Using Teacher Prompts to Increase Leadership Skills in Preschool Children

Sarah Elizabeth West
Louisiana State University and Agricultural and Mechanical College, sewest326@gmail.com

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_theses
Part of the Curriculum and Instruction Commons, Early Childhood Education Commons, and the Educational Psychology Commons

Recommended Citation
4648.
https://digitalcommons.lsu.edu/gradschool_theses/4648
USING TEACHER PROMPTS TO INCREASE LEADERSHIP SKILLS
IN PRESCHOOL CHILDREN

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Master of Education

in

The College of Human Sciences and Education

by
Sarah Elizabeth West
B.S., Louisiana State University, 2015
May 2018
# Table of Contents

ABSTRACT...........................................................................................................iii

CHAPTER

1. INTRODUCTION...............................................................................................1

2. LITERATURE REVIEW.......................................................................................8

3. METHOD...........................................................................................................16

4. RESULTS..........................................................................................................25

5. DISCUSSION.....................................................................................................29

REFERENCES......................................................................................................37

APPENDIX

A. INSTRUCTIONAL REVIEW BOARD APPROVAL...........................................40

B. DATA SHEET....................................................................................................41

VITA.....................................................................................................................42
Abstract

The purpose of the present study was to determine if teacher prompting could increase the frequency of leadership behaviors exhibited by preschool children during play and if teachers increased their level of prompting of leadership behaviors. Parten’s original 1933 framework defined the categories both directing and following; reciprocally directing or sharing leadership with another child; or directing the group in which the preschool children’s leadership behaviors were recorded. A review of the literature revealed prompts teachers could use to promote leadership skills in young children, which included modeling, helping others, completing tasks, praise, decision-making, and problem solving. Results indicated that two of three children increased their leadership behaviors in the category of directing and following, and all three children increased their leadership behaviors in the categories of reciprocally directing and sharing leadership with another child; and directing the group. Additionally, the teacher increased her level of prompting with all three children following training.
Chapter 1. Introduction

Justification

One goal of early childhood programs is the socialization of young children; “where children become a functioning part of society and learn society’s rules and values” (Essa, 2012, p. 336). Early childhood teachers should address social development by providing opportunities for peer interaction (Essa, 2012). Within these opportunities children learn the social skills they need to successfully interact with others. One such skill is leadership (Bailey, Hufford, Emmerson, & Eckert, 2017). Leadership in the early childhood realm was an important topic of discussion in 1933 and has continued with a paucity of research over the last 85 years. The importance of leadership in educational administration has been identified in research recently because “leaders are the people of have the most significant effect in the success and sustainable developments of all organizations and institutions” (Avci, 2015, p. 2758). There is a relationship between teacher leadership in the classroom and student leadership and overall academic outcomes (Noland & Richards, 2015). In the literature, early childhood leadership is defined in different ways by different researchers over the last 85 years (Fox, Flynn, & Austin, 2015; Fukada, Fukada, & Hicks, 2001; Parten, 1933; Trawick-Smith, 1988; Yamaguchi, 2001), but it is continuously stated that it is an important aspect of a child’s development and has been defined as...“[t]he guidance of the others toward a common goal” (Pigors, 1933, p. 140). The role of the teacher is important in this process. Positive child-teacher interactions are part of what is viewed as developmentally appropriate practice (Copple & Bredekamp, 2009) in the field. The present study utilizes prompting through a teacher’s interactions with children to increase leadership skills.
Child leadership. Research suggests that the development of leadership skills at a young age encourages socially competent children who are able to compromise and influence their peers (Trawick-Smith, 1988). The present study observed the child participants’ abilities to compromise and allow others to lead play during certain times, while also providing their own input. This means the participant would listen to the ideas of others and incorporate their opinions into the play scheme in order to sustain a positive interaction, such as that of a diplomatic leader (Parten, 1933). Well-developed leadership skills promote leadership identity and self-regulation, both important to being an industry, organization, or a corporate leader later in a person’s life (Murphy & Johnson, 2011). The present study sought to increase child leadership behaviors that build a foundation for later leadership roles. The study aimed to encourage the child participants to increase their positive interactions with their peers through influencing play that was of the participant’s command. The leadership behaviors were observed as the child participants invited peers into play by giving commands, specific instructions, or assigning a role, while still sustaining the peer’s interest in wanting to play.

Leadership prompting intervention. Teachers can help shape children’s social development through their interactions with young children (Lin, Justice, Emery, Mashburn & Pentimonti, 2017). Teachers have the ability to model leadership behaviors, which encourage children to exhibit similar skills, defined by Noland and Richards (2015) as servant leadership. The present study provided a teacher intervention, which consisted of verbal leadership prompts. The goal of using prompts was to encourage the child participants to increase their leadership behaviors in their interactions with peers.
**Purpose**

The purpose of this study was twofold: (1) to identify leadership skills in preschool-aged children; and (2) to determine if the leadership prompting intervention would increase preschool children’s leadership skills. The leadership behaviors as defined by Parten (1933) as directing a group of children, reciprocally directing leadership with a peer, or both directing and following. The interventions used come from a variety of articles based on leadership in young children, such as understanding teachers’ perceptions of leadership and cues for teachers and parents to provide to young children for increased leadership behaviors (Fox, et al., 2015; The Pennsylvania State University, 2016).

Children were observed in a preschool classroom to determine how their behavior fit within the leadership schema, as defined by Parten (1933). A multiple baseline design across children was used to determine if a leadership prompt intervention would increase child leadership skills. The children and teacher participants were video recorded during the typical classroom play routine. Baseline data were collected on the children’s leadership skills and the teacher’s leadership prompts. Leadership behaviors included both directing and following, reciprocally directing or sharing leadership equally with another child, or directing the group (see *Behavior Definitions* below). The leadership prompt intervention consisted of prompts taken from the literature that had previously demonstrated an increase in children’s leadership behaviors. The leadership prompt intervention consisted of modeling, helping others, completing tasks, praise, decision making, and problem solving (see *Behavior Definitions* below). The purpose of this study sought to answer questions related to the frequency of child leadership behaviors and how this intervention can increase said behaviors.
Research Questions

Child behavior question:

1. Can teacher prompting on leadership increase the leadership behaviors exhibited by preschool-aged children, as defined by Parten (1933)?

Teacher intervention question:

2. Can a teacher increase her leadership prompting of young children’s leadership behaviors following training?

Objective

Previous research supported findings that early exposure to leadership opportunities is important for a child’s development of leadership skills. The purpose of this study was to identify leadership skills exhibited by children in a preschool classroom and determine if leadership prompting intervention would increase child leadership skills (Murphy & Johnson, 2011).

