The Online Journal of Missouri Speech-Language-Hearing Association

Volume 2; Number 2; 2016

2016

Annual Publication of the Missouri Speech-Language-Hearing Association

Scope of *OJMSHA*

The Online Journal of MSHA is a peer-reviewed interprofessional journal publishing articles that make clinical and research contributions to current practices in the fields of Speech-Language Pathology and Audiology. The journal is also intended to provide updates on various professional issues faced by our members while bringing them the latest and most significant findings in the field of communication disorders.

The journal welcomes academicians, clinicians, graduate and undergraduate students, and other allied health professionals who are interested or engaged in research in the field of communication disorders. The interested contributors are highly encouraged to submit their manuscripts/papers to msha@shomemsha.org. An inquiry regarding specific information about a submission may be emailed to Jayanti Ray (jray@semo.edu).

Upon acceptance of the manuscripts, a PDF version of the journal will be posted online during August or September. This publication is open to both members and nonmembers. Readers can freely access or cite the articles.

The Online Journal of Missouri Speech-Language-Hearing Association
Vol. 2 No. 2 December 2016

Table of Contents

Research

Clinical Exchange

The Online Journal of Missouri Speech-Language-Hearing Association
Vol. 2 No. 2 · August 2016

Editorial Board (Peer Reviewers)

Carol Koch, EdD, CCC-SLP, has been a practicing pediatric speech language pathologist for the past 28 years. She has also taught at the undergraduate and graduate levels for the past 11 years. Her areas of clinical expertise, teaching and research interests include early intervention, childhood apraxia of speech, autism spectrum disorders, early phonological acquisition, assessment and intervention of speech sound disorders, family and sibling experiences, and clinical education. Carol was a recent participant in the ASHA Leadership Development in Health Care Program. She currently has a publishing contract to write a textbook on the topic of speech sound disorders. Carol has also been serving on the Board of Directors for Children's TLC for the past 6 years.

Elaine Beussink conducts diagnostic/treatment services for individuals at *Southeast Missouri State University Autism Center*. Earning her Master's degree in Speech Language Pathology in 1989, Elaine holds her ASHA Certificate of Clinical Competence and is a Licensed Speech Language Pathologist in the state of Missouri. She has been working with individuals with developmental delays across settings since 1989, specializing in autism spectrum disorders since 2002. Elaine has served the southeast region as Adjunct Faculty (SEMO), an In-District Autism Consultant and a Social Cognition therapist. She directs Camp SOCIAL, provides professional development for area service providers and presents at State and National conferences.

Janet L. Gooch, Ph.D., CCC-SLP is Full Professor and Dean of the School of Health Sciences and Education at Truman State University and a certified and Missouri licensed speech-language pathologist with successful clinical, teaching and administrative experience. She obtained her Bachelor of Arts in Speech Pathology from the University of Kansas, Master of Arts in Speech Pathology from Kent State University, and her Ph.D. from Case Western Reserve University in Cleveland, Ohio. Dr. Gooch's academic and research interests lie in the areas of Child Phonology, early reading abilities, and cleft lip and palate.

Kevin Squibb, PhD, CCC-A is an associate professor in the Department of Communication Disorders at Southeast Missouri State University. He holds a Master of Science in Audiology from East Tennessee State University and a Doctor of Philosophy degree from Bowling Green State University. He is a clinical audiologist with primary interest in speech science and diagnostic audiology with a focused interest in auditory processing. Dr. Squibb has been teaching at Southeast for 27 years and maintains an intense interest in his students and the pedagogy of teaching.

Martha J. Cook, PhD, CCC-SLP is an assistant professor in the Department of Communication Disorders at Southeast Missouri State University. She is a graduate of the University of Mississippi, Southeast Missouri State University and Southern Illinois University-Carbondale, where she earned her doctorate in Rehabilitation with an emphasis in Communication Disorders and Sciences. Her areas of interest in research and teaching are in fluency disorders (stuttering) and professional issues and pedagogy in communication disorders. Dr. Cook is the Coordinator of the Center for Speech and Hearing and the co-advisor for the Southeast Chapter of the National Student Speech-Language-Hearing Association.

Jennifer Kerr is a clinical assistant professor at Missouri State University (MSU). She has over 16 years of clinical experience working with adult populations as a medical speech-language pathologist (SLP) and 7.5 years of teaching and supervisory experience at the university level. Her primary clinical interest areas are aphasia, motor speech disorders, cognitive-linguistic communication, and working with caregivers. Jennifer has given professional presentations regarding aphasia treatment, counseling, supervision, and how evaluation and treatment of communication disorders should be integrated into the WHO model of service delivery. Her primary focus as an educator includes teaching undergraduate communication sciences and disorders majors and mentoring and supervising SLP graduate students. Prior to joining the faculty at MSU, Jennifer was a clinical instructor at the University of Washington, which is where she also earned her master of science in speech-language pathology. She also holds a bachelor of science in communication studies from the Florida State University.

Shirley A. (Blanchard) Brummett is a speech/language pathologist and Secondary SLP Coordinator for Raytown Quality Schools. Mrs. Brummett is a Southeast Missouri State University alumnus where she obtained her Bachelor of Arts and Master of Science degrees in Speech Pathology. Additionally, she holds a Master of Science in Special Education from the University of Kansas where she specialized in autism. Mrs. Brummett's professional areas of interest include phonological and sound system disorders, child language development and disorders and multicultural issues. When not engaged in professional pursuits, she enjoys hiking, cycling and kayaking with her husband, children, extended family and friends.

Lisa Bell, M.A., CCC-SLP, is a clinical assistant professor in the CSD department at MSU. She has over 27 years of clinical and instructional experience as a public school therapist, per diem clinician in a multitude of medical settings, and as a member of the graduate faculty at MSU. Lisa provides clinical instruction to graduate student clinicians and teaches the undergraduate "Observation II" course and a workshop for SLP Assistants.

Shatonda Jones, PhD, CCC-SLP is an Assistant Professor of Communication Sciences and Disorders at Rockhurst University. She has worked in adult neurogenic rehabilitation for 10 years. Dr. Jones received her Bachelor of Science in Speech Language Pathology and Audiology from the University of Tulsa, Master of Arts in Speech Language Pathology from the University of Iowa, and Doctor of Philosophy in Therapeutic Sciences from the University of Kansas Medical Center.

Anne Bedwinek, PhD, CCC-SLP has alternated between full-time university teaching and medical speech pathology. She is an Adjunct Associate Professor at the University of Missouri and taught at Washington University, St. Louis University, and the University of Tennessee. She has served on four cleft palate-craniofacial teams, including St. Louis Children's Hospital and Mercy Children's Hospital. She is an active member of ASHA's SIG 5, the American Cleft Palate-Craniofacial Association, and the advisory board of RSF-Earthspeak. She holds a BA from the University of Michigan-Ann Arbor, and MA from Northwestern University, and a PhD from Union University.

Hortencia Kayser is a graduate of the University of Arizona and received her doctorate from New Mexico State University. Dr. Kayser completed a post-doctoral fellowship with the University of Arizona's National Center for Neurogenic Communication Disorders where she studied acquired language disorders in children. She has published in the areas of assessment and treatment of Hispanic children with communication disorders and has written 3 books on these topics. Her specialization has been the preschool Hispanic child who is learning English. She has served at Texas Christian University, New Mexico State University (NMSU), and Saint Louis University (SLU). Dr. Kayser was a full professor at NMSU and SLU. She is a Fellow of ASHA and received the Award for Special Contributions for Multicultural Populations.

Victoria Carlson-Casaregola, MA, CCC-SLP, is a school-based Speech-Language Pathologist and university adjunct instructor of advanced writing in St. Louis. She holds a Master's degree in English/ Expository Writing from The University of Iowa and a Master of Arts in Communication Sciences and Disorders from Saint Louis University. In collaboration with SLP colleagues at St. Joseph Institute for the Deaf, she co-wrote *GOALS: A Listening and Spoken Language Guide*. She won First Place in the ASHA 2006 Student Ethics Essay competition.

Grace McConnell, PhD, CCC-SLP, is an assistant professor at Rockhurst University. She received both her PhD in Communication Sciences and Disorders from Kansas University. After receiving her M.A. in CSD from KU, she worked as a clinician in the schools for a decade before returning for doctoral studies. Her interests include language development, language disorders of school age children, and multicultural issues in CSD, including the effects of poverty on language development.

Coordinator/Editorial Board

Jayanti Ray, PhD, CCC-SLP is a professor in the Department of Communication Disorders at Southeast Missouri State University. She teaches undergraduate and graduate courses, and her research interests are dysarthria, AAC, and quality of life in older adults. *OJMSHA* is her dream come true!

Production/Editorial Associate

Melissa Klaybor is a clinical fellow speech-language pathologist at ABC Pediatric Therapy in O'Fallon, Illinois. Melissa obtained her Bachelor of Science and Master of Arts degrees from Southeast Missouri State University. Some of her interests include the remediation of child and adult language disorders and quality of life in children and adults with communication disorders.

Examining Barriers with Implementing Augmentative and Alternative Communication in a Midwest School

Ashley Fields, M.S., CCC-SLP, Ed.D.
Walden University

Abstract
Many speech-language pathologists (SLPs) have experienced barriers that prohibit the effective use of augmentative and alternative communication (AAC). This has left some students without a functional form of communication that they would need to have meaningful relationships and success in and out of school. The purpose of this exploratory case study was to determine the perceived barriers of 8 local school SLPs regarding implementation of AAC and their suggestions for addressing the problem. Data collection included conducting semi-structured interviews with the SLPs. Data collection and analysis were grounded by Ely's conditions of change theory to better understand what conditions were not being met for implementing AAC. The findings suggested that SLPs and teachers lacked the needed knowledge, experience, and time to properly implement AAC. The participants also indicated the need for more participation and commitment from their colleagues, school leaders, and the students' family members, which would require additional training and collaborative planning time. The recommendations are that school administrators provide additional training and time for SLPs, their colleagues, and students' family members to learn how to properly help students AAC in the classroom. The results of this study could help students increase their use of AAC and could improve learning opportunities, student achievement, and relationships.

