

Improving Family-Professional Partnerships through Active Listening Training

by

Sarah Westerfield

Organizational Leadership and Communication, Duquesne University, 2005

M.Ed. Early Intervention with Autism Specialization, University of Pittsburgh, 2011

Submitted to the Graduate Faculty of the
School of Education in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

University of Pittsburgh

2020

UNIVERSITY OF PITTSBURGH

SCHOOL OF EDUCATION

This dissertation was presented

by

Sarah Elizabeth Westerfield

It was defended on

May 29, 2020

and approved by

Steven Lyon, Ph.D., Department of Instruction and Learning

Rachel Robertston, Ph.D., Department of Instruction and Learning

Brooks Vostal, PhD, Department of Counseling and Special Education

Dissertation Director: Douglas E. Kostewicz, Ph.D., Department of Instruction and Learning

Copyright © by Sarah Elizabeth Westerfield

2020

Improving Family-Professional Partnerships through Active Listening Training

Sarah Elizabeth Westerfield, Ph.D.

University of Pittsburgh, 2020

Although family-professional partnerships have a substantial positive impact on student progress and development, there still is a considerable need for educators to work on building and maintaining these relationships. Education professionals continue to discuss the need for training in building partnerships with families. Effective trainings for pre-service teachers in communication may be a key component to develop these skills in future educators. Active listening has been shown to have an important role in effective communication and may be the first step to building strong family-professional partnerships. This study presents a systematic literature review examining how active listening trainings have been conducted in college programs. Eight studies met inclusion criteria for further analysis and discussion. The results demonstrated significant effects and suggest active listening skills can be a potentially effective intervention to address communication barriers. However, the quality of the research base limits the overall confidence in the findings. To address prior limitations in the research, the following study utilized a pretest – posttest design to examine participant’s active listening steps achieved before and after an active listening training. Findings yielded statistically significant effects in pretest and posttest results. In addition, social validity measures showed family members of individuals with disabilities noticed a positive difference between individuals who did and did not receive the training. The research discusses the implications of results and future research.

Table of Contents

Preface.....	x
1.0 Introduction.....	1
2.0 Review of the Literature.....	4
2.1 Methods	7
2.2 Results.....	8
2.2.1 Participants.....	8
2.2.2 Settings	9
2.2.3 Research Design	9
2.2.4 Dependent Variables.....	10
2.2.4.1 Definition of Active Listening.....	10
2.2.5 Independent Variables and Interventions	11
2.2.6 Study Findings.....	11
2.2.7 Quality of Studies	13
2.3 Discussion	13
2.3.1 Active Listening Trainings	14
2.3.2 Training Outcomes	16
2.3.3 Future Implications for Research and Practice	18
2.4 Conclusions	19
2.4.1 Research Questions	20
3.0 Methods.....	21
3.1 Participants and Settings	21

3.1.1 Teacher Candidates	21
3.2 Materials.....	22
3.3 Dependent Variable.....	22
3.4 Independent Variable.....	22
3.5 General Procedures	25
3.5.1 Pretest.....	25
3.5.2 Implementation of Training.....	25
3.5.3 Posttest	26
3.6 Experimental Design	26
3.6.1 Social Validity.....	27
3.6.1.1 Teachers.....	27
3.6.1.2 Parents	27
3.6.2 Training of Graduate Student	28
3.6.3 Inter-observer Agreement and Procedural Fidelity	29
4.0 Results	30
4.1 Scored Role-Plays	30
4.1.1 Pretest.....	30
4.1.2 Post-test	31
4.1.3 Group Comparison	32
4.2 Social Validity	33
4.2.1 Teachers	33
4.2.2 Parents.....	35
4.2.3 Anecdotal Reports and Observations.....	36

5.0 Discussion.....	38
5.1 Effective Training Characteristics	39
5.2 Measurement of LAFF.....	40
5.3 Social Validity	42
5.4 Limitations	43
5.5 Implications for Practitioners	44
5.6 Future Directions for Research.....	44
5.7 Conclusions	45
Appendix A Summary of findings.....	47
Appendix B Essential Quality Indicators	50
Appendix C LAFF Target Skills Checklist.....	53
Appendix D Operational Definitions of Active Listening Steps	55
Appendix E Operational Definitions of Active Listening Steps, continued.....	56
Appendix F Active Listening Training Outline	57
Appendix G Active Listening Flowchart – Training Handout	58
Appendix H In-Class Special Education Classroom Practice Scenario.....	59
Appendix I Special Education Scenario 1: Jonathan	60
Appendix J Special Education Scenario 2: Megan	62
Appendix K Procedural Fidelity Teacher Flowchart	64
Bibliography	65

List of Tables

Table 1. Active Listening Behaviors.....	23
Table 2. Non-Listening Behaviors	23
Table 3. LAFF Active Listening Strategy	23
Table 4. Social Validity Parent Questionnaire.	28
Table 5. Pretest Posttest Scores on Use of Active Listening Strategy	31
Table 6. Social Validity Teacher Questionnaire, Mean Scores.....	34
Table 7. Social Validity Parent Ratings	36

List of Figures

Figure 1. Comparison of Mean Scores	33
--------------------------------------------------	-----------

Preface

I dedicate this work to my children, Nick, Stella, Edie, and Amelia.

Nick, you have not only taught me about motherhood, but you have changed the way that I see the world. You have inspired my research and my advocacy for individuals with disabilities. You have taught me to raise the bar for everyone, to always assume competency, to embrace individuality, and to always love first. Stella, Edie, and Amelia, thank you for your unconditional support, love, and sacrifices, even when times were hard for you. I am inspired by your advocacy for individuals with disabilities. I am so proud to call you my daughters and I cannot wait to see what your future holds.

A sincere thank you to the important people in my life. This work would not be complete without my family, my friends, and my faith.

To my Dad, who left the earth way to soon, I have heard your voice letting me know I can do whatever I set my mind to, and that has kept me motivated. To my Mom and my sister Emily, your undying support and care for me has meant everything. To my cousin Jaime and my friends Andrea, Anne, and Kathy, thank you, I am so blessed to have had your wisdom and encouragement throughout this process. To James, thank you for showing me unconditional love, for giving me daily strength and confidence, for always grounding me, and for being my rock. Thank you for sharing your beautiful daughters with me. Thank you for being my soulmate.

To my advisor, Dr. Douglas Kostewicz, thank you for your belief in me, for your patience, and your guidance. To my committee, Dr. Steven Lyon, Dr. Rachel Robertson, and Dr. Brooks Vostal, thank you for your time, feedback and support of my research. Thank you for your understanding of the importance of working with families.

To my cohort, we made quite an amazing team. I will always remember our work together, our laughter, the tears, the friendship. You have all had an enormous impact on me personally and professionally.

1.0 Introduction

Family-professional partnerships critically affect the success of students with disabilities (El Nokali, Bachman & Votruba-Drzal, 2010; Garbacz & McIntyre, 2016; Mautone, Marcelle, Tresco, & Power, 2015). Parental involvement in education and home-school communication has been repeatedly linked to positive academic outcomes and beneficial effects on child development (El Nokali et al., 2010; Mautone et al., 2015). Although family-professional partnerships have a substantial positive impact on student progress and development, there still is a considerable need for educators to work on building and maintaining these relationships (Mautone et al., 2015; Tucker & Schwartz, 2013).

Proactive measures can be developed and put into place to avoid conflict and strengthen family-professional partnerships (Meuller, 2009). These include strong leadership skills, partnering with parents and service agencies, professional development, updated educational practices, creative uses of resources, communication, and the promotion of trust (Meuller, 2009). Effective communication is a key component to successful partnerships. Among the proactive strategies found to strengthen communication skills between families and educators, active listening is a foundational component (O'Shea, Algozzine, Hammittee, & O'Shea, 2000).

The goal of active listening is to develop an understanding of the speaker's concern, and to allow the speaker to feel that the listener is hearing and clearly understanding the message being delivered (McNaughton, Hamlin, McCarthy Head-Reeves, & Schrieiner, 2007). While there are many important skills that contribute to building effective partnerships, active listening can be viewed as a "first step" in developing collaborative relationships (Coufal, 1993; Todd et al., 2011). Prior research that has examined effective procedures to train preservice educators on active

listening. Studies show that while there are different approaches to training active listening, there are many similarities. Active listening trainings, in general, are based on the work of Gordon (1970; Davidson & Versluys, 1999; Kearney, Kelsey, & Sinkfield, 2014; Lisper & Rautalinko, 1996; Mansfield, 1989; McNaughton et al., 2007; Pedrini et al., 1976; Thistle & McNaughton, 2015, Vostal et al., 2015). Gordon's (1970) model of active listening consists of three specific parts 1) trying to understand a message, 2) putting this understanding into words, and 3) sending the message back for verification. A few trainings have expanded on Gordon's work adding a fourth step which includes creating a plan for moving forward (McNaughton, et al., 2007, Vostal et al., 2015).

A majority of active listening trainings utilize role play and/or live simulation training as a part of their intervention (Kearney, Kelsey, & Sinkfield, 2014; Lisper & Rautalinko, 1996; Mansfield, 1989; McNaughton et al., 2007; Thistle & McNaughton, 2015; Vostal et al., 2015). Roleplay and simulation are utilized in many fields to provide real life experiences. It is a reasonable recommendation for role play and/or simulations to be a foundational part of an active listening training. Simulation allows the benefit of navigating high stakes situations and/or difficult situations in a low stakes and safe environment (Dotger & Alger, 2012). Practice of these skills is crucial for preservice educators to have confidence when they are handed a difficult situation. Literature on active listening trainings has ranged from a few class sessions (Davidson & Versluys, 1999), to being delivered over a course of a semester (Kearney, Kelsey, & Sinkfield, 2014), however statistically significant improvement in communication skills was seen across the studies and was unrelated to the duration of training.

The statistically significant results that are seen in the current literature suggests that active listening trainings are potentially effective in promoting successful partnerships. However,

important limitations exist in the current literature base. Very few of the studies include operationalized training steps, implementation fidelity data, and enough specific detail to be replicable (Thistle & McNaughton, 2015; Vostal et al., 2015). With the lack of this data, it is not possible to determine if the active listening trainings were effective. Including this process is necessary to help solidify active listening as an evidence-based practice and will allow effective interventions to be available to train educators (Makel et al., 2016).

Future active listening trainings should focus on teachers and pre-service teachers who work with families of children receiving special education. The current research in this area is limited (McNaughton et al., 2007, Vostal et al., 2015), yet is necessary given the well documented difficulties building effective partnerships for this population. Evaluation of maintenance and generalization of active listening trainings will also be important moving forward to determine if trainings are working across environments and if practices are being maintained over time.

Finally, parent perspectives of teacher's listening skills should continue to be examined. This includes parent or guardian reports of a difference in listening skills and overall improved communication with a teacher who has specific training on working with families. This insight can add evidence to the benefits of teaching active listening skills and examine if these skills are viewed positively by families. By addressing the future needs for building effective partnerships, starting with active listening research, an evidence base can be established to promote these foundational practices as pertinent and necessary training for preservice educators.

2.0 Review of the Literature

The Individuals with Disabilities Education Act (IDEA, 2004) mandates that a team of individuals together create an Individualized Education Plan (IEP) for students with special needs. Many different people can participate on an any one IEP team, however, IDEA mandates that parents participate as full team members. Relationships and communication developed between home and school are instrumental on student success in school (El Nokali et al., 2010; Mautone et al., 2015). These relationships play an even more important role in the education of individuals who have disabilities (Garbacz & McIntyre, 2016; Mautone, Marcelle, Tresco, & Power, 2015). Teachers and parents working together may also provide early dispute resolution and the prevention of more costly routes such as mediation, due process, and litigation (Mueller, 2009; Tucker & Schwartz, 2013). Conflict situations can place a great strain on families and school districts, making future collaboration even more difficult (Nowell & Salem, 2007). Although family-professional partnerships have a substantial positive impact on student progress and development, there still is a considerable need for educators to work on building and maintaining these relationships (Mautone et al., 2015; Tucker & Schwartz, 2013).

Parents report the beliefs that professionals fail to understand and respect their cultural differences and needs (Mandall & Murray, 2009; Summers, Hoffman, Marquis, Poston, & Nelson, 2005), have the perception that getting appropriate and inclusive services for their child is a “forever and ongoing struggle” (Soodak and Erwin, 2000, p. 36; Summers et al., 2005), and report feeling blamed and judged for their child’s problems (Blue-Banning, Summers, Frankland, Lord Nelson, & Beegle, 2004; Kalyanpur & Harry, 1999; Soodak & Erwin, 2000; Summers et al., 2005; Osher & Osher, 2002). Similarly, teachers have reported that, overall, they are not adequately

prepared to work with families nor feel supported by school administration in building relationships with families (Blue-Banning et al., 2004; Katz & Bauch, 1999; Summers et al., 2005). Teachers express their lack of understanding of families as well as their desires to have training on how to communicate more effectively with families (Bezdek, Summers, & Turnbull, 2010; Bhering, 2002; Dinnebeil & Rule, 1994; Fylling & Sandvin, 1999). Whereas parents attribute the barriers to involvement to the attitudes and behaviors of teachers, teachers themselves tend to attribute barriers to family characteristics (Bezdek, Summers, & Turnbull, 2010; Dinnebeil & Rule, 1994).

