Functional Assessment-based Interventions: Results of a Professional Learning Series to Build Educators' Knowledge, Confidence, and Perceived Use

By

Liane Elizabeth Johl

Submitted to the graduate degree program in Special Education and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirements for the degree of Master of Science in Education.

Chairperson Kathleen Lynne Lane

Gregory Cheatham

Deborah Griswold

Wendy Peia Oakes

Date Defended: June 20, 2016

The Thesis Committee for Liane Elizabeth Johl
certifies that this is the approved version of the following thesis:

Functional Assessment-based Interventions: Results of a Professional Learning Series to Build Educators' Knowledge, Confidence, and Perceived Use

Chairperson Kathleen Lynne Lane

Date approved: 06/20/2016

Abstract

In this study, we replicated the work of Lane et al. (2015), examining the impact of a practice-based professional learning series to support educators in designing, implementing, and evaluating Functional Assessment-based Interventions using the model developed by Umbreit, Ferro, Liaupsin, and Lane (2007). We examined shifts in participants' actual knowledge and perceived knowledge, confidence, and use of concepts taught over the course of the professional learning series using a pre/post measure. Results replicated previous findings, as statistically significant improvements were found across the constructs measured. This study extended previous research by examining FABI completion levels of school-based teams attending the training series. Implications for supporting educators' in Functional Assessment-based Interventions using a practice-based professional learning series were discussed along with considerations for future research.

Acknowledgements

I would like to thank my thesis committee Kathleen Lynne Lane, Wendy Peia Oakes, Deborah Griswold, and Gregory Cheatham for the influential role they have all played in my life and for their support throughout my program.

My dear colleague Eric Common for his dedication in mentoring me throughout this process along with my colleagues at LaneCorp for their wisdom, mentorship, and most importantly, friendship.

My family and friends for the unconditional love and encouragement they have provided me along the way.

Finally, I thank my Father in Heaven for giving me the strength and guidance to achieve the impossible.

Table of Contents

Chapter I: Introduction 1

Teachers' Self-Efficacy on Managing Challenging Behavior 2

Addressing Challenging Behavior Through Function-Based Interventions 4

A Systematic Approach to Functional Assessment-Based Interventions 6

Evidence-Base for Functional Assessment-Based Interventions 9

Functional Assessment-Based Interventions within Comprehensive, Integrated, Three-Tiered Models of Prevention 12

Practice-Based Professional Development 15

Purpose 19

Chapter II: Method 22

Participants and Setting 22

Procedures 23

Professional Learning Series 24

Step 1: Identifying students who need a FABI. 25

Step 2: Conducting the functional assessment. 25

Step 3: Collecting baseline data. 26

Step 4: Designing the intervention. 27

Step 5: Testing the intervention. 28

Measures 28

Knowledge, Confidence, and Use Survey.. 28

Demographic.. 30

Design and Analysis 30

Chapter III: Results 32

Knowledge 32

Did participants demonstrate increased perceived and actual knowledge of core features of functional assessment-based interventions? 32

Confidence 33

Did participants demonstrate increased perceived confidence in their ability to use the techniques taught? 33

Usefulness 34

Did participants demonstrate increased perceived usefulness of the strategies taught? 34

Team FABI Completion 34

What were the levels of completion in the FABI process across school-based teams? 34

Chapter IV: Discussion 37

Educational Implications 38

Limitations 39

Considerations for Future Research 41

Summary 43

References 44

Appendices 67

Appendix A. Team Member Informational Letter 67

Appendix B. Parent Consent Letter 69

Appendix C. Student Assent Letter 72

List of Tables

Table 1 *Participant Characteristics- Team* 50

Table 2 *Participant Characteristics – Student* 51

Table 3 *Knowledge, Confidence, and Use Pre-Test and Post-Test* 52

Table 4 *Summary of Correlation Coefficients* 53

Table 5 *Team Completion of Step 1* 54

Table 6 *Team Completion of Step 2* 55

Table 7 *Team Completion of Step 3* 56

Table 8 *Team Completion of Step 4* 57

Table 9 *Team Completion of Step 5* 58

Table 10 *FABI Case Characteristics of Student Participants* 60

List of Figures

Figure 1. Overview of Professional Learning Series..... 63

Figure 2. Teams' FABI Completion..... 64

Figure 3. Percentage of Step Completion..... 65

Figure 4. Summary of FABI Step Completion..... 66

Chapter I: Introduction

Managing challenging behavior is one of the most critical components in a teacher's repertoire (Emmer & Stough, 2001). Teachers' understanding of how to use effective behavior management techniques is important given these practices impact students' learning, attitudes towards learning, and their overall classroom environment (Doolittle, Horner, Bradley, Sugai, & Vincent, 2007; Fallon, Zhang, & Kim, 2011; Wang, Haertel, & Walberg, 1997). Teachers who struggle in classroom management often experience burnout, resulting in them leaving the field of education (Friedman, 2006). Between 40 to 50% of teachers leave the field within the first five years of teaching, citing student discipline problems as a key reason for their early exit (Buchanan, 2012; Ingersoll & Smith, 2003). Teachers have also expressed concerns with limited classroom instruction on classroom management in their teacher education programs (Baker, 2005; Oliver & Reschly, 2007). Some educators indicated they are not receiving the necessary training to be fully equipped in handling the behavioral challenges that are on the rise in today's classrooms (Brauner & Stephens 2006; Watson, 2006). In one survey, 61% of teachers completing their first year of teaching reported additional needs in classroom management strategies (Harris, 1991; Lane, Oakes, & Menzies, 2014). Thus, the magnitude of concerns is substantial.

Lack of training in classroom management has several implications that may interfere with the quality of instruction and support provided to students. For one, the lack of training may impede inclusive practices, as students are more likely to be removed from the general education classroom when engaging in disruptive behaviors (Oliver & Reschly, 2010). As inclusive practices become a well-established priority, educators must prepare themselves to meet the needs of every learner. Secondly, students at-risk for emotional and behavioral disorders (EBD;

i.e., those who struggle with internalizing and/or externalizing behaviors) may not receive the preventative support needed. If general and special education teachers are not prepared to prevent and respond to the needs of students with EBD, these students will suffer throughout their educational career. Lastly, insufficient attention to teacher preparation in classroom management has shown to impact early intervention efforts within tiered systems of support (Oliver & Reschly, 2010). Principles of classroom management are necessary for educators to understand and adopt, especially within tiered systems of support, as students have various needs. In fact, research found classroom management to be an influential determinant on students' success – the goal of all tiered systems (Brownell et al., 2009; Fallon, Zhang, & Kim, 2011).

For successful intervention efforts and support delivery, educators need support with evidence-based strategies and practices to enhance classroom management. Teacher preparation programs and professional learning efforts must carefully examine practices taught to educators – especially research-based classroom management practices (Fallon et al., 2011). This careful training is also important in minimizing burnout and promoting teachers' sense of self-efficacy.

Teachers' Self-Efficacy on Managing Challenging Behavior

Along with adequate preparation in classroom management, teachers' sense of self-efficacy may impact their effectiveness in the classroom. Bandura (1993) found perceptions of self-efficacy pertaining to an individual's belief in their abilities to set goals, motivation, and perseverance in accomplishing difficult tasks can predict the amount of effort executed by the individual. Greater perceptions of one's own strengths and abilities is associated with increased efforts in completing difficult tasks. Bandura suggested there is greater probability of teachers

engaging in a specific task when they are confident in their abilities to perform the task successfully (Baker, 2005; Bandura, 1993).

In relation to managing challenging behavior, Ruble, Usher, and McGrew (2011) found a correlation between teacher burnout and teacher self-efficacy of classroom management. Furthermore, Tsouloupas, Carson, Matthews, Grawitch, and Barber (2010) studied teachers' perceptions of efficacy, specifically teacher efficacy in handling student misbehavior and found teachers' emotional exhaustion mediated by these perceptions. Teachers with higher levels of efficacy in this area indicated lower states of emotional exhaustion, whereas lower levels of efficacy indicated higher states of emotional exhaustion. This suggested teachers who experienced continuous self-doubt in their abilities to manage their classrooms are affected emotionally, leading to their departure in the field (Tsouloupas et al., 2010). Teachers are more likely to leave the profession if they do not feel like they are making a difference through positive contributions. Teachers with a strong sense of self-efficacy are more determined in tackling obstacles in the classroom. They are also more apt to use a variety of classroom management techniques, which is constructive in supporting the needs of diverse learners. Teachers who have received more preparation in supporting inclusive practices have shown to have more confidence in their abilities to remain resilient when faced with challenging behavior (Baker, 2005; Bandura, 1993).

Teacher self-efficacy and its relation to managing challenging behavior is a growing concern (Gebbie, Ceglowski, Taylor, & Miels, 2012). General education teachers are serving the majority of the population of students with EBD, as only 1% of students with EBD qualify for special education services under Individuals with Disabilities Education Improvement Act (IDEA, 2004; Lane, Oakes, & Menzies, 2014). Considering teachers' perceptions of self-efficacy

and general lack of training in classroom management calls for ongoing professional learning in this area. With problematic behavior a prominent concern within schools, support is needed to address the needs of students with challenging behavior (Pindiprolu, Peterson, & Berglof, 2007). Training educators in behavior management strategies needs to be a high priority for preservice, novice, and veteran teachers throughout their professional careers.

Addressing Challenging Behavior Through Function-Based Interventions

One approach to preparing teachers to address challenging behavior effectively in their classrooms is to provide training in functional-behavior assessments (FBA) to discover the *why* behind an individual's behavior. In 1997, the Individuals with Disabilities Act (IDEA) mandated the use of FBAs to support the design of behavior intervention plans (BIP). This mandate specifies the conditions in which students qualifying for special education services will receive a FBA and BIP. However, IDEA does not specify who and how the FBA/BIP will be conducted and implemented, thus school personnel have continuously faced challenges using FBA data to develop interventions (Van Acker, Boreson, Gable, & Potterton, 2005). Despite school personnel completing the FBA, there are ongoing patterns showing school personnel do not always link hypothesized function as determined by the FBA to the BIP (Borgmeier, Loman, Hara, & Rodriguez, 2014; Van Acker et al., 2005). This specific area of concern is critical, as the purpose of a FBA is to identify the possible function of an individual's behavior and then design a BIP to assist them in meeting their needs in a more appropriate manner.

Borgmeier and colleagues (2014) suggested difficulties using a function-based approach to intervention planning may be due to a lack of explicit instruction of function-based interventions during in-service training. In their study, one hr training sessions were conducted with school personnel, focusing on the identification of function-based interventions. Participants

engaged in partner collaboration, written response work, and group discussions following a think-a-loud format led by the session trainer. Pretest/posttest surveys were used to measure the effectiveness of training sessions, which were given 5-10 min before the start of the training session and at the end of the 60 min session. Participants received an additional copy of the pretest to use during the training session. An alternative posttest survey was distributed to participants at the end of the session. Results showed substantial improvements in participants' tests scores between the pre- and post-test, which were administered immediately after the training session. Pretest/posttest results indicated the training was effective as participants' abilities to identify appropriate function-based interventions improved after the training. Behavior specialists received the highest scores on both pre/posttests while general education teachers received the lowest score on the pretest. There were not any significant differences in posttest scores, despite the role and training backgrounds of the participants. However, even though general education teachers scored the lowest on the pretest, they experienced the biggest gains in their posttest score. Findings are optimistic given the need to train educators in function-based interventions, who enter the field with varying degrees of prior knowledge and experience.

Considering the complexity of human behavior, using function-based interventions are generally more effective than interventions developed based off what the behavior looks like (i.e., the topography of behavior; Dukes, Rosenberg, & Brady, 2008; Mace, 1994). For instance, presumed functions of behavior may be based on initial anecdotes (e.g., student hit another student during math time, function was hypothesized as escape motivated on this instance alone), yet the student may have been trying to access attention. Cooper, Heron, and Heward (2007) suggested target behaviors be selected on more information than the topography alone, as behavior is ruled by its function, not form. Thus, a well-defined target behavior and thorough

consultation of multiple data sources are recommended. School personnel need quality training to accurately collect and interpret the series of informal and formal data gathered in the FBA process to craft interventions that effectively support student needs.

Dukes et al. (2008) assessed special education teachers' knowledge of behavioral functions and their ability to link FBA data to appropriate interventions, as part of a three-day FBA training. Participants answered multiple choice and open-ended items related to FBA terminology and function-based interventions. Scores were compared against trained (i.e., participants who attended the training series) and untrained (i.e., participants who did not attend the training series) special education teachers. Trained participants were found to have scored more accurately on the multiple choice items than teachers who did not attend the training. However, no significant differences were found between trained and untrained participants' abilities to recommend interventions on the open-ended items. Considerations for future FBA trainings included ample opportunities for participants to practice identification of function(s) of behavior and development of interventions that align with the said function (s).

Overall, the literature recommends more intensive training experiences, with multiple training days, team-based experiences, and applied experiences with students from their school sites. In addition, teams would be assigned homework to be completed in-between training sessions with coaching support to provide ongoing feedback throughout the FABI process **(**Borgmeier et al., 2014). These suggestions are important to consider in preparing educators to manage challenging behavior with function-based interventions.

A Systematic Approach to Functional Assessment-Based Interventions

While there are several approaches to assess function(s) of behavior, one model presented in this paper is Functional-Assessment Based Interventions (FABIs) developed by Umbreit,

Ferro, Liaupsin, and Lane (2007). FABIs are a systematic method for supporting students with the most intensive behavioral needs. FABIs incorporate the use of multiple sources of data, such as educational records review, interviews (i.e., teacher, parent, and student), rating scales, experimental analyses, and A-B-C recording (Bijou, Peterson, Ault, 1968) to identify antecedents (A) that occur immediately before the challenging behavior (B) occurs, and the consequences (C) that reinforce the behavior (Lane et al., 2015). The entirety of the FABI process is broken down into 5 steps consisting of *Step 1: Identify a student for a FABI, Step 2: Conduct the Function-Based Assessment, Step 3: Collect Baseline Data, Step 4: Design the Intervention,* and *Step 5: Test the Intervention.* An imperative piece in the FABI process is to establish an operational definition of target behavior. The target behavior refers to the behavior interfering with the selected student's learning, and/or peers' learning. These behaviors may be disruptive in nature, dangerous to the learning environment, or impact a student's ability to engage in social interactions. The target behavior is initially determined and operationalized during the teacher interview with further opportunities for refinement based upon interviews and A-B-C observation data. In effort of selecting behaviors that are observable, measureable, and repeatable, operational definitions of behavior are developed with an explicit label, definition, examples, and non-examples (Umbreit et al., 2007).