Introduction

The field of augmentative and alternative communication (AAC) has made dramatic changes in the last 50 years. This area of speech-language pathology attempts to compensate (either temporarily or permanently) for the impairment of severe expressive communication disorders (American Speech-Language-Hearing Association [ASHA], 2002). What was once thought of as a "last resort" in assisting individuals with speech language impairments, AAC is now known to be a successful method to increase expressive language and provide a functional mode of communication for individuals of all ages and abilities (Light & McNaughton, 2012; Williams, Krezman, & McNaughton, 2008). AAC is no longer reserved for individuals without communication; rather, it is often utilized in situations where a child is at-risk for expressive language disorders, is difficult to understand, or has motor planning difficulties. Research has supported the use of AAC for children with autism spectrum disorders (Odom, Collet-Klingenberg, Rogers, & Hatton, 2010; Paul, 2009; Schlosser & Wendt, 2008), as well as adults with progressive or temporary communication needs (Light & McNaughton, 2012).

While the latest research has supported the use of AAC, many speech-language pathologists (SLPs) experience barriers implementing AAC. Leaders in the communication disorder field are finding that SLPs experience a number of perceived barriers in evaluating, designing, implementing, and maintaining the use of AAC for their students (Baxter, Enderby, Evans, & Judge, 2012). Because of these barriers, SLPs do not receive the tools and support necessary to overcome this challenge. As a result, their students do not receive the support required to access and utilize AAC in the classroom. This leaves the child without a functional way to express his or her basic wants, needs, and knowledge with peers and adults.

Since the 1980s, AAC interventions have made drastic advancements due to changes in technology. Hourcade, Pilotte, West, and Parette (2004) stated this might be the most prevalent challenge for SLPs. In January 2011, there were 65 applications designed for AAC; only 5 months later there were 133, and in 2013 there were 265 (AppsforAAC, n.d.). Research has provided evidence that SLPs have difficulty understanding and keeping up with these changes in technology and incorporating this information in the decision-making process (Fager, Bardach, Russell, & Higginbotham, 2012; Higginbotham, Shane, Russell, & Caves, 2007). Devices are now interactive and

function as a cell phone, computer, or Internet browser (Dynavox, 2013). Just like all technology, individuals use AAC throughout the day in a variety of environments for both educational and personal purposes. Training is necessary to know what product is appropriate for the student, how to use the device, and how to implement a treatment plan (DeRuyter, McNaughton, Caves, Bryen, & Williams, 2007; Fager et al., 2012). SLPs are responsible for leading the school's individualized education plan (IEP) team in the implementation of AAC that requires SLPs to train staff, peers, and families on how to use the device and generalize its use in all settings. Research has indicated that many SLPs experience barriers during this process (e.g., Zangari, 2012). They may struggle maintaining the device, updating, and making appropriate clinical decisions regarding the device. They may also encounter challenges with time management, buy-in, and commitment to the device (Iacono & Cameron, 2009; Zangari, 2012).

Some experts have suggested another barrier could be in preservice training (Fishman, 2011; Zangari, 2012), due to the lack of preservice classes focusing on AAC or ineffective training. Without the knowledge to implement AAC, inexperienced SLPs may encounter obstacles. Ratcliff, Koul, and Lloyd (2008) reported 27% of students in a speech-language pathology program did not complete a class that contained AAC content. This group of individuals would enter the work force without the necessary background knowledge to make appropriate clinical decisions regarding AAC. These factors can make it difficult for some SLPs to implement AAC and may result in neglect or complete abandonment of the device (Cooper, Balandin, & Trembath, 2009; Johnson, Inglebret, Jones, & Ray, 2006; Soto, Muller, Hunt, & Goetz, 2001).

Primary Barriers to the Implementation of AAC

Research has revealed a number of difficulties during the implementation of AAC, although the focus of each study varied. Researchers were typically evaluating the effectiveness of a specific AAC system. Very few studies evaluated specific barriers to AAC as the primary focus of the study; however four studies were very close to this concept.

Baxter, Enderby, Evans, and Judge (2012), Bruce, Trief, and Cascella (2010), and Iacono and Cameron (2009) explored SLP's perceptions of AAC in a variety of settings. After analyzing the aforementioned studies, four major overlapping characteristics were revealed: lack of knowledge, issues regarding attitudes of parents and staff, collaboration, and lack of time. Although the researchers determined these factors to be critical barriers, no conclusive evidence was identified as the specific cause of AAC failure. It is difficult to identify primary barriers to the implementation of AAC based on limited research.

Purpose

There are a number of perceived barriers that contribute to the implementation of AAC (Iacono & Cameron, 2009; Mukhopadyay & Nwaogu, 2009; Sutherland, Gillon, & Yoder, 2005). Without resolution to this problem, individuals who do not have the ability to functionally communicate within their community miss opportunities to grow and learn. These individuals also miss social opportunities to develop relationships and gain acceptance in their community (Cooper et al., 2009). The purpose of this study was to identify the barriers that impact implementation of AAC in the school setting.

Method

Theoretical Framework

By using Ely's (1978) conditions for change theory as a framework for this study, the factors impacting the implementation of AAC at the local setting were determined. The implementation of a new innovation such as AAC involves change on behalf of all participants. This can be difficult and would require specific conditions to be established. Ely (1978) discovered there were specific factors that could promote the adoption or rejection of an innovation. Changes needed to promote acceptance of both hardware and software usage in the classroom, library, and by school staff members was addressed. Ely labeled eight conditions that appeared to facilitate effective implementation of

technology in schools. These conditions included dissatisfaction with status quo; the presence of knowledge and skills; availability of resources; availability of time; existence of rewards or incentives for participants; expectation of participation; commitment by those who are involved, and evident leadership (Ely, 1978). Ely (1978) added that all eight conditions do not need to be fully addressed for change to occur; they must be addressed on some level in order to prevent failures.

Ely (1978) stated that the first condition of change was dissatisfaction with the status quo. This dissatisfaction was necessary because individuals involved with the change must feel that they could improve a situation. The second condition necessary for implementation of technology innovation was sufficient knowledge and skills on behalf of those involved. Ely (1990) added that resources and time must be made available.

Ely (1990) also questioned, "If a current practice is going reasonably well, why risk new techniques?" (p. 4). Ely believed a reward or incentive must exist to create change. Two additional conditions required to make change included the establishment of participation and commitment from all team members. Ely (1990) also addressed leadership, stating that leadership was two-pronged. The author described the first as the executive officer of the organization and the second, as the project leader who should closely be involved in day-to-day activities; however, both must support the change.

Although Ely (1978) evaluated each condition individually, it is important to consider the relationship between the conditions as well. What looks like dissatisfaction with the status quo may actually be an issue of leadership, time, or resources. Conditions are not mutually exclusive and would likely occur at the same time.

Research Question and Objectives

The study was guided by the following research questions to better understand teachers' experiences with AAC, to determine why teachers had decided not to adopt AAC, and what could increase their use of this innovation:

1. What are the school-based SLPs' described experiences with using AAC communication at the local school setting?
2. What are the perceived barriers experienced by school-based SLPs' during the implementation of AAC communication at the local school setting?
3. What are the school-based SLPs' suggestions for improving the implementation of AAC?

Research Design

An exploratory case study research design was used to answer the research questions. Purposeful sampling was used to select eight SLPs who had experience working with AAC in the classroom setting. These therapists worked in a large, urban public school in the Midwest with children from preschool to 12th grade. Each therapist participated in a semi-structured interview that lasted approximately 45 minutes. All interviews were recorded and categorized according to themes grounded by Ely's (1978) conditions of change theory. Questions included:

1. What is your experience with AAC? Describe how you used it. Tell me everything about this including who was involved, how decisions were made, what made this process easier and/or more difficult.
2. How did you determine the student's AAC needs?
3. What does the AAC implementation process look like during the evaluation phase, beginning phase, and maintenance phase?
4. What motivates you to use AAC?
5. What has your training and/or education in AAC involved?
6. Do you feel that you use AAC effectively?
7. What prevents you from using AAC more effectively?
8. What has helped you to use AAC effectively in the past?
9. What suggestions do you have for other SLPs implementing or considering AAC?

Additional follow up and probing questions were asked as well. Those probes included (a) tell me more about that; (b) describe that to me more; and (c) will you

explain that in more detail? These questions were used to assure accurate interpretation of the data provided by the participant (Creswell, 2012). Content analysis of the data was performed. Also, the investigator used resources from professional development trainings, events, conferences, and communications from leaders in AAC at the research site. This includes technology that the district has rented or purchased. The data were used to determine how the school district was addressing AAC. Follow-up questions were used to explain the documents, provide a context for their use, and describe necessary background knowledge regarding the document.

Participants

All eight SLPs participating in the interviews had earned their Clinical Competency Certificate from ASHA. All were women with varying degrees of work experience ranging from 1 to 16 years. Within those years of experience, the SLPs had worked with AAC for 1 to 15 years. One SLP stated they had worked with one to five students with AAC; two SLPs had worked with five to 10 students with AAC; and five had worked with 15 or more students with AAC. Five of the eight SLPs worked in early childhood special educations, while the remaining three worked with kindergarten through fifth grade (K-5) students. All SLPs stated they had at least one course on AAC in undergraduate or graduate school. They all currently had one student using some form of AAC (low or high tech) and had previous experiences using AAC as well.