Proactive measures can be developed and put into place to avoid conflict and strengthen family-professional partnerships (Meuller, 2009). These include strong leadership skills, partnering with parents and service agencies, professional development, updated educational practices, creative uses of resources, communication, and the promotion of trust (Meuller, 2009). Effective communication is a key component to successful partnerships. Among the proactive strategies found to strengthen communication skills between families and educators, active listening is one of the most impactful (O'Shea, Algozzine, Hammittee, & O'Shea, 2000).

The goal of active listening is to develop an understanding of the speaker's concern, and to allow the speaker to feel that the listener is hearing and clearly understanding the message being delivered (McNaughton, Hamlin, McCarthy Head-Reeves, & Schrieiner, 2007). Active listening is often defined in three steps. First, the listener conveys nonverbal involvement/immediacy through the provision of unconditional attention. Examples of nonverbal involvement include eye contact, head nods, and a forward body lean toward the other speaker. Second, the listener paraphrases both the content and the feelings in the speaker's message. This is in an effort to demonstrate awareness of the speaker's intent and to clarify any assumptions. This may include

discussions with the following statements, “So what I hear you saying is....” or “Would it be accurate to say...”. Finally, the listener asks questions to encourage the speaker to provide additional information about his or her feelings or beliefs. This occurs through asking open ended questions and asking the other party if they have any additional questions, concerns, comments, etc. (Weger, Castle, & Emmett, 2010).

There are many important skills that contribute to building effective partnerships and active listening can be viewed as a “first step” in developing collaborative relationships (Coufal,1993; Todd et al., 2011). By studying the effects of active listening trainings on pre-service educators, we can determine effective methods to teach these skills that educators feel they are lacking (Blue-Banning et al., 2004), that have the potential to improve family professional partnerships (McNaughton, 2007), and improve outcomes for students with disabilities (Bezdek et al., 2010). The literature in this review is a foundational start for these active listening trainings, however it is necessary to implement these trainings with preservice educators. Once trainings are shown to be effective their benefits to educators, families, and individuals with disabilities may become more apparent.

Although active listening is identified as an important and valued skill, there is limited research supporting training in active listening, including trainings conducted with pre-service teachers (McNaughton et al., 2007; Vostal, McNaughton, Benedek-Wood, & Hoffman, 2015). With these past findings, providing preservice teacher trainings on effective communication strategies is a logical place to start making meaningful changes in building effective family-professional partnerships.

This review of the literature intends to answer the following questions related to teacher trainings in active listening:

1. How has previous research attempted to evaluate the effectiveness of training for teachers of grades k-12?
2. What were the outcomes of the active listening trainings in undergraduate and graduate programs?

2.1 Methods

This literature search utilized five criteria for inclusion in the synthesis (a) the study was published in a peer reviewed journal and written in the English language; (b) included k-12 in-service teachers, or k-12 pre-service teachers in undergraduate or graduate college programs; (c) conducted a training on active listening strategies and specifically used of the term “active listening” in the training; (d) used quantitative methodology involving single subject experimental designs (e.g., multiple-baseline, withdrawal, alternating treatments), true experimental designs (i.e., randomized clinical trial), or quasi-experimental multiple group comparison; (e) conducted a systematic manipulation of a variables with measurement of the strict observation of behavior.

Studies were located using an electronic data base search using psychINFO and ERIC using the search term “active listening” independently then additionally “active listening AND training; communication; teachers OR educators; teacher training; parent conferences; disabilities; caregiver; advocacy; partnerships; education; family centered practices; services; parents; autism; and meetings. After duplicate articles were removed a total of 804 articles were found. Abstracts were reviewed for criteria and potential articles were identified ($n=99$). After in-depth review of the articles, only a limited number met the search criteria ($n=3$). While many articles exist on active listening and training, the majority were excluded due to a qualitative design, or lacking

observable, measurable behavior. Limiters were broadened to include preschool teachers, however this did not yield additional articles. Due to the limited number of articles, the search was expanded to any undergraduate or graduate education programs, which identified additional articles that met inclusion criteria ($n=5$). The total articles ($n=8$) were coded for: (a) research questions, (b) dependent variables, (c) independent variables, (d) intervention procedures, (e) participants, and (f) study outcomes. Appendix A presents a summary of the included articles.

2.2 Results

2.2.1 Participants

The studies investigated active listening training in educators and undergraduate and graduate pre-service educators. Overall, the studies included 274 participants. Seven out of eight studies identified participant gender (Davidson & Versluys, 1999; Kearney, Kelsey, & Sinkfield, 2014; Lisper & Rautalinko, 1996; McNaughton et al., 2007; Pedrini, Pedrini, Egnoski, Heater & Nelson, 1976; Thistle & McNaughton, 2015; Vostal, et al., 2015). Approximately 70 percent of the study participants were female ($n=176$), while approximately 20 percent were male ($n=34$). These numbers exclude the Mansfield (1989) study, which did not identify gender ($n= 64$). Over ninety percent of the participants were either graduate students ($n=121$; Kearney et al., 2014; Mansfield, 1989; Thistle & McNaughton, 2015) or undergraduate students ($n=133$; Davidson & Versluys, 1999; Lisper & Rautalinko, 1996; McNaughton, 2015; Vostal et al., 2015). Studies whose participants were current students included: Preservice teacher candidates (McNaughton et al., 2007; Vostal et al., 2015; $n=41$), principal prep programs (Kearney et al., 2014, $n = 31$),

psychology students (Davidson & Versluys, 1999; $n=80$), speech and language pathologists (Thistle & McNaughton, 2015; $n =26$), medical students (Mansfield, 1989; $n =64$), and theology and sociology majors (Lisper & Rautalinko, 1996; $n =12$). The participants who were not students were current teachers (Pedrini, et al.,1976; $n=20$).

2.2.2 Settings

Seven out of eight studies took place in a college or university classroom setting (Davidson & Versluys, 1999; Kearney et al., 2014; Lisper & Rautalinko, 1996; Mansfield, 1989; McNaughton et al., 2007; Thistle & McNaughton, 2015; Vostal et al., 2015). Active listening trainings were incorporated into the course curriculum. The eighth, Pedrini (1976) did not report setting location.

2.2.3 Research Design

All eight studies used group experimental research designs. Four studies used a pretest - posttest design (Mansfield, 1989; Pedrini et al.,1976; Thistle & McNaughton 2015; Vostal et al., 2015), two used a pretest - posttest control group design with a control group (Kearney et al., 2014; McNaughton et al., 2007), one used a 2x2 factorial group design (Davidson & Versluys, 1999), and one used a quasi-experimental design (Lisper & Rautalinko, 1996).

2.2.4 Dependent Variables

All articles measured the effects of an active listening training, or a training that had a specific active listening training component. Five studies evaluated active listening components through observation of video-recorded discussions (Davidson & Versluys; 1999; Mansfield, 1989; McNaughton et al., 2007; Thistle & McNaughton 2015, Vostal et al., 2015), one study measured the dependent variable through audiotaped conversations (Lisper & Rautalinko, 1996), and two analyzed written answers/reflections to questions or conversations (Kearney et al., 2014; Pedrini et al., 1976).

2.2.4.1 Definition of Active Listening

The definition of active listening was consistent among studies. The core components of active listening are based on the seminal work of Thomas Gordon (1975). Gordon's model consists of 1) trying to understand a message, 2) putting this understanding into words, and 3) sending the message back for verification (Kearney et al., 2014; Lisper & Rautalinko, 1996). Three of the eight studies expand these three core features, adding a fourth step of creating a plan for moving forward (McNaughton et al., 2007; Thistle & McNaughton, 2015). This four-step model has been referred to as the LAFF Active Listening Strategy. LAFF is an acronym that stands for: L - Listen, empathize, and communicate respect; A - Ask questions and ask permission to take notes; F – Focus on the issue; F – Find a first step (McNaughton, et al., 2007, Vostal et al., 2015). Three studies did not state a specific active listening definition, however they referenced Gordon's (1975) model (Davidson & Versluys, 1999; Mansfield, 1989; Pedrini et al., 1976).

2.2.5 Independent Variables and Interventions

An active listening training was the primary independent variable in all but three studies (Davidson & Versluys, 1999; Kearney et al., 2004; Mansfield, 1989). Trainings ranged from 90-minutes during one college class period to 195-minutes over 4 class sessions. Three studies did not include frequency or duration of training (Kearney et al., 2014; Mansfield, 1989; Pedrini et al., 1976). Interventions included: (a) role plays and/or meetings with mock families and/or patients (Davidson & Versluys, 1999; Lisper & Rautalinko, 1996; Mansfield, 1989, McNaughton et al., 2007; Thistle & McNaughton, 2015, Vostal et al., 2015); (b) video feedback (Mansfield, 1989, McNaughton et al., 2007; Thistle & McNaughton, 2015, Vostal et al., 2015); (c) modeling and verbal practice with materials (McNaughton et al., 2007, Vostal et al., 2015); (d) completing specified readings on active listening (Lisper & Rautalinko, 1996); (e) cooperation training (Conflict Resolution Network, 1990; Egan, 1990); (f) Teacher Effectiveness Training (TET; Pedrini et al., 1976).

2.2.6 Study Findings

The active listening trainings reported an increase in targeted skills in all eight of the studies. Seven out of the eight studies reported statistically significant improvements in the outcome measures (Kearney et al., 2014; Lisper & Rautalinko, 1996; McNaughton et al., 2007; Davidson & Versluys, 1999; Pedrini et al., 1976; Thistle & McNaughton, 2015; Vostal et al., 2015). Davidson & Versluys's (1999) report examined the differences between cooperation training (active listening) and problem-solving training independent and in conjunction with one another. Statistically significant results ($p < 0.01$) were shown for the effects of the active listening

training for the cooperation group. Additionally, trainings in cooperation had significant effects on problem solving ($p < 0.05$). However, statistically significant effects were not shown for cooperation in groups who only received problem solving training (Davidson & Versluys, 1999).

Kearney et al., (2014) examined increasing emotional intelligence in six areas: (a) social awareness/active listening; (b) anxiety management; (c) decision making; (d) appropriate use of assertive behaviors; (e) time management; (f) commitment ethic. Out of these six areas measured, only two yielded statistically significant results, social awareness/active listening ($p < 0.01$) and time management ($p < .05$; Kearney et al., 2014). The remainder of the study findings focused on active listening and time management.

When comparing experiment and control conditions, Lisper and Rautalinko (1996), found active listening training showed significant results in mock counseling sessions (i.e.; direct encouragement, $p < 0.001$, mirroring of content, $p < 0.001$, and mirroring of emotions, $p < 0.05$). Similarly, Mansfield's (1989) participants had statistically significant results in active listening in pretest - post-test video-recorded conversations with pseudo patients ($p < 0.05$). Pedrini, et al., (1976), Thistle & McNaughton, (2015), and Vostal et al., (2015) all showed statistically significant results between pretest and posttest conditions (i.e., $p < .01$, $p < .001$, $p < .000$). McNaughton et al., (2007) did not run a statistical analysis on pretest and posttest scores but results demonstrated a substantial difference in scores from the control (pretest 7/posttest 6) and experimental condition (pretest 6/posttest 16).

Three studies showed considerable learning of active listening skills is a short period of time. These studies ranged from a single 90-minute session to three, two-hour sessions (Davidson & Versluys, 1999; Lisper & Rautalinko, 1996; Mansfield, 1989; Thistle & McNaughton, 2015). A few studies incorporated trainings over the course or academic semester (Mansfield, 1989;

Kearney, Kelsey, & Sinkfield, 2014; Pedrini et al., 1976). Pedrini et al., (1976) completed the active listening training over a 10-week course, and Kearney, Kelsey, and Sinkfield (2014) completed the active listening training over an 11-week course.

2.2.7 Quality of Studies

Quality indicators (QI) for group experimental and quasi-experimental research were used to evaluate the strengths and limitations of the studies (Gersten et al., 2005). For the purpose of this review, indicators for the implementation of the intervention and description of comparison conditions (three QIs) and outcome measures (two QIs) were evaluated (see Appendix B). Six out of eight of the studies met four out of the five standards measured (Davidson & Versluys, 1999; Kearney et al., 2014; Lisper, 1996; McNaughton et al., 2007; Thistle, 2015; Vostal et al., 2015). Of the remaining two studies, one met three out of five QIs and the last met two out five QIs. Of these two studies, both did not clearly describe the intervention being used (Mansfield, 1989; Pedrini et al., 1976) and one did not use multiple measures aligned with the interventions (Mansfield, 1989).

2.3 Discussion

Strong family-professional partnerships are imperative to the success of students with disabilities. Effective communication is the key to having these successful partnerships (Blue-Banning et al., 2004). Although research supports the benefits of effective partnerships, families and educators report the need to improve relationships between home and school (Summers et al.,

2005). Parents often feel unheard and unvalued, while teachers and administrators feel underprepared to build these relationships. Active listening has been identified as a key component in developing effective communication strategies and focuses on developing an understanding of the speaker's concern, but also allowing the speaker to feel that the listener is hearing and clearly understanding the message being delivered (McNaughton et al., 2007). Therefore, this research synthesis examined the current research to identify effective procedures to train preservice educators who work with families of students with disabilities. Specifically, this literature review attempted to answer the following questions: (1) How has previous research attempted to evaluate the effectiveness of training for teachers of grades k-12?, (2) What were the outcomes of the active listening trainings in undergraduate and graduate programs?

