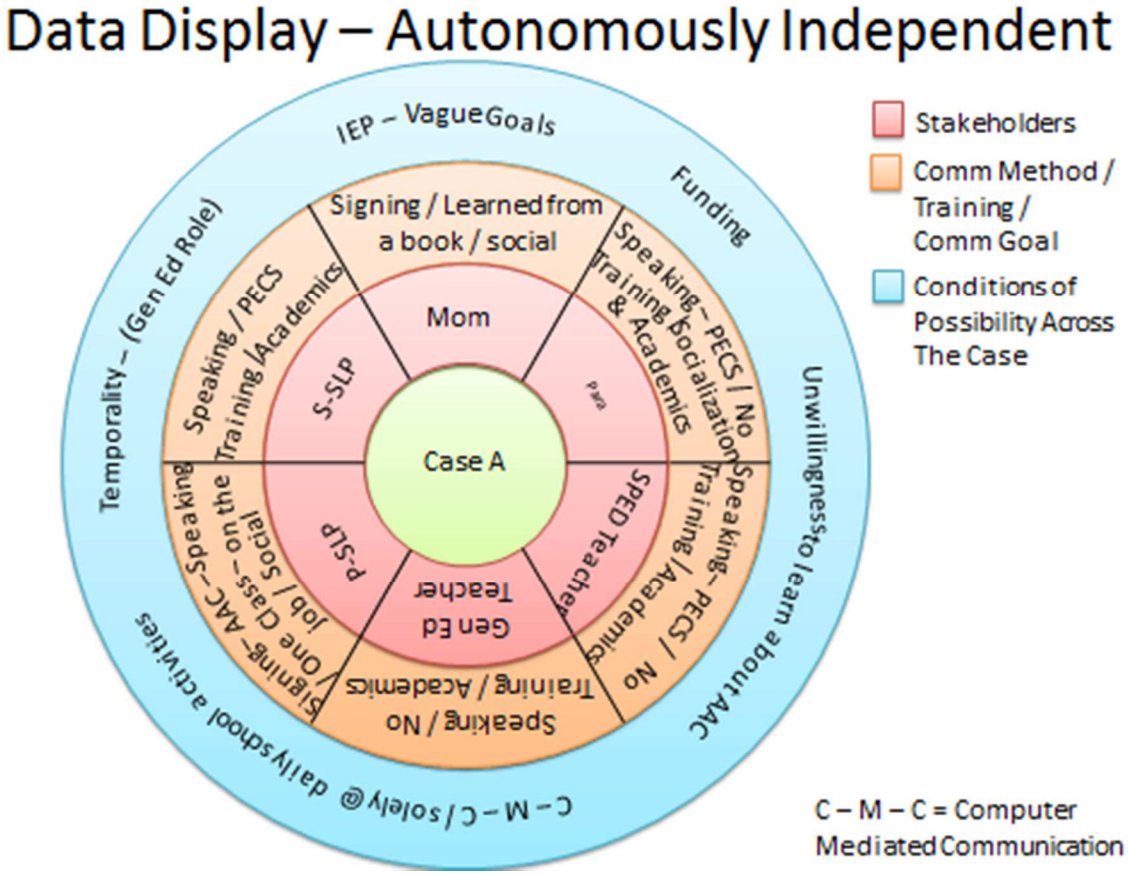