Research Design

In this study, single case research design was used, specifically a multiple-baseline design to collect data on the child leadership and the leadership prompting intervention. A multiple-baseline design was used, as it allows treatment to be provided across subjects at different time phases (Kazdin, 2011). Data were collected in accordance with standards set forth from the Single Case Technical Document (Kratochwill, Hitchcock, Horner, Levin, Odom, Rindskopf, & Shadish, 2010) and included a minimum of five data points per phase.

Benefits and Limitations

This study exhibited benefits and limitations that were unique to the research design, intervention, preschool classroom in which the study took place, and the participants involved.
Benefits

1. The use of a multiple baseline design allowed each participant to receive the leadership prompting intervention at separate times in an attempt to focus on one participant directly (Kazdin, 2011).

2. The Leadership Prompting Intervention is a low cost, low labor-intensive intervention, which incorporates skills that many teachers already possess in their repertoire.

3. The children participants gained skills that will encourage an increase of leadership roles in their play.

Limitations

1. The study was limited to one classroom at the campus preschool and the three child participants who exhibited a need for an increase of leadership skills.

2. Because all participating children were in the same classroom, a limitation may have been diffusion, as children may have heard the Leadership Prompts being delivered to another child.

3. There was a potential for bias as the lead researcher for this study was a peer lead teacher within the preschool classroom in which this study took place.

Assumptions

1. Children who participated in the present study were representative of typical four year olds.

2. The teacher participant in the present study was representative of a typical preschool teacher.

3. The curriculum of the program used in the preschool of the present study did not impact the child or teacher behaviors exhibited.
4. The teacher participant implemented the intervention with each child participant only during the intervention phases.

Definitions

Particular definitions for child leadership and leadership prompts were employed in this study. The terms are defined below.

Child Leadership

*Leadership* is defined as the guidance or influence of peers toward a wanted goal (Pigors, 1933).

*Both directing and following* is defined as the participant demanding actions during play, while also following the demands of a peer (Parten).

*Reciprocally directing or sharing leadership equally with another child* is defined as the participant sharing leadership roles with a peer during play, both making demands of his or her own, but not necessarily following the demands of a peer (Parten).

*Directing the group* is defined as the participant influencing another peer or a group of peers into participating in the activity he or she is engaged in, or influencing a peer or group of peers to begin a new activity based on his or her ideas (Parten).

Leadership Prompting Intervention

*Prompting* is defined as using verbal cues to shape behavior and skill acquisition (Sanchez, Steece-Doran, & Jablon, 2013).

*Modeling* is the teacher making suggestions to the child participant to invite others to play or make observations out loud that a peer wants to participate in play (The Pennsylvania State University, 2016).
**Helping others** is defined as encouraging the child participant to help peers or adults in need of assistance and modeling this type of behavior in an effort to encourage the participant to do so when opportunities arise (Fox, et al., 2015).

**Completing tasks** is defined as the teacher redirecting the child participant to finish a task they are working on, helping them follow through with plans, and prompting the participant to finish (Fox, et al.).

**Praise** in the present study is focused on providing the child participant with positive feedback for including others into play, helping others, completing plans and tasks, making independent decisions, solving problems or other positive behaviors (The Pennsylvania State University, 2016).

**Decision-making** is defined as encouraging the child participant to make his or her own decisions without the influence of a peer or suggesting that the child makes a plan before beginning a task (The Pennsylvania State University, 2016).

**Problem solving** is defined as providing the child with questions linked to solving a problem they are experiencing that are linked to a solution, repeating the child’s thoughts out loud, and/or suggesting a solution to the problem (Fox, et al.).
Chapter 2. Literature Review

Much of the research completed in the area of early childhood leadership focuses on defining child leadership and teacher’s ideas of child leadership, but overall there is a limited amount of research available (Fox, et al., 2011). Erikson’s (McLeod, 2008) theory of Psychosocial Development forms the theoretical framework for the present study, as it examines crises children must overcome to continue in their psychosocial development.

According to Erikson’s theory, each person navigates through a series of crises. When discussing Erikson’s psychosocial stages of development, one must resolve one crisis before moving to the next (Miller, 2016). A person builds upon their next conflict by their resolution from the preceding (McLeod, 2008). From ages three to five years old, children are typically faced with the conflict of initiative versus guilt (McLeod). In this conflict, children are said to be exploring their environment, initiating activities with others, and practicing their abilities to lead in order to develop a sense of initiative and security in their social and decision-making abilities. A well-balanced resolution to this crisis helps a child develop purpose.

As Erikson’s theory relates to the present study, when given the opportunity to initiate play with others, a child develops a sense of confidence and is secure in their ability to make decisions and lead a group. If an adult controls or punishes this behavior, the child may develop a sense of guilt. This may cause the child to feel as though no one wants to play with him or her and lose confidence in his or her ability to lead others. The present study was important to help children overcome this crisis outlined by Erikson by encouraging leadership and initiative behaviors so they can develop confidence in leading during play and move to the next conflict in their development.
In addition to helping a child overcome the crisis of initiative versus guilt, promoting leadership skills in early childhood encourage better leadership roles later in a person’s life (Murphy & Johnson, 2011). Murphy and Johnson argue that early leadership roles provide a firm foundation for future leadership development because a young child’s personality, behaviors, and skills are more malleable and the child has more time to build self-reinforcing confidence in their ability to lead.

**Defining Leadership in Young Children**

Leadership has been defined in various ways depending on the context of the word (Abdigapbarova, Ibrayeva, Baikulova, Ibrayeva, Shalabayeva, & Zhundybayeva, 2016; Arnott, 2013; Bailey, et al., 2017; Fox, et al., 2015; Trawick-Smith, 1988). For the present study, early childhood leadership is defined as guiding others toward a common goal (Pigors, 1933). Leadership can be divided into two types of leaders: the bully and the diplomat (Parten, 1933; Trawick-Smith, 1988; Bailey, et al.). The bully convinces others to follow his or her lead through aggressive commands, not often considering others ideas as an option. The diplomat has a much softer approach to leadership, such as compromising his or her ideas for the ideas of another in an effort to follow through with meaningful play.