Collection of Data

Each of the eight selected SLPs participated in face-to-face, semi-structured interviews. Data were collected through an audio recording of the interview that lasted approximately 40 minutes. Interview questions that connect to Ely's theory were asked to identify key themes during the implementation of AAC. Additional themes emerged from the data through this process. The interview questions did not lead the participants to admitting a relationship to the Ely's theory; rather they created an opportunity for the participants to share their experiences. All interviews were transcribed and e-mailed to the participants for editing. Five of the participants did not change anything on the transcripts. Three made a few grammatical corrections and changed the spelling of a name.

Additional documents were requested for this study and analyzed through content analysis. The interview logistics included agendas, attendance registers, minutes of meetings, event programs, letters, program proposals, or reports. Documents yielding data related to the hardware or software access for student requiring AAC were also requested. All professional development trainings, events, conference, or communications were included with the help of the leaders in AAC at the research site.

A total of eight documents were provided, including a document describing trainings, outside sources utilized, IEP team members, and the evaluation process. Of the eight, one of the documents was included in evidence used for analysis; other forms were utilized as supplemental information from personal communications. Documents were also requested from the early childhood special education administrators. Additional research was conducted using the district website. Several documents were found to be related to the districts' plans to increase the use of technology; however technology related to AAC and special education were limited.

Summary of Major Findings

A summary of the major findings pertaining to the research questions are described below.

Research Question 1.

The SLP respondents had worked with a varying number of students using AAC and had been working in the speech-language pathology field for a wide range of years. Five out of the eight participants had at least one class with AAC content in graduate school and had received minimal training. Although all SLPs participated in the AAC evaluation, only the early childhood SLPs independently conducted the evaluations. Only two out of eight SLPs felt confident in performing the evaluations. SLPs working with K-5 students utilized support from the district assistive technology specialist (ATS).

Seven out of the eight SLPs were motivated to use AAC because of the progress

their students made in functional communication. One SLP explained that she was not motivated because of the intensive time demands that were associated with AAC.

Research Question 2.

Several barriers to AAC implementation were described by the SLPs during the interview. These themes included Ely's (1978) eight conditions, as well as family involvement. SLPs often began using AAC because they were unhappy with the progress the student had made with other alternative treatment approaches; however, this urgency to use AAC was not a universal feeling across the team. Several SLPs explained that other team members did not always use AAC and would even abandon the AAC plan. However, in situations where using AAC decreased inappropriate student behaviors, they were more likely to use and commit to AAC.

A major theme identified was the lack of knowledge and training in AAC. Only two of the participants felt comfortable conducting an AAC evaluation. All others stated that they needed to know more about AAC implementation. This lack of knowledge reflected a feeling of low confidence as the leader on their team in AAC. This lack of knowledge was not limited to the SLPs. Participants explained that the whole IEP team needed more training and knowledge in language acquisition and AAC implementation. For the K-5 SLPs, access to an ATS provided much support, knowledge, and training when needed.

SLPs also discussed a lack of resources necessary for AAC implementation. These resources included having materials needed to implement AAC, sufficient staff members, and support to help with troubleshooting and managing technology. Several struggled making materials needed for AAC, but they did not have anyone on the team who could help in this process. Two of the three K-5 SLPs accessed the ATS for this support.

Time was another very common theme described during the interview. All SLPs stated they needed more time to make more materials, train team members, model for team members, plan, prepare, teach, and learn about AAC. SLPs simply did not feel that they had enough time to do it all. Several SLPs also explained when they spent more time with team members, AAC implementation was more successful. In these situations, team members became more confident using AAC and had time to learn how to use and generalize AAC.

Seven out of eight SLPs were motivated and rewarded to use AAC. They continued to use AAC because they could see the positive results in the student data. One SLP explained that she was not motivated to use AAC because of the time needed to implement it. SLPs assumed that IEP team members were not always equally motivated to use AAC. They believed that members were more likely to continue to use AAC when they received praise from others including the student, families, and administrators.

Team participation and team commitment were also identified as two major themes. All SLPs struggled with one or both of these themes. The lack of participation and commitment was from special education teachers, instructional assistances, general education teachers, therapists, and administrators. The team would easily give up on the AAC plan and, at times, the AAC devices were completely abandoned. SLPs connected these factors with a lack of knowledge in AAC for team members. However, they also believed if they knew more about AAC, they would be more confident and gain more team participation and commitment.

Leadership support was also discussed by the participants. Most felt supported by their administrators but also believed that leaders should be more of a support by helping troubleshoot, implement AAC, and establish the expectation that all staff would participate and commit to using AAC. SLPs who had talked to their administrators about getting more resources or finding time to complete AAC tasks did not feel that support was consistent.

Another theme was family involvement. The importance of family involvement varied across SLPs. Some believed family involvement was a critical component and that families should be involved from the very beginning of AAC services. Other SLPs felt that it was a bonus and the family involvement did not necessarily increase the success of AAC.

Research Question 3.

Several suggestions for improving AAC implementation were provided by the participants. They also described what had helped them in the past with AAC implementation. These themes included increased time, knowledge, resources, and leadership support. SLPs thought that they needed more time to make materials, program devices, train others, and learn more about AAC. Two of the SLPs specifically explained that student progress was significant when they were able to they were able to spend more time in the classroom.

Increasing knowledge in AAC was also suggested for improving the AAC implementation strategies. SLPs stated that they needed more training and knowledge, along with the AAC team, to increase their confidence, team participation, and team commitment.

An increase of resources was another theme identified. SLPs thought that they needed more materials or devices, and staff to appropriately implement AAC and cover their caseload. However, all K-5 SLPs highly recommended contacting the district's ATS as a resource support. This person could help with making materials, getting devices, train others, and provide support to the SLPs.

Leadership support was also suggested by the SLPs. They believed that their administrative leaders needed to establish high expectations for implementing AAC. They also suggested that administrators gain more knowledge in AAC so that they could serve as additional resource for the SLPs when they are having difficulties implementing AAC.

Discussion

The interpretations of the results are based on the theoretical framework from Ely's (1978) eight conditions of change theory. The data from this study revealed that several of the conditions Ely (1978) described were missing from the implementation of AAC at the research site. As suggested by Ely (1990), it was also determined that several of the conditions influenced other factors.

Interpretation of Research Question 1

SLPs shared their experiences with preservice training, post-service training, evaluation of AAC, and their experiences making continued AAC decisions. Overall, they had little preservice training. Most had one class in AAC and few had access to an AAC lab where they could explore a variety of devices; however it was not enough. They still explained that they needed to know more about AAC. These results were comparable with research indicating that SLPs need more training in AAC (Costigan & Light, 2010; Crema & Morgan, 2012; McNaughton, Rackensperger, Benedek-Wood, Krezman, Williams, & Light, 2008; Ratcliff, Koul, & Lloyd, 2008). They all had concerns about continued training and education in AAC and expressed their concern about the lack of training they had experienced.

Crema and Morgan (2012) stressed the importance of on-the-job training because of current SLP's lack of preservice training and the ongoing advances in technology. SLPs at the research site explained that few training opportunities had been offered. There were differences between the early childhood and special education in terms of the amount and type of training they had received. All early childhood SLPs had received official training on one specific type of AAC intervention (PECS training). Two SLPs received an advanced training in this intervention and another two attended a conference on AAC. All other learning opportunities were on their own time, from coworkers, or from calling device manufactures. The K-5 SLPs had not been to official trainings or conferences; however they received more child or device specific training from their ATS. Similar results were discovered by Iacono and Cameron (2009) who stated that most SLPs were gaining new knowledge primarily from other colleagues and other professional development offerings. Even with these trainings, all SLPs in this study explained they needed to know more about AAC.

Fishman (2011) explained the importance in understanding how to complete an evaluation and why it is so important. This is a critical component in beginning AAC correctly and as a result would have lasting impressions on the success of the plan. For the SLPs who utilized the ATS, appeared more confident in the results of the assessment, but they also revealed that they would not know how to evaluate the child if they were practicing independently. Although it has been suggested to utilize an ATS at the research site, it does not dismiss the fact that SLPs need

to have an understanding of how to evaluate AAC independently as well (Fishman, 2011; McNaughton et al., 2008; Proctor & Oswalt, 2008). Assessment should be ongoing rather than a single event that occurs before the annual IEP.

SLPs also discussed the lack of knowledge for their IEP team. This included special education teacher, regular education teacher, therapists, family members, and administrators. Kramlich (2012) suggested that all members needed training and that leaders should provide time and support for collaboration and training in AAC. Kramlich (2012) specifically described the need for teachers, as very few learn about AAC during their preservice training. The SLPs admitting team members that needed more training were those who also struggled with continued participation and commitment to AAC implementation. One of the SLPs made the connection between knowledge and commitment and participation by explaining that her team's AAC goals were successful based on knowledge and experience.

Not only does the AAC team need to understand how to use AAC and why it is important, they also need to have an understanding of language acquisition and service delivery models. SLPs explained they needed to spend time with the student inside the classroom. This is a change in service delivery from pulling the student out of the natural environment to teach AAC. Stoner, Angell, and Bailey (2010) also found this to be an indicator of student success using AAC stating that the school needs to have an understanding of inclusive education. This was a change that would need to start with school administrators and be enforced throughout the building.

