AN AUTO-PHOTOGRAPHIC STUDY OF SELF-EFFICACY AMONG PRESCHOOL GRADUATES IN THEIR MIDDLE-SCHOOL YEARS

A Dissertation by

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ABSTRACT

An Auto-Photographic Study of Self-efficacy among Preschool Graduates in their Middle-School Years examines childhood academic self-efficacy focused on the theoretical relationships between experience, motivational advantage, and social adjustment. My purpose in exploring childhood academic self-efficacy was motivated by the realization that self-efficacy has garnered little attention in longitudinal studies. The premise underlying my research is rooted in the idea that by looking primarily at the quantification of academic outcomes, leaders miss an opportunity to understand the influence of non-cognitive skills associated with individual success. A complementary purpose in conducting the study was to explore efficacy from the perspectives and experiences of children themselves, predicated on a belief that their perspectives are central to understanding the impact of personal and social development’s influence on motivational advantage and social adjustment. In this study, I analyzed eight student-photographers’ experiences, reflections, and beliefs via a camera project where children became active co-researchers sharing perspectives on a variety of topics they captured with their cameras. What they captured photographically served as an introduction to examining their ideas and points of view. Along with structures provided through Pearson’s Work Sampling System and Bandura’s social learning theory, my interpretation of the findings suggests young children exposed to quality early childhood programs may evidence self-efficacy and human agency in adolescence. This iterative process led to the design of an Efficacy Venn, a visual model allowing a view of self-efficacy development through the use of feedback loops. The Efficacy Venn reflects the hypothesis that self-appraisal is central to the self-efficacy process and offers a visualization of how self-efficacy feedback loops may interact with and strengthen the development of soft skills while simultaneously strengthening the self-appraisal process itself.
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CHAPTER I

As early as the 1960’s, educators, doctors, social workers, and economists joined civil rights activists, parents, and politicians in a dialog aimed at influencing the depth and scope of national early childhood policy. Since that time, early childhood advocates have predominantly pursued two activities. One has been building public will for national investments supporting quality early learning experiences and a second has been leveraging outcomes from longitudinal studies to underscore investment benefits. Both activities link to an exploration of the economics of early childhood programs offering opportunities to calculate how programs have value for participants and for society (Barnett, 1985; Nores, Belfield, Barnett, & Schweinhart, 2005a; Swett, 2004; Temple & Reynolds, 2007).

Program evaluations of early childhood outcomes soon provided rates of return (ROI) and cost avoidance figures, illuminating strong advantages for individuals and society in terms of high lifetime earnings and lower criminal activity (Barnett, 1985; Nores et al., 2005a; Swett, 2004; Temple & Reynolds, 2007). Early publications focused on at-risk and low-income children became available due to the contributions of the Consortium for Longitudinal Studies (Campbell & Ramey, 1994; Lazar, Darlington, Murray, Royce, & Snipper, 1982). The consortium members studied 11 early childhood programs, resulting in a selection of three programs of note: the Carolina Abecedarian Project Study, the Chicago Child-Parent Centers Study, and the HighScope Perry Preschool Study (Schweinhart, Barnes, Weikart, Barnett, & Epstein, 1993; Schweinhart et al., 2005; Schweinhart & Weikart, 1988; Weikart, Bond, & McNeil, 1978). All three illustrated connections between quality early programming to life-long outcomes such as school success and employment (Hawley, 1998; Heckman, 2011). These publications provided early childhood advocates a foundation for strategic and targeted calls to action supporting national investments based upon the economic results of early childhood
programming grounded in neuroscience (Shonkoff & Phillips, 2000; Shore, 1997) and developmental psychology (Hunt, 1964). Contemporary calls for funding continue to link these three pioneering longitudinal studies to early childhood program effectiveness. Effectiveness is linked to how quality programming impacts healthy development, strengthens families, and influences academic outcomes later in life (Darlington, Royce, Snipper, Murray, & Lazar, 1980; Gormley, Gayer, Phillips, & Dawson, 2005; Hunt, 1964; Reynolds, 1998; Schweinhart, Berrueta-Clement, Barnett, Epstein, & Weikart, 1985; Weikart et al., 1978; Zigler, Gilliam, & Jones, 2006).

Findings linked to economic benefits from these three extensively cited longitudinal studies continue to fuel contemporary commitments to invest in quality environments for early learners (Heckman, 2011; Masse & Barnett, 2002; Temple & Reynolds, 2007). Investing in effective programs is viewed as a preventative measure to avert poor health (Duncan & Magnuson, 2003; Hunt, 1964; Shonkoff & Phillips, 2000; Shore, 1997), adverse childhood experiences (Felitti et al., 1998), and academic failure (Burchinal, Campbell, Bryant, Wasik, & Ramey, 1997; Campbell & Ramey, 1995; Gomby, Larner, Stevenson, Lewit, & Behrman, 1995; Ramey & Campbell, 1984; Schweinhart et al., 2005). Additional studies suggest early childhood programs impact cognitive achievement, social outcomes, and reduce poverty’s influence on life-span outcomes such as high school graduation, employment, and reductions in incarceration (Brooks-Gunn, 1997; Cryer, 1999; Gomby et al., 1995; Temple & Reynolds, 2007). Scholars also report the beneficial connections between early programming and the first few years of elementary school (Cryer, 1999; Jalongo, 2004; Temple & Reynolds, 2007). They attribute these benefits to a reduced need for remedial services, specifically in grade retention and special education placements. Results of early childhood programming, specifically for low-income pre-kindergarteners, provide statistically significant findings of children’s performance on
cognitive tests (Gormley et al., 2005). Components of these tests include pre-reading and reading skills, pre-writing and spelling skills, math reasoning, and problem-solving abilities.

As a whole, early childhood studies suggest that policies should treat the preschool years as a distinct period while recognizing that families under stress often have difficulty meeting early childhood needs (Duncan & Magnuson, 2003). A fresh look at the findings from the Perry, Abecedarian, and Child-Parent Center programs by some of the lead researchers on these studies (Nores et al., 2005a; Reynolds, Rolnick, Englund, & Temple, 2010a) suggest these programs’ greatest strengths are not in academic achievement but in development of soft skills or social skills. Social skills, however, have received comparatively little attention from researchers. This new view of the findings has led to an interest in exploring the impact of early personal and social development on success later in life.