2.3.1 Active Listening Trainings

Studies took different approaches to training, yet there were many similarities. All of the trainings were based on the work of Gordon (1970; Davidson & Versluys, 1999; Kearney, Kelsey, & Sinkfield, 2014; Lisper & Rautalinko, 1996; Mansfield, 1989; McNaughton et al., 2007; Pedrini et al., 1976; Thistle & McNaughton, 2015, Vostal et al., 2015).

A majority of the trainings in the literature review utilized role play and/or live simulation training as a part of their intervention (Kearney, Kelsey, & Sinkfield, 2014; Lisper & Rautalinko, 1996; Mansfield, 1989; McNaughton et al., 2007; Thistle & McNaughton, 2015; Vostal et al., 2015). Other fields such as medicine frequently use methods of training such as simulations and role play to provide physician training on effective communication skills, such as handling difficult conversations (Lane & Rollnick, 2007). Studies that have examined these trainings suggest that role-play and/or simulation leads to significant improvement in the use of communication skills,

(Johnson & Kopp, 1996; Moral, Salvador, de Torres, & Castillejo, 2003). Medical students that did role-play and/or simulation scored significantly higher when examined for the use of communication skills as opposed to students who just received didactic training. However, it still remains unclear as to if simulation provides more effective results than role-play and vice-versa (Papadakis, Chroughan-Minihane, Fromm, Wilkie, & Ernster, 1997).

Roleplay and simulation are utilized in many fields to provide real life experiences. It is a reasonable recommendation for role play and/or simulations to be a foundational part of an active listening training. Simulation allows the benefit of navigating high stakes situations and/or difficult situations in a low stakes and safe environment (Dotger & Alger, 2012). Practice of these skills are crucial for preservice educators to have confidence when they are handed a difficult situation. Unfortunately, the cost to hire live actors for simulation activities can be high, however more cost-effective options are available to facilitate the acquisition of communication skills (Lane & Rollnik, 2007). For example, role-play utilizes actual students and their instructors creating a zero-cost option. Computerized simulation using mock parent interactions is another route that has showed promise when working on family partnerships (Dotger & Alger, 2012). These simulations are created with using a one-time process, then can be used for repeated training.

The duration of the studies varied in training time from 120 minutes over a few class sessions (Davidson & Versluys, 1999) to an 11-week training over a semester (Kearney, Kelsey, & Sinkfield, 2014). Statistically significant improvement in communication skills were seen across the studies yet were unrelated to the duration of training. This suggests that a brief training may be just as effective as a longer-term training. The effectiveness of a brief training may be due to the nature of the active listening training. When individuals become aware of the components and benefits of active listening, which can be taught in a short amount of time, the true benefits

seem to be in practicing the skills and the monitoring of one's own behavior while communicating. Once foundational components are mastered, an operationalized checklist may be a helpful tool that could be provided for educators to allow for self-monitoring, reducing the need for continued trainings. Brief trainings also save valuable time and money that could be used to develop skills in other areas (Bachman, Barzel, Roschlaub, Ehrhardt, & Scherer, 2012).

2.3.2 Training Outcomes

The second research question examined the outcomes of the active listening training on the selected dependent variables. In general, the results or outcomes of the studies reviewed suggested an overall effectiveness of active listening skills. This is exemplified by the statistical analysis that was run on the pretest - posttest and/or control group measures. As stated in the results, seven out of the eight studies showed a statistically significant increase in target behavior in post observations (Davidson & Versluys, 1999; Kearney et al., 2014; Lisper & Rautalinko, 1996; Mansfield, 1989; Pedrini et al., 1976, Thistle & McNaughton, 2015; Vostal et al., 2015). One study that did not run statistical analysis reported substantial differences between control and experimental conditions (McNaughton et al., 2007).

These statistically significant results suggest that active listening skills can be a potentially effective intervention to address some of the communication barriers seen with parents and educators of students with disabilities. It appears based on the results of this review that role-play and the three or four-step components: 1) trying to understand a message, 2) putting this understanding into words, 3) sending the message back for verification, and 4) creating a plan for moving forward, are critical components when designing active listening training. The three and four-step methods were the foundation for the trainings, however operationalized training steps

and/or implementation fidelity of the steps were only reported in two studies (Thistle & McNaughton, 2015; Vostal et al., 2015). With the lack of this data, it is not possible to determine if the active listening trainings were effective.

Fidelity of implementation also known as treatment fidelity refers to the extent to which an intervention is implemented as intended (Gresham, MacMillan, Beebe-Frankenberger, & Bocian, 2000) and is a quality indicator for experimental and quasi experimental research (Gersten, Fuchs, Compton, & Coyne, 2005). Treatment fidelity is necessary to ensure understand and demonstrate a relationship between the dependent variables and independent variables. Measures for fidelity promote the quality and rigor of the intervention, while providing a foundation for an evidence-based research method (Makel et al., 2016). The use of permanent products (e.g., checklists; audio/videotape, etc.) measures treatment integrity, and provides an important step in establishing the evidence base for active listening (Gersten et al., 2005; Gresham, Dart, & Collins, 2017).

Additionally, although the studies discussed their methods for training, only five of the studies went into enough specific detail to be replicable (Davidson & Versluys, 1999; Kearney, Kelsey, & Sinkfield, 2014; Lisper & Rautalinko, 1996; McNaughton et al., 2007; Pedrini et al., 1976, Thistle & McNaughton, 2015; Vostal et al., 2015). A detailed outline of procedures is a vital component to include given that replicability allows for other researchers to follow the same protocol as a prior study. Including this process is necessary to help to solidify active listening as an evidence-based practice and will allow effective interventions to be available (Makel et al., 2016).

2.3.3 Future Implications for Research and Practice

Based on the findings of the reviewed studies (Davidson & Versluys, 1999; Kearney, Kelsey, & Sinkfield, 2014; Lisper & Rautolinko, 1996; Mansfield, 1989; McNaughton et al., 2007; Pedrinie et al., 1976; Thistle & McNaughton, 2015, Vostal et al., 2015), there is a need for additional research to look at active listening trainings. Research is specifically needed with teachers and pre-service teachers who work with families of children receiving special education service given the limited research in this area ($n=2$; McNaughton et al., 2007, Vostal et al., 2015). Future research should prioritize measurement of implementation fidelity in trainings to document specific training procedures for replication (Davidson, 1999) and trainings should be conducted throughout a variety of environments and situations (McNaughton et al., 2007; Thistle & McNaughton, 2015; Vostal et al., 2015), as well as a wider geographical area (Kearney, et al., 2014). Future research should also look to report maintenance and generalization of active listening trainings to examine if these skills are generalizing into every practice in teaching.

In addition to the looking at the effectiveness of the training, it is important to examine parent perspectives of teacher's listening skills. This includes if a parent or guardian reports a difference in listening skills and overall improved communication with a teacher who has specific training on working with families. This insight can help add to evidence to the benefits of teaching active listening skills and examine if these skills are viewed positively by families.

By ensuring these three things take place, an evidence-based literature base can evaluate the effects of active listening trainings with educators. It will also be important to measure the social validity of these findings to determine the impact of these trainings on the educators and the families involved.

2.4 Conclusions

There are many important skills that contribute to building effective partnerships and active listening can be viewed as a “first step” in developing collaborative relationships (Coulal,1993; Todd et al., 2011). By studying the effects of active listening trainings on pre-service educators, we can determine effective methods to teach these skills that educators feel they are lacking (Blue-Banning et al., 2004), that have the potential to improve family professional partnerships (McNaughton, 2007), and improve outcomes for students with disabilities (Bezdek et al., 2010). The literature in this review is a foundational start for these active listening trainings, however it is necessary to implement these trainings with preservice educators. Once trainings are shown to be effective their effects on educators, families, and individuals with disabilities may become more apparent.

With the need for effective communication training, it is the intention of the proposed study to address some of the limitations and gaps of the literature regarding active listening, while monitoring the implementation fidelity of the training. For that reason the following study proposal is derived from the active listening literature review above and will attempt to investigate the effects of an active listening training for pre-service teachers who teach special education. To address prior limitations in the research, the following proposal will adhere to quality indicators of group design research and will utilize a pretest – posttest design. This design will examine the preservice teachers’ total active listening steps achieved before and after the active listening training.

2.4.1 Research Questions

The current study aims to extend active listening training literature for teachers and preservice teachers who work with individuals with disabilities by asking the following research questions: 1) What are the effects of an active listening training on teacher's active listening skills from pretest to posttest and 2) What are the effects on communication and collaboration skills from the active listening training reported through participant and parent feedback?

3.0 Methods

3.1 Participants and Settings

3.1.1 Teacher Candidates

Eleven students participated in the study. Following university IRB approval (Appendix C) and providing consent, participants selected included undergraduate and graduate students currently enrolled in a special education course at a large northeastern university. Participants in the control group consisted of 100% female students ($n=5$) who were pursuing a bachelor's degree. Degrees being pursued included rehab science ($n=1$), early childhood/special education ($n=2$), biology ($n=1$), and English writing ($n=1$). The experimental group was 33% male ($n=2$) and 67% women ($n=4$) with 33% pursuing a graduate degree ($n=2$) and 67% pursuing an undergraduate degree ($n=4$). Degrees being pursued included rehab science ($n=1$), early childhood/special education ($n=1$), biology ($n=2$), and social work ($n=1$). 91% of the participants were between the ages of 18 and 24 ($n=10$) and 9% of participants were between the ages of 35-44 ($n=1$). 73% of the participants ($n=8$) were Caucasian, 19% of participants identified as Asian and spoke English as a second language and 9% of the participants ($n=1$) were African American. Throughout the study, college students enrolled in the study will be referred to as "teachers". All aspects of the training took place in a classroom at the university and mock meetings took place in a conference room at the university.

3.2 Materials

To conduct the current study, the primary researcher developed and used specific materials. Videos of teachers during role plays were taken with an iPhone on a tripod and stored in a locked digital Box program. Training session employed a researcher-created PowerPoint (See Independent Variables) and was presented through a classroom computer and displayed on a projector. Researchers also used a small meeting room that contained a table and at least two chairs.

3.3 Dependent Variable

The primary researcher collected observation data from video recordings at the conclusion of all participant role plays, both pretest and posttest. A four-step learning strategy, LAFF (McNaughton et al., 2007), broken down into 30 target skills provided the basis for scoring (see Appendix D) and were operationally defined (see Appendix E). Each participant had the opportunity to display all 30 of the behaviors. The primary researcher noted the occurrence or non-occurrence of each behavior and reported behaviors completed.

3.4 Independent Variable

An active listening training served as the independent variable during the study. Teachers in the experimental group received training in the LAFF, active listening protocol of target skills (see Appendix F). The LAFF training was based on a Behavior Skills Training, BST model which

included the following four steps: (1) instructions; (2) modeling; (3) rehearsal; and (4) feedback (Parsons, Rollyson, & Reid, 2012). Teachers received a didactic lecture on active listening which included choral responding and verbal rehearsal of the LAFF steps (see Table 3).

The description and instruction part of the protocol started by discussing the importance of listening and the ways in which we use listening (e.g., to obtain information, to understand, for enjoyment, to learn, etc.). The definition of active listening and verbal and non-verbal behaviors were discussed and demonstrated with the teachers (see Table 1, McNaughton et al., 2007; Vostal et al., 2015). Finally, non-listening behaviors were discussed (see Table 2).

Table 1. Active Listening Behaviors

<u>Non-Verbal</u>	<u>Verbal</u>
Head nods	Paraphrasing
Eye Contact	Reflecting Feelings
Forward Body Lean	Assumption Checking
	Asking Questions

Table 2. Non-Listening Behaviors

<ul style="list-style-type: none"> • Interrupting • Responding vaguely or illogically to what was just said • Looking at phone, watch around room, or otherwise away from the speaker • Fidgeting (tapping on the table, frequently shifting position, clicking a pen, etc.) • Making statements that criticize others • Reacting hastily and promising things that cannot be delivered • Diverting topic to other situations

Table 3. LAFF Active Listening Strategy

L	Listen, Empathize, Communicate Respect
A	Ask questions and ask permission to take notes
F	Focus on the issue
F	Find a first step

After discussions on active listening, the LAFF model was introduced. The teachers verbally rehearsed the steps as a class while looking at the model prior to learning the specifics of each component (see Table 3). The visual model was then removed and the teachers, as a class, recalled the steps. Following this, each teacher paired up with a partner and verbally quizzed one another on the steps. Discussions then occurred on each component of the strategy and what those look like when implemented. For example, “F – Find a first step”, relates to always ending a conversation with “specific next steps” in place so everyone involved knows how things will move forward (e.g., the teacher will follow up with the principal and get call the parent tomorrow at 10 A.M.).

Following the introduction of the LAFF Acronym teachers were provided with the LAFF Checklist (Appendix D), the Active Listening Flowchart – Training Handout (Appendix G) and the operationalized steps were reviewed. Teachers then watched two video simulations of a parent/teacher meeting. These simulations were both based off of the same scenario, however one demonstrated skills for effective communication including the LAFF model, and one did not (see Appendix H). As a class the LAFF target skills checklist was used to identify what occurred, what did not occur, and the strengths and weaknesses in the conversations. The videos were compared and contrasted based on the number of skills that were observed and how those differences affected the outcome of the meetings.