The lack of knowledge in AAC impacted the SLPs' confidence and ability to lead their teams into full participation and commitment. Few stated that they had an overall lack of confidence in AAC. This echoed Ely's (1990) findings that knowledge is also connected to leadership and commitment. However, in this setting, knowledge was expanded to participation as well. The author interpreted from the data that SLPs also lacked the time to get more training and that their administrators did not realize the importance of training. Kramlich (2012) suggested that school leaders become aware of this need and provide the training and time needed to fully support collaboration and the implementation of AAC. Alquraini and Gut (2012) also considered time a critical factor for training, collaboration, and planning AAC implementation.

Interpretation of Research Question 2

Interpretation of research question two involved analyzing all themes identified through coding. These themes included Ely's (1978) eight conditions of change, as well as family involvement. Each of these themes were discussed below connecting them to current literature and conceptual framework.

Dissatisfaction with the status quo.

Ely (1990) suggested that this component was closely linked to leadership. The author explained that the feeling of dissatisfaction could be induced by a movement endorsed by leadership. Ely (1990) also stated that although this was not the most important factor of change, it was still considered important in adoption of an innovation, which was also evident in this study. Only two SLPs mentioned personal dissatisfaction with the current status of a student's progress. Other SLPs stated that they believed the reason some teachers participated and committed to using AAC was also because of the lack of student progress and negative behaviors in the classroom as a result. However, personal dissatisfaction was not influenced by leadership, as suggested by Ely (1990). Other SLPs described a lack of dissatisfaction from their team members, which could also be a result of lack of leadership endorsement. This behavior was also identified in current research (Stoner, Angell, & Bailey, 2010).

Although researchers support the importance of leadership and factors they should provide to staff including time, training, and funding (Alquranini & Gut, 2012), they do not describe the importance of establishing an environment of high expectations for all students to communicate in some way. This expectation would promote change and discourage basic contentment for little to no progress in expressive language. None of the SLPs felt that the messages from their administrators to the staff stressed the importance of AAC use.

Existence of knowledge and skills.

Lack of knowledge was discussed in great detail by all SLPs. As described in the interpretation of Research Question 1, SLPs received relatively little AAC training before entering the work force. Currently, only one SLP thought that she had adequate knowledge in the area of AAC, but also admitted the need to update on the current research in the area of AAC. All participants expressed significant concerns with their lack of education on AAC. A major concern was training on AAC evaluations and making AAC decisions post evaluation.

Ely (1990) stated that sufficient knowledge of the intervention was one of the most important factors in successful implementation. This condition was critical because it is closely connected to other factors such as resources, rewards and incentives, leadership, and commitment (Ely, 1990). SLPs in this study also made these connections due to their own lack of knowledge and the lack of knowledge from the other members of the team. The lack of knowledge in AAC, language acquisition, and service delivery models greatly impacted the success of AAC. Some stated that their lack of knowledge could be the cause of decreased team participation and buy-in. This relationship is also evident in current literature (Fishman, 2011; Iacono & Cameron, 2009; Kramlich, 2012; McNaughton et al., 2008; Proctor & Oswalt, 2008; Stoner et al., 2010). In a study by Baxter et al. (2012) full staff training was found to be a significant component to successful AAC and also associated the lack of knowledge with negative feelings toward AAC. Several SLPs also made this connection. In situations where staff members did not have adequate training in AAC, abandonment of the device, decreased participation, and decrease commitment were evident.

When discussing issues to gaining new knowledge, all SLPs stated concerns with finding enough time to learn themselves and to train others. Some stated that they would only have the option to learn outside of their workday. Studies have stressed the importance of leaders recognizing this need and providing the time for staff to learn (Kramlich, 2012; Stoner et al., 2010). Ely (1978) also stressed the importance of providing quality work time for learning.

Availability of resources.

Ely (1990) connected resources to anything that is required to implement a task. Examples included hardware, software, publications, media, teaching materials, and clerical help for the adaption of technology in the classroom. These all translated to this study; however a significant addition was the support of an assistive technology specialist. This resource was critical in the eyes of all K-5 SLPs. They all stated that they were unable to perform an evaluation without it. The ATS also saved the participants' time by creating materials, trained other staff members, completed trouble shooting for the SLPs, and helped repair AAC devices. All early childhood SLPs mentioned the importance of collaborating with other SLPs. Only one mentioned wanting access to someone who was a leader in AAC, however this could be because the other early childhood SLPs were not aware of this position.

In terms of other resources mentioned, 50% of the SLPs stated they wish for more access to devices, which is most commonly described in the research (Baxter et al., 2012; McNaughton et al., 2008). However the most common resource discussed were materials used for therapy or programming rather than actual devices. SLPs stated they just needed to have more materials for therapy. The cause of this was associated with their lack of time to make materials and the lack of shared responsibility of the team. The SLPs were the only ones making the AAC training materials. Few participants had trained instructional assistants, but all of them discussed this as a barrier. They explained that it would take too much time to train teachers and that the teacher would likely not make materials because it would take up too much of their time as well.

Two SLPs elaborated on the need for enough staff to appropriately implement AAC. This included the need for staff in the classroom working with the children; especially in the beginning stages of using AAC. Another concern for staff was having enough SLPs to properly serve students with AAC because of the increased time needed to implement AAC due to learning about the device, training, planning, and implementing. Therefore, the root cause of this was most likely based on the demands of time. It can be interpreted that SLPs who work with students

with AAC, need a smaller caseload because of time demands. As a result, more SLPs would be required to cover the services for the remaining students.

Availability of time.

Ely (1978) stressed the importance of "good" paid time to learn, plan, adapt, integrate, and reflect on the implementation process. The author linked this to other factors such as participation, commitment, leadership and rewards, and incentives. Time was a factor discussed by all SLPs and is found repeatedly throughout the research (Bruce, Trief, & Cascella, 2011; Calculator, 2009; Calculator & Black, 2009; Iacono & Cameron, 2009; Kramlich, 2012; Mukhopadhyay & Nwaogu, 2009; Parette & Stoner, 2008). Iacono and Cameron (2012) stated, "One of the most important resources of all early childhood education professionals is 'time'… there is often little time to devote to learning how to use devices and how to implement them effectively" (p. 314).

This opinion was supported by SLPs in this study repeatedly. There was simply not enough time for learning, training others, planning, making materials, or working with the student. It was connected to all other conditions mentioned in the Iacono and Cameron (2009) study. The participants also identified time as a top barrier to successful implementation of AAC. The researchers found that it was a problem for all members of the team and the families; however it was an overwhelming issue for the SLPs and often took up personal time as well. Many SLPs in this current study discussed that there was not enough time. Researchers have stressed this issue to school leaders stating that administrators need to provide flexible time for their staff to address these needs (Kramlich, 2012).

Rewards or incentives exist.

Ely (1990) explained that this factor was difficult to quantify and describe. Ely also linked this condition to others such as participation, resources, time, and dissatisfaction with the status quo, which was also discovered in this study.

Ely (1990) explained that a reward was considered something that was given for performance. In this study, extrinsic rewards included praise from administrators, other professionals, family members, and students using AAC. This praise ultimately increased the use of AAC. When the praise ended, teachers often did not continue implementing AAC.

Intrinsic rewards were comments made by the SLP explaining their personal satisfaction or enjoyment using and seeing the benefits of AAC. Many SLPs expressed joy and excitement when students made progress and added that was the reason they were motivated to use AAC. Bruce et al. (2011) also found that professionals were more motivated to use AAC, if they experienced student success.

Ely (1990) further explained that incentives were anything that served as an expectation of the reward or the fear of punishment. This could be anything that would promote the initiation of the implementation. At times, team members appeared to only use AAC to avoid the repercussions of not using it; however at times team members abandoned using AAC altogether. Researchers have also found that in situations where AAC was not rewarding, and viewed as unsuccessful they were at risk of abandoning it completely (McNaughton et al., 2008; Stoner et al., 2010).

Participation.

Decisions regarding team participation were made as a team, and that all members communicated effectively. According to Ely (1990), this condition was somewhat ambiguous, as it was considered one of the most important factors of implementation. All SLPs struggled with participation at some extent and two of the eight felt that it was a major barrier. All described a relationship between knowledge and participation, explaining that as knowledge increased, participation did as well. Several researchers have also made this connection (Greenstock & Wright, 2011; Kessel & Sickman, 2010; Kramlich, 2012; McNaughton et al., 2008). Greenstock and Wright (2011) explained that when multidisciplinary professionals combine to collaborate on using AAC, it must be based upon a shared understanding of their roles in the implementation. The authors added that these professionals must be given time and flexibility in workload to share their professional expertise and decision-making processes during team interactions.

Ely (1990) also related participation to time, commitment, knowledge and skills, and rewards and incentives. Other researchers (Bruce et al., 2011; Iacono and Cameron, 2009) identified time as a critical component of participation because of the time it took to plan and implement, but also to learn individually and as a team. Many of the SLPs in the study had similar opinions. It was found that as teams spent more time working together, as more teachers participated in AAC implementation. All SLPs appeared to be fully participating in AAC implementation with some taking the lead role in assessment, while others provided critical speech and language data to make AAC decisions.

Commitment.

This condition requires "firm and visible evidence that there is endorsement and continuing support of implementation of the innovation" (Ely, 1990, p. 5). Several SLPs explained a major problem was team commitment to using AAC when the SLP was not present. Some teams waited days before asking for help using a device. This abandonment has also been documented in research (McNaughton et al., 2008; Stoner et al., 2010).

Ely (1990) linked commitment to time, resources, and rewards and incentives, as did the SLPs in this study. However, throughout the interview, it was apparent that if the teams were not participating in the implementation of AAC, then they did not demonstrate commitment. Six of the SLPs explained that rewards were an important factor in the commitment from the team for using AAC. One of the SLPs believed that praise from administration, staff members, or families was a major factor in continued use of AAC. Because of intrinsic rewards, such as joy from student progress, nearly 90% of SLPs were committed to using AAC with their students. Bruce et al. (2011) also found that student progress motivated staff to continue using AAC.