**Statement of the Problem**

Findings from longitudinal studies such as the Carolina Abecedarian Project Study, Chicago Child-Parent Centers Study, and HighScope Perry Preschool Study have focused primarily on health and academic achievement. These studies have also made significant contributions in understanding the impact of quality early experiences on young children (Ramey & Campbell, 1984; Ramey & Ramey, 2003; Reynolds, Temple, & Ou, 2007; Reynolds, Temple, Robertson, & Mann, 2001, 2002; Schweinhart et al., 1993; Schweinhart et al., 2005; Schweinhart & Weikart, 1988; Weikart et al., 1978). These and other studies in early childhood development have typically examined a program’s impact in relationship to motivation, cognition, social adjustment, family support, school environments, and academic outcomes. The figure below identifies five areas or pathways identified as having an impact on life-course outcomes (Reynolds, Rolnick, et al., 2010a).
The common methods of evaluation for these five areas of interest are notable for their strengths and limitations. For example, quantitative research provides an abundance of information on how national longitudinal programs offer family and classroom supports and how they influence cognitive outcomes, specifically in reading and mathematics. There is less information available on how motivation and social adjustment are ingredients for student success. By focusing exclusively on the quantification of academic outcomes, educational researchers and policymakers are at risk of misunderstanding the importance of non-cognitive
factors associated with individual success. Widely used quantitative methods such as student and teacher surveys and performance tasks have proven that non-cognitive factors are elusive to measure (West et al., 2015). Despite popular interest in topics such as motivational advantage and social adjustment, knowledge of how to measure their quantitative impact is underdeveloped. Due to such ongoing challenges, the timing is right for qualitative approaches that explore emerging patterns, themes, and connections grounded in student personal and social experience. To understand how learners benefit from their early experiences, it is important to listen to what children have to say about their current lives. By exploring student perspectives and choice connected to personal and social experiences, this study provides a way for children to reflect on past and current events as well as predict what they believe will be their later life outcomes (Bandura, 1986, 1988). This exploration extends to thinking about how these experiences are helpful in understanding the impact of personal and social development on student success.

Qualitative inquiry is currently an overlooked resource in understanding the importance of early experiences in the lives of children. Qualitative research practices are a natural fit for this type of inquiry due to a long-held research tradition that emphasizes empowerment of study participants, particularly marginalized groups, allowing them to share experiences from their point of view. A qualitative study of motivational advantage and social adjustment complements established quantitative research primarily focused on health and academics outcomes. Additionally, a study of motivational advantage and social adjustment provides a link to personal and social development as well as an exploration of efficacy. What we choose, how we motivate ourselves, and how we use information to produce results are all connected to perceptions of self-efficacy (Bandura, 1986, 1988). Self-efficacy has received little attention in established quantitative longitudinal studies.
In this study, I apply a conceptual framework of self-efficacy to explore children’s personal and social experiences in order to understand how their experiences connect to motivation and social adjustment. As noted in Figure 1, motivation and social adjustment are important factors to a child’s well-being and success later in life. This study explores eight children’s perspectives tied to social experiences showcased via multiple snapshots shared in interviews. All eight student-photographers were preschool students when they were four years old. Interview discussions illuminated understandings of what children believed they were capable of and how they are able to influence their current and future life outcomes.

**Pearson’s Work Sampling System and Bandura’s Social Learning Model**

To begin to understand connections between early experience, efficacy, and student success, I have relied on two intellectual systems: Pearson’s Work Sampling System (Dichtelmiller, Jablon, Marsden, & Meisels, 2004) and Bandura’s Social Learning Model (Bandura, 1998). Both offer conceptual frameworks focused on personal and social experiences. The first, Pearson’s Work Sampling System, offers a practical method for coding student experiences. The second, Bandura’s Social Learning Model, provides a perspective useful for analysis and interpretation.

Pearson’s System (Dichtelmiller et al., 2004) organizes student experience and perceptions across five types of experiences within the Personal and Social Developmental Domain. I used this assessment system to thematically organize student perceptions in order to identify their personal and social experiences. These experiences were coded as Self-concept, Self-control, Approaches to Learning, Interactions with Others, and Social Problem-solving. This method is further explored in Chapter Three. These themes then served as the backdrop for analysis using Bandura’s Social Cognitive Theoretical Framework (Bandura, 2005). Bandura’s model provides a way to move beyond identification and sorting of student experience to an
understanding of the variety of experiences students have, how belief systems about capacity are formed from these experiences, and a theory of how these beliefs are articulated into action. An exploration of experience, according to Bandura’s model, offers a way to link both experience and capacity to perceptions of self-efficacy and human agency. Both efficacy and agency within this framework have connections to motivational advantage and social adjustment. These ideas are further explored in Chapter Five.

**Bandura’s Social Learning Model**

Albert Bandura’s social learning model, used in this study, is one component of a vast body of research connected to Social Cognitive Theory. His model offers a theory on how experience builds efficacy, how efficacy builds capacity, how capacity is the springboard for motivation, and how motivation articulates into action. This body of research explores self-efficacy as a trait found in people who believe their actions have value (Bandura, 1989). Self-efficacy is connected to optimism, confidence, and how a person believes they can influence current and future life outcomes (Bandura, 1986, 1988). His theory describes efficacious people as driven by belief systems determining how they feel, think, motivate themselves, and behave (Bandura, 1977, 1989, 1998, 2009). The model is cyclical in nature. It begins with experience, moves to reflections regarding experience, and then classifies the reflections or lessons learned as another type of experience. For example, if I believe I can master a task because I was successful in mastering it before, then I believe I can complete the task successfully again. Belief systems are products of various input from physical, environmental, reflective, and emotional experience that are classified within the social learning model as mastery experience, vicarious experience, social persuasion, and effective states (Bandura, 1988, 1997).

Researchers and educators alike have an interest in how student experiences influence success in school and in later life. His model provides a way to move beyond identification of
the variety of experiences people have to how experience builds belief systems about capacity and how those beliefs articulate into action.

**Experience as the Source of Efficacy**

Bandura’s social learning model asserts experience is the source of efficacy. Of the four types of experience identified above, Bandura (2005) claims mastery experience is foundational for growth of competence and coping skills. The second type of experience introduced is vicarious experience. Vicarious experience is concerned with observations of how people behave and the consequences or outcomes they face due to the choices they have made. These actions are social cues, providing children a framework or guide for corrective action or for a measurement of success. A third important type of experience within the social learning model is social persuasion. This type of experience moves beyond what children see to include influential messages they hear. Sources of social persuasion include messaging from adults, peers, and electronic media. Within social cognitive theory, social persuasion lays a foundation for an individual’s beliefs regarding their capacity to set and accomplish goals and influences how children can and will perform at levels leading to goal attainment. Affective states, the fourth type of experience identified in Bandura’s social learning model, studies how people manage emotions such as stress and anxiety. Often this source of information holds a person steady while managing change. Individuals with a high-level of confidence in their ability to face difficult challenges are able to function amid perceived chaos and disarray (Bandura, 1977).

**Efficacy as Confidence**

Social learning theory proposes that experiences are sources of information that build efficacy. Efficacy is a type of confidence resulting from synthesizing knowledge (Bandura, 1986) gained from doing, seeing, hearing and reflecting, all contributing to building confidence helpful for adapting to and surviving within socially constructed environments. This confidence
results in strong personal commitments to goal completion. These commitments are maintained over time, even when a person faces diversion or failure. Upon facing failure, efficacious individuals often attribute their failure to one of three situations: a) lack of effort on their part, b) lack of knowledge, or c) lack of skill, all of which they perceive are fixable (Bandura, 1997). Efficacious individuals believe such situations can be controlled and overcome. An efficacious outlook has connections to productivity, personal accomplishments, and to the reduction of both stress and depression. In contrast, people who second-guess their ability to adapt and survive in social environments avoid difficult tasks because they see them as personal threats (Bandura, 1989). They do not set high expectations for themselves and have low commitment to goals they do select. They tend to focus on their personal deficiencies or on perceived negative outcomes rather than investing energy in figuring out how to perform successfully (Bandura, 1998).