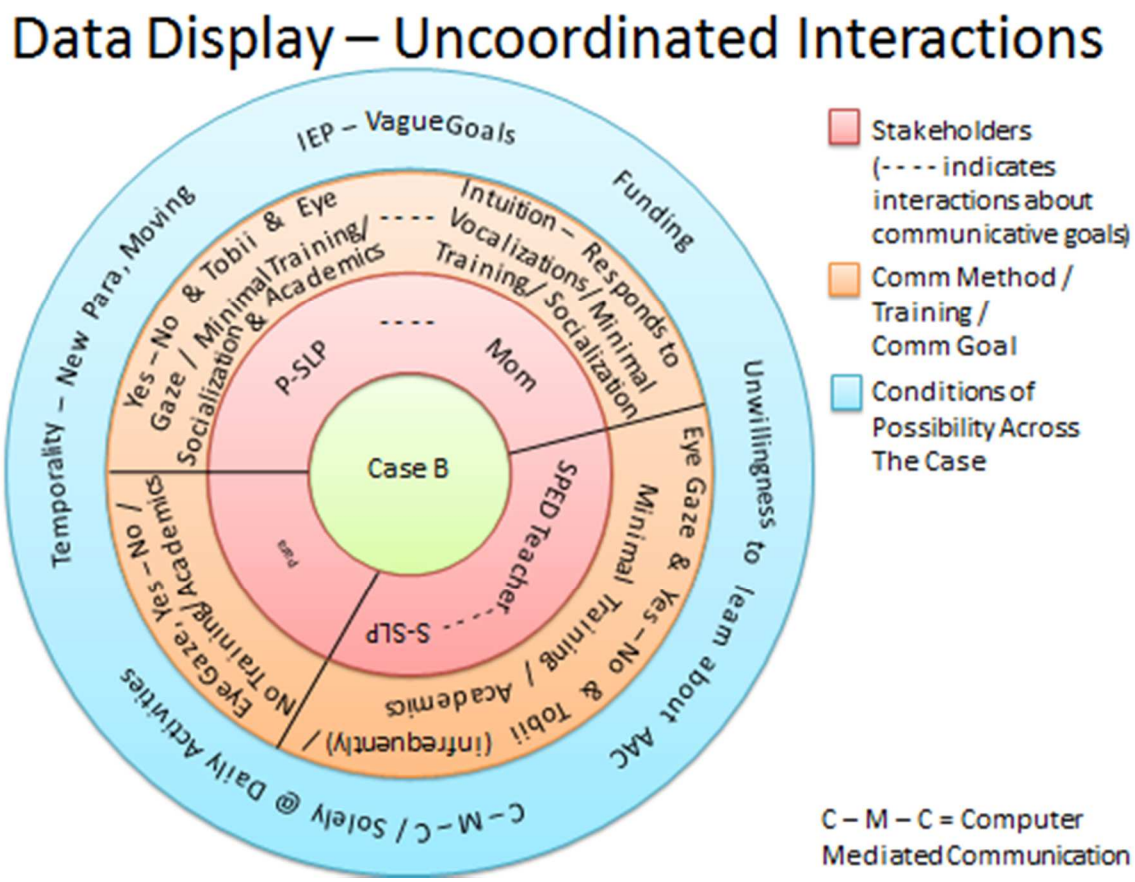
APPENDICES