SLPs also suggested that administrators should first demonstrate their commitment to using AAC and withhold this standard throughout the building. Several SLPs felt that they needed to have training in AAC and that administrators should hold an expectation that all staff members would commit to using AAC as well. Although SLPs thought they had support from administrators, all had concerns in this area and wished leadership could be stronger and more supportive. Leadership support could come in terms of providing enough staff to facilitate AAC, flexible time for planning and implementation, and setting a standard across the building to have high expectations for all children. Research supports this suggestion (Alquraini &Gut, 2012; Calculator & Black, 2009; Kramlich, 2012; Stoner et al., 2010). Calculator and Black (2009) specifically mentioned providing time, resources, and maintaining a high expectation for all students to increase commitment and support successful implementation of AAC.

Leadership.

Ely (1990) explained that leadership had two components including leadership from the executive offices of the organization and the project leader who was more closely related to the day-to-day activities of the implementation. Researchers identified the importance of leaders providing appropriate resources and time for staff to implement AAC (Alquraini & Gut, 2012; Calculator & Black, 2009; Kramlich, 2012; Stoner et al., 2010). The SLPs in this study felt the same way. It was not that they felt disregarded by their administrators; rather they felt as though they needed more intentional efforts from administrators to support AAC. Alquraini and Gut (2012) stated, "Administrators are key players in creating a successful inclusive environment for student with severe disabilities through collaboration with other staff members in the schools" (p. 52). The researchers explained that leadership duties should include joint problem solving, maintaining data, facilitating staff development programs, providing emotional support in tough times, modeling collaborative traits and communication, providing resources, providing advocacy, providing time for staff to engage in collaboration, and assessing program efforts.

Ely (1990) linked this factor to participation, commitment, time, resources, and rewards and incentives. SLPs also made an additional connection to knowledge. They believed that they needed more knowledge to be a strong leader within their team and to become a more confident therapist. Several

SLPs connected this confidence with an increase to team buy-in and commitment. The participants also stated that their building leaders should be more knowledgeable in AAC so that they could understand it more clearly, participate, hold others accountable, and be a resource for staff members. For some schools, finding additional AAC leaders might be more appropriate to help with assessment, case management, and consulting with team members. K-5 SLPs had access to this leader and believed it was an important factor in the success of AAC.

Family involvement.

Ely (1978) did not mention the importance of family. Most likely this was because the author was describing the adoption of technology, such as computers, into day-to-day activities. In context of using AAC for a child, data from this study supported family involvement as an important factor in the implementation of AAC. Current literature also supported this (Baxter et al., 2012; Calculator & Black, 2009; Iacono & Cameron, 2009; Marshall & Goldbart; 2008). Although most participants did not believe it was the most important factor in the success of AAC, they did believe that children who had more family involvement utilized AAC more independently. However, they did not believe that the lack of family participation was the sole cause of AAC failure. Five out of eight SLPs involved the family after the evaluation was complete although one stated it was important to involve the family from the very beginning.

Interpretation of Research Question 3

The third research question explored factors that helped AAC implementation or suggestions that the SLPs had for future AAC implementation. Six conditions were identified as important factors associated with this question. These included sufficient time, sufficient knowledge, sufficient resources, leadership support, team commitment, and team participation. One SLP described family involvement as important factor but because no other participant discussed this factor, it was not interpreted as a critical component. Each of these are discussed.

Team participation and commitment.

Team commitment and participation, in terms of AAC, were very closely related. SLPs explained that as participation increased, commitment also increased. The participants also stated that if all team members were not participating, they were not committed to using AAC. Factors that were associated with these two themes were also similar. Ely (1990) also explained that commitment was linked with participation and that time was associated with both conditions. For the purpose of interpreting Research Question 3, these two themes are addressed together. Participation and commitment are critical components to using AAC and was addressed repeatedly throughout the literature as well (Alquraini & Gut, 2012; Baxter et al., 2012; Bruce et al., 2011; Iacono & Cameron, 2009; Kessel & Sickman, 2010; Kramlich, 2012; McNaughton et al., 2008; Ogletree, 2012; Shepherd, Campbell, Renzoni, & Sloan, 2009; Stoner et al., 2010; Williams et al., 2008). All SLPs stated that team members needed to increase participation and commitment. It was found that participation was needed from all members including special education teacher, regular education teachers, instructional assistants, therapists, administrators, and families. Often they felt that the most critical team members were instructional assistants; this was also identified in a study by Stoner et al. (2010). Upon review of the data, it was determined that the factor most impacting participation and commitment was knowledge.

Sufficient knowledge.

It was very evident that all SLPs needed more knowledge. One of the SLPs stated that she assumed she knew her needs, but would benefit from someone who was immersed in the field that could update her on current changes in AAC. This is possibly one of the most common trends in literature. Many researchers have identified the need for more training as a major area of concern (Alquraini & Gut, 2012; Baxter et al., 2012; Bruce et al., 2011; Costigan & Light, 2010; Crema & Morgan, 2012; Fishman, 2011; Iacono & Cameron, 2009; Kessel & Sickman, 2010; Kramlich, 2012; Gonzales, Leroy, & DeLeo, 2009; McNaughton et al., 2008; Mukhopadhyay & Nwaogu, 2009; Ratcliff et

al., 2008; Stoner et al., 2010; Stuart & Ritthaler, 2008; Zangari, 2012).

The lack of knowledge greatly impacted several other areas of AAC implementation. Six out of the eight SLPs thought that they needed additional support to complete AAC evaluations, which is a critical component in beginning AAC implementation. They felt that lack of team participation and commitment were due to a lack of knowledge and that an increase in knowledge would increase the success of AAC implementation. This increase of knowledge and training for the team and the individual SLP was suggested by nearly 90% of SLPs. Half of the SLPs did specifically state that they suggested contacting an ATS who could them help train, educate, and assist in AAC implementation. I asked the SLPs why they did not gain this knowledge independently or train team members themselves; the overwhelming response was that the SLPs did not have enough time to do so.

Sufficient time.

Several SLPs expressed the need for more time. Harding, Lindsay, O'Brien, Dipper, and Wright (2011) also suggested providing enough quality time with students with significant needs. Half of the SLPs described the successful results of spending more time with teachers training, modeling, and assuring the teacher they were using AAC correctly. SLPs also explained that they needed more time to make materials and program devices.

Time was complex factor in this study. As mentioned, several discussed the lack of time in terms of working with the student, planning and training their team members, making materials, and programing AAC devices. However, overall the greatest need expressed by the SLPs was an increase in knowledge for both themselves and the entire team.

It was interpreted that if SLPs were given more time to learn themselves to train team members, other factors such as decreased participation, commitment, and lack of team understanding could be resolved. Some researchers have clearly stated that time should be provided for SLPs to complete these duties (Bruce et al., 2011; Calculator & Black, 2009; Kramlich, 2012; Stoner et al., 2010).

The final step in interpretation of Research Question 3, led me to ask, "How do you get more time?"

Leadership support.

Leadership played a big role in the implementation of AAC. Several SLPs suggested an increase in participation and commitment from administration. They also expressed the desire for administrators to hold an expectation for all staff to participate and commit to using AAC as well. This idea was identified in research (Calculator & Black, 2009). It was also suggested that leaders gain this knowledge and become a resource for SLPs to go to if they needed help with AAC, or to use an AAC specialists for this role.

Leaders would also be responsible for recognizing the need for and granting appropriate time to implement AAC. This includes providing SLPs with enough time to train and model for the team, as well as providing enough SLPs to appropriately cover the caseload. As SLPs spend more time on all aspects of AAC implementation, they jeopardize serving all students on their caseload. Team members are not able to address the barriers of AAC implementation unless they are given the time to do so. Researchers have suggested providing appropriate time to staff to address these concerns (Bruce et al., 2011; Calculator & Black, 2009; Kramlich, 2012; Stoner et al., 2010).

Recommendations for Action

With emergence of many themes, four significant areas of concern were revealed through this study. Overall, this study revealed that SLPs needed more participation from their team. In order to gain more participation, more training and knowledge needs to be provided. To allow for this increase in knowledge and training, the SLPs and teams needed more time, which ultimately comes from leadership and administrators. The first recommendation would be for leaders to evaluate how they can better enforce the ongoing support and implementation of AAC. Several SLPs in this study explained that they simply needed more time to complete tasks. When asked why they did not gain the knowledge they needed, lack of time was the most common response. It was revealed they did not have time to train, plan,

or model how to use AAC with their team members. This problem has been identified through much research as well (Baxter et al., 2012; Bruce et al., 2011; Calculator & Black, 2009; Kramlich, 2012; McNaughton et al., 2008; Stoner et al., 2010).

The second recommendation is that building administrators evaluate how they are monitoring SLPs caseloads and regularly check-in with the SLPs to determine their needs. AAC demands vary greatly over time. Other SLPs explained how time demands change as the student spends more time in the regular education setting. Teams who are less familiar with AAC would need more time for training when compared to those that have significant experience with AAC. Each SLP's needs are different. The important component is how those needs are acknowledged and addressed by their building leaders. The third recommendation to address is additional AAC training for the whole team. This could come in a variety of forms and would be based on the needs of the team. Teams beginning AAC need intensive training on language acquisition and understand why and how to use AAC. For those who have some experience with AAC but are using it with a new student, the team may just need time to plan together, determine their roles, and evaluate how it to implement AAC across settings. Education and time for planning are critical components to the success of AAC (Alquraini, & Gut, 2012; Bruce et al., 2011; Calculator, 2009; Calculator & Black, 2009; Parette & Stoner, 2008).