Efficacy is a sum of a combination of beliefs. If people believe they are capable, believe they can motivate themselves, believe they have the intellect and the skill to accomplish their goals, and believe they can meet situational demands that arise while they are working toward achievement, then they are regarded as having high perceptions of self-efficacy (Bandura, 1989).

**Demonstrations of Efficacy**

Effort, commitment, perseverance, and supportive self-talk are behavioral components demonstrated by persons with high perceptions of efficacy. Efficacious people are confident with their capabilities and are people who take action (Bandura, 1989). In social cognitive theory, people motivated to take action are agents engaged in four types of agency. Types of agency include planning, goal setting, establishing value systems, and engaging in active reflection and questioning of experiences. Efficacious people believe they have potential and have an ability to control what happens to them. These individuals seek an understanding of their self-development, along with how they can adapt when presented with change.
Bandura (1989) explains that agents do not act autonomously without facts or respond mechanically to environmental stimulus. They make decisions by combining input from physical experiences, environmental influences, thoughtful processing, and through their emotions. All of these factors contribute and interact with one another resulting in motivation. Self-evaluation and an internal revision of an agent’s personal standards and beliefs are all part of this process.

Bandura’s social learning model serves as an interpretive tool for this study. Student experiences initially classified into categories of Self-concept, Self-control, Approaches to Learning, Interactions with Others, and Social Problem Solving, were individually and holistically re-examined through a social cognitive theoretical lens. Bandura’s four types of experience and four types of agency assist in building my theory regarding the types of efficacy shared by each of the eight students participating in this study.

**Purpose of the Study**

Efficacy has garnered little attention in established quantitative longitudinal studies. A qualitative study of efficacy and its relationships to student success may open up a line of research useful to researchers and policymakers interested in understanding how personal and social experiences impact motivation and social adjustment. By looking primarily at the quantification of academic outcomes, leaders may miss an opportunity to understand the influence of non-cognitive skills associated with individual success. An exploration of efficacy from the perspectives and experiences of children may be helpful in understanding the impact of personal and social development’s influence on motivation and social adjustment.

The study delves into student experiences, reflections, and beliefs through a camera project in which eight children became co-researchers in discovering and sharing their perspectives and points of view. What is learned from these children will help to understand
how personal and social experiences shape beliefs of capacity, motivational advantage, and social adjustments and how these beliefs influence achievement. Studies of motivational advantage and social adjustment may lead to an understanding of how sets of behaviors, attitudes, and strategies connect to student short-term outcomes and student perceptions of long-term success. This study of student perspectives addresses a gap in the existing literature allowing an opportunity to understand the contribution of non-cognitive developmental factors to student success.

**Research Questions**

The following three research questions were instrumental in shaping and guiding the direction of this study:

1) How do the personal and social experiences of adolescent students reflect self-efficacy?

2) How do the personal and social experiences of adolescent students reflect motivational advantage and social adjustment?

3) How do the personal and social experiences of adolescent students reflect their beliefs about school achievement, performance, and educational attainment?
CHAPTER II

LITERATURE REVIEW

Existing literature asserts there are cause-effect relationships between children’s early experiences, their well-being, and their success later in life (Cryer, 1999; Hall et al., 2009; Jalongo, 2004; Reynolds et al., 2001). These research findings are supported in studies grounded in brain science, psychology, educational research, and economics (Masse & Barnett, 2002; Temple & Reynolds, 2007). Politicians supporting early childhood investments have relied on longitudinal evaluations of the Carolina Abecedarian Project (Campbell & Ramey, 2010), the HighScope Perry Preschool Program (Schweinhart, 2010), and the Chicago Child-Parent Center Preschool Program (Reynolds et al., 2010). All of which provide examples of how participation in quality early childhood programs have an impact on both short- and long-term outcomes for children. Examples of federal funding commitments over five decades include policies supported by the Oval Office. Presidents Johnson (1963-1969), G.H.W. Bush (1989-1993), Clinton (1993-2001), G.W. Bush (2001-2009), and Obama (2009-2016) all have been able to win bi-partisan support for their administration’s early education policies.

Highlights of these three influential studies include an evaluation of the Abecedarian Project’s curriculum focused on language development. Abecedarian students experienced an increase in cognitive skills during program participation and long-term outcomes included a boost in school performance, high school graduations, and economic well-being. A second longitudinal study, The HighScope Perry Preschool Program, found the program group outperformed the no-program group on intellectual and language tests, school achievement tests, and literacy. In addition, the last of the three, The Child-Parent Center longitudinal study, reported preschool participants experienced greater well-being in health and social behavior.
More of them graduated from high school than their comparison group and many achieved a higher occupational status as well.

**Background on Three Influential Longitudinal Studies**

A prominent group of researchers, the Consortium for Longitudinal Studies (Campbell & Ramey, 1994; Lazar et al., 1982), reviewed 11 early childhood programs that offered services for at-risk and low-income children. Three programs of note, the Carolina Abecedarian Project Study (Ramey & Campbell, 1984; Ramey & Ramey, 2003), the Chicago Child-Parent Centers Study (Reynolds et al., 2001, 2002; Reynolds, Temple, Robertson, & Mann, 2007; Reynolds, Wang, & Wahlberg, 2003); and the HighScope Perry Preschool Study (Schweinhart et al., 1993; Schweinhart et al., 2005; Schweinhart & Weikart, 1988; Weikart et al., 1978) were selected as illustrations of connections between quality early programming and life-long outcomes such as school success and employment (Hawley, 1998; Heckman, 2011). This selection is important in that it established differences between a wide spectrum of early services available to the general public and helped narrow down the focus on what programming was worthy of investment.

Programs with a wide array of social services imbedded within their systems, such as the Perry Preschool, Abecedarian, and the Chicago-Child Parent Study, became blue prints for educators and policy makers. New initiatives were guided by these examples and often included a focus on safety; health related needs such as immunizations, nutrition, and dental care; as well as educational goals for brain-friendly learning opportunities, positive interactions with adults, individualized instruction, and the promotion of positive peer relationships (Cryer, 1999). High-quality environments were determined to have small group size, high ratios of staff to children, trained and well-supervised staff, state, or national accreditation, and utilization of research-based curricula. Temple and Reynolds (2007) also reported that Perry, Abecedarian, and the Child-Parent Center offered small class sizes, credentialed teachers and a curriculum focused on
developing language and cognitive skills as strategies to provide educational enrichment to at-risk children.

The Consortium was also concerned with the evaluative rigor of each longitudinal program’s research design. Researchers looked at generational data collections and reviewed the study research designs. Two designs emerged (Gormley et al., 2005; Lazar et al., 1982). The first was characterized by the random assignment of children enrolled in a program participation group or assigned to a control group of non-participants. The second was a research design with children enrolled in a program participation group or assigned to a matched comparison group. The emphasis on research design was important to establish validity and reliability of the data. Evidence from these studies showed higher graduation rates, higher labor force performance (Perry and Abecedarian), higher employment rates (Perry), and higher rates of college attendance (Chicago Child-Parent Centers). Evidence of other long-term effects included reductions in juvenile criminal activity, arrests as adults (Chicago Child-Parent Centers), and of a reduction of teen parenting rates among females.