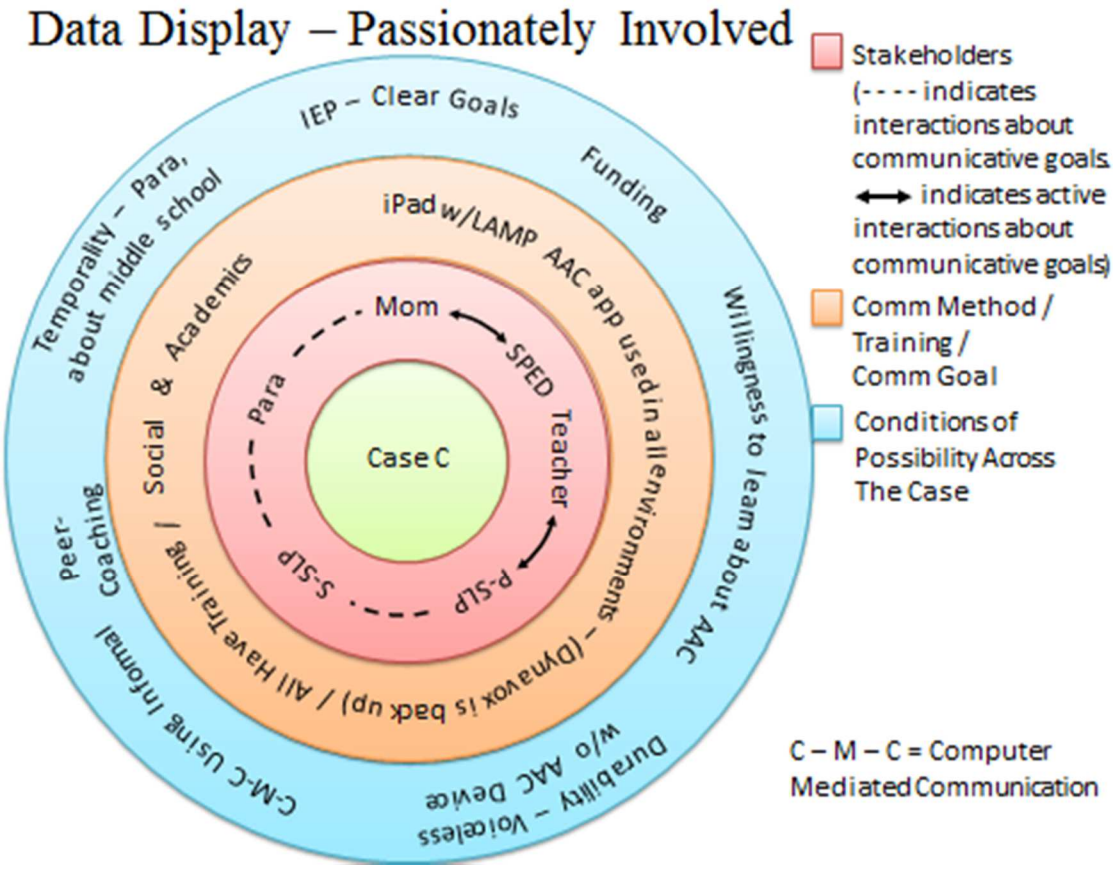
APPENDIX A



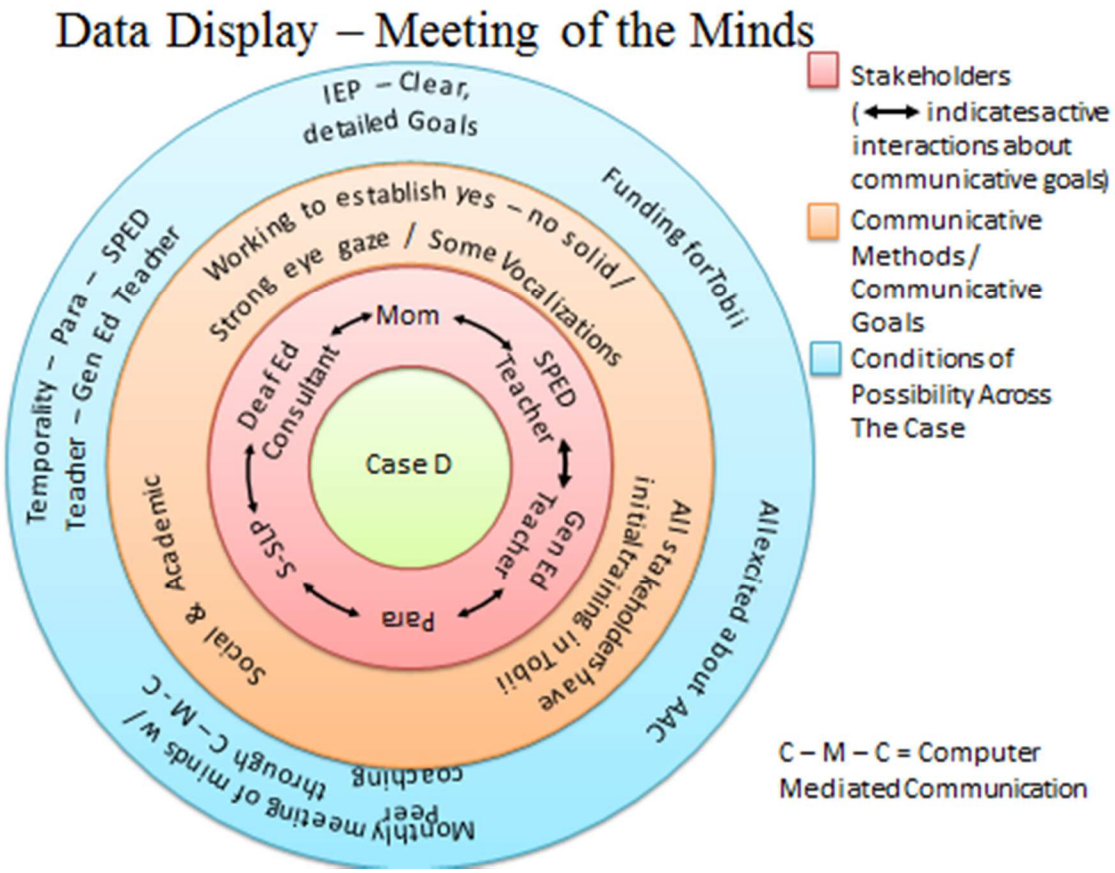
APPENDIX A


Data Display – Uncoordinated Interactions
IEP – Vague Goals
Funding
Unwillingness to learn about AAC
C – M – C / Solely @ Daily Activities
Temporality – New Para, Moving
Intuition – Responds to Vocalizations / Minimal Training / Socialization
Yes – No & Tobii & Eye Gaze / Minimal Training / Socialization & Academics
Eye Gaze & Yes – No & Tobii (infrequently) / Minimal Training / Academics
No Training / Academics / Eye Gaze, yes – No
P-SLP
Mom
SPED Teacher
S-SLP
Case B
Stakeholders (- - - - indicates interactions about communicative goals)
Comm Method / Training / Comm Goal
Conditions of Possibility Across The Case
C – M – C = Computer Mediated Communication

APPENDIX A


Data Display – Passionately Involved
IEP – Clear Goals
Funding
Willingness to learn about AAC
Durability – Voiceless w/o AAC Device
C-M-C Using Informal Peer-Coaching
Temporality – Para, about middle school
Social & Academics
iPad w/LAMP AAC app used in all environments – (Dynavox is back up) / All Have Training /
Mom
SPED Teacher
P-SLP
S-SLP
Para
Case C
Stakeholders
(- - - - indicates interactions about communicative goals
↔ indicates active interactions about communicative goals)
Comm Method / Training / Comm Goal
Conditions of Possibility Across The Case
C – M – C = Computer Mediated Communication

APPENDIX A


Data Display – Meeting of the Minds
IEP – Clear, detailed Goals
Funding for Tobii
All excited about AAC
All stakeholders have initial training in Tobii
Monthly meeting of minds w/ Peer coaching through C – M - C
Social & Academic
Temporality – Para – SPED Teacher – Gen Ed Teacher