In the Umbreit et al. (2007) approach to FABIs discussed in this paper, two unique features are highlighted; the *Function Matrix* and *Function-Based Intervention Decision Model*. The Function Matrix is a graphic organizer used to categorize data collected from teacher, parent, and student interviews, as well as A-B-C observations. Data are entered into the Function Matrix under the following maintaining functions, positive reinforcement (access something) and negative reinforcement (avoid something). Once a decision has been made as to whether the data

infers access or avoidance, information is placed in corresponding cells pertaining to specific elements of the function (i.e., accessing or avoiding attention, tangibles/activities, and sensory stimulation; Umbreit et al., 2007). Teams use the information presented on the Function Matrix to hypothesize function(s) of the individual's behavior, such as positive or negative reinforcement of any combination of attention, activities/tangibles, or sensory stimuli. Once teams hypothesize the function(s), a replacement behavior is defined to substitute the target behavior in a more socially appropriate manner. With the completion of a hypothesis statement and operational definition of replacement behavior, an intervention can then be designed to respectfully meet the needs of the individual (Lane et al., 2015).

The second unique feature of the FABI model is the Function-Based Intervention Decision Model (Umbreit et al., 2007), which is a tool used for selecting a method for intervention. When utilizing this tool for intervention selection, educators are asked to answer the following questions *(1) Can the student perform the replacement behavior?* and *(2) Do antecedent conditions represent effective practice?* Based off these two questions, the Function-based Intervention Decision Model guides educators to an intervention method, acting as a flowchart to support decision-making of suitable methods for intervention. Methods for intervention consist of *Method 1: Teach the Replacement Behavior*, *Method 2: Improve the Environment*, *Method 3: Adjust Contingencies*, or a combination of *Methods 1 & 2: Teach the Replacement Behavior and Improvement the Environment* (Umbreit, et al., 2007). Once a method is selected, an intervention is created utilizing A-R-E components, which are *Antecedent Adjustments* through instruction and modification, *Rates of Reinforcement* of the replacement behavior, and *Extinction* procedures to withhold previous reinforcement of the target behavior (Lane et al., 2015).

With hypothesized function for the target behavior used to guide development of A-R-E tactics, educators and interventionists are more equipped to design packaged interventions that satisfy the individual's needs and decrease problematic behavior in the classroom. The Institute of Education Sciences practice guide for reducing challenging behavior further supported educators' use of packaged interventions schoolwide (Atkins, Cullinan, Kutash, & Weaver, 2008). In a component analysis, Janney, Umbreit, Ferro, Liaupsin, and Lane (2013) studied A-R-E components of FABIs to examine the effects of the extinction procedure. Findings showed interventions based on the Function-based Intervention Decision Model that incorporated all three A-R-E components significantly improved participants' on-task behaviors. However, when the extinction tactics of the intervention were removed, participants' on-task behavior drastically declined. These results illustrated extinction as an essential component to the success of the intervention (Janney et al., 2013).

Recognizing these underlying facets of behavior are the foundation of function-based interventions. In one study, effects of behavior intervention plans were examined across two participants, who received a function-based and non-function based behavior intervention plan (Ingram, Lewis-Palmer, & Sugai, 2005). Results indicated a decline in problem behaviors for both students with function-based and non-function based behavior intervention plans. However, the function-based behavior intervention plans indicated greater change in problematic behavior with more stability than non-function based intervention plan outcomes. This literature provides indication for further investigations of FABIs with function-based planning and packaged interventions.

Evidence-Base for Functional Assessment-Based Interventions

Three systematic literature reviews have been conducted examining the effectiveness of function assessment-based interventions, specifically the FABI model (Umbreit et al., 2007). Lane, Bruhn, Crnobori, and Sewell (2009) conducted an initial review of the FABI literature with the intent of testing the use of quality indicators discussed by Horner et al. (2005) as a possible evidence-based practice (EBP) for K-12 grade students with and at-risk for high incidence disabilities. These seven quality indicators comprise of description of participants and settings; dependent variable; independent variable; baseline; experimental control/internal validity; external validity, and social validity (Horner et al., 2005). Two of the nine studies analyzed met each of the 21 components falling within the seven quality indicators. Conversely, using an alternative coding criteria (e.g., meeting at least 80% of the quality indicators) resulted in six studies meeting this criterion. Despite these positive findings, the literature reviewed only included a total of nine participants, thus it did not meet the proposed guidelines of Horner et al. (2005) for an EBP by incorporating a minimum of least 20 participants across five or more studies (Lane et al., 2009). Yet, it is worth noting the literature reviewed met all remaining principles of EBP, such as operational definitions of the practice, clear definitions of the context and outcomes associated with the practice, implementation of treatment fidelity, evidence supporting a functional relation between the independent variable (e.g., intervention) and changes in the dependent variable (e.g., target behavior). Literature reviewed also met the minimum of five-peer reviewed journal articles replicating the experimental effects conducted by at least three different researchers across three different geographical locations (Horner et al., 2005).

In a downward extension, Wood, Oakes, Fettig, and Lane (2015) reviewed FABIs as applied in early childhood settings (i.e., preschool through third grade). This review utilized

Council for Exceptional Children (CEC; 2014) standards. These standards include the following quality indicators: context and settings, participants, intervention agents, description and practice, implementation fidelity, internal validity, outcome measures/dependent variables, and data analysis (CEC, 2014). Wood et al. (2015) found seven of the 12 studies reviewed met all eight quality indicators with three studies meeting seven of the indicators. In addition, one study met six indicators and another met three. Fourteen participants were included across the seven studies that met all eight quality indicators, deeming FABIs as a *potentially evidence-based practice*, as participants included were under the proposed minimum of 20 participants (Wood et al., 2015). This review also investigated teachers' engagement throughout the FABI process, finding that 11 out of the 12 studies reviewed included teachers' implementation of the interventions, yet teacher engagement in decision-making, such as determining function and data collection were limited. This information further supports building preparation efforts for educators with designing, implementing, and evaluating FABIs.

More recently, Common et al. (2016) applied these same standards presented by CEC (2014) to studies supporting students with and at risk of high incidence disabilities, grades K-12. They found nine out of 18 studies met all eight core quality indicators. Following CEC's strict absolute coding criterion, insufficient evidence was found to classify FABI as an evidence based practice. However, 16 of the studies reviewed met 80% or more of the quality indicators across 19 participants. Optimistically, if a more liberal definition of methodologically sound criteria (e.g., weighted coding using 80% criteria; Lane et al., 2009) were to be accepted by the field, FABIs would be classified as a potentially evidence based practice. As three studies reviewed included three or more participants and demonstrated positive effects across these participants. With the growing evidence base behind the use of FABIs, we now turn to questions of how can

we best support professional learning for in-service teachers to design, implement, and evaluate FABIs?

Functional Assessment-Based Interventions within Comprehensive, Integrated, Three-Tiered Models of Prevention

Tiered models of support are widespread in today's schools; therefore, educators need to understand how FABIs fit within tiered systems as well as how to utilize FABI concepts across tiered interventions. An overview of tiered models of support in relation to FABI concepts is provided. FABIs are grounded in applied behavior analysis (ABA), thus knowledge of FABIs can inform strategies implemented across tiered systems of support. One schoolwide framework in particular, Comprehensive, Integrated, Three-tiered, Models of Prevention (Ci3T; Lane, Kalberg, & Menzies, 2009) integrates principles of Response to Intervention (RTI; Gresham, 2005) and Positive Behavior Interventions and Supports (PBIS; Horner & Sugai, 2000) within a three-tiered framework. Ci3T integrates academic, behavior, and social skills instruction to support the various needs of all students. Primary prevention, also referred to as *Tier 1* includes supports provided to all students with the goal to prevent harm. These supports are typically sufficient for 80% of students within any given school. Secondary prevention, *Tier 2,* incorporates supplemental supports to reverse harm, serving roughly 15% of the student population. Lastly, tertiary prevention, *Tier 3,* reduces harm through the provision of the most intensive and individualized instruction for approximately 5% of students (Lane et al., 2014). While all students receive support at the Tier 1 level, intensity of supports offered increases across tier 2 and tier 3.

Horner and Sugai (2015) illustrated how PBIS was essentially ABA taken to scale. Most notable implications consistent with ABA and PBIS included the use of operational definitions

for behavior and intervention features, such as a logical model for adjustments to environmental conditions for improving behavior. Also noted is the tenacity in measuring fidelity of program implementation and student outcomes associated with the program. These specific elements discussed fall within the schoolwide Ci3T framework as well as parallel the specific steps completed throughout the FABI process, such as operationally define the target behavior, use the Function-Based Intervention Decision Model (Umbreit et. al., 2007) to determine a method for intervention (i.e., Method 1: Teach the Replacement Behavior, Method 2: Improve the environment, Method 3: Adjust the Contingencies), and the measurement of treatment integrity data along with using student outcome data to determine a functional relationship.

The knowledge and pedagogical skills gained through the FABI process influences practices implemented at the primary (Tier 1) and secondary (Tier 2) levels. While FABIs are considered a tertiary tier of support available for all students in need as well as mandated for students meeting specific criteria under IDEA, many of its core features can be generalized to other tiers of support (i.e., Tier 1, Tier 2). Through its utilization of principles of ABA (e.g., A-B-C data collection), training in how to design, implement, and evaluate FABIs would be beneficial for general education and special education teachers alike as the skills acquired throughout the process could inform behavior management practices. For instance, developing the mindset of function-based thinking, in terms of viewing all behavior as a means for serving a function along with an understanding of A-B-C (Antecedent, Behavior, and Consequence) concepts can influence the practices teachers implement day by day at the primary prevention level. This awareness of basic elements of ABA provides educators with insights they may not have considered previously, such as adjusting antecedent conditions, increasing the rate of reinforcement, or practicing procedures of extinction with fidelity in their classrooms.

Teacher observations of antecedents of behavior along with the consequence maintaining the behavior could help teachers in their delivery of low-intensity strategies. For instance, educators using the instructional choice strategy could provide students with choices that serve a function, such as reading to a peer to access attention, earning a break card to escape a task, or choosing a preferred activity across a menu of choices to either access a preferred or escape a less-preferred activity. It is important to consider that these examples may be intensified for a specific group of students or an individual student within the three-tiered model of prevention.

At the secondary level of prevention, educators may apply the content gleaned from the FABI process to consider an intervention using a function-based approach. For example, Check-In/Check-Out (CICO), also referred to as the Behavior Education Program (BEP; Crone et al., 2004) is a common intervention used at the Tier 2 level that although widely used, may be most powerful in supporting students whose behavior is maintained by accessing attention. CICO provides an avenue for students to access attention and develop rapport with an adult in the school building at multiple time points within the school day (e.g., at the start and end of the school day). McIntosh, Campbell, Carter, and Dickey (2009) conducted a study and evaluated the effectiveness of CICO based on the function of the target behavior. Students whose behavioral function was to access attention experienced substantial improvements compared to students whose behavior was maintained by avoidance. In contrast, Turtura, Anderson and Boyd (2014) suggested the use of CICO for students with escape-maintained behaviors as results indicated it is an effective intervention for decreasing problem behaviors maintained by academic task avoidance. Students are given a brief break to check in or check out with the designated adult. CICO appears to be a versatile intervention as the literature supports its use for students who are maintained by both attention and avoidance.

Furthermore, Carter and Horner (2007) studied the effects of functional behavioral assessment (FBA) and function-based supports, as an addition to *First Steps to Success* (Walker et al., 1998), an individualized intervention used to support young students at risk for antisocial behavior. Results revealed a functional relationship between function-based supports and a reduction in problem behavior with an increase in academic engagement. Results suggested the addition of FBA and function-based supports to First Steps to Success may support students whose behavior is *not* maintained by attention, as parameters for accessing attention are already in place for reinforcing appropriate behavior (Carter & Horner, 2007). These findings (Carter & Horner, 2007; McIntosh et al, 2009; Turtura et al., 2014) support the research on the function of behavior operated as a moderator to intervention outcomes, thus suggesting educators cogitate function when determining interventions across tiered levels of support. This knowledge of function-based thinking pertinent in the FABI process has the capabilities of supporting instruction, intervention efforts, and classroom management practices within a Ci3T framework.

While educator understanding of designing, implementing, and evaluating FABIs can support the management of challenging behavior, additional considerations must be made regarding the format and delivery of professional development to address teacher preparation needs. A call for professional learning opportunities has been made to reflect a practice-based approach, promoting the engagement in hands-on learning experiences. Content mastery is simply not sufficient preparation for today's teachers. Along with content knowledge, the application of said knowledge through teaching delivery must also be taught to educators.

Practice-Based Professional Development

Educators need professional learning opportunities that are balanced between key content and pedagogical techniques with ample time provided for application of learning. The work of

Ball, Sleep, Boerst, and Bass (2009) expand the shifts toward practice-based instruction through their development of a course for preservice teachers. They discuss several methods to inform strategies used in practice-based learning environments. For one, identification of essential skills to be acquired during the course or training series is critical. Established learning outcomes guide the development of opportunities for practice. Methods included *decomposition*, which is breaking down a practice into smaller practices that are practiced until a reasonable level of mastery is met within each broken down practice (Ball, Sleep, Boerst, & Bass, 2009; Grossman et al., 2009). Once mastery is achieved, practices are put together and applied as a whole practice. Decomposition closely resembles the ABA concept of task analysis, which is to break down a skill into smaller steps. Individuals are more likely to fully commit to the task and develop proficiency when focusing on one step at a time. This connection between decomposition and task analysis in practice-based learning relates back to the usefulness of educators grasping principles of ABA.