Teachers were then paired with a partner and participated in a mock simulation using the same scenario from the videos (see Appendix H). Teachers were provided with the teacher and parent description, told to assume a role of parent or teacher, and to have a five-minute conversation. The same simulation scenario was used in order for the teachers to be able to focus on the LAFF steps, as opposed to learning the parent/teacher role and the specific of the situation.

After five minutes, teachers then used the LAFF checklist to provide feedback to their partner regarding skills achieved on the checklist during the conversation. Then the pair alternated roles and feedback was discussed again afterwards. After each teacher had the opportunity to play each role, the training concluded.

3.5 General Procedures

3.5.1 Pretest

During the pretest session pre-service teachers participated in brief meetings with a parent actor, who based their conversation on a simulation scenario, created by the research team (see Appendix I). An advanced special education doctoral student, who was also a parent, played the role of the parent actor in all simulations. These simulations portrayed a situation with families that would be similar to a meeting that may occur between a parent and teacher regarding school concerns. Pretest sessions occurred prior to the active listening training and feedback was not given to participants during the baseline sessions. Teachers were video recorded for future review and coding of the sessions.

3.5.2 Implementation of Training

At the conclusion of the pretest, all teachers received random assignment into two groups, experimental and control. Teachers in the experimental group received the aforementioned active listening training during one class session (i.e., approximately 150 minutes) one week following

the pretest, in lieu of their normally scheduled class period. Teachers in the control group received a normally scheduled class period one week following the pretest.

3.5.3 Posttest

One week following the training for the experimental group and normal class for the control group, all teachers received a posttest. All procedures mirrored the pretest and were video recorded for review (see Appendix J). The week following the completed posttest, students in the control group received the active listening training.

3.6 Experimental Design

A pretest - posttest control group design was used to examine the effects of a training package on active listening for pre-service special education teachers (Borg & Gall, 1989). The active listening skills of the participants were assessed prior to any type of training on active listening strategies and reassessed after training. Participants from a convenience sample (i.e., special education foundations course) were randomly assigned to the experimental and control groups. Mean differences on the pretest and posttest measures were used to determine the effects of the active listening training. A *t*-test was used to analyze the data. The test statistic or *t*-value is used to determine if the population means of the two groups are equivalent. Any *p*-value $p < .05$ indicates a significant difference between two groups.

3.6.1 Social Validity

3.6.1.1 Teachers

Social validity measures occurred at various points within the study. All teachers in the experimental and control group completed a Likert-type scale that discussed their skills and comfort levels in working with families (McNaughton et al., 2008). Questions included statements such as “I feel prepared to talk with parents about their children” and “Talking with parents helps in the development of appropriate solutions.” In addition, the teachers in the experimental group had two additional questions, “Learning the LAFF strategy was a good use of my time” and “I would recommend that other pre-service teachers learn the LAFF strategy.”

3.6.1.2 Parents

Five parents of children who have disabilities were recruited to gain perspective of the effectiveness of the active listening training. The parents all had a child with an IEP and who was currently enrolled in grades K-12, in a public-school district. All of the parents who participated were female and between the ages of 33-54 ($n=5$). Education included some college ($n=2$), bachelor’s degree ($n=2$), and a master’s degree ($n=1$).

Six videos were randomly selected, three from the control group and three from the experimental group. Parents/guardians viewed all three groups of videos. Each group contained one video from the experimental and one video from the control group. Parents, blind to the status of the tape (i.e., if the video was from the experimental or control condition), were asked to identify which tape the preservice educator communicated more effectively with the mock parent and to describe what the teacher did differently that displayed more effective communication. (see Table 4).

Table 4. Social Validity Parent Questionnaire.

-
1. Identify the collaboration simulation in which the special educator “demonstrated stronger communication skills.”?
 2. For the collaboration simulation described as stronger, parents will be asked to identify important communication skills demonstrated by the special educator.
-

3.6.2 Training of Graduate Student

The primary investigator trained a graduate student who served as the parent in the pretest and posttest scenarios and also as the second coder of the pretest and posttest videotapes. The graduate student/parent was provided the practice scenario a week prior to the pretest and posttest to learn the background information (see Appendix I and J). Within those scenarios the graduate student/parent was provided with an opening line to start the conversation with the teacher. After the response to that statement the graduate student/parent was instructed to provide two follow up prompts/questions to encourage opportunities for active listening in order try to keep the conversation going. If the teacher was not engaging in active listening and or/ providing solutions that were not the outcome desired by the parent, the graduate student (parent) was instructed to say, “If you think that is our best option” or “if you are willing to do that, we’ll give it a try.” In order to end the conversation (see Appendix K) .

The graduate student was also trained to identify LAFF target skills that were demonstrated during the pretest and posttest video. This training utilized the LAFF Target Skills Checklist (see Appendix D), the Operational Definitions LAFF Protocol (see Appendix E), and the in-class practice scenario videos.

3.6.3 Inter-observer Agreement and Procedural Fidelity

Videotaped sessions of the mock parent-teacher meetings were independently reviewed by the primary investigator (PI) and the graduate student. All videos were scored to assess the number of target LAFF skills obtained during each pretest and posttest session. The PI and secondary observer used the same data sheets to record target skills (see Appendix D). There were 30 opportunities for agreement for each participant in the pretest session and 30 opportunities in the posttest session. Agreement was scored when two observers gave a step of the LAFF the same score on the rubric. Agreement was calculated for each of the measures by adding the total number of agreements and dividing by the total number of agreements and disagreements, then multiplying that number by 100%. Overall agreement was 96% (range 80-100%).

The LAFF training that was given to the experimental group was videotaped to ensure the accuracy of the training. During the training fidelity of implementation was assessed through a checklist (see Appendix F) to confirm that the training was delivered as intended and that a Behavior Skills Training model was utilized. In addition, the training was videotaped and reviewed again for accuracy by the lead researcher. All steps of the training were implemented as intended with 100% accuracy. The checklist and recording confirm the didactic lecture on active listening, choral responding and verbal rehearsal of the LAFF steps and overview of the LAFF model, the use of video modeling with class discussions, rehearsal through simulated parent/teacher meetings and feedback from group partners and the instructor.

4.0 Results

The results are broken down into two sections. The first focuses on teachers' scores during the pretest and posttest role plays. The second section focuses on three different, yet related, social validity measures.

4.1 Scored Role-Plays

4.1.1 Pretest

Prior to the training, all teachers in the control and experimental group participated in a pretest. Table 5 shows pretest scores for all teachers. Out of a possible 30 skills, teachers in the control group scored between one and five skills per role play with a mean of two. In the experimental group, teachers scored between one and six with a mean score of 2.6. A two-tailed *t*-test ran on the pretest groups showed no statistical significance between the experimental and control group ($t=-2.236, p=0.089$).

Table 5. Pretest Posttest Scores on Use of Active Listening Strategy

Participant	Pretest Out of 30	Posttest Out of 30
Control 1	2	3
Control 2	5	5
Control 3	1	3
Control 4	1	1
Control 5	1	1
Mean	2	2.6
Experimental 1	4	21
Experimental 2	6	22
Experimental 3	3	21
Experimental 4	1	22
Experimental 5	1	18
Experimental 6	1	20
Mean	2.6	20.6

4.1.2 Post-test

Table 5 shows the individual scores of teachers during the posttest. As with the pretest, control group teachers scored between one and five skills, with a mean of 2.6. Unlike the control group, experimental group teachers scored more completed steps with a low and 18 and high of 22 steps with a mean score of 20.6. A *t*-test ran on the posttest groups showed a statistically significant difference between the experimental and control groups ($t=-24.767, p<0.001$).

4.1.3 Group Comparison

In order to assess the overall effects of the LAFF strategy the mean differences of the pretest and posttest measures were used. Students who received the active listening training scored significantly higher on the LAFF Target Skills Checklist. A *t*-test showed a statistically significant difference between the pretest and posttest scores of the experimental group ($t = -9.861, p < 0.001$), whereas the scores for the control group were not significantly different ($t = 1.500, p = 0.208$). Scores from the experimental group improved considerably from the pretest condition. The experimental group had a mean score of 2.67 target skills in the pretest condition, with a standard deviation of 2.09. After receiving the LAFF training to posttest scores for the experimental group increased to a mean of 20.6, with a standard deviation of 4.03. The scores from the control group remained relatively the same from pretest to posttest. Pretest scores for the control group were 1.73 with a standard deviation of 0.77, whereas posttest scores were a mean of 2.6 with a standard deviation of 1.7 (see Figure 1.)

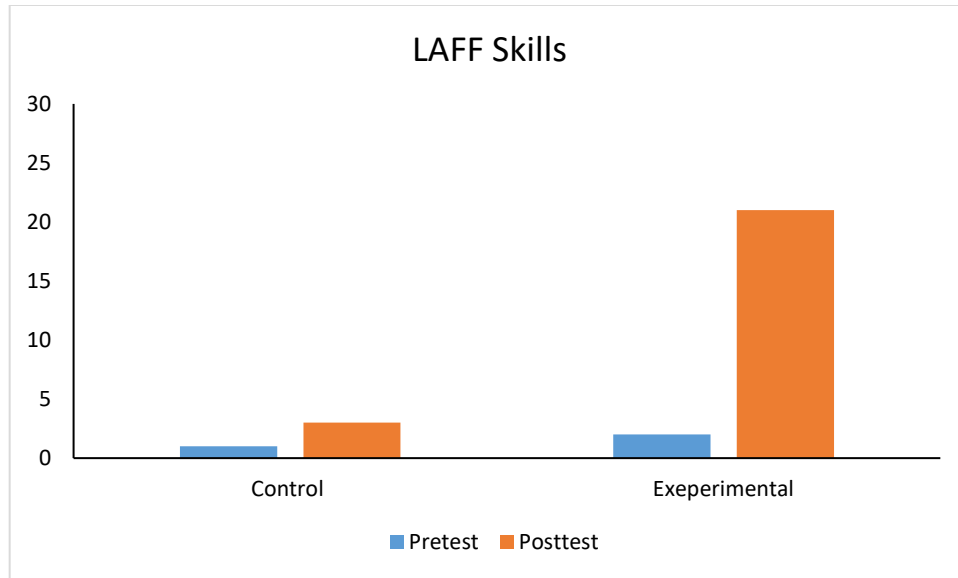


Figure 1. Comparison of Mean Scores

4.2 Social Validity

4.2.1 Teachers

Researchers assessed the social validity of the active listening training after conclusion of the study looking at two different areas. First, it was important to determine if the teachers felt the training was valuable. This was assessed through a brief survey on the LAFF training (see Table 6). The survey was provided to the control and experimental groups after the posttest took place. The beginning questions in the survey that discussed questions around the importance of working with families. These included questions such as “Talking with parents is useful” and “Talking with parents helps in the development of appropriate solutions”. With this type of questions scores were consistent between both the control and the experimental group.

However, in the two questions that asked if teachers felt “prepared” to work with families, the experimental group on average answered agree to strongly agree, whereas the control group on average felt they neither agreed or disagreed. This included questions such as “I feel prepared to talk with parents about student issues/concerns” or “Talking with parents they may think I am not competent” (see Table 6)

Table 6. Social Validity Teacher Questionnaire, Mean Scores

	Experimental	Control
1. I feel prepared to talk to parents about student issues/concerns	4.6	3
2. I am worried about talking with parents about student issues/concerns	1.8	3.2
3. Talking with parents is useful	4.8	5
4. I expect I will enjoy talking with parents about student issues/concerns	4	3.8
5. Talking with parents, helps in the development of appropriate solutions	4.8	5
6. Talking with parents, they may think I am not competent.	1.8	3.2
7. I feel prepared to talk with parents about their children	4.6	3
8. Learning the LAFF Strategy was a good use of my time. ^b	4.6	n/a
9. I would recommend that other pre-service teachers learn the LAFF strategy. ^b	4.6	n/a

^a Likert-type scale scores: 1 = strongly disagree, 2 = disagree, 3 = Neither agree or disagree, 4 = agree, 5 =strongly agree

^b Statements 8 and 9 did not appear on the control group questionnaire

4.2.2 Parents

Parents of children who have disabilities were asked to view three sets of videos that were randomly chosen from the mock parent-teacher meeting posttests. Each set of videos contained one individual that received the training and one who did not. Parents were asked to identify the individual who had stronger communication skills and to provide specific examples as to why they felt that person exhibited stronger communication skills (see Table 7). Parents overwhelmingly reported stronger communication skills in the students who received the training (see Table 7). Parents reported specific skills that they felt exhibited strong communication. The top skills, reported by 75% or more of participants, included paraphrasing, asking open ended questions (e.g., asking about the student's feelings and experiences on the subject matter, asking for parental input on experience at home), and scheduling next steps. All of the skills identified by parents were areas that were targeted in the LAFF training. Specific comments by parents included,

“The teacher was confident in what she was saying. She wanted to get the student's opinion and had concrete examples of the student's behavior and ideas on how to best manage it for the student's comfort.”

“Teacher 4 and teacher 1 in the first two scenarios stood and greeted the mom. Each asked about the new dog they got and seemed genuinely interested in the student. Neither made any empty promises, but in real-time put together a game plan with moving forward, meeting with teachers, principals, etc.”