Working to establish yes – no solid / Strong eye gaze / Some Vocalizations
Mom
SPED Teacher
Gen Ed Teacher
Para
S-SLP
Deaf Ed Consultant
Case D
Stakeholders (↔ indicates active interactions about communicative goals)
Communicative Methods / Communicative Goals
Conditions of Possibility Across The Case
C – M – C = Computer Mediated Communication

APPENDIX B

Interview Guide

Interview Questions for a Parent

- Can you tell me about your child?
    - How old is she/he now?
    - What does she/he like? What makes them happy?
    - Are there things she/he doesn't like?
    - Does she/he have siblings? If so, what are their ages and genders?
- How old was she/he when he began receiving educational services?
    - Did she/he receive services in the home before she/he began school at the age of three?
        - If so, can you tell me about those services?
        - How did the Sooner Start professionals help her/him?
        - Did they spend time with you on working on home based goals?
- What are her/his communication abilities today?
    - Can you tell me how these communication abilities changed over the years?
    - Can you tell me about the communication systems she/he uses at school?
    - What about at home? Or when you are in the community?
    - How does she/he communicate basic wants and needs in these different settings?
    - How does she/he get your attention?
- Can you tell me about your experiences with the school professionals (speech therapists, special education teachers, Paraprofessionals) that you have worked with to help your child?
    - Can you think of a time when they may have suggested that you work on a particular program or skill with your child that you were excited to try in the home?