Although individualized trainings would be critical to meet the ongoing needs of SLPs and their teams, overall training on the evaluation process was described as a need repeatedly throughout this study. SLPs stated that they needed guidance on the initial assessment, but because assessment is ongoing, they needed the information throughout AAC implementation. My final suggestion is that an AAC evaluation workshop be held for SLPs. As a result of this training, SLPs should be provided take-home materials that they can utilize during AAC assessments to guide decision-making. Many of the SLPs did not know where to go for more support and have the tools they needed at hand. An addition to this suggestion is to include a mentor program for using AAC or providing access to an ATS. This could be an option across the district to provide support and increase collaboration among professionals.

Recommendations for Future Studies

Several recommendations for future studies emerged after reflection of this study. This study focused specifically on the experiences of the SLP. It is recommended that future researchers also consider exploring the experiences of the teachers and instructional assistants working closely with the student and their families using AAC. These two team members are often with the student for a longer time period than the SLP. It is critical that they understand why and how to implement AAC effectively. It would be assumed that they also have experiences, barriers, and suggestions that would contribute the literature of AAC research. It could also be replicated with the viewpoint of administrators.

A final suggestion for research would be to observe an SLP and their team as they complete an initial referral for AAC evaluation, through one-year post AAC implementation. By evaluating this process, researchers could evaluate factors that help and hinder the AAC process first hand, as well as how SLPs and teams are using AAC in the school setting.

Conclusion

This study explored the experiences of SLPs during the implementation of AAC. The results of this study revealed that SLPs are motivated and willing to implement AAC; however there are several barriers that prevent AAC from being used appropriately. SLPs need the necessary tools, such as more knowledge in AAC and time to do so. It was found that these two components were important for all members of the team to increase participation and commitment to using AAC. It is suggested that leaders acknowledge these needs and provide these elements.

For SLPs, it may simply feel like professional responsibility to implement AAC. However, for the individuals who depend on it, it is their life. These individuals, who cannot speak on their own, rely on this process to be implemented effectively and efficiently by all members of their IEP team. The extent to which they can connect with their peers and

contribute to society depends solely on how well they can communicate their thoughts and knowledge. Therefore, it is not simply the responsibility of SLPs to provide AAC options; it is their job to give a voice to the voiceless.

Limitations

Limitations are uncontrollable threats to the internal validity of the study (Ellis & Levy, 2009). A number of these were revealed through the development of this study. The first limitation was the application of the results to the greater population due to the small number of interviews, only within the large, urban public school in the Midwest. Small sample size decreased the generalizability of the findings. Other characteristics such as the individualized nature of AAC and each setting would make generalization more difficult. Another limitation is that only SLPs were questioned regarding the implementation of AAC, limiting the perception of this process. This provided only one perception of the implementation process, although research suggested using a team approach to AAC implementation (Baxter et al., 2012; Bruce et al., 2011; Stoner et al., 2010). A related limitation is the small number of SLPs that typically work with children requiring AAC. The final limitation identified in this study was that member checking only included the review of interview transcripts with participants, rather than the review of analyzed and coded data.

References

Alquraini, T., & Gut, D. (2012). Critical components of successful inclusion of students with severe disabilities: Literature review. *International Journal of Special Education, 27*(1), 42-59.

American Speech-Language-Hearing Association. (2002). *Augmentative and alternative communication: Knowledge and skills for service delivery*. Retrieved from http://www.asha.org/policy/KS2002-00067/

AppsforAAC (n.d.). *Welcome*. Retrieved from http://appsforaac.net

Baxter, S., Enderby, P., Evans, P., & Judge, S. (2012). Barriers and facilitators to the use of high technology augmentative and alternative communication devices: a systematic review and qualitative synthesis. *International Journal of Language & Communication Disorders*, *47*(2), 115-129.

Bruce, S. M., Trief, E., & Cascella, P. W. (2011). Teachers' and speech-language pathologists' perceptions about a tangible symbols intervention: Efficacy, generalization, and recommendations. *Augmentative and Alternative Communication*, *27*(3), 172-182.

Calculator, S. N. (2009). Augmentative and alternative communication (AAC) and inclusive education for students with the most severe disabilities. *International Journal of Inclusive Education*, *13*(1), 93-113.

Calculator, S. N., & Black, T. (2009). Validation of an inventory of best practices in the provision of augmentative and alternative communication services to students with severe disabilities in general education classrooms. *American Journal of Speech-Language Pathology*, *18*(4), 329-342.

Crema, C., & Morgan, N. (2012). Training speech language pathologists of adult clients on the implementation of AAC into everyday practice. *Perspectives on Augmentative and Alternative Communication*, *21*(2), 37-42.

Cooper, L., Balandin, S., & Trembath, D. (2009). The loneliness experiences of young adults with cerebral palsy who use alternative and augmentative communication. *Augmentative and Alternative Communication*, *25*(3), 154-164.

Costigan, F. A., & Light, J. (2010). A review of preservice training in augmentative and alternative communication for speech-language pathologists, special education teachers, and occupational therapists. *Assistive Technology*, *22*(4), 200-212.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (Laureate custom ed.). Boston, MA: Pearson Education, Inc.

DeRuyter, R., McNaughton, D., Caves, K., Bryen, D., & Williams, M. (2007). Enhancing AAC connections with the world. *Augmentative and Alternative Communication, 23*(3), 258-270.

Dynavox (2013). Products. Retrieved from http://www.dynavoxtech.com/products/

Ely, D. (1978). Creating the Conditions for Change. In Bonn, G. S., & Faibisoff, S. (Ed.), *Changing Times: Changing Libraries* (p 150-163).

Ely, D. P. (1990). Conditions that facilitate the implementation of educational technology innovations. *Journal of Research on Computing in Education, 23*(2), 298-305.

Ellis, T. J., & Levy, Y. (2009). Towards a guide for novice researchers on research methodology: Review and proposed methods. *Issues in Informing Science & Information Technology, 6*, 323-337.

Fager, S., Bardach, L., Russell, S., & Higginbotham, J. (2012). Access to augmentative and alternative communication: New technologies and clinical decision-making. *Journal of Pediatric Rehabilitation Medicine, 5*(1), 53-61.

Fishman, I. (2011). Guidelines for teaching speech-language pathologists about the AAC assessment process. *Perspectives on Augmentative and Alternative Communication, 20*(3), 82-86.

Gonzales, C., Leroy, G., & DeLeo, G. (2009). Augmentative and alternative communication technologies. *Handbook of research on developments in e-health and telemedicine: technological and social perspectives. Medical Information* Science Reference. In M. M. Cruz-Cunhea, A. J. Tavares, & R. J. Simoes (Eds.), Handbook of research on developments in e-health and telemedicine: Technological and social perspectives (pp. 1070-1087).

Greenstock, L., & Wright, J. (2011). Collaborative implementation: Working together when using graphic symbols. *Child Language Teaching and Therapy, 27*(3), 331-343.

Harding, C., Lindsay, G., O'Brien, A., Dipper, L., & Wright, J. (2011). Implementing AAC with children with profound and multiple learning disabilities: a study in rationale underpinning intervention. *Journal of Research in Special Educational Needs, 11*(2), 120-129.

Higginbotham, D. J., Shane, H., Russell, S., & Caves, K. (2007). Access to AAC: Present, past, and future. *Augmentative and Alternative Communication, 23*(3), 243-257.

Hourcade, J., Pilotte, T. E., West, E., & Parette, P. (2004). A history of augmentative and alternative communication for individuals with severe and profound disabilities. *Focus on Autism and Other Developmental Disabilities, 19*(4), 235-244.

Iacono, T., & Cameron, M. (2009). Australian speech-language pathologists' perceptions and experiences of augmentative and alternative communication in early childhood intervention. *Augmentative and Alternative Communication, 25*(4), 236-249.

Johnson, J. M., Inglebret, E., Jones, C., & Ray, J. (2006). Perspectives of speech language pathologists regarding success versus abandonment of AAC. *Augmentative and Alternative Communication, 22*(2), 85-99.

Kessel, L., & Sickman, L. S. (2010). Undergraduate elementary education majors' knowledge of augmentative and alternative communication. *SIG 12 Perspectives on Augmentative and Alternative Communication, 19*(4), 100-107.

Kramlich, C. (2012). Perspectives from general education teachers, students and their parents: Including students with robust communication devices in general education classrooms. *SIG 12 Perspectives on Augmentative and Alternative Communication, 21*(3), 105-114.

Light, J., & McNaughton, D. (2012). The changing face of augmentative and alternative communication: Past, present, and future challenges.

*Augmentative and Alternative Communication, 28(*4), 197-204.

Marshall, J., & Goldbart, J. (2008). 'Communication is everything I think.' Parenting a child who needs augmentative and alternative communication (AAC). *International Journal of Language and Communication Disorders, 43*(1), 77-98.

McNaughton, D., Rackensperger, T., Benedek-Wood, E., Krezman, C., Williams, M. B., & Light, J. (2008). "A child needs to be given a chance to succeed": Parents of individuals who use AAC describe the benefits and challenges of learning AAC technologies. *Augmentative and Alternative Communication, 24*(1), 43-55.

Mukhopadhyay, S., & Nwaogu, P. (2009). Barriers to teaching non-speaking learners with intellectual disabilities and their impact on the provision of augmentative and alternative communication. *International Journal of Disability, Development and Education, 56*(4), 349-362.