“The teacher that demonstrated stronger communication skills was participant 1. I liked the way he repeated the mom's concerns, and said “so you think...”. He asked for resources that the mom had. He said what he can do (ask the principal) and said what he would do next.”

“Teacher 1 had better communication skills in that he kept repeating what the mom was requesting. Teacher 2 was more like MOST special education teachers and clearly came to the meeting with her own agenda.”

Table 7. Social Validity Parent Ratings

Stronger Teacher (Control or Experimental)			
Parent	Scenario 1	Scenario 2	Scenario 3
1	E	E	E
2	E	E	E
3	E	E	E
4	E	E	C
5	E	E	C

4.2.3 Anecdotal Reports and Observations

After the training, teachers reported the mock practice sessions in the classroom with a partner were very helpful in putting the LAFF skills to practice immediately. They appreciated assessing their performance directly afterward independently and getting feedback. They also reported the use of the same scenario that was used in the video demonstrations for their mock practice sessions were very helpful (see Appendix H). Teachers reported that because they had already viewed the practice scenario played out two times in the video demonstrations they were able to focus on implementation of the steps in the LAFF method during their in-class practice session, as opposed to focusing on the details of the situation. Sample statements from students in

the experimental group after the training include, “I cannot wait to implement the LAFF strategy in my daily work,” “I am really thankful to have had this training, in general teacher’s really don’t have guidance in talking with parents,” and “Thank you for taking the time to teach this training, it is helpful to have a set of steps to focus on as a guide.”

During the simulation and after analyzing the videos, researchers took note of observations during the role-plays. It was noted that in the pretest groups many teachers in the experimental and control group spoke from more of a deficit-based approach. Teachers frequently spoke about what they could not make happen for student. For example, When the parent asked about the student attending classes with peers, several students stated that the student couldn’t be fully included in the school day due to behavior concerns and possible disruption of other students. In addition, during the pretest sessions teachers led the parent-teacher conversation and did not frequently ask for parent input. However, after receiving the training, the experimental group allowed parents to lead conversations, asked more questions to keep conversation going, and attempted to gain more input from the parent, while the control group had a meeting that mirrored their pretest.

5.0 Discussion

A team is a group of people who are interdependent with respect to information, resources, knowledge, and skill and who seek to combine their efforts to achieve a common goal (Thompson, 2008). The members who collaborate on an Individualized Education Plan or IEP, for a student with a disability form an IEP team. Families of students with disabilities and teachers often form the nucleus of an IEP team. Too often, teachers are not prepared with the skills necessary to communicate effectively with families which can lead to unnecessary concerns and problems (Mueller, 2009). A teacher's ability to display active listening skills can be viewed as a "first step" in developing collaborative relationships in family-professional partnerships (Coufal, 1993; Todd et al., 2011). The focus of the current study was to examine the effects of an active listening training on pre-service educators' abilities to display active listening behaviors. Two specific questions guided the study. First, what are the effects of an active listening training on teacher's active listening skills from pretest to posttest? Second, what are the effects on communication and collaboration skills from the active listening training reported through participant and parent feedback?

The first research question looked at the effects of the active listening training on the teacher's skills from pretest to posttest. While scoring approximately the same during pretest conditions, the experimental group showed a statistically significant increase in displayed active listening skills during posttest simulations. In addition to statistical significance, teacher gains suggest a clear practical significance displaying almost 70% of the LAFF skills on average. The positive results hold consistent with previous research on the LAFF strategy (McNaughton et al.,

2007; Thistle & McNaughton, 2015; Vostal et al., 2015) and showed statistically significant changes that took place from the pretest to posttest simulations.

Two of the previous studies (Thistle & McNaughton, 2015; Vostal et al., 2015) showed similar gains from pretest to posttest for participants but did not include a control group. McNaughton et al. (2007) included a control group and showed a statistically significant difference between the pretest and posttest scores of the experimental group. Teachers in the experimental group during the current study showed a statistically significant difference between the pretest and posttest scores. Combined with the practical gains and comparisons to the control group, the experimental group during the current study mirrored and superseded participants in previous studies. These increased gains may have resulted from a combination of effective training characteristics and measurement adjustments.

5.1 Effective Training Characteristics

Didactic training, while popular, has moderate outcomes for adults (Lord & Orkwiszewski, 2006). More successful trainings for adults often contain enhanced training methods (Roumell, E.A. (2019). Trainings associated with LAFF often move past a strict one-way presentation of facts and ideas. Interactive discussions between trainer and trainee, modeling of examples/non-examples of active listening and choral responding appear across the LAFF literature base (McNaughton et al., 2007; Thistle & McNaughton, 2015; Vostal et al., 2015) and in the current study. Additional highlighted activities confirmed the usefulness of core concepts and skills such as interactive peer discussions/quizzing, watching and scoring active listening role plays. In combination, the additional skills provide many opportunities to respond as well as numerous

opportunities for feedback. One characteristic in particular may have contributed considerably to the overall positive effects of training, the use of simulations. For families of children with disabilities, meetings with teachers can be emotional. Disagreements can make the meetings even more difficult (Nowell & Salem, 2007). The inability to remain calm can exacerbate the situation. Simulations can play a critical role for teachers learning to adjust to unexpected and difficult situations (Dotgers, 2008). Simulations give individuals realistic practice opportunities to navigate difficult situations safely with feedback and support (Dotgers, 2008). As demonstrated in the current study and within the LAFF literature base (McNaughton et al., 2007; Thistle & McNaughton, 2015; Vostal et al., 2015), simulations play a key role in the active listening training. Teachers had multiple opportunities to witness examples and nonexamples of active listening behaviors as well as actively scoring those simulations. Immediately moving to active simulations via role-play further allowed practice and feedback. As with other fields such as medicine practicing simulated scenarios in a controlled and safe environment promotes positive gains and reduces the risk during actual implementation (Amsalem, Gotheif, Soul, Dorman, Ziv, & Gross, 2020).

5.2 Measurement of LAFF

In order to teach complex behaviors, clear and concise steps promote learning (Cooper et al., 2007). The LAFF method refers to many different skills that occur in a loose order. Previous versions of LAFF contained 17 (Vostal et al., 2015) and 20 (McNaughton et al., 2008; Thistle & McNaughton, 2015) behaviors/steps. The LAFF model was expanded to include 30 observable and measurable steps. For interventions to be successful they must be implemented as intended

(Dusenbery, Branigan, Falco, & Hansen, 2003). If an intervention and/or program lacks quality implementation the chances for positive outcomes are drastically reduced (Vroom, Massey, Yampolskaya, & Levin, 2019). To determine if an intervention has been implemented with fidelity, data must be recorded to reflect the accurate completion of steps. Dunst (2017) discusses the use of evidence-informed performance checklists which can serve as a visual reminder or cognitive tool to help practitioners implement interventions with fidelity. Performance checklists can provide permanent products that serve as a self-assessment, a data collection tool, and a benchmark to determine if actual performance was equivalent with expected performance (Gawande, 2009; Wilson, 2013).

It was noted that the most frequently missed step by teachers was asking a third open-ended question. Further review of the video simulation suggested it may have been possible for students to have received sufficient information through asking two open-ended questions during the simulations. Students automatically missed six points by not asking the third open-ended question. The requirement of the third question on the updated operationalized checklist may have unintentionally deflated the results. If the tool had required only two open-ended questions, all participants in the control group would have would have obtained 85% or more of protocol steps. However, even with the large number of points missed from the requirement of the third question, teachers still had statistically significant improvements.

Even with the stringent requirements, the more detailed version of LAFF may have prompted the strong gains noted in the current study across multiple aspects. First, clear specific steps made instruction more succinct for teachers in the experimental group. Second, the trainer and peers could provide specific feedback during simulations based on the observable steps. Third, teachers could refer to the steps as a reminder prompt to display specific skills. Fourth, the list of

skills provided a clear outline for discussion and self-reflection following demonstrations and a gauge for how communication could be more effective in future conversations.

5.3 Social Validity

Parents and/or guardians serve as integral tie between their children and the educational team (El Nokali et al., 2010). Successful interactions between team members facilitate stronger group outcomes (Mueller, 2009). The ability to actively listen can help foster those conclusions. Teachers in the current study felt better prepared to interact with parents. Similarly, Vostal et al., (2015) found that participants felt more confident in their abilities to communicate with family members. The confidence may have resulted from the repetition gained through the training, including the use of the same practice scenario and the expansion of the operationalized measurement of target skills. Students focused on specific skills and reviewed completed or missed steps on their individual checklist, allowing for self-assessment in addition to receiving feedback from others.

Impressions of teacher behavior did not solely rely on checklist scoring. In addition to teacher feedback, parents of students with disabilities provided additional insight that supported the benefits of the LAFF protocol. Observations from parents who participated clearly speak to the viability of the current study's training. As with previous research (i.e., Thistle & McNaughton, 2015), parents noticed and preferred active listening behaviors. The noticeable difference parents found between trained and untrained teachers may mirror actual parents' reactions to active listening behaviors. Parents want to feel heard and valued when it comes to the well-being and future of their child (Valle & Aponte, 2002). By taking the time to be openminded,

listening to concerns, and asking questions out of true desire to help a student and their family, teachers can foster the development of a trusting reciprocal relationship (McNaughton & Vostal, 2010). Every family has their own set of strengths, struggles, beliefs and way of living that may or may not be consistent with our lives or way of living. With that being said, educators must meet families where they are and help them to get to where they want to be, not where we want them to be (Kearney, Kelsey, & Sinkfield, 2014). Parents want to feel respect, trust, and commitment from their child's teacher and educational team (Blue-Banning et al., 2004).

5.4 Limitations

The study had a small sample size from one university course in special education. In addition, while all of the students were enrolled in the course, they were not necessarily from a special education teacher-education program. While it is beneficial for all professional fields need to maintain strong partnerships with families, it would be ideal to examine the effects of a training solely with preservice special education teachers. Second, the new LAFF tool developed for this study was not independently verified and validated. Because of this, the new requirements for the LAFF tool may have unintentionally deflated the overall results of the experimental group. Third, parents who participated in the study to provide feedback were not diverse. Ages, education and community type varied however, 80% were white woman and all family members were female. Diversity of family members should be considered

5.5 Implications for Practitioners

Results from this research support past studies that found the use of LAFF training as effective and useful in practice. Training in communication strategies such as the LAFF method will provide support to teachers who often don't feel they have the tools and/or training to effectively communicate with families (Bezdek et al., 2010). These results suggest that a training over one class period may improve teacher communication skills. With the minimal time and resources needed, college courses could quickly and easily include coursework on active listening and effective communication without altering an entire course syllabus.

In addition to college coursework, school districts could easily implement active listening training during in-service teacher trainings. This would train teachers who did not receive training through college coursework and offer refreshers to those who may have prior experience. This could improve family professional partnerships, but also has the potential to improve communication across teams in general.

5.6 Future Directions for Research

Future studies should continue to focus on the LAFF method as well as the strengths that parents identified as important in the study videos. For example, 75% or more of family members stated discussed paraphrasing, asking open ended questions (e.g., asking about the student's feelings and experiences on the subject matter, asking for parental input on experience at home), and scheduling next steps as traits that they felt exhibited effective communication skills. These skills identified were all targeted in the LAFF training, however they may be areas that should be

highly focused on during instruction. An in-depth look into the specific skills or traits that parents find effective may help determine if specific skills should be prioritized over others when teaching communication skills.

Researchers should also consider utilizing the LAFF training in a variety of settings including real-life scenarios with families. The target of high stakes meetings such as IEP meetings. IEP meetings occur regularly throughout the year and provide the ideal time for team collaboration. The focus on collaboration of teams where a student displays problem behavior would also provide valuable insight. Active listening techniques may be highly impactful in cases where there is a history of issues/disagreements between home and school and when behavioral issues are present. Behavior issues in schools can be extremely difficult for both families and educators, have been linked to stress for all involved, and may increase communication difficulties (Schieve, Blumberg, Rice, Visser, & Boyle, 2007).

Teachers also frequently site other teachers as barriers to implementing accommodations and modifications that are required by a student's IEP (Bezdek et. al, 2010). These implementation barriers, can also lead to frustration of family members, which could lead to a cycle of frustration and difficult communication. Researchers should also explore the effects of utilizing the LAFF training in communication with multidisciplinary teams, such as teacher to teacher, or teacher to administration, in order to provide tools to effectively work through these challenges.

5.7 Conclusions

When family members feel welcome and a part of the education team they are generally able to participate more meaningfully in the education of their child (Kratowill et. al, 2003).

Additionally, parents who have a positive perception of their own efficacy tend to demonstrate higher levels of involvement (Kratochwill et al., 2003). Teachers often find themselves going into parent meetings without training on the best practices in communication with families. Active listening can be viewed as a “first step” in learning these best practices to develop collaborative relationships (Coufal, 1993; Todd et al., 2011). Throughout the simulations, students demonstrated observable changes in their active listening behaviors, such incorporating rapport building statements, asking open-ended questions, taking notes, clarifying concerns, and using body language that demonstrates listening. By building on what was learned in the prior studies we furthered the past experimental designs and analyzed data using a parametric analysis, showing statistically significant effects. These results demonstrate that trainings to improve communication, such as active listening can be taught in an efficient and systematic manner and can be easily integrated as part of a college curriculum. After participation in this study, pre-service educators developed an understanding of active listening, the benefits of active listening, and have strategies in hand to immediately start to build effective relationships.