Parten (1933) studied the complexity of leadership behaviors in preschool children. She identified that more often a child’s actions, rather than words, causes another child to follow his or her direction. Through this, Parten defined two types of child leaders: the artful leader or brute force leader. The artful leader has a more casual and realistic approach to leading other children. The artful leader often gives a reason for his or her direction and is referred to as the “diplomat” by Parten (p. 437). The brute force leader is more forceful or demanding of other children. The brute force leader wants immediate responses or actions from his or her followers.
and Parten referred to this type of leader as a “bully” (Parten, p. 437). The bully’s group of friends is limited in size because of the leader’s negative interactions with peers, while the diplomat has a sizeable following. Parten found that age, social participation, and changes in roles were all factors related to a child’s leadership behaviors. Concluding the study, Parten expresses that young children most often engage in independent play, but increase their following, reciprocal directing, and directing of a group with age.

Parten identified the approaches a child takes when engaging in play with other children and Fukada, et al. (2001) identified how children place themselves within playgroups. Fukada, et al. studied the structure of 5-year-old children’s leadership behaviors. The participants in this study were defined as Centrals, who held a central role in playing with others; In-Betweeners, who sometimes held central roles in playing with others; and Peripherals, who did not often have a central role in playing with others (Fukada et al.). The researchers used a leadership scale to record leadership behaviors based on a 15-item checklist. This checklist was then divided into two factors: Facilitation of Play factor and Consideration-Evaluation of Playmates factor. There was no significant difference found between the three types of children in the Facilitation of Play factor. Centrals scored significantly higher on the Consideration-Evaluation of Playmates factor when compared to Peripherals. This study concluded that leadership behaviors held different functions when divided into these two factors. This study presents the idea that the context in which a child is asked to play in may influence his or her ability to be a leader by definition.

Similar to the play context factors supported by the research by Fukada, et al., Yamaguchi (2001) studied emergent leadership behaviors as they influence the completion of group tasks. This study used elementary and middle school aged children as participants. The children were separated into different settings: mastery goal orientation and performance goal
orientation. The mastery goal orientation focused on learning, understanding, and mastering the skill or task at hand. Performance goal orientation focused on out performing the other members of the group. The children were given a situational math activity to work out as a group for 30 minutes, allowing at any one of the group members to take lead at any time. Prior to the introduction of the activity, the children in the differing groups were given differing explanations that spoke to the specific group. The results of the study concluded that the emergence of leadership depends on the learning condition, or setting. The performance goal orientation exhibited more dominating and negative leadership behaviors, with little effectiveness when solving the math activity. The mastery goal orientation exhibited more pro-social and positive leadership behaviors while focusing on the group as a whole to successfully complete the activity.

Dissimilar to the research already presented, Murphy and Johnson (2011) examined the various contexts in which leadership develops across a person’s life. The article presents the idea that leadership roles are best developed at a young age in order to provide the child with a firm foundation to build upon across his or her experiences throughout life. There are various influences that help a child develop leadership skills, such as genetics and temperament, parenting styles, and early learning experiences. All of these influences lead to leadership identity and self-regulation. A person’s results from these early experiences will either foster a positive leadership identity that leads to confidence in leading others or a poor leadership identity that stops the person from taking leadership positions.

Trawick-Smith (1988) published a brief overview of leadership research, briefly discussing some of the research articles that have already been discussed here. Trawick-Smith discussed the two main types of leadership that Parten (1933) discovered in her research: the
bully and the diplomat. He presented the idea that bullies and leaders with similar characteristics were “unskilled leaders” (Trawick-Smith, p. 54). These types of leaders should receive instruction much like that of followers to increase their positive, democratic interactions with peers. Trawick-Smith concluded that having effective leadership behaviors means directing, but also being willing to follow the direction of others in order to sustain relationships of those who play together.

Shin, Recchia, Lee, Lee, and Mullarkey (2004) describe the importance of leadership in young children similar to the work done by Trawick-Smith (1988). Shin, et al. (2004) provide examples of the negative views of leadership as it relates to social dominance, explaining, “Research based on the concept of social dominance has characterized leadership as a negative/coercive dimension of peer influence and focused on the establishment of power within the group through aggression, bully, and force-submission sequences” (p. 302). The researchers later apply the importance of early childhood leadership as it provides skills such as “negotiating, compromising, and using other pro-social behaviors to influence peers” (Shin, et al., p. 303). In comparison to the different types of leaders that have been depicted, Shin, et al. support the present study in explaining the benefits of developing social skills that are built in diplomatic leaders.

Throughout these articles, there are two common goals: leadership can be divided into bullies and diplomats and the context of leadership is what influences a child’s leadership skills. Parten (1933) and Trawick-Smith (1988) agreed that the type of leader is what makes the child a successful or unsuccessful leader. This is what makes the child able to include others in his or her play or unable to gather others to play with him or her. Fukada, et al. (2001) and Yamaguchi (2001) agreed that the context in which children are asked to be leaders influence the leadership
role they take. Murphy and Johnson (2011) conclude that people who are leaders later in life are
in these positions and roles because of the foundation they were provided in early childhood.
This article states that a person’s earliest experiences help shape their leadership traits and skills
for later successes. Depending on the type of leader a child becomes, whether a bully or a
diplomat, this type of behavior can be described as positive or negative in the eyes of both
children, teachers, and other adults (Bailey, et al., 2017; Parten; Trawick-Smith). Children who
are able to compromise his or her ideas to fit in the ideas of another child or a child who is able
to follow another’s lead in an effort to engage in play and positive interactions is viewed as the
type of leader that is successful in our definition of leadership: guiding others toward a common

Teacher’s Perception of Leadership in Young Children

Fox, et al. (2015) studied how teachers in early childhood settings identified leadership
skills in children. The researcher distributed a survey to educators asking how they would
describe leadership, if they were able to recognize leadership behaviors, and how they might
influence leadership behaviors in children four to six years old. The study found that most
teachers described child leaders as being helpful, having well developed communication skills,
being confident, and shows initiative. About half of the teacher participants were able to identify
child leadership in given scenarios. The final finding from this study is that teacher’s
interactions with children exhibiting leadership skills often discouraged the behavior.

Bailey, et al. (2017) published a study that assessed leadership and how to improve its
development in preschool through 4th grade aged girls. The researchers examined the current
literature and research on leadership in young females that found that girls are often described as
bossy in a similar situation where a boy may be described as a leader. Bailey et al. aimed to
answer three questions: (1) how their school fostered intentional leadership development in young girls, (2) how the understanding of leadership changed once the intentional teaching program was in place, and (3) how teachers participating in this program viewed leadership development in young girls. Based on the responses from their first research question, the teachers and administration developed a toolkit that focused on developing leadership skills. The toolkit was utilized in the teachers’ classrooms in a variety of ways, but it made an impact on the children that it reached through conversations and interactions. At the end of the study, the teachers recognized the positive behaviors and actions as it related to taking ownership over their relationships and schools as leadership.