Referring back to the FABI process and its place in practice-based professional learning, each step in the FABI process consists of a breakdown of smaller tasks, which enabled educators working through this model to practice and focus on each mini-step before moving forward in the process. Ball et al. (2009) mentioned the following factors to have a positive influence on practice-based learning, which are consistent use of common language and instruction on practices that are generalizable across content areas and settings, no matter what the curriculum or personal teaching style employed. These two factors are critical in professional development, especially on FABIs. Consistent terminology is needed (e.g., developing operational definitions of target and replacement behavior) throughout the training between trainers, coaches, and team members, as they learn and practice how to assess, implement, and evaluate a FABI.

Generalization connects with FABIs as steps are in place for assessing generalization of the target student's replacement behavior, thus it is important to conduct professional learning that educators may be able to use across diverse settings to support students' needs.

Furthermore, the importance of understanding one's audience is discussed. Quality instruction and effective support can be provided to students who are struggling with a concept if educators know more information beyond the fact students are confused and solved problems incorrectly (Ball et al., 2009). Educators must place themselves in the shoes of their students to figure out how they solved the problems and understand their reasoning, in order to use strategies that will support student learning. This information is related to practice-based professional development efforts, as training leaders and coaches should consider the mindset of training participants as they learn specific skills. For instance, considering professional development on FABIs, training participants complete several tasks in which an understanding of their thought processes would be beneficial, such as rationale for selected intervention or how they defined and measured behavior. This understanding informs trainers and coaches on how to provide direction to participants in a manner that makes sense to their situation. Ultimately, this applies to the teaching principle of understanding one's students, which in a training setting is knowing the audience in which one is training. If prior knowledge of the community in which one is working with is limited, more formal approaches could be taken to gain additional information on the audience, such as distributing pre-training measures and collecting demographic information when conducting a research-based professional development series.

Duran, Brunvand, Ellsworth, and Sendag (2012) explored motivation of teachers' participation in professional development and factors that influenced the effectiveness of professional development. They found the general process teachers experienced as they altered

their teaching practices and adopted new methods to be two main considerations for professional development. Findings indicated district support influenced teachers' motivation, as participants reported it was easier and more motivating to learn the topics of the professional development series with continual support from the school district. In addition, it was proposed that a mentoring component be added to the professional learning structure for teachers in need of additional support, thus creating a combination of workshop and mentoring opportunities (Duran, Brunvand, Ellsworth, & Sendag, 2012).

Kratochwill, Volpiansky, Clements, and Ball (2007) presented the need for professional development in prevention and intervention strategies to meet the needs of all students within tiered systems of support. They recognized the capabilities of professional development in supporting systematic change within schools to improve student outcomes. In effort to understand what is necessary for quality professional development, the work of Guskey (2003) was explored. Guskey examined characteristics across the literature that constituted as effective practices for professional development. Results supported the need for established common ground, in terms of clear criteria for professional development. Essentially, Guskey's work concluded that standards for professional development would be beneficial, as his analysis of thirteen sources did not find any one characteristic to be present within each document. Insights gleaned from the various literature reviewed included the No Child Left Behind (NCLB) standpoint of professional learning opportunities must focus on student achievement and educator knowledge. Professional development needs a practical application piece for training participants, in order to support positive student outcomes. Change in student outcomes will likely occur when educators develop knowledge, confidence and understanding of the usefulness

for not only the content background, but in how it is facilitated in the classroom with opportunities to practice these skills.

Overall, the research suggested professional learning efforts need practice-based activities that enable participants to apply their newfound knowledge. Additional recommendations for professional development included multiple modalities for learning, such as case study reviews, role-playing, group discussions, displays of intervention material, and collaborative problem solving (Kratochwill, Volpiansky, Clements, & Ball, 2007). Along with the activities, adequate time must be provided to training participants to practice and build fluency in the skills taught before they are expected to independently apply skills in the workplace (Dukes et al., 2008).

Purpose

In summary, the literature on professional development indicated leaders in training efforts should consider planning in the same manner in which teachers prepare lessons with adult learning principles in mind. Practical application of content taught aligned to standards along with consideration of teacher interests and goals are proposed as effective professional development practices. Utilizing EBPs that support the focus on student outcomes are listed for quality professional development**.** Duran et al. (2012) described Gredler's (1997) work on knowledge, as an evolving process. Measures used to examine this progression of learning through a professional development series could provide insights for future direction on the effectiveness of professional development; thus supporting the rationale of this study.

The purpose of this study is to examine participants' learning outcomes and progress during the systematic FABI process over the course of the 5-day training series*, Focusing on Function II*: *The impact of school designed interventions*. This study sought out to replicate

findings in a previous study *Focusing on Function I* conducted by Lane et al. (2015) to investigate three questions posed in the original study, as well as provide an extension with the addition of a fourth question to examine training participants' levels of completion in the FABI process. In this thesis, the following questions were explored:

1. Did participants demonstrate increased perceived and actual knowledge of core features of functional assessment-based interventions?
2. Did participants demonstrate increased perceived confidence in their ability to use the techniques taught?
3. Did participants demonstrate increased perceived usefulness of the strategies taught?
4. What were the levels of completion in the FABI process across school-based teams?

Based off the work of Lane et al. (2015), it was hypothesized participants would demonstrate similar results with increased perceptions of knowledge (perceived and actual), confidence, and usefulness of FABI concepts. These outcomes were anticipated as the training series followed a similar format as the original study for professional development with the addition of one more day. This five-day training series utilized the same testing measures in the aforementioned study for replication.

In recent years, the importance of replication studies has gained more recognition. Makel and Plucker (2014) advocated for movement towards an increase in replication studies within educational sciences. They suggested replications of critical findings are necessary within educational research as it provides a more reliable understanding of educational environments to support the development of policies and inform practices. Thus, through the replication of the work of Lane et al. (2015), it is hoped to further inform efforts for practice-based professional

development and training educators within school-based teams on how to systematically design, implement, and evaluate FABIs.

Chapter II: Method

Participants and Setting

Participants included 148 educators constituting 29 school-sites who attended the FABI professional learning series as part of a school-based team This training series was hosted by one school district responsible for the provision of special education services across 22 partner school districts within a Midwestern state. Twenty-nine teams from 15 partner districts attended the training series with teams including between 2 and 9 educators. Out of these 148 participants, nine were district coaches assigned to one or more school-site teams attending the FABI training series. District coaches supported the implementation of the FABI process by providing coaching on-site at the training and in-between each training session as each team supported one student who required this intensive Tier 3 support.

Participant makeup primarily consisted of females (n = 88, 80.73%; See Table 1). Every participant who completed the demographic measure (described subsequently) had at least a Bachelor's degree with the majority of participants holding a Master's Degree or higher (n = 96, 72.74%). Across participants, 19 (14.62%) were general education teachers, 18 (13.85%) were special educators, 16 (12.31%) were administrators, 74 (56.92%) related service providers, and three (2.31%) school staff members (e.g., teaching assistants). Related service providers included school psychologists, counselors, social workers, speech and language pathologists, behavior specialists/consultants, board certified behavior analysts (BCBA), and applied behavior analyst associates.

Student participants, who were selected for a FABI, were primarily male (n = 24, 82.76%; See Table 2). Approximately 70% (n = 17) of these students qualified for special

education services within the following eligibility categories: Specific Learning Disability (*n* = 3, 13.64%); Emotional Disturbance (*n* = 4, 18.18%); Autism (*n* = 4, 18.18%); and Developmental Delay (*n* = 4, 18.18%).

Procedures

University leaders of this training series collaborated with the school district to conduct this training series. Institutional Review Board approval was secured from two universities as well as the school district leading the professional learning series to collect de-identified data on (a) team member and coaches learning outcomes as well as (b) student performance throughout the FABI process. Participants of this training series were self-selected and registered following the hosting district's procedures.

Upon registration, the 148 registered participants received an informational letter describing the 5-day training series with an invitation to participate in the research project. The letter explained that participation in the research aspect of the training would allow university leaders and their research team to analyze data collected throughout the training series, as part of the FABI, in addition to completion of the pre-post measure with demographic information. The letter stated participants agreed to participate in the study by submitting any materials completed throughout the training process (See Appendix A: Team Informational Letter). An invitation to participate in the entire training series was extended to all team members, regardless of whether they chose to submit their materials for research purposes. Twenty-nine teams attended the training series and shared information pertaining to their interventions developed during the training.

Each team identified one student to conduct a FABI over the course of the training series. Once a student was selected, each team received a parental consent packet. This packet included

two copies of the consent form (one for parents to keep for their records and one copy to submit to the university), and a stamped return envelope and an envelope to send these materials to the parents. The consent letter invited parents to participate in the study by granting permission for the information the school-based team collects on their child as well as materials developed (e.g., function-based intervention) to be used for analysis in the research purposes of this study (See Appendix B: Parent Consent Letter**)**. The letter suggested parents discuss with their child —depending on their age and maturity — if they would be comfortable in this information used to help other children and teachers. Parents agreed to participate in the study by allowing the research team to analyze the data collected on their child. Parents signed the consent form and agreed they were willing for the information from the training to be used for research to help improve the training and help others, as well as to evaluate how the program is working. Once parent permission was obtained, students were invited to participate in this study (See Appendix C. Student Assent Letter). Twenty-eight out of 29 student participants assented to participate in this study.

Professional Learning Series

School teams and district coaches attended a five-day professional learning training series to learn how to design, implement, and evaluate FABIs. Participants were given pretest and posttest Knowledge, Confidence, and Use surveys (KCU; Borthwick-Duffy, Lane, & Mahdavi, 2002; Barton-Arwood, Morrow, Lane, & Jolivette, 2005), which examined shifts in their knowledge, confidence, and perceived use over the course of the training series. Out of the 148 participants including district coaches, 141 participants completed the Pre-KCU survey on the first day of the training series. On the fourth day of the training series, 111 completed the Post-KCU survey.

Each day of the training series focused on salient features in the FABI process. For example, Day 1 emphasized Steps 1 and 2 of the five step FABI process with subsequent sessions focusing on the remaining steps (See Figure 1). For each of the five steps, participants received a Step Checklist (described sequentially), which broke down each item teams were to complete as part of the FABI process. As school-based teams completed each step, they submitted their checklist and corresponding documents to their designated district coach via an electronic platform. Teams organized various documents submitted to the district coaches by using the step checklists as a table of contents. In the following section, a detailed description of each step in the FABI process is provided along with topics covered during the training series.

Step 1: Identifying students who need a FABI. School-based teams worked together to select a student for a FABI, a tertiary support to serve students with and at-risk for learning and behavior problems. After teams agreed on a student, parent permission was acquired by sending home a parent consent letter as previously described. After necessary permissions were obtained, training participants completed a referral checklist to provide rationale for the student selected for a FABI. The referral checklist consisted of student data across the academic, behavioral, and social skill domains, such as curriculum-based measurements, report cards, attendance, office discipline referrals, and screening data.

Step 2: Conducting the functional assessment. In Step 2, participants completed a comprehensive review of educational records of the student receiving the FABI, using the Schoolwide Archival Records Search (SARS; Walker, Block-Pedego, Todis, & Severson, 1991). SARS is a method for collecting pertinent information regarding students' academic records, such as attendance, special education status, and discipline records. Along with using the SARS, team members completed informal classroom observations to gain insights on the instructional

environment. As part of the informal observations, school-based teams created a classroom map and obtained copies of the classroom instructional schedule, classroom system for behavior management, as well as a copy of the schoolwide PBIS plan if applicable.

Participants conducted interviews at their school site, which began with interviewing the classroom teacher to operationally define a target behavior for the student. Parent and student interviews followed the teacher interview and gave participants input regarding the student's strengths, challenges, as well as any information that could be linked to a potential function of behavior. During these interviews, the teacher and parent completed rating scales, specifically the Social Skills Improvement System (SSiS; Gresham & Elliott, 2008). A-B-C (i.e., Antecedent, Behavior, Consequence) data collection occurred over the course of three different sessions for a total of 3 hours. Teams practiced how to collect A-B-C data collection during the professional learning series using videos. Once A-B-C data were collected, teams organized these data collected throughout step 2 (e.g., A-B-C, interviews, rating scales, etc.) into the function matrix. The visual arrangement of these data using the function matrix supported the development of a hypothesized function of the student's target behavior. Participants operationally defined a replacement behavior for their selected student using a label, definition, examples, and non-examples to support data collection and intervention efforts.

Step 3: Collecting baseline data. In the third step, participants collected baseline data on their selected student. Prior to starting data collection, school teams trained on behavioral data collection methods, such as selecting a dimension of behavior (e.g., frequency, duration) aligned with a behavioral measurement system (e.g., frequency and event recording). Participants practiced using event recording and momentary time sampling measurement systems with video clips shared at the training. From there, participants learned methods for reliable data collection,

such as obtaining interobserver agreement (IOA). Participants practiced IOA calculation and compared their data collected on video clips to assess reliability. These methods of reliability supported observers in refining operational definitions of target behaviors. Observers may discuss discrepancies in data collection and adjust examples and non-examples included in the operational definition before beginning baseline data collection. School-based teams also practiced using timing devices, specifically the MotivAider® (MotivAider is the registered trademark of Behavioral Dynamics, Inc. http://habitchange.com), which is a tool that vibrates at selected intervals. MotivAiders support educators in data collection while delivering instruction, as the quick vibration prompts educators to record observations compared to clock-watching or potentially disruptive timers.