Appendix A Summary of findings

Study #	Author	Research Question/ Purpose	Methods	Dependent Variable	Independent Variable	Participants	Study Outcome
1	Davidson, J. A., & Versluys, M. (1999).	Evaluate the effects of short periods of training in cooperation and problem solving	2x2 factorial group design	outcome measures of 5 skills - one being active listening - video-recorded for analysis	1-hour active listening (AL) training or 2-hour training over 2 days depending on group, Cooperation training including AL (Conflict Resolution Network, 1990; Egan, 1990) Training package: defining problem, Brainstorming creative options, combining options for a win-win solution	80 participants - first year psychology students 64 women, 16 men	Training in each component significantly improved success on the outcome measure, raised scores on the related process measures, and generalized to at least some of the other process measures. The only exception was brainstorming, where training was successful only in the group that also received cooperation training.
2	Kearney, W. S., Kelsey, C., & Sinkfield, C. (2014).	Can emotionally intelligent leadership skills be taught to aspiring principals? Are targeted interventions proposed by Nelson and Low (2011) successful at improving the level of emotional intelligence?	pretest/posttest, control group	Emotional intelligence scores based on the Emotional skills assessment process	Training over 11-week course, 5 step listening intervention that targets increasing emotionally intelligent leadership skills (Nelson & Low, 2011) role play, reflection, repeat	Spring 2011, 14 females and 3 males, spring 2012, 12 females and 2 males in principal prep program (n=31)	The results of these analyses indicate that the interventions employed for social awareness and time management resulted in a statistically significant gain for students who received the intervention as compared with those in the control group. Implications are discussed.

Study #	Author	Research Question/ Purpose	Methods	Dependent Variable	Independent Variable	Participants	Study Outcome
3	Lisper, H., & Rautalinko, E. (1996).	To compare modes of training AL and their effect on a help seeker in a mock help-seeking session.	quasi-experimental	Different Modes of training by analyzing audio tape transcription from counseling sessions.	AL Training: 22-page reading about AL, supervised role-play and written exercises (reflection), videos of counseling sessions demonstrating AL responses, experimental group met 3 x – 2-hour sessions, control group 1x- 2-hour session	N=12, 5 males, 7 females of sociology and theology from 20-40	The result was that role-play participants used AL more than the control participants did.
4	Mansfield, F. (1989)	To determine: (1) Was the emotional problem behind the physical one and discussed by the ‘doctor’? (2) Was the patient listened to with appropriate understanding of the skills of AL? (3) Did the patient leave with a management plan?	Pretest - posttest	Videos of medical student’s skills with patients before and after training for analysis.	AL training over five weeks: small group teaching, role plays in class and role playing on video, video-feedback with instructors.	64 4th-year medical students interviewing pseudo patients	The results show that considerable learning was achieved in the short time available (two mornings). The results for question 2 showed that the ‘before teaching’ skills were higher than for the other questions.
5	McNaughton, D., Hamlin, D., McCarthy, J., Head-Reeves, D., & Schreiner, M. (2007).	Did the instruction on active listening have an effect on preservice special education teachers AL skills, from pretest to posttest?	Pretest-posttest, control group	AL strategy use was assessed by rubric of four 5-point scales Audio-taped interview	Training on active listening including Four Step AL Strategy. Pre-Test, model strategy, verbal practice, practice with materials (role-play), generalization training. LAFF Strategy (230 minutes), video role-play	10 undergraduate teacher candidates, 8 female, 2 male - split into experimental and control groups.	Instruction resulted in statistically significant improvement for targeted AL skills

Study #	Author	Research Question/ Purpose	Methods	Dependent Variable	Independent Variable	Participants	Study Outcome
6	Pedrini, D. T., Pedrini, B.C., Egnoski, E.J, Heater, J.D., & Neslon, M.D., (1976)	What are the effects of TET on AL and I messages measured by written answers to questions	Pretest posttest	Pre-Test, post Test, written exercises	Teacher Effectiveness Training – 10-week period	20 teachers, 16 women, 4 men	significant differences in pre/post testing, no difference between post and follow-up
7	Thistle, J. J., & McNaughton, D. (2015)	Examined effect of instruction of an AL strategy on communication skills of pre-service speech-language pathologists	Pretest, posttest	Pre and post instruction of AL was video-recorded scored and compared	AL Training - LAFF Model Instruction in the active listening AL strategy single 90-minute session integrated into the students' clinical methods colloquium., description, model, rehearsal, role-play.	26 graduate students, SLP Program, all female, age 22-28	Suggests evidence of the effectiveness of strategy instruction in AL skills that may be incorporated into SLP preparation programs.
8	Vostal, McNaughton, Benedek-Wood, & Hoffman, (2015)	Did participants demonstrate differences in active listening skills after LAFF instruction, as observed during simulations of collaboration?	Pretest posttest	Pre-test, advanced practice and post-test were video recorded for analysis	AL training – LAFF Model, two class periods (150 minutes) using video-recorded simulations during pre-test, advanced practice, and post-test (10 min. each in length)	31 pre-service special education teachers, 29 female, 2 male	Participants learned to make use of the active listening communication skills and that the use of the active listening skills was valued by both the pre-service teachers and by practicing general education teachers who observed pre- and pos-instruction videos of the study participants.

Appendix B Essential Quality Indicators

Quality Indicator	1	2	3	4	5	6	7	8
Quality Indicators for Implementation of the Intervention and Description of Comparison Conditions:								
- Was the intervention clearly described and specified?	X	X	X	-	X	-	X	X
- Was the fidelity of implementation described and assessed?	-	-	-	-	-	-	-	-
- Was the nature of services provided in comparison conditions described?	X	X	X	X	X	X	X	X
Quality Indicators for Outcome Measures								
- Were multiple measures used to provide an appropriate balance between measures closely aligned with the intervention and measures of generalized performance?	X	X	X	-	-	-	X	X
- Were outcomes for capturing the intervention's effect measured at the appropriate times?	X	X	X	X	X	X	X	X

IRB Approval Letter

University of Pittsburgh
Institutional Review Board

Human Research Protection Office
 3500 Fifth Avenue, Suite 106
 Pittsburgh, PA 15213
 Tel (412) 383-1480
www.hrpo.pitt.edu

APPROVAL OF SUBMISSION (Expedited)

Date:	February 3, 2020
IRB:	STUDY19110219
PI:	Sarah Westerfield
Title:	Enhancing Communication to Create Effective Family-Professional Partnerships
Funding:	None
Grant Title:	<Indicate "None" if there is none.>

The Institutional Review Board reviewed and approved the above referenced study. The study may begin as outlined in the University of Pittsburgh approved application and documents.

Approval Documentation

Review type:	Initial Study
Approval Date:	2/3/2020
Expiration Date:	

Determinations:	<ul style="list-style-type: none"> • Students / Employees
Approved Documents:	<ul style="list-style-type: none"> • Classroom Practice Scenario , Category: Data Collection; • Parent Demographic Questionnaire , Category: Data Collection; • Student Demographic Questionnaire , Category: Data Collection; • LAFF Target Checklist , Category: Data Collection; • Flowchart, Category: Data Collection; • Operational Definitions , Category: Data Collection; • Scenario 1, Category: Data Collection; • Scenario 2, Category: Data Collection; • Social Validity Questionnaire , Category: Data Collection; • Parent SV questionnaire , Category: Data Collection; • Letter of Permission , Category: Other; • Parent Consent , Category: Consent Form; • Parent recruitment flier , Category: Recruitment Materials; • Preservice Teacher Recruitment Flier , Category: Recruitment Materials; • Student consent , Category: Consent Form;

As the Principal Investigator, you are responsible for the conduct of the research and to ensure accurate documentation, protocol compliance, reporting of possibly study-related adverse events and unanticipated problems involving risk to participants or others. The HRPO Reportable Events policy, Chapter 17, is available at <http://www.hrpo.pitt.edu/>.

University of Pittsburgh
Institutional Review Board

Human Research Protection Office
3500 Fifth Avenue, Suite 108
Pittsburgh, PA 15213
Tel (412) 383-1480
www.hrpo.pitt.edu

Continuing review (CR) can be submitted by clicking "Create Modification/CR" from the active study at least 5 weeks prior to the expiration date.

Clinical research being conducted in an UPMC facility cannot begin until fiscal approval is received from the UPMC Office of Sponsored Programs and Research Support (OSPARS).

If you have any questions, please contact the University of Pittsburgh IRB Coordinator, [Emily Bird](#).

Please take a moment to complete our [Satisfaction Survey](#) as we appreciate your feedback.

Appendix C LAFF Target Skills Checklist

Data will be collected on a four-step learning strategy, LAFF, modified from original LAFF sequences. LAFF represents 1) Listen, empathize, and communicate respect; 2) Ask questions, ask permission to take notes; 3) Focus on the issues; and 4) Find a first step (McNaughton & Vostal, 2010;) Each step will be broken down into a checklist of behaviors and the researcher will record the occurrence or non-occurrence of each step.

Step 1: Listen, empathize, and communicate respect (aka Greeting Sequence)	
Makes initial eye contact	
Thanks the conversational partner for meeting	
Incorporates a rapport building statement	
Total Points	/ 3

Step 2: Ask questions (aka Question Sequence)			
Transition to topic of meeting and ask permission to take notes.			
Ask open ended question in regard to the meeting topic/topic of concern			
Makes eye contact while asking question			
Takes notes			
Uses appropriate body language that demonstrates listening			
Wait at least a count of one before response to parent comments			
Speaker does not disclose opinion on the conversational partner's discussion points			
Total			/19

Step 3: Focus on the issues (aka Review Sequence)	
Summarizes concerns	
Makes eye contact while summarizing concerns	

Asks for any additions or clarifications	
Makes eye contact while asking for additions or clarifications	
Total	/4

Step 4: Find a first step	
Determines a follow-up activity	
Schedules next discussion, who and when	
Thank conversational partner for time	
Makes eye contact while thanking conversational partner for time	
Total	/4

Step 1: ____ /3 Step 2: ____ /19 Step3:____ /4 Step4:____ /4. Total = ____ /30

% ____ correct

Notes:

Appendix D Operational Definitions of Active Listening Steps

Active Listening Step	Definition
Teacher will face parent for 90% of the conversation	Teacher faces parent with front of bodies directly toward or angled toward one another (Time teacher not facing parent will be timed and the percentage will be computed).
Teacher will make eye contact(for at least 3 seconds) and thank the conversational partner for meeting	Teacher thanks parent for taking the time to meet within one minute of meeting, while making eye contact
Incorporate a rapport building statement	Teacher makes a positive statement that will establish rapport/build trust. Examples include: Discussing shared experiences, such something you like about the student, something going on in the community, something you know about the family from the past (e.g., vacation, birthday, etc.,)
Ask open ended questions (for at least 3 and will make eye contact while asking these questions)	Teacher asks questions that do not have a yes or no answer. Examples include: Could say more about....? What can I do to help? What do you think is the best way to handle this situation? Eye contact will be made while asking these questions.
Ask permission to take notes Take notes	Teacher asks parent if it is okay to take notes Teacher takes specific notes on parent's questions and concerns
Use appropriate body language that demonstrates listening	Teacher utilizes body language that demonstrates he or she is hearing what is being said. For example, leaning in, nodding head, brief verbal affirmations such as mmm hmmm, sure, or I understand
Effective pauses	

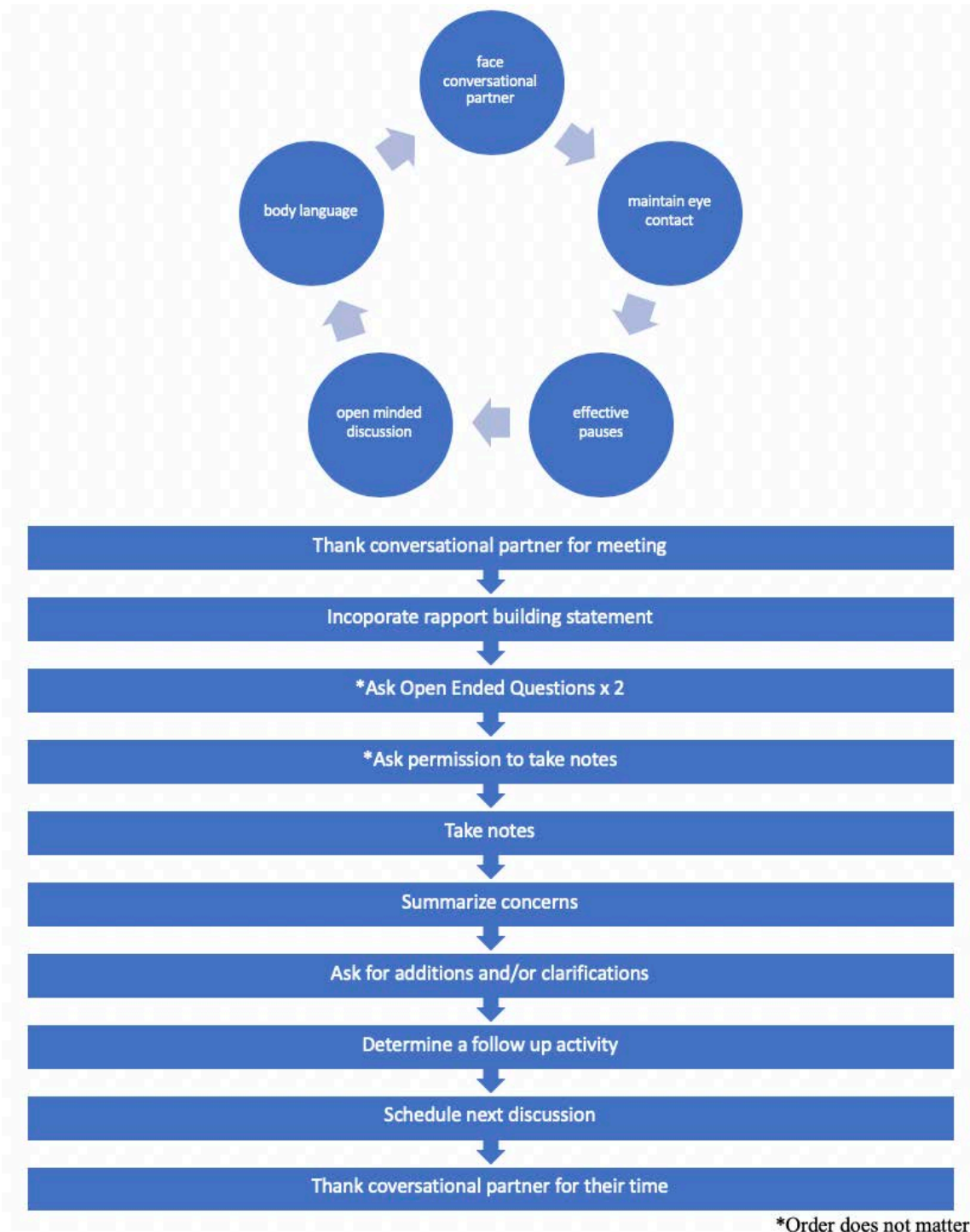
Appendix E Operational Definitions of Active Listening Steps, continued