Evaluations of these studies (Campbell & Ramey, 1994; Reynolds et al., 2007; Temple & Reynolds, 2007) cited three limitations. First, the majority of the evidence for the positive, long-term effects of preschool derived from model demonstration programs rather than large-scale public programs. Second, existing research provided cost-benefit analysis on only one of the studies, the HighScope Perry Preschool. There were no cost-effectiveness studies available at this time on large-scale public programs. Finally, research findings did not focus on how preschool programs produced different effects on different students. In sum, it was not clear if there were groups of children who benefitted more or less than others.

Regardless of the limitations to these studies, program evaluations (Barnett, 1985; Nores, Belfield, Barnett, & Schweinhart, 2005b; Swett, 2004; Temple & Reynolds, 2007) proposed that
all three programs provided benefits to participants, the public, and to society. Findings from these studies pointed to the value of comprehensive programming. The three studies highlighted the early interventions’ relationships to strong academic and social competencies in young children and adolescents.

**Interplay between Research and Political Investments**

These three longitudinal studies are actually a contemporary focus of a long held historical interest in supporting the education of young children. As early as the eighteenth century, philosopher Jean-Jacques Rousseau (1712-1778) proposed that an early childhood education for low-income children would influence long-term life outcomes. Current financial commitments to early childhood services are reflected in allocations of over $10 billion state and federal dollars for early programming initiatives focused on the prevention of academic failure of low-income children (Campbell & Ramey, 1995). These investments are based on an assumption that a child’s early years present a unique developmental opportunity where early enrichment is connected to successful lifelong outcomes (Gomby et al., 1995). Contemporary scholars (Jalongo, 2004) assert a nation’s wealth is not evaluated solely by its financial or natural resources but through its development of human capital. According to these researchers, the most important national investment our government can make is to invest in developing our nation’s human resources by targeting investments to support young children and their families.

Campbell and Ramey (1994) proposed early childhood investments should shift from whether the government should play a primary role in advocating high-quality early childhood environments to how these programs can be guaranteed via federal policy initiatives. Two examples of such a shift are the Educational Summit of 1989 and Goals 2000: Education America Act. The Educational Summit of 1989 culminated in establishing the National Educational Goals, which were a component of America 2000 under President George Bush’s
administration. Goals 2000: Education America Act, established under President Bill Clinton, became law in 1994. Both of these measures emphasized early childhood as an important national focus.

In 1989, President George Bush invited all 50 United States governors to a two-day education summit held at the University of Virginia. The President’s focus was to establish clear national performance goals that would prepare graduates to compete in international business ventures. This was a call to action that addressed perceived deficiencies in the United States public school system. An outcome of the 1989 Educational Summit was the announcement of six National Educational Goals in President Bush’s 1990 State of the Union speech. This announcement had bi-partisan support and varied slightly in wording and content from the version published by the National Governors’ Association. Overall, the National Educational Goals were intended to guide federal, state, and local authorities in implementation of plans for school improvement. The first of the six goals originally put forth by President Bush in his State of the Union address makes a strong national statement supporting investments in early learning services: By the year 2000, every child will start school ready to learn (Bush, 1990).

Goals 2000 additionally underscored the importance of access to high-quality programming for all children. The goals stressed the importance of developmentally appropriate environments, recognition of parents as a child’s first teachers, and included statements in support of nutrition, healthcare, mental alertness, and physical activity. The National Education Goals and Goals 2000 Act paved the way for the 2002 adoption of the No Child Left Behind Act (NCLB, 2002) and the Zero to Five plan (Obama & Biden, 2008) supported by the Obama administration. Passed with bipartisan support, NCLB dedicated federal funds for accountability, flexibility, choice, vouchers, and the use of research-based teaching practices. NCLB linked national policy to research-based teaching practice, accountability tied to
observable results, and a strong focus on reading for early learners. One example of a research-based outcome of NCLB was the act’s strong emphasis on English proficiency for all students.

President Obama’s Zero to Five plan (Obama & Biden, 2008), introduced to the nation early in his first year of service, proposed investing $10 billion a year to support young children and their parents. This plan included commitments to Early Learning Challenge Grants, Head Start, universal pre-school, child and dependent care tax credits, a reauthorization of the Child Care Development Block Grant Program (CCDBG), and a commitment to create a Presidential Early Learning Council charged with increasing collaboration and program coordination across federal, state, and local levels.

Often politicians and researchers alike have been interested in how low-income children may benefit from early learning interventions. Studies (Cryer, 1999; Jalongo, 2004; Temple & Reynolds, 2007) continue to show quality early childhood interventions empower low-income children to master grade level competencies. Some studies claim a comprehensive early childhood program, specifically targeted for low-income pre-kindergarteners, provides statistically significant findings of skill development such as pre-reading and reading skills, prewriting and spelling skills, math reasoning, and problem-solving abilities (Gormley et al., 2005). Temple and Reynolds (2007) report many benefits from participation in an early childhood programs occur in the first few years of elementary school and attribute this success to the reduced need for remedial services, specifically in grade retention and special education placements. Researchers (Campbell & Ramey, 1994; Gomby et al., 1995) additionally report that programs produce lifelong social and cognitive benefits for low-income children such as kindergarten readiness, reading comprehension, computation abilities for grade school students, high school graduations and employment, reductions of incarcerations, and reductions of adult dependence on welfare subsidy.
Early Childhood by the Numbers

The Carolina Abecedarian Project Study, the Chicago Child-Parent Centers Study, and HighScope Perry Preschool Study not only illustrate the impact of early childhood (EC) programming on lifelong outcomes but also illustrate a return on investment (ROI). Rolnick and Grunewald (2003) reviewed these studies and concluded early childhood programming returns on investment were exceptional. Returns on investment, identified as taxpayer benefits, were determined by examining the cost-effectiveness of operations, procedures, or programs. Rolnick and Grunewald were the first researchers to launch a persuasive argument using business terminology to frame study findings. Longitudinal studies highlighting the impact of life-long health outcomes communicated the economic benefits of investing early (Heckman, 2011; Masse & Barnett, 2002; Temple & Reynolds, 2007). When applied to social systems such as early childhood programs, economists were interested in determining how financial investments in current programming produced savings to society over time. Programs preventing social costs later by reducing the amount of resources required to fund a government operation over time, become a taxpayer benefit. Many early childhood longitudinal studies highlighted cost benefits of federal investments in early childhood by connecting study findings to the larger picture of social good through findings about life-long productivity and wealth and financial stability later in life (Gormley et al., 2005; Guralnick, 1997; Karoly et al., 1998; Ludwig & Phillips, 2007; Temple & Reynolds, 2007). Economic studies of these three longitudinal studies highlighted early interventions’ relationships to strong academic and social competencies in young children and adolescents (Barnett, 1985; Nores et al., 2005a; Swett, 2004; Temple & Reynolds, 2007). Economists used these findings to illustrate the economic impact of early investments.