Consistent with Bailey, et al. (2017) presentation of the importance of knowledgeable teachers on child leadership, Noland and Richards (2015) presents the understanding that leadership behaviors exhibited by teachers in the classroom have an impact on student successes. Noland and Richards define servant leadership as “an approach to leadership that embraces the opportunity for the leaders to embrace service to their followers” (p. 16). This style of teaching suggests the teacher leadership is encouraged by the student development, thus more commitment to the cause.

Lee, Recchia, and Shin (2005) explain the importance for further research specifically in the field of early childhood leadership, as it differs from the research on youth and adult leadership. Their study focused on the individual leadership styles of four children as their teachers described them in an interview and later observed. This study supports the importance of an early childhood teacher’s interactions with the children and the impact they have on a child’s social-emotional and leadership development.
A teacher’s perception of leadership in has shown to be an important aspect to increasing leadership behavior (Bailey, et al., 2017 & Noland & Richards, 2015). Fox, et al. (2017) found most teachers are able to identify key leadership skills in children, but when the children exhibit the behaviors in the classroom, they were found to discourage the behaviors. Bailey, et al. presents the idea that a teacher’s understanding and delivering this understanding to the students in turn increases leadership and the discussion of leadership in a school. Similar to these findings, Noland and Richards discuss the importance of a teacher’s leadership role as it impacts students exhibiting leadership behaviors. Lastly, Lee, et al. (2005) emphasizes the importance of additional research in the area of child leadership the importance of a teacher’s positive interactions on young children’s social-emotional development.

Summary

Parten’s (1933) study laid the foundation for the present study in that it provided definitions for the types of behaviors, whether a leader or a follower, for young children in play. Fukada, et al. (2001) and Yamaguchi (2001) call attention to the importance of children’s various interactions during the times in which they were observed as this may influence their leadership roles in the present study. Murphy and Johnson (2011) describe the various aspects of a child’s life that may positively or negatively influence their leadership behaviors. This reinforces the importance in the present study for intentional leadership interventions at an early age. Fox, et al. (2015) described how teachers depict themselves in building or discouraging early leadership skills. Fox et al. found that teachers were able to identify the importance of leadership in children, but did not always foster skills that led the children to continue to exhibit these skills. The present study focuses on the importance of fostering and encouraging leadership skills in young children.
Chapter 3. Method

The purpose of the present study was to increase child leadership behaviors in preschool-aged children through a leadership prompting intervention. Research and literature relevant to the present study of leadership in early childhood focused on the types of leadership children exhibit and leadership qualities (Fox, et al., 2015; Fukada, et al., 2001; Parten, 1933; Trawick-Smith, 1988; Yamaguchi, 2001). The literature encourages leadership development in young children in order to build a firm foundation for lead roles in their later years (Murphy & Johnson, 2011). The research questions in the present study sought to measure the impact of a leadership prompting intervention on the leadership behaviors of preschool aged children, and the teacher’s ability to increase her leadership prompting.

Setting

The setting for the study was a campus laboratory preschool classroom of four-year-old children. There were 16 four-year-old children enrolled in the preschool classroom and two peer lead teachers in the classroom. Pseudonyms used protect the identity of the participants. One teacher, Lucy, was a 54-year-old White female who earned a Bachelor of Science in Merchandising and had 17 years’ experience working with young children; the other teacher, Sandy, earned a Bachelor of Science in Education with PK-3 teacher certification and two years of experience and also served as the lead researcher for this study. The preschool classroom had eight learning areas aligned with Early Childhood Environment Rating Scale – Revised Edition (ECERS-R; Harms, Clifford, & Cryer, 2012). The classroom’s learning areas included music and movement; dramatic play; math manipulatives; art studio; writing; reading; science; and blocks. The program utilized a Reggio-inspired philosophy that allowed for free-choice
investigations of the classroom based on the children’s interests. Children had at least 75 minutes of free-choice play each day.

**Participants**

The three participants in the present study were all enrolled in the same four-year-old classroom. The children were all four years old at the time of the study and were all functioning within normal limits according to the Ages and Stages Questionnaire (ASQ; Bricker & Squires, 2017). Mya was a four years and nine months old White female. Violet was a four years and nine months old White female. Brandon was a four years and five months White male. One peer lead teacher, Lucy, participated in the study. The other peer lead teacher, Sandy, was the lead researcher for this study. This study sought and obtained approval from the university’s Institutional Review Board and informed consent was obtained from administration, teachers, parents, and child participants (see Appendix A for Institutional Review Board approval).

A measure of child leadership was collected according to the behavior definitions, below. The three child participants were targeted for intervention because they fit within the critical case sampling scheme presented by Collins, Onwuegbuzie, and Jiao (2007). The children did not exhibit leadership behaviors in the classroom under the primary researcher’s observations, thus their inclusion in the study. The teacher participant was included in the study due to the convenience and purposeful sampling schemes (Collins, et al., 2007). The lead researcher and teacher participant were peer lead teachers in the classroom, making it a convenient fit for the study. The lead researcher was familiar with the behaviors and skills of the children in the classroom, providing a purposeful sampling for the participants.
Behavior Definitions

Child behaviors. Leadership is defined in various ways by various researchers. The definition by Pigors (1933) is most related to the present study, and was defined as “[t]he guidance of the others toward a common goal” (p. 140). For example, if a child wanted to build a castle he saw while reading a book, he would gather a group of children together and discuss the plans to build the castle so all of the children are working toward the same goal. In order to create observable and measureable definitions of child leadership behaviors, the following behaviors were obtained from the work of Parten (1933) (a) *followed another child’s directions* – which was defined as listening to and following another child’s orders or observing another child in play and replicating the behaviors, such as being given the role of collecting blocks to build a castle; (b) *neither directed nor followed, but pursued their own desires* – which was defined as independently doing what he or she chooses to do, without another child’s direction or actions to follow, such as building a castle next to the group of children constructing a castle together; (c) *directed and followed* – which was defined as offering ideas of his or her own to a peer, but also following under the direction of another child without demanding changes being made, such as offering ideas for the height of the castle, but following the instructions of a peer with a different idea; (d) *reciprocally directed or shared leadership equally with another child* – which was defined as the child and a peer are both demanding one another or the group to meet their ideas, but not necessarily following what the other demands, such as offering ideas for who should draw the design of the castle but not following when someone suggests the child does it himself; or (e) *directing the group* – which was defined when the target child had complete control of the play area, had another child or group of children following his or her ideas, and was looked to for
what to do next by the group of children, such as the child directing others as to the role they will hold in helping to build the castle and the child whom the group is coming to for the plans.