Step 4: Designing the intervention. At this stage in the FABI process, participants designed interventions using the Function-Based Intervention Decision Model. This model guided team members to select a method for intervention that aligned with their student's needs based off the two previously stated questions. School teams developed interventions using the A-R-E components. Aligned with the A-R-E tactics, team members created a form to monitor treatment integrity. Educators responsible for implementing the intervention and secondary observers used this form to monitor whether or not each tactic of the intervention was implemented as planned. Participants sought out the input of the teacher responsible for delivery of the intervention to revise their A-R-E components. Once intervention components were finalized, team members taught the intervention to the teacher and student. Social validity data were collected prior to the start of the intervention. The teacher responsible for implementation of the intervention completed the Intervention Rating Profile-15 (IRP-15; Witt & Elliott, 1985),

whereas the selected student completed the Children's Intervention Rating Profile (CIRP; Witt & Elliott, 1985).

Step 5: Testing the intervention. The fifth and final step of the FABI process incorporated experimental analyses. Educators used these analyses to make accurate decisions as to whether the intervention was effective for their student. Participants completed data collection using an ABAB withdrawal design. In this experimental design, A1 represented baseline data collection — completed during step three — whereas B1 indicated the introduction of the intervention. Following B1 is A2, the withdrawal phase of the intervention with B2 the reintroduction of the intervention being the last phase of the design. Data collection across these phases provided the opportunity to determine a functional relation between the behavior and intervention selected. Withdrawal and reintroduction of the intervention assisted in ruling out other occurrences that may have influenced behavior. Maintenance and generalization data are recommended for data collection to assess whether the students' behavior change is long-lasting and can be applied in other settings. Along with intervention and withdrawal data collection, participants continued collecting treatment integrity as well as post-intervention social validity data from the teacher and student.

Measures

Knowledge, Confidence, and Use Survey. This measure was adapted from the Borthwick-Duffy, Lane, and Mahdavi Project SKIL survey (2002) and modified in Project IMPROVE (Barton-Arwood, Morrow, Lane, & Jolivette, 2005). To answer three of the research questions posed in this study (i.e., Did participants demonstrate increased perceived and actual knowledge of core features of functional assessment-based interventions?, Did participants demonstrate increased perceived confidence in their ability to use the techniques taught?, and

Did participants demonstrate increased perceived usefulness of the strategies taught?) participants completed the Knowledge, Confidence, and Use (KCU) survey.

The KCU survey examined shifts in participants learning over the course of the training series, as participants completed this measure at the start and end of the training. This measure included 25 items, intended to take 15 min to complete. Fifteen of these items required participants to rate their perceived knowledge, confidence, and usefulness of content presented throughout the training series, using a 4-point Likert-type scale (e.g., 0 = *I have no knowledge of this concept or strategy,* 1 = *I have some knowledge of this concept or strategy,* 2 = *I have more than average knowledge of this concept or strategy,* and 3 = *I have a substantial amount of knowledge about this concept or strategy).* The additional 10 items were open-ended questions, which participants handwrote their definitions of ten pertinent concepts outlined throughout training series (i.e., performance deficit, functional-assessment based intervention, social validity, operational definitions of behavior, positive reinforcement, replacement behavior, A-B-C data collection, antecedent adjustment, extinction, and treatment integrity. To determine actual knowledge of training participants, their open-ended questions were scored using a similar Likert-type scale (e.g., 0 = *no knowledge;* 1 = *partially accurate knowledge, but inaccurate information included;* 2 = *partially accurate knowledge, with no inaccurate information included; and* 3 = *completed answer, with all provided information correct).* Total scores for each 15 item construct ranged from 0-45. For the actual knowledge construct, composite scores ranged form 0-30 on the 10 item open-ended questions.

University leaders of this training series scored participants' KCU surveys with assigned roles as either the primary or secondary scorer. Interrater reliability (IRR) of primary and secondary scorers was determined by computing Pearson correlation coefficients. IRR for

participants' actual knowledge was .99 (p<.0001) on both pre and post KCU scores. We computed Cronbach's coefficient alphas to assess reliability, yielding the following estimates for perceived knowledge, confidence, usefulness scales, .97, .98, .98, and .93 for the 10 open-ended actual knowledge items.

Demographic. Participants completed a brief demographic form on the first day of training to provide background information on the training participants. This measure included items related to participants' educational background (e.g., highest degree obtained), years of experience in current job placement, certification level (e.g., teaching credential, BCBA, or seeking BCBA), current role (e.g., general education teacher, special education teacher, administer, related service provider, paraprofessional, etc.), and gender. 132 training participants completed this measure (See Table 1).

Design and Analysis

We conducted secondary data analyses using descriptive statistical methods. Data analysis was generated using SAS® software (SAS Institute INC, 2013). We replicated the data analysis plans used by Lane et al. (2015) to answer the following questions: Did participants demonstrate increased perceived and actual knowledge of core features of functional-assessment based interventions, did participants demonstrate increased perceived confidence in their ability to use the techniques taught, and did participants demonstrate increased perceived usefulness of strategies taught. First we computed composite scores for each construct (i.e., actual knowledge, perceived knowledge, confidence, and use). Higher scores indicated greater levels of knowledge, confidence, and perceived usefulness. We compared mean scores of pre and post training KCU surveys to examine shifts in participants' learning over the course of the training series. To discern if there were statistically significant differences in mean scores across constructs, we

used dependent *t*-test (alpha = 0.05) to compare pre and post knowledge, confidence, and use scores.

To determine the magnitude of change in participants' perceived knowledge, confidence, and usefulness of FABI concepts, as well as their actual knowledge over the course of the training series, we calculated effect sizes calculated using the Hedges's *g* formula

$$g = \frac{M_A - M_B}{S \text{ pooled}}$$

(Fritz & Morris, 2012). Hedge's *g* was selected over Cohen's *d* to allow for unequal sample sizes. Using the mean, standard deviation, and sample size (i.e., number of participants who completed the measure) for pre and post training surveys, effect sizes were calculated (See Table 3). Effect sizes were interpreted based off the following recommendations: .20 were small, .50 were medium, and .80 were large (Cohen, 1988). Pearson Correlation Coefficients were used to calculate difference in participants' perceived knowledge and actual knowledge by linking open-ended items associated with actual knowledge to Likert-type items representing perceived knowledge (See Table 4). The following guidelines specified in Hinkle, Wiersma, & Jurs (2003) were used to interpret correlations: .00 to .30 were little, .30 to .50 were low, .50 to .70 were moderate, .70 to .90 were high, and .90 to 1.0 were very high. To answer the fourth research question (What were the levels of completion in the FABI process across school-based teams?), we calculated (a) across teams, percent started and average completion of each step; and (b) percent completion of each step across teams.

Chapter III: Results

In this paper, we examined participants' perceptions of and actual knowledge of FABI concepts, as well as their views of their confidence and perceived usefulness of concepts taught throughout the professional learning series. We examined shifts in participants' perceptions of knowledge, confidence, and usefulness over the course of the training series and analyzed differences in training participants' perceptions and actual knowledge of FABI concepts. We also examined levels of FABI step completion (e.g., how many steps and tasks within each step completed, specifically looking at how far teams were able to get in the FABI process. We looked descriptively at step completion along with a breakdown of task completion levels within each of the five steps in the FABI process.

Knowledge

Did participants demonstrate increased perceived and actual knowledge of core features of functional assessment-based interventions? Participants' perceived knowledge of FABI concepts at the start of the training series averaged 24.01 (*SD* = 14.28; See Table 3). At the end of the training series, participants' average perceptions of knowledge increased to 38.00 (*SD* = 8.91). The greatest gains demonstrated by participants occurred in this construct perceived knowledge with a mean change of 12.30 (*SD* = 10.63). Dependent t-test scores and effect size calculation for perceived knowledge indicated statistically significant differences between participants' perceived knowledge from the start and end of the training series, t (87) = 10.85, p <.001 with a large magnitude change (effect size = 1.15). A moderate positive correlation between perceived knowledge at the end and start of the training series, r = 0.65, p = <.0001 (See Table 4).

Actual knowledge at the start of training was a mean score of 10.60 (*SD*=8.75) with post-test mean score of 21.75 (*SD*=4.79), which indicated gains in actual knowledge over the course of the training series. Difference in actual knowledge was a mean score of 10.23 (*SD*=6.29). Dependent t-test scores and effect size calculation for actual knowledge indicated a statistically significant, high magnitude difference between pre and post-KCU scores t (59) = 12.60, p <.0001 (effect size = 1.56). There was a positive correlation between actual knowledge at the end and start of the training series, r = 0.72, p = <.0001.

Participants demonstration of increased perceived and actual knowledge of core features of assessment-based interventions supported questions posed in this study at a high magnitude (perceived knowledge effect size = 1.15; actual knowledge effect size = 1.56). Correlation between actual and perceived knowledge at the start of the training was high, r = 0.77, p = <.0001. A moderate correlation between actual and perceived knowledge was found at the end of the training, r = 0.59, p = <.0001. There was a notable discrepancy between participants' actual and perceived knowledge at both time points. Participants' perceived their level of knowledge almost twice the size of their actual knowledge (See Table 3).

Confidence

Did participants demonstrate increased perceived confidence in their ability to use the techniques taught? Participants initial perceptions of confidence in their ability to use the FABI concepts and techniques to be taught during the professional learning series was a mean score of 23.55 (*SD* = 14.17). At the end of the training series, participants perceived confidence increased with a mean score of 35.99 (*SD*= 9.06). Difference in participants' perceived confidence at the start and end of the training series was a mean score 11.53 (*SD*= 10.47). Dependent t-test scores and effect size calculation for perceived confidence indicated a

statistically significant, high magnitude difference between pre and post-KCU scores t (78) = 9.79, p <.0001 (effect size = 1.03). Correlation between perceived confidence at the start and end of the training was moderate positive, r = 0.64, p = <.0001.

Usefulness

Did participants demonstrate increased perceived usefulness of the strategies taught? Participants perceived usefulness of the FABI concepts and strategies to be taught at the start of the training series was a mean score of 34.54 (*SD* = 12.21). Post-test scores support increased perceptions of usefulness with a mean score of 40.24 (*SD*= 5.06) and a difference between pre/post KCU mean score of 3.26 (*SD* = 9.30). Dependent t-test scores and effect size calculation indicated a statistically significant difference of medium magnitude, scores t (64) = 2.83, p <.0063 (effect size = 0.61). Correlation between perceived usefulness at the start and end of the training was low positive, r= 0.41, p = 0.0007.

Team FABI Completion

What were the levels of completion in the FABI process across school-based teams?

Analyses of completion levels of teams in the FABI process were 3-fold; first, we examined percentages of school-based teams who started each step and turned in any given portion of the tasks within the step. (See Figure 2). Second, we reviewed percentages of how far teams got in completing tasks within each step (See Figure 3). Third, we computed percentages and frequency of task completion within each step in the FABI process (See Tables 5-9). Across teams, 100.00% (*n*= 29) started step 1, this percentage included all teams who completed any of the three tasks made up of Step 1. On average, 83.91% (*SD*=15.60) of the 29 school-based teams completed tasks comprised of Step 1 (See Figure 4).

Step 2 consisted of ten steps, in which 100% (*n*= 29) of teams started. An average of 66.21% (*SD*=23.19) completion was found over the tasks assigned in Step 2. Step 3 included nine tasks, which 82.76% (*n*= 24) of teams started and 39.72% (*SD*=33.91) completion of tasks associated with Step 3 tasks. 82.76% (*n*= 24) of teams started Step 4, which incorporated nine tasks. Across the nine tasks making up Step 4, an average of 42.15% (*SD*= 30.70) of teams completed tasks associated with this step. Lastly, 68.97% (*n*=20) of teams started the fifth and final step in the FABI process. Average percentage of completion of the tasks within this step was 22.13% (*SD*= 25.95). Fourteen tasks represent Step 5. Additionally, three tasks (i.e., graphed data, completion of FABI Planning Form, and BIP) were excluded from step percentages and calculated separately. These tasks were repeatedly assigned throughout the FABI steps, therefore reports of completion were reserved until the end of the training series. Task level percentages for these tasks were reported (See Table 9).

Along with team levels of step- and task-completion in the FABI process, specific characteristics of features of each FABI conducted by school-based teams were described (See Table 10). Notable characteristics reported included operational definitions of behavior. The most frequently used target behavior across the 29 FABI cases was off-task (46.43%, *n* = 13). Academic engagement/on-task was the most frequently used replacement behavior across 62.96% (*n* = 17) of teams. Majority of the school-based teams (65.38%, *n* = 17) identified two functions in their hypothesis statements. Two of the most frequently used functions of behavior across FABI cases were access attention (76.00%, *n* = 19) and avoid tangibiles and activities (69.23%; *n* = 18). In terms of alignment of behavorial dimension and measurement system, 83.33% (*n*=15) of teams selected an appropriate combination for data collection. Considering the interventions available in the FABI intervention-decision model, the most commonly selected

interventions were combination of Method 1 and 2 (47.62%, n = 10) and Method 2 (38.10%, *n* = 8). Of the selected interventions utilized for each team's FABI, 75.00% (*n* = 15), selected an intervention method that aligned with the hypothesized function(s) of behavior.

Chapter IV: Discussion

In this paper, we sought out to replicate the findings of *Focus on Function I* (Lane et al., 2015) and extend the literature in support of practice-based professional learning models for supporting educators in designing, implementing, and evaluating FABIs. Specifically, this study examined the perceptions of educators' knowledge, confidence, and views on usefulness, as well as actual knowledge of concepts taught throughout the professional learning series. We extended the work of Lane et al. (2015) by examining how far school-based teams got — in terms of task completion levels — across this systematic five-step process.

As hypothesized, results of this study showed participants made gains in their actual and perceived knowledge, confidence, and perceived usefulness across FABI concepts and strategies targeted throughout this professional learning series. Highest gains, in terms of difference and magnitude were found within the construct of perceived knowledge. As expected, this finding suggested participants believed they were more knowledgeable of FABI concepts after completion of the FABI professional learning series. Participants experienced high shifts in their perceived confidence in their abilities to utilize techniques taught as well. Participants' increased perceptions of knowledge and confidence in FABI concepts could potentially link to further studies on self-efficacy (Bandura, 1993). This construct of perceived self-efficacy may be applied considering participants with greater perceptions of knowledge and confidence are more likely to complete the FABI process**.** Out of the three constructs related to participants' perceptions, perceived usefulness of the FABI concepts taught demonstrated the highest mean score at the time of the pre and post-test.