Economists explained early childhood investment benefits as rates of return on investment (ROI), economic rates of return (ERR), and cost avoidance (CA). ROI, ERR, and
CA identified ways to measure the economic impact of investments in social services. They focused on identifying the earning power of assets (adults enrolled in a social program supported by the State) by looking at profit (the participants’ contributions to society) less depreciation (value of the dollar when invested versus value of the dollar today). ROI, ERR, and CA were reported out as percentages. For example, an 11% ROI indicated that for every $1,000 invested, there was a rate of return or profit of $110. ERR examined the gain or loss on an investment over a specific period and was usually expressed as a percentage increase over the initial investment cost. Cost avoidance looked to how an investment reduced future costs, such as implementation of an early childhood prevention program today to avoid higher costs to society later on. Cost avoidance may initially incur higher costs but compared to the cost of not investing in the prevention at all, economically successful prevention programs will eventually yield savings to society.

Calculations from longitudinal studies showed a projected economic return to society for the HighScope Perry Preschool Project of $258,888 per participant based on an investment of $15,166 per student (Schweinhart et al., 2005). This equaled a savings of $17.07 per dollar invested. The Abecedarian program cost-benefit analysis indicated the program cost of $13,362 per child per year equaled a benefit to society of a $3.78 return per dollar invested (Campbell & Ramey, 1994). Finally, the Chicago Child-Parent Centers program yielded a $7.14 return per dollar (Reynolds et al., 2002).

Policymakers and economists, due in part to Rolnick and Gruenwald’s (2003) contributions, continue to be captivated by estimates suggesting a high rate of return (Masse & Barnett, 2002; Reynolds et al., 2007; Reynolds et al., 2002; Temple & Reynolds, 2007). New studies show a growing reliance on results of cost-benefit analysis in the evaluation of early childhood studies. According to Zigler, Gilliam, and Jones (2006), significant research over the
past 40 years has demonstrated the positive long-term effects of high-quality preschool programs.

**The Influence of Neurological and Psychological Studies**

Even with strong commitments from multiple presidents, investments in high-quality environments serving low-income children face jeopardy due to competing priorities resulting in federal and state funding shifts. Advocates, in an attempt to preserve high-quality services for these young children, work to focus legislators and community members on both short- and long-term benefits of high-quality programming for low-income children. They use both neurological and psychological studies to point out how our brains are wired for learning before the age of five (Shonkoff & Phillips, 2000). Neurological studies focus on biology and rapid brain development whereas studies in psychology examine social and environmental contexts connected to early learning. In this way, advocates use studies to stress how investments benefit children, families, and society.

Cognitive studies from neuroscience and psychology highlight the importance of enriched environments and how they impact early brain development (Shonkoff & Phillips, 2000). Findings confirm newborns are biologically ready for learning, which debunks earlier beliefs that children are born with a fixed intellectual capacity. Brain circuitry studies on infants and toddlers document rapid synapse growth crucial for strengthening short- and long-term memory. During these early years, young children have twice as many circuits, or synapses, as an adult. Neuroscientists have come to understand typical brain growth and development connected to enriched environments aid rapid synapse development (Kuhl, 2004; Shore, 1997). According to scientists, synapses stimulated by experience become permanent. This discovery supports the position that the early years are critical in the education of young children (Rolnick & Grunewald, 2003).
Social Competencies: Adaptive Systems and Soft Skills

Historically, politicians and early childhood researchers focused first on understanding the development of cognition and its relationships to academic outcomes. However, there is currently a growing research base providing insights suggesting that quality early childhood program strengths are not primarily in academic achievement but what researchers refer to as non-cognitive or soft skills (Cunha & Heckman, 2010; Duckworth, Peterson, Mathews, & Kely, 2007; Duckworth, Tsukayama, & May, 2010; Egalite, Mills, & Greene, 2016). Evidence from early-intervention literature suggests the enriched preschool environments provided by the Abecedarian, Perry Preschool, and Chicago Parent-Child Center programs impact personal and social skill development and these emotional skills are as important as acquiring cognitive skills (Cunha & Heckman, 2010; Cunha, Heckman, Lochner, & Masterov, 2006). Hence, there is a contemporary research interest in exploring early childhood programs and the development of social competencies. For example, researchers (Gomby et al., 1995; Henry, Gordon, & Rickman, 2006) connect cognitive advantages gained from engagement in quality early learning environments to social competencies essential for later academic success, such as high school graduation (Masten & Coatswork, 1998). In the heart of this research is a discussion of adaptive systems.

Highly developed adaptive systems help children navigate social systems by managing attention, emotion, and behavior (Masten & Coatswork, 1998). Many early childhood programs provide support for adaptive system development through social-emotional, literacy, and problem-solving experiences in the classroom. Masten and Coatswork (1998) also note adaptive systems may be impaired when children face high-risk factors such as poverty, stress, and violence (Duncan & Magnuson, 2003). There is general agreement that quality early learning environments prioritizing safety, health, developmentally appropriate experiences, positive
interactions with adults, and promotion of positive peer relationships (Cryer, 1999; Gomby et al., 1995) impact the development of adaptive systems and oftentimes neutralize the influence of high-risk factors (Brooks-Gunn, 1997; Cryer, 1999; Gomby et al., 1995; Temple & Reynolds, 2007). Findings support the notion that children who can adapt and persevere are motivated and flexible in their thinking and through their interactions with others. In turn, these children are able to make adjustments when encountering new ideas or social situations (Masten & Coatswork, 1998). In this way, a child’s ability to adapt influences their ability to master grade level competencies.

An adaptive system is comprised of a set of soft skills, understood to be a set of behaviors, attitudes, and strategies (Egalite et al., 2016; Mischel, Shoda, & Peake, 1988; Mischel, Shoda, & Rodriguez, 1989; Zimmerman, 2000). A short list of these skills includes optimism, perseverance, motivation, risk aversion, self-esteem, self-control, and resilience. Perseverance, dependability, and consistency are the most important predictors of grades in school (Bowles & Gintis, 1976). Students, highly motivated to stay in school and to work hard, have experienced higher achievement test scores, decreased grade retention, decreased time in special education, decreased crime and delinquency and as a group have experienced an increase in high school graduation (Cunha & Heckman, 2010; Cunha et al., 2006). All of these soft skills are regarded as influencing social adjustment in early elementary school and have traditionally been a focus for early childhood programs (Cunha & Heckman, 2010; Daily, Burkhauser, & Halle, 2010; Dichtelmiller, Jablon, Marsden, & Meisels, 2013; Egalite et al., 2016).