Active listening step	Definition
Speaker does not disclose opinion on the conversational partner’s discussion points	Teacher asks more in-depth questions as opposed to giving feedback. For example. “Can you expand on that idea for me?”, “Would it be accurate to say...?”
Summarize concerns	Teacher paraphrases what the parent stated based on notes that were discussed
After reviewing participants asks for any additions or clarifications, (while making eye contact for at least 3 second)	Teacher clarifies that the summary stated are the concerns of the parent and asks if there are any additional concerns that were missed
Determine a follow-up activity	Teacher determines the next steps. For example, “I will talk with the special education director to about to determine if that summer camp is an option for extended school year.”
Ask conversational partner if they have any other concerns or anything else they would like to discuss, (while making eye contact for at least 3 seconds)	Teacher ask the parent if there are any other questions or concerns
Schedule next discussion, who and when	Teacher schedules the next mode of contact. For example, will next contact be via email or phone, who will be contacting, and when it will happen
Thank conversational partner for their time, while making eye contact (for at least 3 seconds)	Teacher thanks the parent for taking the time to meet

Appendix F Active Listening Training Outline

-
- **Discussion Active Listening**
 - **Choral rehearsal of LAFF steps**
 - **Video observations/Modeling (video of a not great parent meeting and video of a good meeting, interactive review**
 - **Utilizing checklists**
 - **Class Discussion**
 - **Break 10 min**
 - **Form groups of 2, one person will be teacher, one parent, collect data based on the sheet that reviews the steps of the raining. Run 5 min meetings, debrief session students will rotate roles throughout the training.**
 - **Feedback/Group Discussion/ Class Discussion**
-

Appendix G Active Listening Flowchart – Training Handout



Appendix H In-Class Special Education Classroom Practice Scenario

Parent: You are Mrs. Miller, the stay-home mother of a 5th grade boy Jake, who has a diagnosis of high-functioning autism. Jake is your oldest child of three. Jake has transitioned into middle school and it is October the first month into the school year. Jake has accommodations and specially designed instruction in place for academics and behavior. For example, at least one time per week Jake is to be roleplaying stressful situations that may arise (e.g., schedule changes, losing a game, not getting to be first in line). The goal for this is for him to be able to handle things not going his way in the classroom. When you ask Jake about these role play situations he tells you they are not happening. In addition, when you ask Jake if he is going to a different room for accommodations or being provided with daily schedule, he is unaware of what you are talking about. You have been a strong advocate for him but are tired and burned out from explaining year after year that Jake's plan isn't being followed. You feel that his classroom teacher is not following the IEP and have scheduled a meeting with the special education teacher to see why his needs are not being met in the classroom.

Teacher: You are Mrs./Mr. Harris, the 5th grade special education teacher at Pointer Middle School. Jake Miller, a 5th grade student with high-functioning autism, is on your roster and it is his first year at middle school. You received an email from his mother Mrs. Miller, and she would like to meet with you in person. She has reported she is concerned because she doesn't think that Jake is receiving accommodations and modifications that he should in his IEP. You feel that it is only a month into the school year and that things are starting to come together. The students don't always get every accommodation and modification right from the get-go, as everyone is adjusting to a new building, new schedules, etc. You have a full caseload of students, some are much more intense than Jake and have required a lot of your attention. In addition, Jake's homeroom teacher is not very understanding. You have worked with him frequently in the past. He is older, set in his ways, and feels that students should all be held to the same standard regardless of needs. He has stated to you in private that if students can't get by in the classroom like the other kids, then they should be in a special education classroom

Appendix I Special Education Scenario 1: Jonathan

Parent Info:

You are Mrs. Walker, the mother of third-grader, Jonathan Walker. Johnathan has a diagnosis of autism. He is highly verbal and an extremely strong memory. He even started reading early. His evaluation report shows he has a low average IQ and he is not keeping up with his peers academically. He currently goes to the learning support classroom for reading and math instruction and has been making some progress. In addition, Jonathan has some behaviors that impede his learning, and that of others in the classroom. For example, he often walks around in class and makes loud humming noises that distract the students. You just went to an autism conference and after listening to all of the experts giving presentations, you feel it would be much more beneficial for Jonathan to be in the regular education classroom for the entire day. Based on the research you heard about you feel Jonathan's ability to function in the classroom with his typically developing peers is more important. You are now set on Jonathan being with his peers 100% of the day.

Opening Line: "After going to the autism conference and learning more about the benefits of inclusion, I am really concerned about him being pulled out for math and reading. I want him to be with his typically developing peers for the entire school day."

Possible answers to questions:

- "From what I have learned it is extremely important for him to be included with his peers."
- "I have a really good friend whose son has autism, and he is included for 100% of the day in his classroom."
- "I'm not sure academics is the most important focus."

Prompt:

"I'm unclear as to why you cannot provide all of his supports in the classroom?"

If the teacher does not ask a question for FIVE seconds: I am just really frustrated knowing he should be with his peers and he is not."

If the teacher offers to "take care of it":

"If you think that is our best option/if you are willing to do that, we'll give it a try." (Be prepared to end the conversation here.)

Teacher Info:

Option 1: You are a third-grade special education teacher in a learning support classroom. Jonathan is a student identified with autism who is on your caseload. He currently receives supplemental support and receives a direct instruction reading and math program in your classroom. He currently does not have grade level academic skills. In addition, he has some behavioral issues which affect his learning and the others in the class. For example, Jonathan often gets out of his seat to walk around the classroom and he often makes loud humming noises that distract other students. His mother, Mrs. Walker, has emailed you to set up a meeting.

Option 2: You are a third-grade special education teacher in a learning support classroom. Jonathan is a student identified with autism who is on your caseload. He currently receives

supplemental support and receives a direct instruction reading and math program in your classroom. He currently does not have grade level academic skills. In addition, he has some behavioral issues which affect his learning and the others in the class. For example, Jonathan often gets out of his seat to walk around the classroom and he often makes loud humming noises that distracts other students. His mother, Mrs. Walker, has emailed you to set up a meeting. She has just attended a special education workshop and would like to talk with you about Jonathan receiving all of his academic instruction in the regular education classroom. – Extra info

Appendix J Special Education Scenario 2: Megan

Parent Info:

You are Mrs. Renshaw, the mother of third-grader, Megan Renshaw. Megan has a diagnosis of autism. She is highly verbal and an extremely strong memory. Her evaluation report shows she has a low average IQ and she is not keeping up with her peers academically. She currently goes to the learning support classroom for reading and math instruction and has been making some progress. In addition, Megan has some behaviors that impede her learning, and that of others in the classroom. For example, she talks out during instruction and melts down during transitions. This can be distracting for students. You just had lunch with your support group of other mom of children with autism, and their son's/daughters are regular education classroom for the entire day and have very similar needs.. Based on your talk with them and websites they showed you, you now want to push for him to be with his peers 100% of the day.

Opening Line:

“After meeting with my autism support group and talking with the other parents, I realized their children, who have very similar needs to Megan are included with their peers for the entire school day. This is something I really want for Megan now that I know it is possible.”

Possible answers to questions:

- “From what I have learned it is extremely important for him to be included with his peers.”
- “I have a really good friend who is a special education teacher and she agrees it is possible for Megan to be in the regular education classroom for the entire day.”
- “I’m not sure academics is the most important focus.”

Prompt:

“I’m unclear as to why you cannot provide all of his supports in the classroom?”

If the teacher does not ask a question for FIVE seconds: I am just really frustrated knowing he should be with his peers and he is not.”

If the teacher offers to “take care of it”:

“If you think that is our best option/if you are willing to do that, we’ll give it a try.” (Be prepared to end the conversation here.)

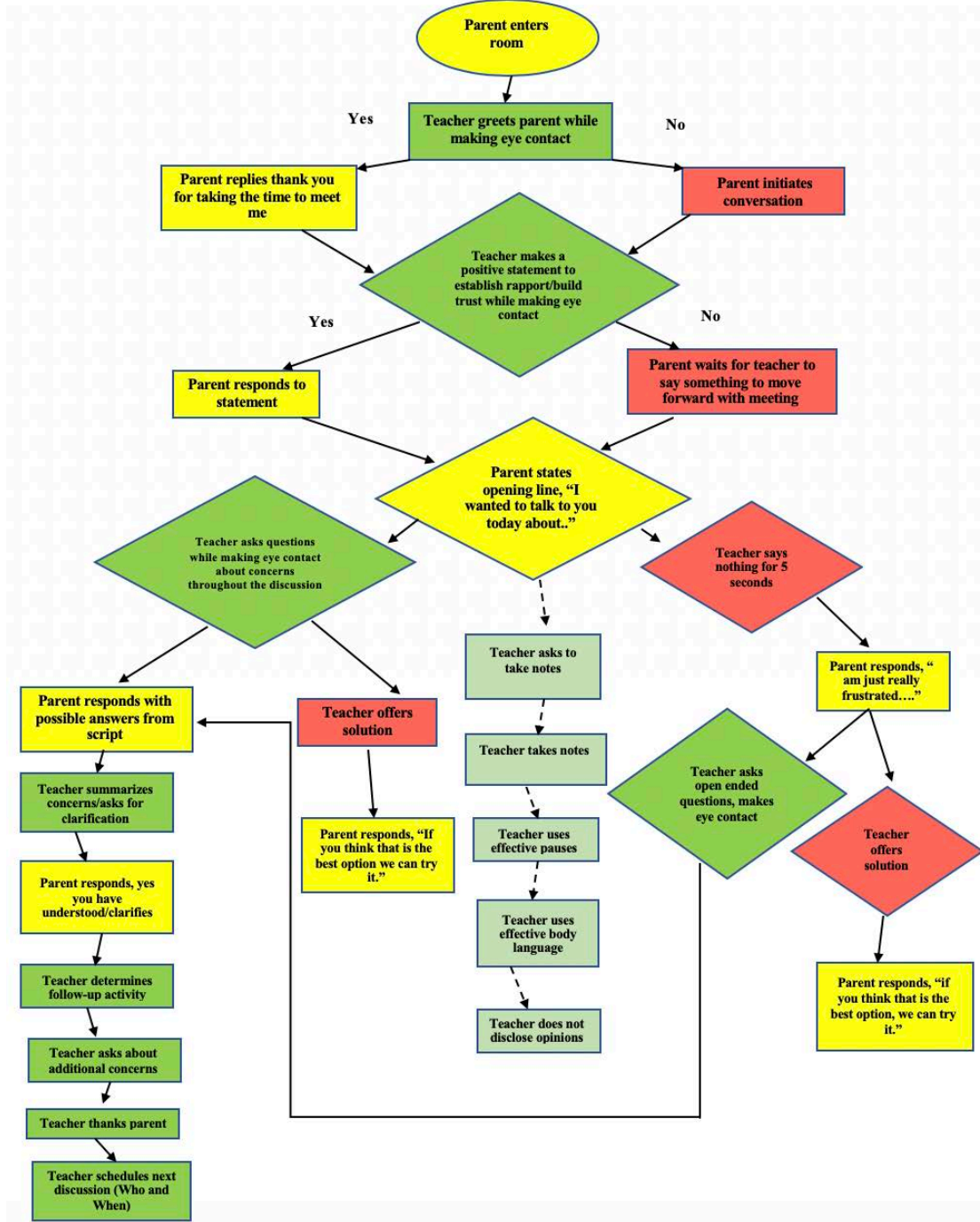
Teacher Info:

Option 1: You are a third-grade special education teacher in a learning support classroom. Megan is a student identified with autism who is on your caseload. She currently receives supplemental support and receives a direct instruction reading and math program in your classroom. She currently does not have grade level academic skills. In addition, she has some behavioral issues which affect his learning and the others in the class. For example, Megan occasionally talks out during instruction and she also has a really hard time with transitions, typically resulting in meltdowns. Her mother, Mrs. Renshaw, has emailed you to set up a meeting.