**Leadership prompts.** The leadership prompts were developed through a number of research studies that are thought to increase leadership. *Modeling* from a teacher includes making suggestions to the child participant to invite others to play or make observations out loud to the child that someone else may want to play (Bailey, et al., 2017; The Pennsylvania State University, 2016). Modeling would be the teacher using parallel and self-talk to explain actions taking place, such as, “I’m going to invite David to play because he might be able to help me build my castle.” *Helping others* includes encouraging the child participants to help others who may need assistance and modeling this type of behavior in an effort to encourage the child to help as well when opportunities arise (Fox, et al., 2015). An example of this would be encouraging a child to help a peer clean up spilled paint or carry a heavy blocks across the classroom. *Completing tasks* requires the teacher to redirect the child participant to finish a task they may have forgotten they were working on, help them to follow through with plans they created, and prompt them to finish (Fox, et al.). The teacher could remind the child of a project started, but may have gotten distracted from finishing. *Praise* includes giving the child participant positive feedback for including others in their play, helping others, completing tasks, making a decision independently, solving a problem, or any other positive behaviors (The Pennsylvania State University). Praise can be used to encourage any leadership behaviors exhibited in the children, such as, “I like the way you invited David to help you, he may be able to help you finish building the castle.” *Decision-making* encourages the child participant to make decisions on his or her own or suggests that the child makes a plan before beginning a task (Bailey, et al.; The Pennsylvania State University). A teacher can use hinting to encourage the
child to make decisions or give a child choices to make more thoughtful decisions. *Problem solving* prompts include asking the child questions linked to solving a problem they are having that may help them come to a solution, repeating the child’s thoughts out loud, and/or helping the child find a solution to a problem (Fox, et al.). An example of this may be the teacher suggesting possible solutions or directing the child toward observations being made that would lead the child to a solution to a problem.

**Data Collection**

Data were collected using interval recordings in 20-second intervals for a period of 10-minutes during the children’s free choice center time daily until requirements outlined by What Works Clearinghouse were met (Kratochwill, et al., 2010). All 28 observations were video recorded by the primary investigator in the preschool classroom. The data sheet used outlined the five possible behaviors the child may exhibit and was marked for each 20-second interval (see Appendix B for data sheet). The child behaviors include following; neither directing nor following, but pursuing own desires; both directing and following; reciprocally directing or sharing leadership equally with another child; or directing the group (see *Behavior Definitions*, for a full description of *Child Behaviors*). The data sheet also outlined six leadership prompts, which included modeling, helping others, completing tasks, praise, decision making, or problem solving (see *Behavior Definitions*, for a full description of *Leadership Prompts*). Each time the teacher participant used a leadership prompt with the child participant, it was marked.

**Observation Procedure**

The researcher videotaped all 28 sessions using a laptop. Prior to free-choice center time, the laptop was set in the free play center area and the recording began for a 10-minute period. The researcher moved the laptop to ensure that the target child was captured on the videotape,
along with the other children with whom the participant may have been playing. There were separate recordings for each of the three child participants during each session.

**Experimental Conditions**

**Baseline.** Mya usually arrived to school about ten minutes into morning investigations and chose the learning area, dramatic play, which is closest to the door and where her friends were already engaged in play. During play, Mya often followed two other friends to whichever learning area they moved, even if she was in the middle of playing or working on a project. Violet typically scanned the classroom before making a decision of where she would like to initially play for the morning; Violet usually found one learning area to play in, but was not successful in inviting others to join in her play. She joined others in their play or played alone. Brandon usually picked one learning area to play in and quickly changed his mind if he noticed there was something more exciting happening in another area. Brandon did not often engage in meaningful play for an extended period of time because of the constant transition through learning areas. Brandon often left projects unfinished in an effort to follow others in their play. Peer lead teachers, Lucy and Sandy, typically engaged in play and positive interactions with all of the children in the classroom. When opportunities arose, the teachers used their knowledge of child development to encourage pro-social behaviors in the children during play. There were no changes to the children’s routines or activities during the baseline phases.

**Leadership prompting intervention.** Prior to the intervention, the participating teacher received an explanation of the importance of child leadership, behavior definitions of child leadership (modified from Parten, 1933), and a collection of prompts aimed at increasing child leadership behaviors (herein referred to as *leadership prompts*) to use with the targeted children to increase their leadership behaviors. The teacher was provided with the six prompts she would
provide to the children to increase leadership skills in the classroom setting: *modeling, helping others, completing tasks, praise, decision making, and problem solving* (modified from Fox, et al., 2015; The Pennsylvania State University, 2016; see *Behavior Definitions*, for a full description of *Leadership Prompts*). These prompts were delivered to each child after establishing a stable baseline and were used during free-choice investigations in their typical preschool classroom. There were no changes in the children’s routines or activities during the intervention phase.

**Experimental Design**

The present study used a single subject research design to measure the impact of a leadership prompting intervention (independent variable) on child leadership behaviors (dependent variable). Specifically, a multiple-baseline design was used because it allowed the leadership prompting intervention to be applied to each child in succession (Kazdin, 2011). Experimental control is shown through the leadership prompting intervention being applied to each participant across different points in time (Kazdin). Data were collected during baseline and intervention phases for at least five data points during each phase of research (Kratochwill, et al., 2010).

**Interobserver Agreement**

The reliability observer was a teacher certified in PK through 3rd grade with two years of experience. She was trained through written instructions and video training with the primary researcher. During the training period, the two observers watched a 10-minute video together and recorded child and teacher behaviors, according to the behavior definitions. Following the initial viewing, any discrepancies were further explained. The two observers watched another 10-minute video together and reached 89% agreement for overall baseline data. Standards set
forth by the What Works Clearinghouse (Kratochwill, et al.) stipulate that interobserver agreement (IOA) must meet a minimum threshold of at least 80%. Additionally, IOA must be conducted on at least 20% of sessions across both baseline and intervention phases (Kratochwill, et al.). IOA was calculated using point-by-point reliability using the formula agreements/agreements plus disagreements x 100 for occurrence, nonoccurrence, and overall agreement (Kazdin, 2011).

A teacher certified in early childhood education conducted reliability observations with the primary researcher. The observations were done concurrently by watching the 10-minute video recordings during baseline and intervention phases.