Pearson’s Work Sampling System

Despite popular interest in adaptive systems and soft skills such as motivation and social adjustment, knowledge of how to measure their impact is underdeveloped. In my efforts to capture and best represent student interview responses, I have chosen to use the Work Sampling
System as a coding system for this study. The Work Sampling System (WSS) has been used for many years to document a teacher’s perceptions of student performances. It provides a system to assess student development and accomplishments (Dichtelmiller et al., 2013). Currently, classroom teachers use the Work Sampling System (WSS) in two ways, both as a formative and summative assessment. WSS consists of three elements: a checklist, portfolio, and summary report. The assessment system’s purpose is to assist teachers in documenting and evaluating students’ skills, knowledge, and behaviors using classroom-based experiences, activities, and products. Teachers then use these documents and evaluations to design classroom instruction. The WSS strives to be a comprehensive means of monitoring the social, emotional, physical, and academic progress of students. The WSS uses guidelines based upon research and nationally recognized standards for seven domains of development to determine a student’s level of knowledge and skills. These guidelines were used to rate children’s skills on multiple domains of learning based on work samples and teacher observations throughout the year. Domains include Personal and Social Development, Language and Literacy, Mathematical Thinking, Scientific Thinking, Social Studies, The Arts, and Physical Development. The assessment system includes documentation of student reflections and discussions in order to provide evidence of the development of language, thinking, and understanding.

**Bandura’s Social Learning Theory**

In addition to using the Work Sampling System to code interview responses, I have chosen to use Bandura’s social learning theory for analysis. Bandura’s social learning theory offers a social learning model as a theoretical tool for an analysis of self-efficacy, perceived self-efficacy, and personal agency. Self-efficacy beliefs are the driving force behind how individuals determine how they feel, think, motivate themselves, and behave (Bandura, 1977, 1989, 1998, 2009). Additionally, components of this framework include discussion and explanation of
concepts such as mastery experience, coping capabilities, and understandings of perceived goal-attainment (Bandura, 1977).

**Efficacy**

Social learning theorists such as Bandura define self-efficacy as a trait found in people who believe their actions have value (Bandura, 1989). This belief leads to an optimistic confidence about how a person can influence current and future life outcomes (Bandura, 1986, 1988). Perceived self-efficacy, an extension of the theory, explains the relationship between optimism and a person’s perceived capability to perform. These performance belief systems have connections to direct and mediated experience. Social learning theorists suggest direct and mediated experiences allow access to information (Bandura, 1977; Bandura, Barbaranelli, Caprara, & Pastorelli, 2001; Benight & Bandura, 2004) which strengthens perceptions regarding performance. Four important sources of information for building efficacy in Bandura’s social learning model are: a) mastery experience, b) vicarious experience, c) social persuasion, and d) affective states (Bandura, 1988, 1997).

Bandura (2005) determined mastery experience as the most significant source of efficacy. For early learners, an example of mastery experience is when a child is able to communicate orally in his or her home language and understand emergent literacy concepts such as numbers, phonemic awareness, colors, and shapes. An increase in mastery experience results in a growth of competence and coping skills. Within the social learning model, mastery experience is a foundation for building self-confidence and a sense of control over conflict in a person’s life.

A second type of experience found in the social learning model is vicarious experience, which is linked to modeling (Bandura, 2005). Models provide social cues, observers provide matching responses, and the reinforcement from the experience allows individuals to imitate or rehearse modeled behaviors. Within social cognitive theory, modeling provides representations
of skilled performances and standards that provide children with a framework or guide for taking corrective action or for a measurement of success. Modeling allows opportunities for children to see, do, and receive instructive feedback. Modeling also promotes creativity and innovation (Gist, 1989; Harris & Evans, 1973). Models that synthesize knowledge or share understandings and ways of doing things with children (Bandura, 1986) may assist students in learning how to adapt to new environments.

A third type of experience explained within the social learning model is social persuasion, which essentially is a form of encouragement. Within social cognitive theory, social persuasion lays a foundation for an individual’s expectations. Efficacious perceptions have relationships to how children can and will perform at levels leading to goal attainment (Bandura, 2005).

Affective states, the last of the four types of information sources highlighted in social cognitive theory, are a study of the child’s management of emotions such as stress and anxiety. Often this source of information holds a person steady while managing change. Individuals with a high-level of confidence in their ability to face difficult challenges are able to function amid perceived chaos and disarray (Bandura, 1977).

Efficacious people, according to theory, are confident with their capabilities; they define rigorous projects as goals to master rather than as experiences to avoid. This confidence results in strong personal commitments to goal completion (Bandura, 1977). These commitments are maintained over time, even when a person faces diversion or failure. When confronting failure, efficacious individuals often attribute their failure to one of three situations: a) a lack of effort on their part, b) lack of knowledge, or c) a lack of skill, all of which they perceive as fixable. These individuals believe such situations can be controlled and overcome. An efficacious outlook has
connections to productivity, personal accomplishments, and to the reduction of both stress and depression.

In contrast, people with doubts regarding their capabilities tend to avoid difficult tasks because they see them as personal threats. They do not set high expectations for themselves and have low commitment to the goals they do select. Low self-efficacy beliefs are displayed in individuals who when faced with difficult situations, focus on their personal deficiencies or on perceived negative outcomes rather than investing time and effort to figure out how to perform successfully.

**Agency and Motivation**

Agents, in social cognitive learning theory, are people who take action (Bandura, 1989). They are planners and thinkers who adopt standards and create goals. They monitor, examine, and reflect on their goals. Individual agency, within this theory, is a blend of an individual’s beliefs about their potential and their ability to control what happens to them. These individuals seek an understanding of their self-development along with how they can adapt when presented with change.

Bandura (1989) explained that agents do not act autonomously without facts, nor do they respond mechanically to environmental stimulus. They make decisions by combining input from physical experiences, environmental influences, thoughtful processing, and through their emotions. In social cognitive theory, all of these factors contribute and interact with one another to produce motivation.

Motivation has a direct connection to the process of goal setting. Self-evaluation perceived self-efficacy for goal attainment, and an internal revision of standards are all part of this process. Specifically, motivation equates to effort. How much and how long a person
invests in effort while encountering insurmountable odds is a reflection of how efficacious they believe they are. In this way, efficacy is an indication of a strong belief system.

Perceived self-efficacy (Bandura, 1989) is a combination of beliefs. When people believe they can motivate themselves, believe they have the intellect and skill to accomplish goals, and believe they can meet situational demands arising as they work toward achievement, they are considered to have high perceptions of self-efficacy. These belief systems guide goal design and acquisition. Effort, commitment, perseverance, and supportive self-talk are all components demonstrated by persons with high perceptions of self-efficacy (Bandura, 1989). Efficacious people make choices. They select challenges, determine how they will invest their time, and plan how long they will stick to their plan when challenged (Bandura, 1986, 1988). They use their knowledge and skills to produce results. According to the tenets of social cognitive theory, people who produce results are agents of change. Personal agency is an outcome a strong belief system. Social cognitive theorists such as Bandura defined self-efficacy as a trait found in people who believed their actions had value. They were optimistic and confident people and believed they could influence current and future life outcomes (Bandura, 1986, 1988, 1989).