Option 2: . Option 1: You are a third-grade special education teacher in a learning support classroom. Megan is a student identified with autism who is on your caseload. She currently

receives supplemental support and receives a direct instruction reading and math program in your classroom. She currently does not have grade level academic skills. In addition, she has some behavioral issues which affect his learning and the others in the class. For example, Megan occasionally talks out during instruction and she also has a really hard time with transitions, typically resulting in meltdowns. Her mother, Mrs. Renshaw, has emailed you to set up a meeting. – Extra info: Mrs. Renshaw has just met with her autism support group and many of the other parents reported that their child receives all of their support in the regular education classroom. This is something she wants to explore with Megan.

Appendix K Procedural Fidelity Teacher Flowchart



Bibliography

- Amsalem D, Gothelf D, Soul O, Dorman A, Ziv A and Gross R (2020). Single-Day Simulation-Based Training Improves Communication and Psychiatric Skills of Medical Students. *Frontiers in Psychiatry* 11, 1-6. doi: 10.3389/fpsy.2020.00221
- Bachmann, C., Barzel, A., Roschlaub, S., Ehrhardt, M., & Scherer, M. (2012). Can a brief two-hour interdisciplinary communication skills training be successful in undergraduate medical education? *Patient Education and Counseling*, 93(2), 298-305.
- Bezdek, J., Summers, J.A., & Turnbull, A. (2010). Professionals' attitudes on partnering with families of children and youth with disabilities. *Education and Training in Autism and Developmental Disabilities*, 45(3), 356-365.
- Blue-Banning, M., Summers, J.A., Frankland, H.C., Lord Nelson, L., & Beegle, G. (2004). Dimensions of family professional partnerships: Constructive guidelines for collaboration. *Council for Exceptional Children*, 70 (2), 167-184.
- Borg, W. R. & Gall, M. D. (1989). Educational research. New York: Longman.
- Coufal, K.L. (1993). Collaborative consultations for speech-language pathologists. *Topic in Language Disorders*, 14, 1-14.
- Conflict Resolution Network. (1990). *Conflict resolution trainers' manual: 8 sessions*(7th ed.). Chatswood, Sydney, Australia: Author.
- Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). Applied behavior analysis(2nd ed.). Columbus, OH: Merrill Prentice Hall.
- Davidson, J. A., & Versluys, M. (1999). Effects of brief training in cooperation and problem solving on success in conflict resolution. Peace and Conflict: *Journal of Peace Psychology*, 5(2), 137-148.
- Dinnebeil, L.A. & Rule, S. (1996). A qualitative analysis of parents' and service coordinators' descriptions of variables that influence collaborative relationships. *Topics in Early Childhood Special Education*, 16 (3).
- Dotger, B., & Alger, A. (2012). Challenging parent, challenged curricula: Utilizing simulated interactions to enhance school leadership preparation. *Planning and Changing*, 43(3), 344-362.
- Dotger, B.H., Harris, S. & Hansel, A. (2008) Emerging authenticity: the crafting of simulated parent–teacher candidate conferences, *Teaching Education*, 19:4, 337-349

- Vroom, E.B., Massey, O.T., Yampolskaya, S., & Levin, B.L.(2020). The Impact of Implementation Fidelity on Student Outcomes in the Life Skills Training Program. *School Mental Health, 12*(1), 113-123.
- Egan, G. (1990). *The skilled helper* (4th ed.). Monterey, CA: Brookes Cole.
- El Nokali, N. E., Bachman, H. J., & Votruba-Drzal, E. (2010). Parent involvement and children's academic and social development in elementary school. *Child Development, 81*, 988-1005.
- Fylling, I., & Sandvin, J.T. (1999). The role of parents in special education: The notion of partnership revised. *European Journal of Special Needs Education, 14*, 144-157.
- Garbacz, S. A., & McIntyre, L. L. (2016). Conjoint behavioral consultation for children with autism spectrum disorder. *School Psychology Quarterly, 31*(4), 450-466.
- Gast, D.L, & Ledford, J.R. (2014). Single case research methodology: Applications in special education and behavioral sciences, (2nd ed.).
- Gawande, A. (2009). *The checklist manifesto: How to get things right*. New York: Metropolitan Books.
- Gersten, R., Fuchs, L.S., Compton, D., Coyne, M., Greenwood, C., & Innocenti, M. S.(2005). Quality Indicators for Group Experimental and Quasi-Experimental Research in Special Education. *Exceptional Children, 71*(2).
- Glass, G.V., & Hopkins, K.D. (2008). *Statistical methods in education and psychology* (3rd ed). Boston: Allyn & Bacon.
- Gresham, F.M., Dart, E.H., & Collins, T.A. (2017). Generalizability of Multiple Measures of Treatment Integrity: Comparisons among Direct Observation, Permanent Products, and Self-Report. *School Psychology Review, 46*(1), 108-121.
- Gordon, T. (1975). *P.E.T. Parent Effectiveness Training*. New York: Peter H. Wyden.
- Gordon, T. (2003) *Teacher Effectiveness Training* . New York: Three Rivers Press.
- Gresham, F. M., MacMillan, D. L., Beebe-Frankenberger, M. E., & Bocian, K. M. (2000). Treatment integrity in learning disabilities intervention research: Do we really know how treatments are implemented? *Learning Disabilities Research & Practice, 15*, 198–205.
- Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2004)
- Johnson, J.A., & Kopp, K.C., (1996). Effectiveness of standardized patient instruction. *Dental Education, 60*, 262-266.
- Kalyanpur, M. & Harry, B., (1999). *Culture in special education: Building a posture of reciprocity in parent-professional relationships*. Baltimore, MD: Brookes.

- Katz, L. & Bauch, J.P., (1999). The Peabody Family Involvement Initiative: Preparing preservice teachers for family/school collaboration. *The School Community Journal*, 9(1), 49-69.
- Kearney, W. S., Kelsey, C., & Sinkfield, C. (2014). Emotionally intelligent leadership: An analysis of targeted interventions for aspiring school leaders in Texas. *Planning and Changing*, 45(1), 31–47.
- Kratochwill, T. R., Elliott, S. N., Loitz, P. A., Sladeczek, I., & Carlson, J. S. (2003). Conjoint consultation using self-administered manual and videotape parent-teacher training: Effects on children's behavioral difficulties. *School Psychology Quarterly*, 18(3), 269-302. doi:http://dx.doi.org.pitt.idm.oclc.org/10.1521/scpq.18.3.269.22574
- Lane, C., & Rollnik, S. (2007). The use of simulated patients and role-play in communication skills training: A review of the literature to August 2005. *Patient Education and Counseling*, 67,13-20.
- Lindh, G., & Lisper, H.O. (1990). *Samtal for forandring*. Lund: Studentlitteratur.
- Lisper, H., & Rautalinko, E. (1996). Effects of a six-hour training of active listening. *Scandinavian Journal of Behaviour Therapy*, 25(3-4), 117-125.
- Lord, T., & Terri Orkwiszewski. (2006). Moving from Didactic to Inquiry-Based Instruction in a Science Laboratory. *The American Biology Teacher*, 68(6), 342-345. doi:10.2307/4452009
- Makel, M.C., Plucker, J.A., Freemman, J., Lombardi, A., Simonsen, B., & Coyne, M.(2016). Replication of special education research: Necessary but far too rare. *Remedial and Special Education*, 37(4), 205-212.
- Mandall, C.J., & Murray, M. M. (2009). Administrators' understanding and use of family-centered practices. *Journal of Early Intervention*, 31(1), 17-37.
- Mansfield, F. (1989). An introduction to the consultation: a brief teaching method and its evaluation. *Medical teacher*, 11(2), 225-227.
- Mautone, J., Marcelle, E., Tresco, K. E., & Power, T. J. (2015). Assessing the quality of parent-teacher relationships for students with ADHD. *Psychology in the Schools*, 52, 196-207.
- Maxwell, D.L., & Satake, E. (2006). *Research and statistical methods in communication science and disorders*. Boston, MA: Thompson/Delmar Learning.
- McNaughton, D., Hamlin, D., McCarthy, J., Head-Reeves, D., & Schreiner, M. (2007). Learning to listen: Teaching an active listening strategy to preservice education professionals. *Topics in Early Childhood Special Education*, 27(4), 223–231.
- Moral, R.R., Salvador, J.J.R, de Torres, L.P., & Castillejo, J.A.P. (2003). Effectiveness of a clinical interviewing training program based on applications of behavioral theory and practice residents: A randomized control trial. *Family Medicine*, 35, (489-495).

- Mueller, T.G. (2009). Alternative dispute resolution: A new agenda for special education policy. *Journal of Disability Policy Studies*, 20, 4-13.
- Nelson D.B., & Low, G.R. (2011). *Emotional Intelligence* (2nd ed.). Boston: Prentice Hall.
- Nowell, B. L., & Salem, D. A. (2007). The impact of special education mediation on parent-school relationships. *Remedial and Special Education*, 28(5), 304-315.
- Papadakis, M.A., Croughan-Minihane, M., Fromm, L.J., Wilkie, H.A., & Ernster, V.L. (1997). A comparison of two methods to teach smoking-cessation techniques to medical students. *Acad Med*, 72, 725-727.
- Pedrini, D. T., Pedrini, B.C., Egnoski, E.J, Heater, J.D., & Neslon, M.D.(1976). Pre-, post- and follow-up testing of teacher effectiveness training. *Education*.
- O'Donnell, C.L. (2008). Defining, conceptualizing, and measuring fidelity of implementation and its relationship to outcomes in K-12 curriculum intervention research. *Review of Educational Research*, 78, 33-84.
- O'Shea, L., Algozzine, R., Hammittee, D., & O'Shea, D. (2000). *Families and teachers of individuals with disabilities: Collaborative orientations and responsive practices*. Boston: Allyn & Bacon.
- Osher, T.W., & Osher, D.M. (2002). The paradigm shift to true collaboration with families. *Journal of Child and Family Studies*, 11(1), 47-60.
- Parsons, M.B., Rollyson, J.H. & Reid, D.H. Evidence-Based Staff Training: A Guide for Practitioners. *BehavAnalysisPractice* 5, 2–11(2012). <https://doi.org/10.1007/BF03391819>
- Roumell, E.A. (2019). Priming Adult Learning for Learning Transfer: Beyond Content and Delivery. *Adult Learning*, 30(1), 15-22.
- Schieve, L., Blumberg, S., Rice, C., Visser, S., & Boyle, C. (2007). The relationship between autism and parenting stress. *Pediatrics*, 119, S114-S121.
- Soodak, L.C., & Erwin, E.J., (2000). Valued member or tolerated participant: Parents' experiences in inclusive early childhood settings. *Journal of the Association for Persons with Severe Handicaps*, 14, 271-277.
- Symeou, L., Roussounidou, E., & Michaelides, M. (2012). "I Feel Much More Confident Now to Talk with Parents": An Evaluation of In-Service Training on Teacher-Parent Communication. *School Community Journal*, 22(1), 65-97.
- Summers, J. A., Hoffman, L., Marquis, J., Turnbull, A., Poston, D., & Nelson, L. L. (2005). Measuring the quality of family-professional partnerships in special education services. *Exceptional Children*, 72 (1), 65-81.

- Todd, A.W., Horner, R.H., Newton, J.S., Algozzine, R.F., Algozzine, K.M., & Frank, J.L. (2011). Effects of team-initiated problem solving on decision making by schoolwide behavior support teams. *Journal of Applied School Psychology, 27*, 42-59.
- Thistle, J. J., & McNaughton, D. (2015). Teaching active listening skills to pre-service speech-language pathologists: A first step in supporting collaboration with parents of young children who require AAC. *Language, Speech, and Hearing Services in Schools, 46*(1), 44–55.
- Thomson, Leigh (2008). *Making the team: A guide for managers* (3rd ed). Upper Saddle River, NJ: Pearson/Prentice Hall.
- Valle, J. W., & Aponte, E. (2002). IDEA and collaboration: A Bakhtinian perspective on parent and professional discourse. *Journal of Learning Disabilities, 35*, 469-479.
- Vostal, B.R., McNaughton, D., Benedek-Wood, E., & Hoffman, K. (2015). Preparing teachers for collaborative communication: Evaluation of instruction of an active listening strategy. *National Teacher Education Journal, 8*(2), 5-14.
- Vroom, E.B., Massey, O.T., Yampolskaya, S., & Levin, B.L. (2020). The Impact of Implementation Fidelity on Student Outcomes in the Life Skills Training Program. *School Mental Health, 12*(1), 113-123.
- Weger, H., Castle, G.R., & Emmett, M.C. (2010). Active listening in peer interviews: The influence of message paraphrasing on perceptions of listening skills. *International Journal of Listening, 24*, 34-49. Doi: 10.1080/1090401090346631
- Wilson, C. (2013). *Credible Checklists and Quality Questionnaires: A User-Centered Design Method*. San Francisco, CA: Morgan Kaufmann Publishers Inc.