Similarly, to findings of Lane et al. (2015), participants' perceived usefulness experienced the smallest difference from pre to post test, despite scoring the highest mean score

of all constructs measured. These findings suggested participants found FABIs to be useful, yet they were not as knowledgeable or confident in this area at the start of the training. While perceptions of usefulness increased over the course of the training, participant's experienced greater shifts in their perceived knowledge and confidence at the time of the post-test. One notable finding in this study was participants' actual knowledge increased throughout the training series, thus supporting the efficacy of the FABI practice-based professional learning model. Results supported the research questions posed in this study, as every construct measured displayed shifts from the start to the end of the professional learning series. Consistent with the results of Lane et al. (2015), training participants increased actual and perceived knowledge, confidence, and use of FABI concepts yielded high magnitude effects across all constructs. Both studies showed the highest mean scores of participants' perceptions of usefulness at the start and end of the training series with smallest difference in mean score change. Participants perceived knowledge was notably higher than their actual knowledge in both studies. This discrepancy may be due to participants' tendency to over-estimate their scores, therefore it is important to use measures that assess actual knowledge in addition to self-reports (Lane et al., 2015). It is important to note that in this current study, a larger sample size was used within a different population yielding similar high magnitude effects. Results achieved replication of similar findings in the Lane et al. (2015) study along with posing additional questions to build schools' capacities to conduct FABIs.

Educational Implications

Additionally, how far school-based teams were able to get in the FABI process, in terms of step completion were examined for further insights on improving the efficacy of the training series and supporting educators' implementation of FABI. While 29 teams successfully

completed the training, there was variation in how far teams progressed in the practice-based learning application of FABI. Considering the variability in how far school-based teams got in the FABI process and what tasks within each step they completed during the course of the professional learning series (See Tables 5-9) may illuminate areas educators may need additional support. Lower levels of completion may indicate the specific areas of needed support. For instance, tasks in Step 5 had the lowest rates of completion, specifically tasks pertaining to post-intervention social validity (See Table 9). Teams' completion of student and teacher post-intervention social validity data collection were limited, therefore this provided insights to direct future training endeavors and coaching opportunities. Teams may need additional support to develop proficiency in implementing each component of the FABI. Time management and possibly extending the training series are considerations to help educators gain more time to practice and develop capacity to conduct an entire FABI independently. Additional instruction on social validity and its usefulness in FABI may be needed.

On the other hand, utilizing the function matrix, a unique feature of the FABI Umbreit model used in this study reported the highest level of completion aside from securing parent and student permissions (See Table 6). High levels of completion indicated teams were able to complete items independently, therefore this posed questions as to what influenced lower levels of completion. Educators may have run out of time, did not understand the concept, or simply may have not submitted the items for research analyses. It is proposed these questions be explored in future studies. These levels of completion in the FABI process may be addressed in refinements to the professional learning series as well as through additional coaching supports.

Limitations

One limitation of this study was that teams' submission of all materials (e.g., tasks within each step) completed was optional. Submission of materials was considered as consent for items to be used for research purposes (See Appendix A: Team Informational Letter), therefore there is a possibility that not every item teams completed was submitted. Many teams partially completed steps with the expected documents for the task seemingly not submitted. In addition, this limitation impacts the effectiveness of the interventions across the 29 FABI cases completed by school-based teams. It is unclear how many teams were truly able to establish a functional relationship between the hypothesized function of behavior and intervention outcomes due to incompleteness.

Secondly, this study focused on a practice-based professional learning model to examine pre and post test scores along with completion levels, therefore there were not any measures of fidelity on the training series as well as school-based teams conducting FABIs. Additionally, social validity of participants' thoughts on the FABI training series was not measured. While an efficacious professional learning model is not dependent on social validity, considering the views of the participants' does play an important role in establishing a quality professional learning series. Collection of social validity data on participants' thoughts regarding the training could potentially move the FABI practice-based professional learning series forward if deemed socially-valid.

Lastly, training participants primarily consisted of related service providers (RSP), which may include individuals who expressed higher perceptions of usefulness of behavioral interventions based on their educational background. Research supports the use of comprehensive school-based teams in professional development, made up of a variety of school faculty and staff (Guskey,1995). It is proposed that considering established guidelines for school-

based team makeup be considered to represent a variety of expertise levels as well as further support training classroom teachers on FABIs.

Considerations for Future Research

As a result of the information gleaned from this study, proposed considerations for future research include examining how far teams progressed in this systematic process in conjunction with the quality of teams' work product. Quality of the work teams submitted throughout the five step process could potentially provide information to better understand how the practice-based training model supported shifts in participants' knowledge, confidence, and usefulness of the training series. Specifically, this information may inform which elements of the training need refining, based on teams' abilities to successfully complete the tasks. Considering quality informs coaching needs throughout the professional learning series, which the literature cites coaching to be a beneficial support to participants in professional learning (Kratochwill et al., 2007).

Along with this idea of coaching throughout the professional learning series, Lane et al. (2015), proposed the development of coaching protocols to monitor the type (e.g., in person, video conferencing, phone call) and frequency of support provided to school-based teams. Collection on type and frequency of coaching provided to each school-based team could be used to address team specific supports as well as identify reoccurring patterns across the teams participating in the training series.

Looking at quality also provides insights as to whether teams are grasping the material presented as well as able to put this knowledge into practice. Furthermore, quality of completion and examination of student outcomes, in regard to teams' success in establishing a function relation between the target behavior and intervention could further the evidence-base for FABIs

as a promising EBP. Future studies may also investigate whether step completion levels influenced higher shifts in participants perceived knowledge, confidence, and use of FABI concepts. Utilizing additional measures, such as daily pre and post formative assessments to assess participants shifts in knowledge is another consideration to explore the efficacy within each day of the training series. Formative assessments identify growth as well as areas to address, which would be beneficial in improving professional development for educators (Guskey,1995).

Considering the social validity of training participants and families with students receiving a FABI is another important consideration for future research. Collecting social validity data on participants' beliefs and opinions of the training series could provide insights regarding areas to address in the training. Furthermore, considering the viewpoints of family members may also provide information that may support the efficacy of the FABI implemented with that specific child, such as if the child is generalizing the replacement behavior at home.

In addition, monitoring the procedural fidelity of the training series is another consideration for future research efforts. Procedural fidelity has become a prominent aspect of assessing the consistency of intervention and program delivery (Reed & Codding, 2013). Monitoring procedural fidelity data of a professional learning series may further the field in practice-based professional development, as we learn under how participants learn to design, implement, and evaluate FABIs. Future studies should consider the possibility of conducting a randomized control trial between groups of participants attending the training series with limited university support along with the procedural fidelity across groups.

Lastly, while schools in this study were not implementing Ci3T (Lane, Oakes, & Menzies, 2014), it is important for future research to consider training schools working within

tiered models of support. Tiered systems are widespread in today's schools, thus considerations of building schools' capacities to design, implement, and evaluate FABIs within a Ci3T framework is important. Additional research in this area could answer questions pertaining to implementation fidelity along with extending the current study to examine difference in participants' perceptions of knowledge, confidence, and use in comparison to schools not working with tiered models of support.

Summary

For the purpose of this thesis, a replication and extension of findings in a previous study Focus on Function (Lane et al., 2015) was conducted to examine shifts in participants' thinking across a practice-based professional development series on FABIs. In this study, Focus on Function II findings replicated Focus on Function I, as participants' perceptions increased on all mean scores within every construct examined. Extension of the previous study resulted in examined completion levels of teams to further support the efficacy of the training series and extend the literature base. While this study provides initial evidence in support of FABI practice-based professional learning, future studies are needed particularly within randomized control trials to determine the overall efficacy of the training with diverse populations.

References

Atkins, M., Cullinan, D., Kutash, K., & Weaver, K. (2008). *Reducing behavior problems in the elementary school classroom*. National Center for Education Evaluation and Regional Assistance.

Baker, P. H. (2005). Managing student behavior: How ready are teachers to meet the challenge?. *American Secondary Education, 33*(2), 51-64.

Ball, D. L., Sleep, L., Boerst, T. A., & Bass, H. (2009). Combining the development of practice and the practice of development in teacher education. *The Elementary School Journal*, 109(5), 458-474.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational psychologist* 28(2): 117-1.

Barton-Arwood, S., Morrow, L., Lane, K., & Jolivette, K. (2005). Project IMPROVE: Improving teachers' ability to address students' social needs. *Education and Treatment of Children*, 430-443.

Bijou, S. W., Peterson, R. F., & Ault, M. H. (1968). A method to integrate descriptive and experimental field studies at the level of data and empirical concepts. *Journal of Applied behavior analysis*, *1*(2), 175.

Borgmeier, C., Loman, S. L., Hara, M., & Rodriguez, B. J. (2014). Training school personnel to identify interventions based on functional behavioral assessment. *Journal of Emotional Behavioral Disorders*, 23 (2), 78-89.

Borthwick-Duffy, S., Lane, K.L., & Mahdavi, J. (2002). SKIL survey. Unpublished Survey.

Brauner, C., & Stephens, C. (2006). Estimating the Prevalence of Early Childhood Serious Emotional/Behavioral Disorders: Challenges and Recommendations. *Public Health Reports (1974-), 121*(3), 303-310.

Brownell, M. T., Bishop, A. G., Gersten, R., Klingner, J. K., Penfield, R. D., Dimino, J., ... & Sindelar, P. T. (2009). The role of domain expertise in beginning special education teacher quality. *Exceptional Children*, *75*(4), 391-411.

Buchanan, J. (2012). Telling tales out of school: Exploring why former teachers are not returning to the classroom. *Australian Journal of Education*, *56*(2), 205-217.

Carter, D. R., & Horner, R. H. (2007). Adding Functional Behavioral Assessment to First Step to Success a Case Study. *Journal of Positive Behavior Interventions*, *9*(4), 229-238.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. (2nd ed.). Hillsdale, New Jersey: Erlbaum.

Common, E.A., Lane., K.L., Pusteovsky, J., Shadish, W.R., Swaminathan, S., & Johl, L.E. (2016) *Examining functional assessment-based interventions for students with or at risk for high incidence disabilities: An application of new single-case design analyses.* Manuscript in preparation.

Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). *Applied behavior analysis* (2nd ed.). Upper Saddle River, NJ: Pearson.

Council for Exceptional Children (CEC) (2014). CEC: Standards for evidence-based practices in special education. *Exceptional Children*, *80*(4), 504-511.

Crone, D. A., Horner, R. H., & Hawken, L. S. (2004). *Responding to problem behavior in schools: The behavior education program*. New York, NY: Guilford.

Doolittle, J. H., Horner, R. H., Bradley, R., Sugai, G., & Vincent, C. G. (2007). Importance of student social behavior in the mission statements, personnel preparation standards, and innovation efforts of state departments of education. *The Journal of Special Education*, *40*(4), 239-245.

Dukes, C., Rosenberg, H., & Brady, M. (2008). Effects of training in functional behavior assessment. *International Journal of Special Education*, 23(1), 163-173.

Duran, M., Brunvand, S., Ellsworth, J., & Sendag, S. (2012). Impact of research-based professional development: Investigation of inservice teacher learning and practice in wiki integration. *Journal of Research on Technology in Education,* 44(4), 313-334.

Emmer, E. T., & Stough, L. M. (2001). Classroom management: A critical part of educational psychology, with implications for teacher education. *Educational psychologist*, *36*(2), 103-112.

Fallon, M., Zhang, J., & Kim, E. J. (2011). Using course assessments to train teachers in functional behavior assessment and behavioral intervention plan techniques. *The Journal of International Association of Special Education*, 12, 50-58.

Friedman, I. A. (2006). Classroom Management and Teacher Stress and Burnout. In C. Evertson & C. Weinstein (Eds.) The Handbook of Classroom Management (pp. 925-944). Mahwah NL: Lawrence Erlbaum Associated.

Fritz, C. O., Morris, P. E., & Richler, J. J. (2012). Effect size estimates: current use, calculations, and interpretation. *Journal of Experimental Psychology: General*, *141*(1), 2.

Gebbie, D. H., Ceglowski, D., Taylor, L. K., & Miels, J. (2012). The role of teacher efficacy in strengthening classroom support for preschool children with disabilities who exhibit challenging behaviors. *Early Childhood Education Journal*, *40*(1), 35-46.

Gredler, M. E. (1997). Jean Piaget's cognitive-development theory. *Learning and instruction: Theory into practice*, *3*, 201-235.

Gresham, F. M. (2005). Response to intervention: An alternative means of identifying students as emotionally disturbed. *Education and Treatment of Children*, 328-344.

Gresham, F. M., & Elliot, S. N. (2008). *Social skills improvement system: rating scales*. Bloomington, MN: Pearson Assessments.

Grossman, P., Compton, C., Igra, D., Ronfeldt, M., Shahan, E., & Williamson, P. (2009). Teaching practice: A cross-professional perspective. *The Teachers College Record*, *111*(9), 2055-2100.

Guskey, T.R (1995), "*Professional development in education: in search of the optimal mix*", in Guskey, T.R. and Huberman, M. (Eds), *Professional Development in Education: New Paradigms & Practices*, Teacher College Press, New York, NY, pp. 114–32.

Guskey, T. R. (2003). *Analyzing lists of the characteristics of effective professional development to promote visionary leadership*. NASP Bulletin, 87(637), 38-54.

Harris, L. (1991). *The metropolitan life survey of the American teacher, 1991, The first year: New teachers' expectations and ideals.* New York, NY: Metropolitan Life Insurance Company.

Hinkle, D. E., Wiersma, W., & Jurs, S. G. (2003). *Applied statistics for the behavioral sciences* (5th ed.). Boston, MA: Houghton Mifflin.

Horner, R. H., & Sugai, G. (2000). School-wide behavior support: An emerging initiative. *Journal of Positive Behavior Interventions*, *2*(4), 231.