**Both directing and following.** For directing and following for Violet, overall agreement averaged 100% (range, 100-100%), occurrence agreement averaged 100% (range, 100-100%), and nonoccurrence agreement averaged 100% (range, 100-100%). For both directing and following for Brandon, overall agreement averaged 100% (range, 100-100%), occurrence agreement averaged 100% (range, 100-100%), and nonoccurrence agreement averaged 100% (range, 100-100%). For both directing and following for Mya, overall agreement averaged 100% (range, 100-100%), occurrence agreement averaged 100% (range, 100-100%), and nonoccurrence agreement averaged 100% (range, 100-100%).

**Reciprocally directing or sharing leadership.** For reciprocally directing and following for Violet, overall agreement averaged 94% (range, 87-100%), occurrence agreement averaged 89% (range, 77-100%), and nonoccurrence agreement averaged 90% (range, 80-100%). For reciprocally directing and following for Brandon, overall agreement averaged 90% (range, 80-100), occurrence agreement averaged 88% (range, 75-100%), and nonoccurrence agreement averaged 75% (range, 50-100%). For reciprocally directing and following for Mya, overall
agreement averaged 92% (range, 83-100%), occurrence agreement averaged 91% (range, 81-100%), and nonoccurrence agreement averaged 72% (range, 44-100%).

**Directing the group.** For directing the group for Violet, overall agreement averaged 92% (range, 90-93%), occurrence agreement averaged 59% (range, 33-84%), and nonoccurrence agreement averaged 85% (range, 77-93). For directing the group for Brandon, overall agreement averaged 90% (range, 80-100%), occurrence agreement averaged 78% (range, 55-100%), and nonoccurrence agreement averaged 87% (range, 73-100%). For directing the group for Mya, overall agreement averaged 92% (range, 83-100%), occurrence agreement averaged 75% (range, 50-100%), and nonoccurrence agreement averaged 94% (range, 88-100%).

For teacher prompting for Violet, overall agreement averaged 84% (range, 80-87%), occurrence agreement averaged 77% (range, 71-83%), and nonoccurrence agreement averaged 95% (range, 90-100%). For teacher prompting for Brandon, overall agreement averaged 88% (range, 83-93%), occurrence agreement averaged 82% (range, 76-88%), and nonoccurrence agreement averaged 89% (range, 88-90%). For teacher prompting for Mya, overall agreement averaged 84% (range, 80-87%), occurrence agreement averaged 78% (range, 73-83%), and nonoccurrence agreement averaged 78% (range, 67-89%).
Chapter 4. Results

The purpose of the present study was to determine the effects of teacher prompting on the leadership skills of preschool-aged children using the framework provided by Parten (1933). The results suggest that the leadership prompting intervention increased some child leadership behaviors, while others were not affected (see Figure 1). Guiding research questions for the present study sought to determine the impact of teacher leadership prompting on leadership skills exhibited by children, as defined by Parten (1933). Additionally, the study also sought to determine if a teacher could increase her leadership prompting.

Research Question 1. Children’s Leadership Skills

Both directing and following. During baseline for Violet, both directing and following averaged 1% (range, 0-6%); when the leadership prompting intervention was applied, the average of both directing and following was 3% (range, 0-10%). This represents a 2-percentage point increase. During baseline for Brandon, both directing and following averaged 0% (range, 0-0%); when the leadership prompting intervention was applied, the average of both directing and following was 0% (range, 0-0%). There was no increase. During baseline for Mya, both directing and following averaged 0% (range, 0-0%); when the leadership prompting intervention was applied, the average of both directing and following was 1% (range, 0-3%). This represents 1 percentage point increase.

Reciprocally directing or sharing leadership. During baseline for Violet, reciprocally directing and following averaged 15% (range, 0-40%); when the leadership prompting intervention was applied, the average of reciprocally directing and following was 49% (range, 40-70%). This represents a 34-percentage point increase. During baseline for Brandon, reciprocally directing and following averaged 22% (range, 0-40%); when the leadership
prompting intervention was applied, the average of reciprocally directing and following was 63% (range, 7-97%). This represents a 41-percentage point increase. During baseline for Mya, reciprocally directing and following averaged 7% (range, 0-27%); when the leadership prompting intervention was applied, the average of reciprocally directing and following was 61% (range, 20-77%). This represents a 54-percentage point increase.

**Directing the group.** During baseline for Violet, directing the group averaged 5% (range, 0-20%); when the leadership prompting intervention was applied, the average of directing the group was 31% (range, 3-57%). This represents a 29-percentage point increase. During baseline for Brandon, directing the group averaged 8% (range, 0-30%); when the leadership prompting intervention was applied, the average of directing the group was 20% (range, 0-40%). This represents a 12-percentage point increase. During baseline for Mya, directing the group averaged 3% (range, 0-10%); when the leadership prompting intervention was applied, the average of directing the group was 19% (range, 10-33%). This represents a 16-percentage point increase.

**Research Question 2. Teacher Prompting**

**Teacher prompting.** During baseline for Violet, the teacher prompting averaged 30% (range, 13-43%); when the intervention was applied, the average teacher prompting was 65% (range, 57-83%). This represents a 35-percentage point increase. During baseline for Brandon, the teacher prompting averaged 33% (range, 7-53%); when the intervention was applied, the average teacher prompting was 62% (range, 57-70%). This represents a 29-percentage point increase. During baseline for Mya, the teacher prompting averaged 17% (range, 0-37%); when the intervention was applied, the teacher prompting averaged 71% (range, 63-83%). This represents a 54-percentage point increase.
Summary

The present study was most successful at increasing the children’s leadership behaviors in reciprocally directing or sharing leadership equally with another child and directing the group. Two of the children increased their ability to both direct and follow. The results of the study also show an increase in the teacher’s use of leadership prompting.
Figure 1. Percentage of observed intervals with child leadership behavior and teacher prompting.
Chapter 5. Discussion

The purpose of the present study was to increase leadership behaviors in preschool-aged children through leadership prompts provided by a teacher. For the purpose of the present study, leadership is defined as the guidance or influence of peers toward a wanted goal (Pigors, 1933). As the literature has identified both short-term (Trawick-Smith, 1988) and long-term (Murphy & Johnson, 2011) benefits of leadership skills, cultivating leadership in young children is a worthy pursuit.

Research Question 1. Children’s Leadership Skills

Results from the present study indicated that leadership behaviors as defined by Parten (1933) were infrequent during classroom playtime. During baseline, all three children engaged in reciprocally directing or sharing leadership roles with a peer during play most frequently, followed by directing the group. Directing and following was the least observed by all three children during baseline. The three participants spent much of their playtime following the lead of another child or group of children and not making many decisions for him or herself. The children did not have strong enough leadership skills to encourage others to follow their lead, make suggestions in play, or place an emphasis on their role in play.