Odom, S. L., Collet-Klingenberg, L., Rogers, S. J., & Hatton, D. D. (2010). Evidence-based practices in interventions for children and youth with autism spectrum disorders. *Preventing School Failure, 54*(4), 275-282.

Ogletree, B. T. (2012). Stakeholders as partners: Making AAC work better. *SIG 12 Perspectives on Augmentative and Alternative Communication, 21*(4), 151-158.

Parette, H. P., & Stoner, J. B. (2008). Benefits of assistive technology user groups for early childhood education professionals. *Early Childhood Education Journal, 35*(4), 313-319.

Paul, R. (2009). Interventions to improve communication. *Child & Adolescent Psychiatric Clinics of North America, 7*(4), 835-856.

Proctor, L. A., & Oswalt, J. (2008). Augmentative and alternative communication: assessment in the schools. *Perspectives on Augmentative and Alternative Communication, 17*(1), 13-19.

Ratcliff, A., Koul, R., & Lloyd, L. L. (2008). Preparation in augmentative and alternative communication: an update for speech-language pathology training. *American Journal of Speech-Language Pathology, 17*(1), 48.

Schlosser, R. W., & Wendt, O. (2008). Effects of augmentative and alternative communication intervention on speech production in children with autism: A systematic review. *American Journal of Speech-Language Pathology, 17*(3), 212-230.

Shepherd, T. A., Campbell, K. A., Renzoni, A. M., & Sloan, N. (2009). Reliability of speech generating devices: A 5-year review. *Augmentative and Alternative Communication, 25*(3), 145-153.

Soto, G., Müller, E., Hunt, P., & Goetz, L. (2001). Critical issues in the inclusion of students who use augmentative and alternative communication: An educational team perspective. *Augmentative and Alternative Communication, 17*(2), 62-72.

Stoner, J. B., Angell, M. E., & Bailey, R. L. (2010). Implementing augmentative and alternative communication in inclusive educational settings: A case study. *Augmentative and Alternative Communication, 26*(2), 122-135.

Stuart, S., & Ritthaler, C. (2008). Case Studies of Intermediate Steps/Between AAC Evaluations and Implementation. *SIG 12 Perspectives on Augmentative and Alternative Communication, 17*(4), 150-155.

Sutherland, D. E., Gillon, G. G., & Yoder, D. E. (2005). AAC use and service provision: A survey of New Zealand speech-language therapists. *Augmentative and Alternative Communication, 21*(4), 295-307.

Williams, M. B., Krezman, C., & McNaughton, D. (2008). "Reach for the stars": Five principles for the next 25 years of AAC. *Augmentative and Alternative Communication, 24*(3), 194-206.

Zangari, C. (2012). Helping the general education team support students who use AAC. *SIG 12 Perspectives on Augmentative and Alternative Communication, 21*(3), 82-91.

Contact Author: Ashley Fields; E-mail:
ashleyrw@hotmsail.com

Early Intervention: How Parent Friendly Is the Process in 2016? A Case Study

Nancy Montgomery, PhD, CCC-SLP
University of Central Missouri

This article is based on a series of interviews over two years with a single parent with a child with special needs who agreed to share her story so that professionals and students could learn from their experience. The interviews took place over time at an agreed-upon site. The interviews began as this family was introduced to Birth to 3 services and then progressed to the preschool-aged services offered through their school district. Interviews included open-ended questions which allowed the parent to share information freely. Responses to questions were analyzed with themes being identified, and follow-up questions clarified any missing information. The names used in the article have been changed, and the mother gave consent for this information to be shared. The purpose of these interviews were for professionals to hear parents' perceptions during the early intervention process.

Currently in the states of Missouri and Kansas, Early Intervention services for children who are ages birth to three are delivered through the First Steps Program or the Infant-Toddler Program of a particular county. Children qualify for these programs in a variety of ways-----some children are born with medical diagnoses that qualify them immediately such as cleft lip and palate or Down syndrome, since this child is considered "at risk" of not developing age-appropriate communication skills. Other children are referred for multiple evaluations to see if they "qualify" for the programs based on the delays that they exhibit in not only speech and language but also fine and gross motor skills. If these delays are determined to be 25% or more in more than one developmental area, the family and child may qualify for services. For services for children birth to three years of age, a sliding scale for fees is now implemented so that some families do not pay anything for services. However, other families are charged nominal fees for the services they receive. Services are generally delivered in the child's home but can also be provided in the child's daycare environment or another "natural environment" such as a public library, park or even at a McDonald's. The intent of the services is to work closely with the family members so that they are the primary facilitators of new skills in the child's life.

Services in different school districts and different states vary and parents should be made aware of this. If a family moves from one school district to another or from one state to another, services may change.

Background: Kay is a single parent who is college educated and employed full-time. As a thirty-something mom, she gave birth to her son, Brodie, who was diagnosed with mega-cisterna magna with an abnormality on chromosome 16. "According to the genetics information I was given, this diagnosis only occurs 1% of the time and generally leads to a diagnosis on the Autism spectrum. He has a moderate to severe hearing loss in both ears and wears hearing aids" Kay indicated. "The final diagnosis was not made until Brodie was three years old."

IFSP, EIT, OHI—Kay was suddenly faced with a whole new language when her son Brodie was diagnosed with hearing loss, as well as other medical needs, which impact his learning of speech and language skills as well as academics. "All of a sudden I was introduced to all of this medical terminology that I had never heard before----I work in the mortgage business. For me, it's like trying to buy a house in Germany when you do not speak the language and you have no idea what the terminology means or even what the process is" (K. Johnson, personal communication, November 13, 2014).

"Looking back, since my son was born, it has been the perfect storm of hope and disappointment. One audiology test would come back okay, and I would hope that his hearing was going to be fine, but then the next test showed a moderate to severe hearing loss and that led to disappointment." When Brodie was fit with his first hearing aids, his mom indicated that the look on his face when he first heard her voice was priceless. "Definitely a memorable moment of joy" she reported.

When asked about the diagnostic process, Kay indicated that it wasn't one test that revealed all of the challenges for her child. An entire series of tests revealed multiple problems over time. "I hardly had time to get my breath—between doctor visits and dealing with a new medical problem—there was no time for grieving. Being a single parent, I had

to deal with each challenge as it came and try to educate myself as fast as I could so I could ask all of the right questions. Emotions were buried since I did not want my child to see them and there was no time to deal with them but these same emotions surfaced later so professionals should be ready for them."

Kay added, "It was wonderful when professionals understood that a word or a thought triggered a strong emotion and the professionals didn't overreact to that. As a parent of a child with special needs, I experienced sadness, anger, and joy every day and I usually did not see it coming. A particular behavior by my son or a statement by a professional may have brought a new emotion or even just a moment of that emotion." (K. Johnson, personal communication, October 29, 2015)

According to the Best Practices in the area of assessment from the Division of Early Childhood (DEC, 2014), good communication between the parent and the team of professionals is critical. Working as a team effectively means utilizing practices that promote and sustain collaborative adult partnerships, relationships, and ongoing interactions to ensure that programs and services achieve desired child and family outcomes. The family is an essential part of the team which should also include professionals from multiple disciplines, as needed. The teaming and collaboration practices recommended by the Division of Early Childhood (2014) include interacting and sharing knowledge and expertise in ways that are respectful, supportive, enhance capacity, and are culturally sensitive.

Team members should use group emails with each other so they stay up to date on what is happening with the family and the child. Parents need to share as much information about their child as they can so that professionals can effectively work with the child. "I felt like I was repeating myself over and over---telling the same story and hoping I remembered to include all of the relevant information every time" Kay said. (K. Johnson, personal communication, December 10, 2015)

"My advice to parents is to start a binder and keep a copy of everything. Even doctors at the same hospital could not seem to communicate with each other. Once we were part of the Early Intervention process, we had one team of professionals completing the evaluation process, but no one ever mentioned that those would not be the professionals who would be working with my child. We started over with a completely new team" Kay said.

Like life transitions or changes, positive relationships are associated with greater satisfaction, better adjustment, and better child outcomes (DEC, 2014). Clear and concise communication should be part of every meeting and every transition.

"Please give us any and all resources you have----that will save me time in finding them when I don't even know to ask if they exist," Kay suggested. She recently attended her first parent support group for families with children with hearing loss but unfortunately, when she arrived at the meeting place, the doors were locked and she could not find a way into the building. "I'll try again next month but it was disappointing."

An advocate can play a significant role in helping a parent of a child with special needs understand their child's rights and work effectively with an entity such as a school district. According to the Family Advocacy Center (2011), the purpose and role of an advocate include all of the following areas in each stage of the IEP Process: information, communication, and assessment.

Information

An advocate can inform parents of terminology and their rights related to the IEP Process. This information is valuable if parents are going to be an active part of the IEP process. The advocate can also suggest to the parent appropriate information to share with the school district and questions to ask.

Communication

Effective communication between families of children with special needs and the educational team is crucial. The advocate should recommend that parents put any concerns they have in writing to the team using respectful but clear language. Providing examples of a behavior may be helpful for everyone. An advocate may be helpful in suggesting goals for the IEP and/or services

Assessment

Reviewing and explaining assessment information to parents is a critical role an advocate can play. Requesting additional

assessments is also another role that may be necessary to obtain a clear picture of the child's skills.

IEP Process

Parents should be familiarized with the entire IEP process. An advocate can explain the legal issues to the parent and prepare them for all IEP meetings. In addition, the advocate can attend meetings with the parents, making certain to inform the school district ahead of time that they plan to attend. During these meetings, the advocate can suggest goals and appropriate supports to enable to student to be successful. Helping the parent provide evidence of a child's skills, or lack of skills, is another important task. The advocate can also review the IEP document with the parent before they sign the finalized document (Family Advocacy Center, 2011).