Horner, R. H., Carr, E. G., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of single-subject research to identify evidence-based practice in special education. *Exceptional children*, *71*(2), 165-179.

Horner, R. H., & Sugai, G. (2015). School-wide PBIS: an example of applied behavior analysis implemented at a scale of social importance. *Behavior Analysis in Practice*, *8*(1), 80-85.

Individuals with Disabilities Education Improvement Act of 2004, Pub. L No. 108-446, 20 U.S.C. § 1400 *et seq*.

Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational leadership*, *60*(8), 30-33.

Ingram, K., Lewis-Palmer, T., & Sugai, G. (2005). Function-Based Intervention Planning Comparing the Effectiveness of FBA Function-Based and Non—Function-Based Intervention Plans. *Journal of Positive Behavior Interventions*, *7*(4), 224-236.

Janney, D. M., Umbreit, J., Ferro, J. B., Liaupsin, C. J., & Lane, K. L. (2013). The Effect of the extinction procedure in function-based intervention. *Journal of Positive Behavior Interventions*, *15*(2), 113-123.

Kratochwill, T. R., Volpiansky, P., Clements, M., & Ball, C. (2007). Professional development in implementing and sustaining multitier prevention models: Implications for response to intervention. *School Psychology Review, 36(4), 618-631.*

Lane, K. L., Bruhn, A. L., Crnobori, M. L., & Sewell, A. L. (2009). Designing functional assessment-based interventions using a systematic approach: A promising practice for supporting challenging behavior. *Policy and practice: Advances in learning and behavioral disabilities*, *22*, 341-370.

Lane, K. L., Kalberg, J. R., & Menzies, H. M. (2009). *Developing schoolwide programs to prevent and manage problem behaviors: A step-by-step approach*. Guilford Press.

Lane, K. L., Oakes, W. P., & Menzies, H. M. (2014). Comprehensive, integrated, three-tiered models of prevention: Why does my school—and district—need an integrated approach to meet students' academic, behavioral, and social needs?. *Preventing School Failure: Alternative Education for Children and Youth*, *58*(3), 121-128.

Lane, K. L., Oakes, W. P., Powers, L., Diebold, T., Germer, K., Common, E. A., & Brunsting, N. (2015). Improving teachers' knowledge of functional assessment-based interventions: Outcomes of a professional development series. *Education and Treatment of Children*, *38*(1), 93-120.

Mace, F. C. (1994). The significance and future of functional analysis methodologies. *Journal of applied behavior analysis*, *27*(2), 385-392.

Makel, M. C., & Plucker, J. A. (2014). Facts Are More Important Than Novelty Replication in the Education Sciences. *Educational Researcher*, *43*(6), 304-316.

McIntosh, K., Campbell, A. L., Carter, D. R., & Dickey, C. R. (2009). Differential effects of a tier two behavior intervention based on function of problem behavior. *Journal of Positive Behavior Interventions*, *11*(2), 82-93.

Oliver, R. M., & Reschly, D. J. (2007). Effective Classroom Management: Teacher Preparation and Professional Development. TQ Connection Issue Paper. *National Comprehensive*

Center for Teacher Quality.

Oliver, R. M., & Reschly, D. J. (2010). Special education teacher preparation in classroom management: Implications for students with emotional and behavioral disorders. *Behavioral Disorders*, 188-199.

Pindiprolu, S. S., Peterson, S. M., & Bergloff, H. (2007). School personnel's professional development needs and skill level with functional behavior assessments in ten Midwestern states in the United States: Analysis and issues. *Journal-international association of special education*, *8*(1), 31.

Reed, F. D. D., & Codding, R. S. (2014). Advancements in procedural fidelity assessment and intervention: Introduction to the special issue. *Journal of Behavioral Education*, *23*(1), 1-18.

Ruble, L. A., Usher, E. L., & McGrew, J. H. (2011). Preliminary investigation of the sources of self-efficacy among teachers of students with autism. *Focus on autism and other developmental disabilities*, *26*(2), 67-74.

Tsouloupas, C. N., Carson, R. L., Matthews, R., Grawitch, M. J., & Barber, L. K. (2010). Exploring the association between teachers' perceived student misbehaviour and emotional exhaustion: The importance of teacher efficacy beliefs and emotion regulation. *Educational Psychology, 30*(2), 173-189.

Turtura, J. E., Anderson, C. M., & Boyd, R. J. (2014). Addressing Task Avoidance in Middle School Students Academic Behavior Check-In/Check-Out. *Journal of Positive Behavior Interventions*, *16*(3), 159-167.

Umbreit, J., Ferro, J., Liaupsin, C., & Lane, K.L. (2007). *Functional behavioral assessment and function-based intervention: An effective, practical approach.* Upper Saddle River, NJ: Pearson.

Van Acker, R., Boreson, L., Gable, R. A., & Potterton, T. (2005). Are we on the right course? Lessons learned about current FBA/BIP practices in schools. *Journal of Behavioral Education*, *14*(1), 35-56.

Wang, M. C., Haertel, G. D., & Walberg, H. J. (1997). What Helps Students Learn? Spotlight on Student Success.

Walker, H. M., Block-Pedego, A., Todis, B., & Severson, H. (1991). *School archival records search.* Longmont, CO: Sopris West.

Walker, H. M., Kavanagh, K., Stiller, B., Golly, A., Severson, H. H., & Feil, E. G. (1998). First step to success an early intervention approach for preventing school antisocial behavior. *Journal of emotional and behavioral disorders*, *6*(2), 66-80.

Watson, S. B. (2006). Novice science teachers: Expectations and experiences. *Journal of Science Teacher Education*, *17*(3), 279-290.

Witt, J. C., & Elliot, S. N. (1985). Acceptability of classroom intervention strategies. In Kratochwill, T.R. (Ed.), *Advances in School Psychology,4,* 251-288. Mahwah, NJ: Erlbaum.

Wood, B. K., Oakes, W. P., Fettig, A., & Lane, K. L. (2015). A Review of the Evidence Base of Functional Assessment-based Interventions for Young Students Using One Systematic Approach. *Behavioral Disorders*, *40*(4), 230-250.

Table 1
Participant Characteristics- Team

Variable	Level	Total n = 132
Team Members		% (n)
Gender		
	Female	80.73 (88)
	Male	19.27 (21)
Highest Degree Obtained		
	Bachelor's Degree	27.27 (36)
	Master's Degree	51.52 (68)
	Master's Degree + 30 credits	16.67 (22)
	Doctoral Degree/Educational Specialist	4.55 (6)
Role		
	General Education Teacher	14.62 (19)
	Special Education Teacher	13.85 (18)
	Administrator	12.31(16)
	Related Service Provider	56.92(74)
	Other	2.31 (3)
Grade Levels Taught		
	PK	18.42 (7)
	K	15.79 (6)
	1	28.95 (11)
	2	28.95 (11)
	3	28.95 (11)
	4	28.95 (11)
	5	26.32 (10)
	6	18.42 (7)
	7	15.79 (6)
	8	18.42 (7)
	9	2.63 (1)
Certification for Current Assignment		67.72 (86)
Board Certified Behavior Analyst (BCBA)		12.09 (11)
Seeking BCBA Licensure		32.26 (30)
Years of Experience in Current Position		1-30

Note: Information is representative of participants who completed the items on the demographic measure.

Table 2
Participant Characteristics – Student

Variable	Level	Total $n = 29$
Students receiving FABI		% (*n*)
Gender		
	Female	17.24 (5)
	Male	82.76 (24)
Grade Level		
	PK	17.39 (4)
	K	8.70 (2)
	1	8.70 (2)
	2	4.35 (1)
	3	26.09 (6)
	4	4.35 (1)
	5	8.70 (2)
	6	4.35 (1)
	7	4.35 (1)
	8	8.70 (2)
	9	4.35 (1)
Student Status		
	General Education	29.17 (7)
	Special Education	70.83 (17)
Primary Eligibility Category for Special Education Services		
	Specific Learning Disability	13.64 (3)
	Emotional Disturbance	18.18 (4)
	Autism	18.18 (4)
	Developmental Delay	18.18 (4)

Note. Information is representative of information completed by teams during the FABI process. No student participants were reported to have a secondary eligibility category for special education services.

Table 3
Knowledge, Confidence, and Use Pre-Test and Post-Test

Construct	Time			Significance Testing	
	Pre-Training M (SD) N	Post- Training M (SD) N	Difference M (SD) N	*t* value DF *p* value	Effect Size Hedges's *g*
Perceived Knowledge	24.01 (14.28) 126	38.00 (8.91) 104	12.30 (10.63) 88	10.85 87 <.001	1.15
Perceived Confidence	23.55 (14.17) 117	35.99 (9.06) 101	11.53 (10.47) 79	9.79 78 <.0001	1.03
Perceived Use	34.54 (12.21) 96	40.24 (5.06) 97	3.26 (9.30) 65	2.83 64 0.0063	0.61
Actual Knowledge	10.60 (8.75) 90	21.75 (4.79) 85	10.23 (6.29) 60	12.60 59 <.0001	1.56

Note: Information is representative of participants who completed the items on the KCU measure.

Table 4
Summary of Correlation Coefficients

Construct (Item)	Pre/Post			Pre			Post		
	r	*p* value	*n*	*r*	*p* value	*n*	*r*	*p* value	*n*
Perceived									
Knowledge	0.65	<.0001	88	—	—	—	—	—	—
Confidence	0.64	<.0001	79	—	—	—	—	—	—
Usefulness	0.41	0.0007	65	—	—	—	—	—	—
Actual				—	—	—	—	—	—
Knowledge	0.72	<.0001	60	—	—	—	—	—	—
Actual Knowledge to Perceived	—	—	—	0.77	<.0001	86	0.59	<.0001	79
Knowledge (Performance Deficit)	—	—	—	0.39	0.0001	90	0.12	0.2407	90
(Functional assessment-based intervention)	—	—	—	0.48	<.0001	91	0.25	0.0194	85
(Social Validity)	—	—	—	0.66	<.0001	91	0.39	0.0003	85
(Operational Definitions of Behavior)	—	—	—	0.75	<.0001	91	0.40	0.0001	85
(Positive Reinforcement)	—	—	—	0.39	0.0001	91	0.50	<.0001	85
(Replacement Behavior)	—	—	—	0.58	<.0001	91	0.32	0.0031	83
(A-B-C Data Collection)	—	—	—	0.71	<.0001	90	0.44	<.0001	85
(Antecedent Adjustments)	—	—	—	0.76	<.0001	90	0.40	0.0002	82
(Extinction)	—	—	—	0.66	<.0001	90	0.44	<.0001	88
(Treatment Integrity)	—	—	—	0.64	<.0001	90	0.39	0.0002	86

Table 5
Team Completion of Step 1

Task Assigned in Step 1	% Started	% Completed			
Assignment	% (n)	0	1	2	3
Communicated with parents and secured permissions	100 (29)				100.00 (29)
Called PIs to secure student assent	100 (28[a])				100.00 (28 [a])
Completed Referral Checklist	68.97 (20)	10.00 (2)	5.00 (1)	20.00 (4)	65.00 (13)

Note. 0 = Item not completed, 1 = *Item partially completed, less than half*, 2 = *Item partially completed, at least half or greater*, 3 = *Item Completed*. Percentages represent items completed and submitted by teams. 28[a] One student did not assent, as it was deemed developmentally inappropriate for this child.

Table 6
Team Completion of Step 2

Task Assigned in Step 2	% Started	% Completed			
Assignment	% (n)	0	1	2	3
Submitted informal observation documents (e.g., classroom map, copy of PBIS plan, instructional schedule, and classwide system for behavior management)	89.66 (26)	3.85 (1)	3.85 (1)		92.31 (24)
Completed School Archival Record Search (SARS)	72.41 (21)	4.76 (1)	4.76 (1)	52.38 (11)	38.10 (8)
Interviewed Teacher	86.21 (25)		4.00 (1)	4.00 (1)	92.00 (23)
Operationally Defined Target and Replacement Behavior	75.86 (22)	4.55 (1)	4.55 (1)	40.91 (9)	50.00 (11)
Interviewed Parent Interview	72.41 (21)	28.57 (6)			71.43 (15)
Interviewed Student Interview	55.17 (16)	18.75 (3)		25.00 (4)	56.25 (9)
Teacher Completed Social Skills Improvement System (SSIS) Rating Scales	82.76 (24)			25.00 (6)	75.00 (18)
Parent Completed Social Skills Improvement System (SSIS) Rating Scales	89.66 (26)	7.69 (2)		15.38 (4)	76.92 (20)
Collected A-B-C Data	86.21 (25)		48.00 (12)	48.00 (12)	4.00 (1)
Used Function Matrix to organize data and develop a hypothesis statement as to what is maintaining the behavior	96.55 (28)		7.14 (2)	3.57 (1)	89.29 (25)

Note. 0 = Item not completed, 1 = *Item partially completed, less than half*, 2 = *Item partially completed, at least half or greater*, 3 = *Item Completed*. Percentages represent items completed and submitted by teams.

Table 7
Team Completion of Step 3

Task Assigned in Step 3	% Started	% Completed			
Assignment	% (n)	0	1	2	3
Selected and documented behavioral dimension	24.14 (7)				100.00 (7)
Reported selected system for behavior measurement	79.31 (23)		4.35 (1)		95.65 (22)
Described data collection methods to measure behavior	37.93 (11)		9.09 (1)	36.36 (4)	54.55 (6)
Documented training procedures for reliable data collection	20.69 (6)				100 (6)
Completed three or more reliability sessions	34.48 (10)		10.00 (1)		90.00 (9)
Calculated interobserver agreement (IOA) of reliability sessions	31.03 (9)				100.00 (9)
Collected a minimum of five baseline data points.	62.07 (18)				100.00 (18)
Collected IOA for 25% of baseline phase	37.93 (11)				100.00 (11)
Reported IOA % during baseline	41.38 (12)				100.00 (12)

Note. 0 = Item not completed, 1 = *Item partially completed, less than half*, 2 = *Item partially completed, at least half or greater*, 3 = *Item Completed*. Percentages represent items completed and submitted by teams.