I selected Bandura’s social learning model because I thought it would be a good fit as a theoretical framework for this qualitative study. Bandura’s analytical framework offers an inductive approach to understand how interviewee responses have significant relationships to motivational advantage and social adjustment.
CHAPTER III

METHODOLOGY

Qualitative research practices provide opportunities for individuals, particularly marginalized groups such as children, to share their personal experiences. Qualitative approaches often take place in natural settings such as community centers, public libraries, and home environments. They are descriptive in nature and focus on process. Such types of methodologies offer an inductive approach through theoretical frameworks to understand the significance of the data’s relationship to the research problem (Bogdan & Biklen, 2007).

Methods for this study were chosen for their appropriateness and effectiveness in creating an environment where children aged 10 – 14 would feel comfortable introducing themselves, reflecting on the past, and sharing plans for the future. This chapter has provided a plan for collecting and coding student responses, connecting coded responses to the theoretical perspective, and reporting on findings derived from the data. Additionally, significant literature and practices connected to the study are found in the literature review and throughout the entire dissertation (Lincoln & Guba, 1985; Merriam, 2009). Two image-based qualitative methods, auto-photography and photo-interviews were the primary methods used for The Self-efficacy Camera Study. They were chosen to collect participants’ interpretations of their experiences at a given point in time (Merriam, 2002).

Image-based Methods and Participatory Research

Auto-photography (Ziller & Lewis, 1981) evolved from work with the Twenty Statement Test (Who are You) and the photo-essay methods developed by Dollinger and Dollinger (2003) and Jones (2004). Auto-photography has been used primarily with elementary children (DeMarie, 2010) whereas this study has focused on the use of auto-photography with children ages 10 through 14. Researchers working with children often face ethical issues regarding
vulnerability and control connected to inequalities in the research setting. One approach to offsetting this challenge is to choose image-based methods (Jorgenson & Sullivan, 2009). At times, students are influenced by an unequal power relationship when interviewed by an adult due to differences of age, size, and verbal skills between themselves and the researcher (Hayden & Ward, 1996). Although most researchers would consider students aged 10 - 14 as sufficiently verbally proficient to participate in a formal interview, students may find it difficult to express their ideas or knowledge about a topic because of these differences (Ganger & Brent, 2004). Interview responses may also be influenced by demand where interviewees strive to say what they think an interviewer wants to hear (Orne, 1962). To offset power relationships and demand characteristics, some researchers have turned to methods that encourage a participatory approach where interviewers and interviewees become co-researchers in the project, which is a method used extensively in this study. Image-based methods offered me an opportunity, due to their collaborative nature, to foster participant engagement in the research process.

Both auto-photography and photo-interviews actively engaged the children in this study as co-researchers, allowing a transfer of power to the child in the research process (Moreland & Cowie, 2005). The camera became a participatory research tool that was a fun and unique experience (Clark & Moss, 2001). Images produced by the children helped break down the power differentials during the photo-interviews (Prosser & Burke, 2011). Children chose the images they wanted to photograph, which in turn determined what they wanted to talk about (Noland, 2006). An interview method, where participants and I explored the images together, provided a qualitative voice that allowed the children to select images and provide descriptions, explanations, and reflections connected to the pictures in their own words (Moreland & Cowie, 2005). This technique allowed each child’s thinking to become both visible and auditory. In this
way, collaborative work diminished power structures and fostered conversations where students were comfortable responding to my queries.

**Image-based Methods and Visual Competence**

Image-based based methods go beyond establishing participants as co-researchers by tapping into the visual competence of the child. One of the first physical and intellectual skills infants and young children develop is the ability to see. Words develop and often are tied to an effort to verbalize what they see (Berger, 1972). Using sight to collect information, young children construct understandings of their environment. Image-based research methods draw upon this strength (Prosser & Burke, 2011). Through images, researchers are able to capture and articulate children’s depictions of identity, human activity, and thought (Noland, 2006). Wertsch (1991) noted that knowledge is socially constructed and human actions are grounded within social, cultural, political, and economic contexts. Additional researchers have claimed that experiences grounded in these contexts shape a person’s understanding of who they are and the roles played by these individuals within their communities (Moreland & Cowie, 2005).

How individuals perceive themselves guides their thinking and behavior (Lorraine, 1990). Children become early experts in constructing meaning through what they see. They can draw upon this expertise to produce photographic self-representations (Combs & Ziller, 1977; Ziller & Lewis, 1981). Photos offer a way to understand a child’s interpretation of one place at one moment in time (Noland, 2006). In this way, snapshots are more than a mechanical record of a simple event; they are a unique insight into a student’s thinking (Moreland & Cowie, 2005). Auto-photography is a method that allows children to take pictures of what they believe is representative of who they are (Noland, 2006). Auto-photography allows children freedom to depict familiar environments and take snapshots of people and objects that are meaningful to them.
Student photographers, when asked by a third party, often take task-based projects seriously when they are included in the project as important co-collaborators (Noland, 2006). Photographing important items in their environment is a thoughtful exercise that enhances the student photographer’s confidence while participating in the photo-interview (Jorgenson & Sullivan, 2009). Additionally, photographs often act as a neutral third party that help reduce stress; the subject of the interview becomes the photo, not the student (Banks, 2001). When focusing on the photo, there is less eye-to-eye contact, allowing the student to become a guide sharing a spontaneous story (Collier & Collier, 1986). Photo-interviews foster a relaxed interview atmosphere by giving participants something tangible to focus on (Clark-Ibanez, 2004).

Student-photographers in The Self-efficacy Camera Study served as my co-researchers where they shared what they saw via the photos they had taken (Moreland & Cowie, 2005). This process allowed me and each student-photographer to have an interpretive conversation regarding the student’s values and experiences (Prosser & Burke, 2011). The photo-interview provided a process where participants examined static images they believed represented their values, experiences, and views of others (Noland, 2006). Both auto-photography and photo-interviews were powerful methods for eliciting how the children in the study conceived of present and future events (Prosser & Burke, 2011).

In addition to setting up an interview environment where children were comfortable sharing ideas, the image-based research methods used in this study established an authentic research process (Noland, 2006). Image-based methods allowed me to view each participant’s world through the participant’s eyes. For example, questions and procedures emerged from student’s portfolio presentations. The photo-interviews were open-ended and shaped by students as to which photos were shared (Bogdan & Biklen, 2007; Creswell, 2009). Students structured
the interviews by sorting photos into themes and choosing the order of photos shared. Interview questions were used flexibly and in no specific order (Merriam, 2009). Interviewing was conversational so participants related their stories in their own words (Erlandson, Harris, Skipper, & Allen, 1993). This process allowed for the generation of data in two ways: from the images produced by participants and through transcripts of the conversation derived from an audio recording of the interview. This was how snapshots, descriptions of snapshots, and extended conversations based upon the snapshots all became data for The Self-efficacy Camera Study. The integrity of the data depended on depicting the participant’s world through the participant’s eyes, to the fullest extent possible.