Consistent with the roles defined in Fukada, et al. (2001), many of the children could be described as Peripherals prior to the leadership prompting intervention because the children did not often hold a central role in leading a group in play, but were often following others or playing alone. Fukada, et al. supports the importance of the present research because the study depicts the differing roles children hold in play with their peers. Following the implementation of the leadership prompts, the children could be categorized as In-Betweeners because they sometimes held a central role in playing with peers. The results of the present study are
important because, while they did not become *Centrals* holding a central role in play, they did increase their leadership behaviors enough to be described as children who sometimes held an a central leadership role.

Once the treatment for the present study was implemented, there is a shift in children’s role in playing with peers. Following the Leadership Prompting Intervention, all three children engaged most frequently in *reciprocally directing or sharing leadership roles with a peer during play*, followed by *directing the group*, and engaged in *both directing and following* with the least frequency. The children were successful at becoming leaders by the definition of leadership for the present study. The children were able to compromise his or her ideas of a peer or follow a peer’s lead in an effort to interact positively (Baily, et al. 2017; Fukada, et al., 2001; Parten, 1933; Trawick-Smith, 1988).

Consistent with Parten’s (1933) definition of the artful leader, a successful leader must both lead a group, but also accept the suggestions of a peer in order to sustain the friendship. When compared to the brute force leader who demands actions of others and is compared to a bully by Parten, the present study focused on the importance of reciprocally directing or sharing leadership roles to emphasize the importance of developing successful, artful leaders. As found in the literature by Trawick-Smith (1988), in order to sustain positive relationships with peers, the children should develop leadership skills that are accepting of the ideas and suggestions of everyone in the group, but be able to execute the ideas into play to be a successful leader. Shin, et al. (2004) presents the importance of pro-social behaviors, such as negotiating and compromising, to develop this type of diplomatic leader.
Research Question 2. Teacher Prompting

Results from the present study indicated that an increase in teacher leadership prompts increased young children’s leadership behaviors. The teacher participant used prompting during the typical play routine to encourage the development of leadership skills. Similar to the information collected by Fox, et al. (2015), the teacher participant was made aware of the benefits of leadership skills in young children in order to encourage the behaviors through teacher-child interactions. Table 1 displays the increase of individual leadership prompts across baseline and intervention data.

Consistent with the research presented by Murphy and Johnson (2011), positive interactions and reinforcement helped increase the children’s leadership behaviors in the classroom. Murphy and Johnson stress the importance of early learning experiences in a child’s life to foster a positive leadership identity and increased confidence in leading others. Trawick-Smith’s (1988) emphasis on the importance of leading and following others to be defined as a skilled lead supports the results of the present study. The children showed increased leadership abilities, but also took others’ ideas into consideration in their play. They would be defined as diplomatic leaders by Parten’s (1933) definition.

Noland and Richards (2015) presented the idea of servant leadership as teachers exhibiting leadership in the classroom, which in turn encourages leadership in the children being taught. The leadership prompts selected for the Leadership Prompting Intervention are consistent with this research. For example, the teacher participant modeled many of the prompts, such as helping others, completing tasks, decision making, or problem solving. These are qualities that the teacher participant exhibited in the classroom through modeling and self-talk, which related to the interactions and prompts she delivered to the children.
The teacher participant in the study praised and encouraged leadership skills in each of the participating children, showing consistency with the research completed by Baily, et al. (2017). Once the teacher was aware of the pro-social behaviors she would develop in the children through prompting, there was an emphasis placed on its importance. Inconsistent with the research completed by Fox, et al. (2015), the teacher did not discourage the leadership behaviors, but instead praised them and encouraged more. As stated by Lee, et al. (2005), there is a need for more research in the area of teacher perspectives of leadership behaviors in young children.

Table 1. Teacher prompting across baseline and intervention.

<table>
<thead>
<tr>
<th>Teacher Prompts</th>
<th>Baseline</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modeling</td>
<td>1%</td>
<td>17%</td>
</tr>
<tr>
<td>Helping Others</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Completing Tasks</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>Praise</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>Decision Making</td>
<td>4%</td>
<td>9%</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>14%</td>
<td>27%</td>
</tr>
</tbody>
</table>

**Limitations**

A limitation for the present study is the potential for bias in the selection of the participant sample selection. The lead researcher was also a peer lead teacher in the classroom in which the study took place. This is a limitation because the researcher could have selected children that were not as fit for a leadership prompting intervention. The researcher may have
influenced the teacher participant in her implementation of the intervention due to being in the classroom.

A conflict with instructional time proved to be another limitation in the present study. The 10-minute video recordings were difficult to attain during some sessions. The recording of the intervals interfered with instructional time and behavior management in the classroom due to one teacher participant being restricted to implementing the intervention with the child and/or group of children the child participant chose to play with.

Generalizing the results of the present study is another limitation. The use of a single-subject design poses a treat to external validity because of the limited number of participants involved (Kazdin, 2011).

Diffusion may be a limitation in the present study. Data were collected on each of the participants at different times and intervention was implemented with each of the participants at different times. As the children are allowed to play together, participants who had not received treatment may have heard the prompts being delivered to another participant, thus increasing his or her leadership behaviors before data were collected.

**Clinical Implications**

Implementation of the leadership prompting intervention increased the amount of prompts the teacher participant provided to the children in the class, thus increasing the amount of leadership behaviors the children used during play. The intervention helped the children learn leadership and social skills, thus building a firm foundation for later leadership roles and well-developed skills (Murphy & Johnson, 2011). The present study made the teacher participant more aware of her interactions with the children and helped her build her repertoire of skills that
were easily implemented into her interactions in the classroom that were supported by the research presented by Bailey, et al. (2017).

This is a skill that more teachers should be aware of and implement into their interactions with young children due to the pro-social behaviors developed (Shin, et al., 2004). Classroom teachers can model leadership behaviors, as Noland and Richards (2015) has supported the importance of servant leadership has on helping classroom children develop leadership skills of their own. Providing children with the leadership prompting used in the present study can be done through interactions in the classroom, on the playground, or in the cafeteria to encourage increased leadership behaviors.