Table 8
Team Completion of Step 4

Task Assigned in Step 4	% Started	% Completed			
Assignment	% (n)	0	1	2	3
Selected a method for intervention using the Function-Based Intervention Decision Model	75.86 (22)				100.00 (22)
Drafted intervention using A-R-E Components	—	—	—	—	—
Collected pre- intervention social validity data from teacher and student, using the IRP-15 and CIRP	31.03 (9)			66.67 (6)	33.33 (3)
Prepared plan for introducing the intervention to teacher	37.93 (11)		9.09 (1)		90.01 (10)
Prepared plan for introducing the intervention to student	37.93 (11)		9.09 (1)		90.01 (10)
Finalized A-R-E Components and Treatment Integrity form using teacher's feedback	72.41 (21)		4.76 (1)		95.24 (20)
Collected baseline intervention data after Winter Break	17.24 (5)	40.00 (2)			60.00 (3)
Completed Teacher PRE-IRP-15	41.38 (12)				100.00 (12)
Completed Student PRE-CIRP	41.38 (12)				100.00 (4)

Note. 0 = Item not completed, 1 = *Item partially completed, less than half*, 2 = *Item partially completed, at least half or greater*, 3 = *Item Completed*. Percentages represent items completed and submitted by teams. — Drafted A-R-E intervention components were not analyzed

Table 9
Team Completion of Step 5

Task Assigned in Step 5	% Started	% Completed			
Assignment	% (n)	0	1	2	3
Reported implementation of intervention	34.48 (10)				100.00 (10)
Collected treatment integrity of intervention	24.14 (7)		28.57 (2)	28.57 (2)	42.86 (3)
Collected intervention data	41.38 (12)		8.33 (1)		91.67 (11)
Calculated IOA % for intervention	20.69 (6)	50.00 (3)			50.00 (3)
Withdrew intervention and collected withdrawal phase data	20.69 (6)		16.67 (1)		83.33 (5)
Collected treatment integrity of withdrawal	6.90 (2)			100.00 (2)	
Reintroduced intervention	27.59 (8)	11.11 (0)			88.89 (8)
Collected treatment integrity of intervention	6.90 (2)		50.00 (1)	50.00 (1)	
Collected intervention data	31.03 (9)	11.11 (1)		11.11 (1)	77.78 (7)
Planned for follow up data collection and maintenance	34.48 (10)	10.00 (1)		20.00 (2)	70.00 (7)
Completed Ethical Considerations form	44.83 (13)		7.69 (1)	7.69 (1)	84.62 (11)
Collected post-intervention social validity data from teacher and student, using the IRP-15 and CIRP	13.79 (4)			50.00 (2)	50.00 (2)
Completed Teacher POST-IRP-15	13.79 (4)				100.00 (4)

Task Assigned in Step 5	% Started	% Completed			
Assignment	% (n)	0	1	2	3
Completed Student POST-CIRP	3.45 (1)				100.00 (1)
Graphed Data	65.52 (19)		31.58 (6)	36.84 (7)	31.58 (6)
Completed FABI Intervention Planning Form	68.97 (20)		35.00 (7)	60.00 (12)	5.00 (1)
Completed Behavior Intervention Plan (BIP)	58.62 (17)		11.76 (2)	35.29 (6)	52.94 (9)

Note. 0 = Item not completed, 1 = *Item partially completed, less than half*, 2 = *Item partially completed, at least half or greater*, 3 = *Item Completed*. Percentages represent items completed and submitted by teams.

Table 10
FABI Case Characteristics of Student Participants

Variable	Level	Total N = 29
		% (n)
Target Behavior		
	Noncompliance	14.29 (4)
	Disruption	3.57 (1)
	Off-Task	46.43 (13)
	Inappropriate talking in class	7.14 (2)
	Task Avoidance	3.57 (1)
	Physical Aggression	3.57 (1)
	Inappropriate vocalizations	7.14 (2)
	Elopement	7.14 (2)
	Unwelcome physical touching towards students	3.57 (1)
	Hand Fidgeting	3.57 (1)
# of Hypothesized Functions		
	One	26.92 (7)
	Two	65.38 (17)
	Three	7.69 (2)
Function of Behavior		
	S^R+ Attention	76.00 (19)
	S^R- Attention	8.00 (2)
	S^R+ Tangibles/Activities	7.69 (2)
	S^R- Tangibles/Activities	69.23 (18)
	S^R+ Sensory	19.23 (5)
	S^R- Sensory	3.85 (1)
Replacement Behavior		
	Academic Engagement/On-Task	62.96 (17)
	Compliance	11.11 (3)
	Appropriate Communication	7.41 (2)
	Appropriate Voice Level	3.70 (1)
	List of Functions*	3.70 (1)
	Hands to Self	7.41 (2)
	Sensory Tool Use	3.70 (1)
Targeted Dimension of Behavior		
	Frequency	54.55 (6)
	Rate	18.18 (2)
	Duration	27.27 (3)

Variable	Level	Total N = 29
Selected Measurement System		
	Event Recording	30.43 (7)
	Partial Interval Recording	17.39 (4)
	Whole Interval Recording	8.70 (2)
	Momentary Time Sampling	43.48 (10)
Dimension and Measurement System Alignment		
	Did not Align	16.67 (3)
	Aligned	83.33 (15)
Intervention Method		
	Method 1: Teach the Replacement Behavior	0.00 (0)
	Method 2: Improve the Environment	38.10 (8)
	Method 3: Adjust the Contingencies	14.29 (3)
	Combination of Method 1 and 2	47.62 (10)
Function and Intervention Alignment		
	Did not align	25.00 (5)
	Aligned	75.00 (15)
Established a functional relationship		
	Did not establish functional relationship	73.68 (14)
	Established functional relationship	26.32 (5)

Note. Information is representative of information completed by teams during the FABI process. S^R+ refers to positive reinforcement. S^R- negative reinforcement (Cooper, Heron, Heward, 2007). *indicates incorrect label for replacement behavior.

Session	Agenda, Homework, and Next Steps
Training Day 1	▪ Welcome and Introductions ▪ Overview of functional assessment-based interventions (FABI) ▪ Illustrations ▪ Step 1: Identifying students who need a FABI ▪ Step 2: Conducting the functional assessment
After Day 1	▪ Complete Referral Checklist ▪ Complete the Records Review ▪ Informal Observations o Draw a classroom map o Obtain a copy of the Tier PBIS program o Obtain a copy of the instructional schedule o Obtain a copy of any classwide systems for behavior management ▪ Complete the Interviews (Teacher, Parent, Student) ▪ Complete the SSiS Ratings Scales ▪ Complete the direct observation A-B-C (3 hrs., 8 instances of target behavior)
Training Day 2	▪ Step 3: Baseline Data
After Day 2	▪ Complete and confirm FABI Planning Form ▪ Select the dimension of behavior to measure. ▪ Select measurement system to measure behavior. ▪ Draft data collection procedures (materials needed, data collection sheet, schedule observation times) ▪ Explain procedures used for becoming reliable on data collection. Include number of training sessions and Inter-observer (IOA) agreement percentage (3 consecutive observations at 85% or higher IOA). ▪ Collect baseline data (5 points minimum) ▪ Collect IOA on at least 2 data points (2 out of 5, 25% of observations) and calculate overall IOA for baseline. ▪ Graph baseline data
Training Day 3	▪ Step 4: Intervention Development: Using the Decision Model ▪ Step 5: Testing the Intervention
After Day 3	▪ Finalize Intervention DRAFT (A-R-E components) ▪ Share the decision model and intervention with the teacher and revise accordingly ▪ Design treatment integrity form

	▪ Polish the treatment integrity form ▪ Teach the teacher the intervention, assess social validity ▪ Teach the student the intervention, assess social validity ▪ Prepare all intervention materials ▪ After winter break, reestablish baseline performance, then begin intervention (collect at least 5 data points; with 2 IOA points) ▪ Monitor treatment integrity (Daily by Teacher/Interventionist; 25% IOA) ▪ Graph data and examine for level, trend, and stability (contact coach with graphed data for support) ▪ Withdraw intervention for at least 3 data points (at least 1 IOA)
Training Day 4	▪ Step 5: Testing the Intervention ▪ Putting all of the pieces together: A defensible plan ▪ Finalizing the Behavior Intervention Plan ▪ Complete the Knowledge, Confidence, and Use Survey
After Day 4	▪ Implement the intervention (share graph with coach for decision making for withdrawal) ▪ Complete treatment integrity form (Daily by Interventionist/Teacher; 25% IOA) ▪ Withdrawal of intervention with at least 3 data points (1 IOA) ▪ Complete treatment integrity form (Daily by Interventionist/Teacher; 25% IOA) ▪ Assess Teacher's POST social validity ▪ Assess student's POST social validity ▪ Graph all data ▪ Work with coaches to complete behavior intervention plan (BIP) and graphed data to share with teacher and parents
Training Day 5	▪ Analyzing Intervention Outcomes ▪ Finalizing the Behavior Intervention Plan ▪ Building Fluency: Supporting Student 2 ▪ Planning Time with Your Coach

Figure 1. Overview of Professional Learning Series

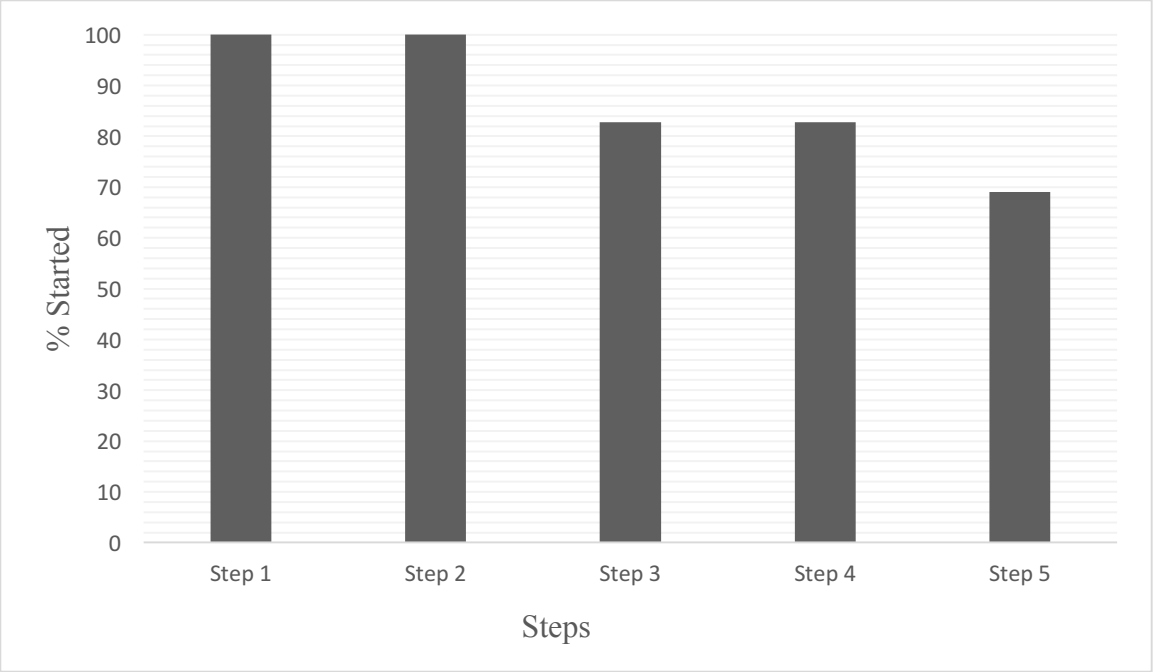


Figure 2. Teams' FABI Completion.
Note. This figure represents the percentage of teams who started and turned in any given portion of the tasks within each step in the FABI process.