- Can you think of a time when they may have suggested that you work on a particular program or skill with your child that you were hesitant to try in the home?

- Can you think of ways that educators can work with you and your child to help you to work on communication goals that are being tried in the school?
- Can you tell me how your child's communication goals and objectives are developed for their Individual Education Plan at school? Are you involved in the process?

<u>Interview Questions for special education teachers, general education teachers, speech therapists, and Paraprofessionals</u>

- Can you tell me how you decided to become a (special education teacher/general education teacher/speech therapist/Paraprofessional)?
- How long have you been a (special education teacher/general education teacher/speech therapist/Paraprofessional)?
- Can you tell me about your daily experiences as a (special education teacher/general education teacher/speech therapist/Paraprofessional)?
- What are the age ranges of the children you have worked with since you first became a (special education teacher/general education teacher/speech therapist/Paraprofessional)?
    - Do you have a favorite age to work with?
    - Why do you think it is your favorite age?
- What is your opinion about establishing communication between home and school for children with disabilities?
    - Has your opinion changed over the years?
    - If so, why do you think it has changed??
    - Can you think of any factors that have influenced you when you have attempted to establish meaningful communication between home and school?

- When you first get a new student with limited communication skills, what questions do you ask the parent?
    - Can you describe the sequence of events when you get a new child on your caseload/in your classroom?
- What kinds of information are you trying to find out when you talk with parents?
- Has this information evolved since you first became a special education teacher/general education teacher/speech therapist/Paraprofessional?
    - To what extent has the information provided by the parents helped you develop instruction to meet the child's communication needs?
- What are some questions or concerns parents ask you when you meet with them to talk about their child?
    - Can you describe a time when you had continual communication with a particular family about their concerns with their child?
- What has been your experience using parental input to design instruction with students who have limited communication skills?
    - What kind of training have you had in augmentative/alternative communication systems (for example, Picture Exchange Communication Systems [PECS] or Picture Communication Systems [PCS] like Boardmaker symbols)?
    - Can you describe the support your district provides for on-going professional development for your position?
- Based on what they learned from the school, have you had any experiences where a parent successfully incorporated a school-based communication system in their home?
    - What were the factors that led to the success of using these programs both in the home and in the school?
- Was there ever a time when you met resistance from a parent when you asked them to begin using communication systems in their home?
    - What is your opinion for why the parents were resistant?

    - Can you think of an instance when you were able to overcome their resistance?
    - Can you describe any strategies you have when you think there may be some resistance on the part of a parent?
- What do you think was the difference between the two: parents/situations?
- Suppose you have a friend with a child who has limited communication skills and they want to help their child communicate more effectively in the home, what would tell them?
    - What information or resources are available to parents of children with limited communication skills?
- What advice would you give to a new (special education teacher/general education teacher/ speech therapist/Paraprofessional) who wants to establish a partnership with parents of children with limited communication skills?
    - What classes/trainings are available to new (special education teacher/general education teacher/speech therapist/Paraprofessional) to help them learn how to engage parents in the implementation of communication systems for students with limited communication skills?

VITA

Gretchen Michele Cole-Lade

Candidate for the Degree of

Doctor of Philosophy

Thesis: MOVING FROM "THEY" TO "WE"-A QUALITATIVE CASE STUDY OF THE PERSPECTIVES AND INTERACTIONS OF TEAMS WHO SUPPORT CHILDREN WITH COMPLEX COMMUNICATION NEEDS TO CONTRIBUTE TO THE GENERALIZATION OF COMMUNICATION SKILLS

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