**Future Research**

While the present study is an addition to the current research, the pool of literature supporting and studying early childhood leadership is limited. Future research should focus on the importance of building a foundation of leadership in early childhood and how it affects a person later in life. The literature applied in this study supports the importance of early childhood and building firm foundations (Murphy & Johnson, 2011) and also, the literature accessed indicated strong leadership skills are important to a person’s success, but there are no present longitudinal studies following a person’s leadership developments across time. Leadership skills are a gateway to enhanced social skills (Shin, Recchia, Lee, Lee, & Mullarkey, 2004). Further research will make teachers and early childhood care providers more aware of the importance of building a firm foundation for leadership behaviors.

The present study found leadership prompts that help increase leadership skills in children, but did not focus on teaching children what leadership is and its importance as presented by Bailey, et al. (2017). Teaching children specifically that these are positive
behaviors and encourage them more frequently would benefit the children exhibiting these behaviors if prompting is not provided. In the study conducted by Bailey, et al., the teachers developed a toolkit that consisted of nine objects that represented leadership traits by their definition: responsibility, honesty, communication/listening, reflective thinking, problem solving, collaboration/cooperation, kindness, independent mindedness, and resilience. Teachers were responsible for implementing the toolkit in their classroom in a way that made sense for their children, such as a bulletin board, class meetings, or books that related to the trait(s). The purposefulness of the toolkit and prompts as delivered by individual teachers increased the students’ leadership behaviors because the students had an understanding of why these traits were important to their growth and were prompted to use these skills.

Understanding a teacher’s perspective of leadership in young children is another topic for further research. The current study did not interview the teacher participant to find out her views of child leadership prior to the implementation of the intervention; it was only afterward the teacher expressed her understanding and awareness of its importance in the early childhood classroom. Lee, Recchia, and Shin (2005) conducted a study in which teachers were interviewed on their idea of the leadership styles of children in their classes. The study focuses heavily on the importance of positive teacher interactions with children and foster child leadership in an environment that is welcoming to these traits. In contrast to the research by Fox, et al. (2015) in which teachers were found discouraging leadership skills in children, the present teacher participant was made aware of the benefits of leadership skills in young children and instead encouraged these behaviors.

Although the children were not given specific tasks to complete to identify and measure their leadership behaviors, this is a means for further research. In the study conducted by
Yamaguchi (2001), a group of children were given a specific task to complete with different goals for each group. Future research could focus on this task with younger children, such as the children in the present study, to identify if they develop as artful or brute force leaders due to the goal they are given.

Noland and Richards (2015) discuss servant leadership as it emphasizes the importance of teachers modeling leadership behaviors to encourage leadership in their classroom students. Based on the results presented in Table 1, future research could focus on increasing praise of child leadership behaviors, helping others, completing tasks, and decision making. All of these behaviors could be modeled by and praised by a teacher in effort to increase this behavior and further develop leadership skills in children.

Conclusion

In this study, teacher prompting increased leadership skills in preschool-aged children. This study adds to the limited body of research that is available in the area of early childhood leadership. Leadership in the classroom has been a topic of research since Parten’s study in 1933 and should continually be studied as it holds significance to a child’s social development (Lee, Recchia, & Shin, 2005).
References


ACTION ON PROTOCOL APPROVAL REQUEST

TO: Cynthia DiCarlo  
   Education
FROM: Dennis Landin  
   Chair, Institutional Review Board
DATE: October 31, 2017
RE: IRB# 3961
TITLE: Using Teacher Prompts to Increase Leadership Behaviors in Preschool Children


Review type: Full ___ Expedited X ___ Review date: 10/31/2017
Risk Factor: Minimal ___ X ___ Uncertain ______ Greater Than Minimal_______

Approved X _____ Disapproved ____________

Approval Date: 10/31/2017 Approval Expiration Date: 10/30/2018
Re-review frequency: (annual unless otherwise stated)
Number of subjects approved: 3
LSU Proposal Number (if applicable):
Protocol Matches Scope of Work in Grant proposal: (if applicable)

By: Dennis Landin, Chairman 

PRINCIPAL INVESTIGATOR: PLEASE READ THE FOLLOWING –
Continuing approval is CONDITIONAL on:

1. Adherence to the approved protocol, familiarity with, and adherence to the ethical standards of the Belmont Report, and LSU's Assurance of Compliance with DHHS regulations for the protection of human subjects*
2. Prior approval of a change in protocol, including revision of the consent documents or an increase in the number of subjects over that approved.
3. Obtaining renewed approval (or submittal of a termination report), prior to the approval expiration date, upon request by the IRB office (irrespective of when the project actually begins); notification of project termination.
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.
5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants, including notification of new information that might affect consent.
6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the study.
8. SPECIAL NOTE: When emailing more than one recipient, make sure you use bcc.

*All investigators and support staff have access to copies of the Belmont Report, LSU's Assurance with DHHS, DHHS (45 CFR 46) and FDA regulations governing use of human subjects, and other relevant documents in print in this office or on our World Wide Web site at http://www.lsu.edu/irb
### Appendix B. Data Sheet

<table>
<thead>
<tr>
<th>Time</th>
<th>Child</th>
<th>Teacher</th>
<th>Child</th>
<th>Teacher</th>
<th>Child</th>
<th>Teacher</th>
<th>Child</th>
<th>Teacher</th>
<th>Child</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>:00</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
</tr>
<tr>
<td>:20</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>:40</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>1:00</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
</tr>
<tr>
<td>:00</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>:20</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>2:00</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
</tr>
<tr>
<td>:00</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>:20</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>3:00</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
</tr>
<tr>
<td>:00</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>:20</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>4:00</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
</tr>
<tr>
<td>:00</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>:20</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>5:00</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
</tr>
<tr>
<td>:00</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>:20</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>6:00</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
</tr>
<tr>
<td>:00</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>:20</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>7:00</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
</tr>
<tr>
<td>:00</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>:20</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>8:00</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
</tr>
<tr>
<td>:00</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>:20</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>9:00</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
</tr>
<tr>
<td>:00</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>:20</td>
<td>R D NO</td>
<td>P D PS</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
<td>F N B</td>
<td>M H C</td>
</tr>
<tr>
<td>10:00</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
<td>Child: ______________________________</td>
<td>Date: _____________________________</td>
</tr>
</tbody>
</table>
Vita

Sarah West, a native of Kenner, Louisiana, received her Bachelor’s of Science from Louisiana State University (LSU) in Early Childhood Education and a teaching certification for pre-kindergarten through third grade. Since earning her undergraduate degree, she has taught preschool at the LSU Early Childhood Education Laboratory Preschool for three years. Sarah anticipates graduating with her Master’s of Education in Curriculum and Instruction with a focus in early childhood in May 2018. She plans to continue teaching in early childhood classrooms in Louisiana.