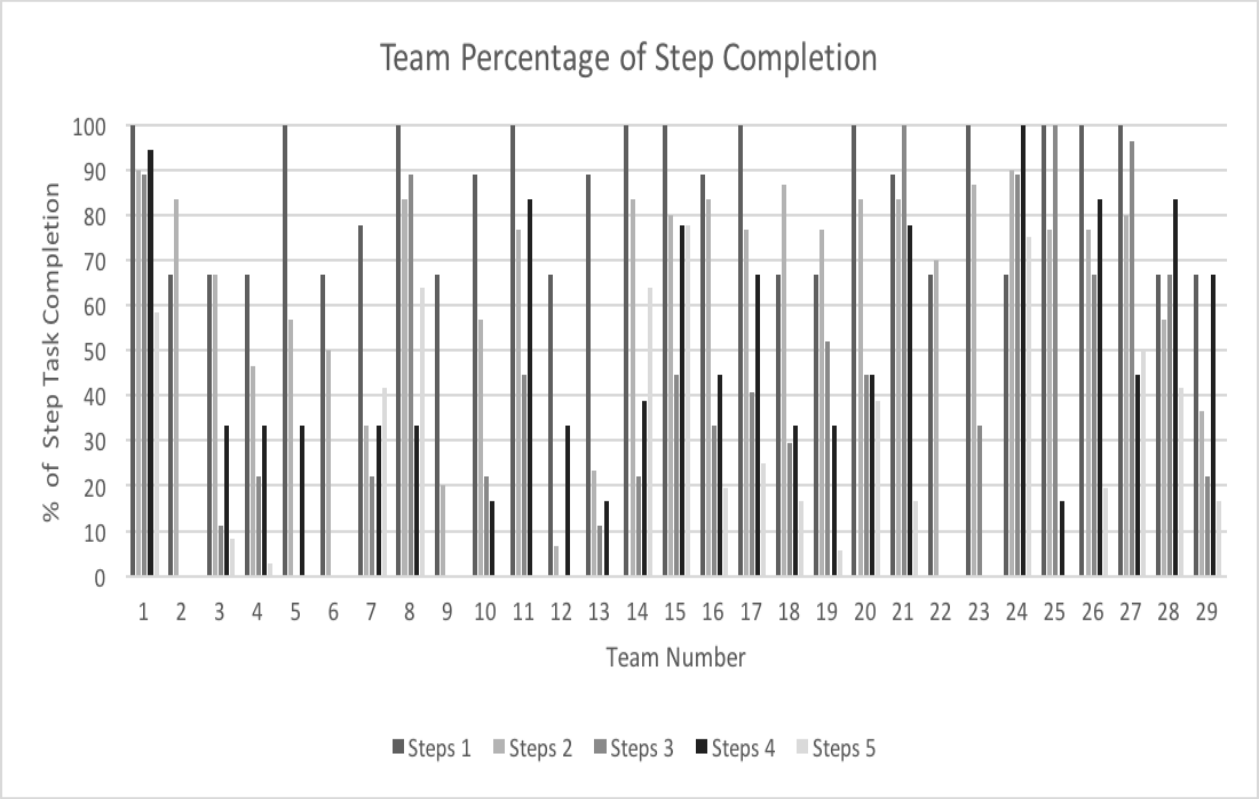
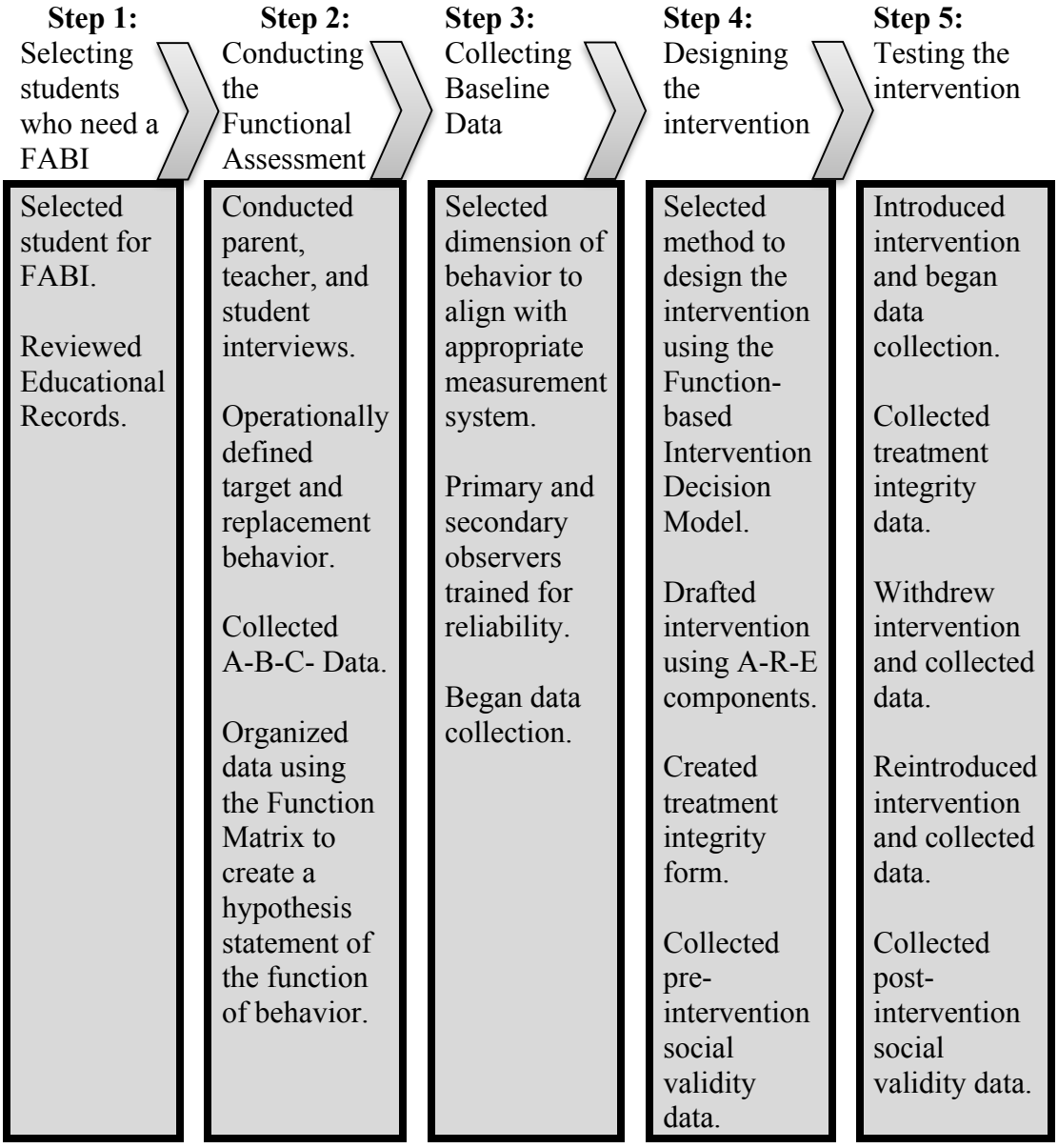


Figure 3. Percentage of Step Completion This figure represents each teams' percentage of task-completion within each step across the five steps of the FABI process.



			%		
Percent of teams who started step (*n*)	100 (29)	100 (29)	82.76 (24)	82.76 (24)	68.97 (20)
Average percentage of task completion across 29 teams (*SD*)	83.91 (15.60)	66.21 (23.19)	39.72 (33.91)	42.15 (30.70)	22.13 (25.95)

Figure 4. Summary of FABI Step Completion

Appendices

Appendix A. Team Member Informational Letter

Approved by the Human Subjects Committee University of Kansas, Lawrence Campus (HSCL). Approval expires one year from 9/5/2012 HSCL # 20331

THE UNIVERSITY OF KANSAS
School of Education

Department of Special Education

Greetings!

We are pleased you have decided to attend the Tier 3 behavior training series offered at the [redacted]! Specifically, this training seeks to build schools' capacities to design, implement, and evaluate functional assessment-based intervention as a tertiary support to better serve students with and at-risk for learning and behavior problems.

Because the experiences and outcomes of this training series in your community may help to inform other schools and school districts about how to put a team-based approach to behavioral support in place, Kathleen Lane, Professor at the University of Kansas, and Wendy Oakes, Assistant Professor at Arizona State University, would like to use the information obtained during the training series for research purposes.

The intent of this letter is to invite you to participate in a research project, *Focusing on Function II: The Impact of School-Designed Interventions*. All you would do to participate is allow Drs. Lane and Oakes and their research staff to analyze (a) the data you will collect over the course of the training process as you design, implement, and evaluate functional assessment-based interventions and (b) the pre-post measure you will complete to evaluate the overall learning process along with some basic demographic information about you (e.g., gender, years of experience, etc). This information would be analyzed and shared, without using your name or your school's name, to learn about the overall effectiveness of this training program.

There are no known risks to you for participating in this study. Your school may benefit if functional assessment-based interventions are implemented. What is learned in that process may help us to improve and refine our future training efforts for other schools.

All information will be treated as confidential. Each participant will be given a unique identification code that is a combination of your team number (which will be assigned by [redacted]) and your initials to use on all forms. The researchers will not know which names go with which numbers—only the participants themselves know. For example, each team from a given school will be given an identification number such as Team 01 KS, Team 01 JC, Team 01 CL, Team 01 AO. (e.g., School 1, team member initials) to show these four people are all at the same school. However, we will not keep a record of your name or your school's name.

Once the data are received, all data will be kept in the researcher's locked office at The University of Kansas. The information will be stored indefinitely. By turning in materials completed over the course of the training, you are agreeing to participate. If you decide you do not want to take part, there will be no penalty or loss of benefits to which you are entitled, you simply do not turn in materials you complete. Your training will take place even if you decide not to allow your information to be analyzed for research purposes. If you agree to participate and the data are received, you will not be able to withdraw the data later as we will have no way of knowing which data are yours (because we are not keeping a master list of your names and identification)

Thank you very much for your willingness to consider participating in the research project by allowing the use of the information that will be obtained as part of the training.

If you have any questions, please contact Kathleen Lane [redacted] or Wendy Oakes [redacted] If you have any general questions about your rights as a research participant, contact the Institutional Review Board of The University of Kansas [redacted] The research study number is 20331 or Arizona State University [redacted] - The research study number is 1209008293.

Respectfully,

[redacted]

[redacted]

Kathleen Lynne Lane, Ph.D., BCBA-D
Professor
University of Kansas
Department of Special Education (SPED)
[redacted]

Wendy Peia Oakes, Ph.D.
Assistant Professor
Arizona State University
Mary Lou Fulton Teachers College
[redacted]

Note. Letter is redacted for confidentiality purposes.

Appendix B. Parent Consent Letter

Approved by the Human Subjects Committee University of Kansas, Lawrence Campus (HSCL). Approval expires one year from 9/5/2012 HSCL # 20331

Department of Special Education

To Parents/ Guardians,

As you know, your child is being supported by a school team attending a training series offered at the [redacted]. The purpose of the training is to teach teachers, administrators, and other school staff to develop behavior supports for individual students at school, put the support into place, and determine the benefit for each student. It is our belief that participation in this project may improve the ability of these schools to meet the needs of their students.

Because one of our goals is to learn from the experiences and outcomes of the teams attending this training series so that we may help other schools and school districts support students by this team-based approach to behavioral support, we are asking for your participation. Kathleen Lane, Professor at the University of Kansas, and Wendy Oakes, Assistant Professor at Arizona State University, would like to use the information from this training series offered at the [redacted] for research on this learning process.

This letter requests your participation in the research project, *Focusing on Function II: The Impact of School-Designed Interventions*. All you would do to participate is simply allow Drs. Lane and Oakes and their research staff to analyze the information that the school's team collect during the training process as they provide behavioral supports for your child.

Depending on the age and maturity of your child, it might be helpful if you would discuss this with your child to see if he or she is also comfortable with allowing his/her information to be used to help children and teachers in other schools and school districts.

There are no known risks to you as a parent, and there are no known risks or inconveniences to your child. Even if you decide not to allow your child's information related to the behavior support to be used by Drs. Lane and Oakes, your child will still receive those services at school. That means your child will have the benefit of this support during the school day even if you decide not to participate in this research study.

The students and school staff members at your school may benefit if behavioral interventions are implemented. What is learned in the training process may help us improve and refine our future

training efforts for other schools and other children. Information collected would be analyzed and shared, without using anyone's name, to learn about the overall effectiveness of this training series.

All information will be treated as confidential. Each student participant will be assigned a pseudonym or initials rather than using their real names. Teachers will use the pseudonym or initials on forms they complete about your child. Once the information is shared with researchers it will be stored in Dr. Lane's locked office at the University of Kansas and labeled with only the study identification number. The information will be stored indefinitely. If you agree to allow the use of the training information for research purposes, you will not be able to withdraw that data as we will have no way of knowing which data belong to your child—the data are truly anonymous.

Thank you very much for your willingness to consider participating in the research project by allowing the use of the information that will be obtained as part of the training. If you have any questions, please contact Kathleen Lane [redacted] or Wendy Oakes [redacted] you have any general questions about your rights as a research participant, contact the Institutional Review Board of The University of Kansas [redacted] The research study number is 20331or Arizona State University [redacted] - The research study number is 1209008293.

Respectfully,

[redacted]

[redacted]

Kathleen Lynne Lane, Ph.D., BCBA-D
Professor
University of Kansas
Department of Special Education (SPED)
[redacted]

Wendy Peia Oakes, Ph.D.
Assistant Professor
Arizona State University
Mary Lou Fulton Teachers College
[redacted]

The information that will be used for the research will be collected as part of the training process during of the school year. The training process will help teachers and staff design and put into place behavioral supports for your child.

If you and your child ARE WILLING to allow information that stems from being involved in the training to be used for research purposes, please indicate YES below.

If you are NOT willing, please indicate NO below.

For either response, please complete the section below so we know who has responded.

__ YES, I/we are willing for the information from the training to be used for research to help improve the training and help others, and to evaluate how the program is working.
OR
__ NO, I/we do not want to allow the information from the training to be used for research nor to evaluate how the program is working. Please **return one copy of this signed form** to your child's teacher, or to Kathleen Lane in the enclosed postage paid envelope.

Parent's Name (Print and Sign) Date

Child's Name Teacher School District

PLEASE KEEP THE SECOND COPY OF THIS LETTER FOR YOUR RECORDS.

Note. Letter is redacted for confidentiality purposes.

Appendix C. Student Assent Letter

Approved by the Human Subjects Committee University of Kansas, Lawrence Campus (HSCL). Approval expires one year from 9/5/2012 HSCL # 20331

THE UNIVERSITY OF KANSAS
School of Education

Department of Special Education

Focusing on Function II: The Impact of School-Designed Interventions

Child Assent
Younger than age 7

Hi. My name is Kathleen Lane. I would like to invite you to be in a study. We will help your teacher make changes in your classroom to help you do even better work in school and to get along better with your friends. Your teacher and parents will help by telling us about you and looking how things are going in your classroom. If you do not want to be in this study, just tell your teacher or your parent, or me. If you start working with us and then decide that you want to stop, that is okay. Just tell one of us and you can stop being part of our study. Would you like to be in this study?

_____ Yes _____ No

Child's Name _____

Child's Signature _____

Adult Present During Assenting _____

Date _____

Department of Special Education

Focusing on Function II: The Impact of School-Designed Interventions

Child Assent
Ages 7 and older

You are invited to be a part of our study to see how changes in your classroom can help you to do even better work in school and to get along better with your friends. We are working together with your teacher and others at your school. Your teacher and parents will complete a brief rating scale about how you do in school and at home. They will also participate in interviews with some people from your school to give us some information about how things are going for you here at school. We will get other information by observing in your classroom for about 4 to 5 hours over a month or so. You will not be taken out of class. We hope to use what we learn to make small changes in your classroom that will help you to do an even better job at school. If you decide you do not want to be in this study, all you need to do is tell your teacher, your parent, or me. If you start working with us and later decide that you want to stop, that is okay. All you have to do is tell one of us and you can stop being part of our study. Would you like to be in this study?

_____ Yes _____ No

Child's Name _____

Child's Signature _____

Adult Present During Assenting _____

Date _____