Kay reported that "my advocate helped me feel not so outnumbered at the team meetings and made sure that I comprehended items that I might have otherwise missed. I just felt like I had someone in my corner. The more I learned about the process, the more level the playing field felt. It's so beneficial when everyone has the same information before a meeting----that way everyone can bring questions and concerns to the team, rather than just reading a document for the first time at the team meeting" (K. Johnson, personal communication, March 10, 2016).

"Professionals have to remember that the services my child receives are determined by his needs—not the availability of those services or if that professional has room on his/her caseload for one more child. Financial concerns cannot be used as a consideration for whether or not a child gets a service he needs, and professionals need to remember this fact," she indicated. "With our situation, finding a support system is a bit difficult since many of my family members do not live close enough to help. "I had to look outside my family and when I did, people stepped up. My son's grandparents are helpful for many tasks such as taking him to certain appointments, observing him at school at recess, babysitting, etc. so I am fortunate in that regard. Parents should also consider co-workers or friends from church, and don't be afraid to ask them to get involved. Some people will surprise you with their kindness and what they are willing to do," Kay reported. "Then educate that support system on everything they need to know—how to troubleshoot hearing aids, how to handle behavior challenges, etc. were topics for discussion before my child was left with another adult." (K. Johnson, personal communication, March 10, 2016)

"That support system allows me to deal with everything and periodically get a much-needed break from my child. Stress management is important but when my child was little, it didn't happen much. As he has gotten older, it is easier to schedule in a break for both of us. The stress would catch up with me and then I would realize how long it had been since I had a break. Eventually I got more skilled at knowing myself and heading it off a little better," Kay indicated.

Daycare centers are a challenge when dealing with a child with special needs. "My son is in his fourth daycare since I required staff that was willing to meet my child's needs. A huge problem was that the daycare centers would not move my son out of the "baby class" since he was not walking. Socially, he was not with his peers. As soon as he was walking, they moved him to his chronologically-aged peers, and that has been much better," Kay said.

Looking ahead to the future, Kay indicated that she understands the importance of early intervention. She sees the frustration that some of the younger parents of children with special needs are experiencing. "I have trouble relating to many of these parents since I'm not sure they understand the magnitude of the situation. The process can be overwhelming for all of us," she indicated.

"Who knows?" she asked. "My son may be the next 'google guy.' We will just have to wait and see."

References

Division for Early Childhood. (2014). DEC recommended practices in early intervention/early childhood special education 2014. Retrieved from http://www.dec-sped.org/recommendedpractices

Family Advocacy Center. 2011. Retrieved from http://familyadvocacycenter.org/Advocacy.html

Resources

National Organization for Rare Disorders (NORD)
55 Kenosia Avenue
Danbury, CT 06810
orphan@rarediseases.org
http://www.rarediseases.org
Tel: 203-744-0100; Voice Mail: 800-999-NORD (6673)
Fax: 203-798-2291

National Dissemination Center for Children with Disabilities
U.S. Dept. of Education, Office of Special Education Programs
1825 Connecticut Avenue NW, Suite 700
Washington, DC 20009
nichcy@aed.org
http://www.nichcy.org
Tel: 800-695-0285; 202-884-8200
Fax: 202-884-8441

Contact Author: Nancy Montgomery; E-mail: nmontgomery@ucmo.edu

Call for Papers: The Online Journal of Missouri Speech-Language-Hearing Association

Guidelines for Submissions to *Online Journal of Missouri Speech-Language-Hearing Association*

The *Online Journal of Missouri Speech-Language-Hearing Association* (OJMSHA) is MSHA's peer-reviewed journal, which is published annually. OJMSHA is not only available to MSHA members but is also accessible to readers out of state. Manuscripts from clinicians, students, and academicians are accepted on a rolling basis.

Manuscript submission
OJMSHA is an online journal that publishes papers pertaining to the processes and disorders of speech, language, and hearing, and to the diagnosis and treatment of such disorders, as well as articles on educational and professional issues in the discipline. Contributed manuscripts may take any of the following forms: reports of original research, including single-subject experiments; theoretical or review articles; tutorials; research notes; and letters to the editor. *OJMSHA* follows the policies and procedures of any typical scholarly publishing board. Articles submitted to *OJMSHA* are reviewed by professionals in communication science and disorders and, when appropriate, professionals from allied health fields are also invited to review the papers.

Manuscripts should be submitted to *OJMSHA* Coordinator, Jayanti Ray, at jray@semo.edu. Specific questions or concerns may also be directed to jray@semo.edu. Manuscripts are reviewed by at least two peer reviewers on the editorial board and final decisions are made jointly by the coordinator and peer reviewers. Submissions are reviewed and edited for content and clarity prior to publishing. The peer reviewers, based on their expertise, have the discretion to reject any submissions as necessary.

Circulation
OJMSHA is circulated to MSHA members using the website. The journal is also open to other nonmembers and other professionals.

Editing
The peer reviewers are expected to review the submitted paper and make specific recommendations to the author within 45 days from the initial date of submission of the manuscript. It is the author's responsibility to edit the paper for APA style (6th Edition), clarity, and consistency before submitting. After the paper is accepted, the authors are sent the article electronically for final proofreading. Only minimal alterations are permissible pertaining to the final draft.

The editorial consultants of *OJMSHA* are established authorities in their areas of expertise and most of them have terminal degrees in their disciplines.

Editorial Policies
All manuscripts are peer reviewed, typically by two editorial consultants with relevant expertise and the editor/coordinator. The principal criteria for acceptance are significance of the topic or experimental question, conformity to rigorous standards of evidence and scholarship, and clarity of writing. No manuscript that has been published or is under consideration elsewhere may be submitted.

All manuscripts should be accompanied by a cover letter requesting that the manuscript be considered for publication and stating that the manuscript has not been published previously and is not currently submitted elsewhere. The contact author's business address and phone number should be included. The names of any student authors who contributed to the article should also be included in the cover letter.

Letters to the Editor
E-mail letters to Jayanti Ray (jray@semo.edu). Please include your name and telephone number. Letters will not be printed without contact information.

Manuscript Style and Requirements
Contributions are expected to follow the style specified in the Publication Manual of the American Psychological Association (6th edition). To ensure clarity of scientific communication in this journal, articles should not exceed 50 manuscript pages (double-spaced, 12 font size, Times New Roman)

including title page, abstract, references, tables, and figures. In light of special circumstances, the editorial board may approve articles longer than 50 pages. ASHA policy requires the use of nonsexist language. Authors are encouraged to refrain from using person-first language in preparing manuscripts.

A completely double-spaced electronic version of the manuscript should be attached to the author's cover letter and e-mailed to jray@semo.edu. A system of blind review is available to contributors. Authors who wish to remain anonymous to the editorial consultants during the review process should attach a second copy of the manuscript with no names or institutional references by which a reviewer could identify the author. Responsibility for removal of identifying information rests with the author.

Tables and Figures
Copies of tables and figures should be attached to each copy of the manuscript. Use Arabic numerals for both tables and figures, and do not use suffix letters for complex tables; instead, simplify complex tables by making two or more separate tables. MS Office tools may be used for figures and tables. Table titles and figure captions should be concise but explanatory. The reader should not have to refer to the text to decipher the information. The pictures (color or black/white) should be submitted using the jpeg format (resolution: 300x800 dpi). Keep in mind the width of a column or page when designing tables and figures.

Figures/charts and tables created in MS Word should be included in the main text rather than at the end of the document. Pictures may be submitted using separate files.

References
All literature, as well as test and assessment tools, must be listed in this section. References should be listed alphabetically, then chronologically under each author. Journal names should be spelled out and italicized. Pay particular attention to accuracy and APA style for references cited in the text and listed in the References. The reference page may be single-spaced.

Authorship
Papers should only be submitted for consideration once the authorization of all contributing authors has been gathered. Those submitting papers should carefully check that all those whose work contributed to the paper are acknowledged as contributing authors. The list of authors should include all those who can legitimately claim authorship. This is all those who have made a substantial contribution to the concept and design, acquisition of data or analysis and interpretation of data; drafted the article or revised it critically for important intellectual content. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content.

Research Ethics
All papers reporting human studies must include whether written consent was obtained from the local Institutional Review Board (IRB).

Patient/Participant consent
Authors are required to follow the IRB guidelines and the study participants have a right to privacy that should not be infringed without informed consent. Identifying information, including patients' names, initials, or hospital numbers, should not be published in written descriptions and photographs. Informed consent for this purpose requires that a patient/participant who is identifiable be shown the manuscript to be published. When informed consent has been obtained it should be indicated in the submitted article.

Copyright Transfer
The authors of manuscripts must transfer all rights, title, interest, and copyright ownership in *OJMSHA* when the MSHA accepts it for publication. The authors will not have the rights to edit, publish, reproduce, distribute copies, prepare derivative works, include in indexes or search databases in print, electronic, or other media. All accepted articles become the MSHA's property and may not be published elsewhere without the prior written permission. Authors may use parts of the article (e.g., tables, figures) in subsequent works (submitted to MSHA) without asking the permission. The Copyright

Transfer form will have to be signed by the authors upon acceptance of the manuscript.

Copyright Clearance

Authors are responsible for obtaining permission from copyright holders for reproducing any illustrations, tables, figures or lengthy quotations previously published elsewhere. Copies of individual journal articles or journal articles used for commercial purposes must request permission from MSHA (msha@shomemsha.org).

The Online Journal of Missouri Speech-Language-Hearing Association
Vol. 2 No. 2 · December 2016

Research

Clinical Exchange