**Participant Selection and Recruitment**

Interviews took place in the summer of 2016 prior to entry into a new academic year. The eight student-photographers participating in the study ranged in age from 10-14 years. They had attended or were currently entering into 6th through 8th grades, with the majority of the students preparing to enter middle or high school. All were preschool students for a minimum of 8 months when 4-years old. They were graduates of a local preschool whose mission was to serve low-income families. While in attendance, their preschool adopted a blend of curricula focused on development of personal and social skills, as well as traditional academic skills. Upon graduation from preschool, their parents gave consent for their inclusion in a local longitudinal study following these students from kindergarten to their current grade level (Bakken, Brown, & Downing, 2017). Comparisons of their public-school experiences to those of their demographically similar peers were a component of the annual longitudinal review. The longitudinal study design did not include student interviews nor was self-efficacy a focus of the research.
Eligibility for preschool was based on whether children were members of a low-income family or if they were deemed at-risk. Seven factors determined low-income or at-risk family status in Kansas preschools at that time. Families could qualify for free-enrollment eligibility if their family qualified for the free or reduced lunch program, if the family was enrolled in a child care subsidy, if the parent was a teen, or if the parent did not have a high school diploma. Families also qualified for free-enrollment if the child’s first language was not English, came from a migrant family, or had a developmental or academic delay. A child identified with at least one of these factors allowed for free-enrollment in a local early childhood program.

All eight of the participant’s parents were already familiar with the consent process due to participation in the longitudinal study. Because of this association, I felt the chances were strong I could recruit parents and students to participate in The Self-efficacy Camera Study. Five of the children were female and three were male. Two student-participants were Hispanic, two were African American, and four were Caucasian. At the time of preschool enrollment, four lived in single-parent households and four had two parents in the home. All participants lived in an urban county in the state of Kansas.

All student-photographers attended one of three local preschools when they were 4-years old. Their recruitment for this study was through collegial relationships. I contacted three early childhood center administrators via e-mail and phone. All had strong long-term relationships with formerly enrolled families. All three directors were former colleagues of mine and were able to contact teachers and parents on my behalf. If parents thought their child would be interested in The Self-efficacy Camera Study, parents gave permission to teachers or the center directors to share their contact information with me. Interested parents received an electronic letter of introduction from me as a first contact inviting their child’s participation in the project. In the letter, I introduced myself and explained that I was a doctoral student who wanted to
conduct a study where students would participate as co-researchers in a The Self-efficacy Camera Study. If their child agreed to participate, they would receive a digital camera and would take photos for the study. Parents understood their child’s photos would provide the subject matter for their child’s interview. If the parents agreed, they signed electronic consent forms and sent them back to me with additional contact information. At that point, I worked directly with parents and students. Consequently, I was able to set up face-to-face meetings with children, explain the study in age-appropriate detail, and collect their assent forms. Students also signed consent to use photos of themselves in the study. In this meeting, students also received consent forms to give to adults and children to sign if the student-photographers chose them as their prospective photo subjects. If the subject of a photo was under the age of 18, I instructed the student-photographer to collect parent consent as well. Once children finished taking their photos, I collected the cameras, downloaded pictures so I could print hard copies, and returned the cameras to the students. As an incentive to participate in the study, I allowed students to keep their cameras.

**Meetings with Student-photographers**

Methods were selected for this study for their appropriateness and effectiveness in establishing an environment where students aged 10 – 14 could feel comfortable sharing perceptions of who they were, what they remembered, and what they planned to do or accomplish in the future. Photo-interviewing (Kolb, 2008) is a collaborative interview technique used to help children explore subjective meanings of their images (Jorgenson & Sullivan, 2009). This interview method, where participants and the interviewer explore the images together, allow a child’s thinking to become both visible and auditory. Many social researchers are interested in an authentic research process for both researchers and participants (Noland, 2006). Photo-interviews offer such a process and enable researchers to view the participant’s world through
the participant’s eyes—the emic view. This process is inductive, where questions and procedures emerge from observations and discussion, data is collected within a natural setting, and data analysis builds from details to general themes (Creswell, 2009).

I met twice with each student photographer. The first meetings took place in a variety of locations such as school conference rooms, offices, classrooms, public libraries, community centers, homes, and fast food restaurants. The site selection was up to the parent. Parents understood they were welcome to attend meetings with their child. However, none of the parents chose to attend the initial introductory meetings. In the first meeting, the students and I introduced ourselves to one another. I provided assent forms if the student had not signed one prior to the meeting, general instructions for the project, and gave students their cameras. We practiced taking pictures to ensure the camera was working properly and I answered any questions they had about the camera and the project. Students understood they were volunteers for the study and could withdraw at any time.

Students and I discussed the directions, which I also provided in writing so they would have a hard copy to take home. I explained I was interested in three types of pictures: snapshots of what they thought was interesting, important, or portrayed the future. I encouraged them to take photographs at home, school, and in the community. They understood they could take as many or as few as they liked. Students agreed to complete their photo shoot within 2 weeks. I asked them to have their parents contact me when they completed their photo shoot so I could have the photos developed. I provided written contact information, which included my email, phone number, and directions for the project. This introductory meeting was not audio-recorded.

Our second meeting was for the photo-interview and these took place in various locations as well. We met in school conference rooms, offices, classrooms, community centers, and public libraries. Once again, parents determined the interview sites. Interviews typically lasted
between 30 – 45 minutes and were audio recorded with the student’s permission. As before, parents were welcome to attend the interview with their child. Two parents chose to attend; six parents did not. Of the two who did attend, one exited the interview early and returned when it was completed. The second parent stayed for the entire interview and the student appeared to be comfortable with her mother in the room. During each interview, I explained to each student that all information the student shared in the interview was confidential. I explained that when I wrote the study results, their identity would be anonymous.

Student-photographers accepted instructions to take three types of photos: a) interesting people, b) places, objects, or ideas of importance to them, and c) images connected to how they viewed the future. Each child agreed to participate an interview to review their photos and sort them according to these same three categories. In essence, the initial instructions for the project became the opening question for each set of photos taken by the child. Upon review of the photos, I asked them the following questions:

1) What is interesting to you in these photos? Why?
2) What is important to you in these photos? Why?
3) What in these photos shows the future?

The initial questions were the jump-start for the photo-interview. The children’s responses allowed for open-ended follow-up questions, which were spontaneous and conversational.

Before each interview began, students sorted their photos into thematic stacks of what they thought was “interesting,” “important,” and “the future.” The photo-interview commenced when students had completed this task. During interviews, I asked students to reflect and share ideas connected to the images they produced (Noland, 2006). In this way, the photos guided interview questions and discussions. I asked them to take each picture and explain what was in the photo and why they had decided to take the picture. At the end of the interview, I gave
children permission to take their photos home. These were in addition to digital copies of their photos, which were on cameras returned to them prior to the interview. Student interviews were audio recorded and transcribed verbatim later on. Coded transcriptions used pseudonyms to protect student identities.

**Data Analysis**

Data were collected, coded, and analyzed using snapshots and transcripts, inductively building from descriptive details to general themes (Creswell, 2009). I coded student responses according to five categories within Pearson’s Work Sampling System (WSS). The categories used to code student responses were Self-concept, Self-control, Approaches to Learning, Interactions with Others, and Social Problem-solving. Analysis of the data began with the first read through of the transcriptions, which helped identify student responses for coding according to the five categories selected from the WSS. Huberman and Miles (1984) recommend an early analysis to ensure a continual interplay between existing and new data, allowing for new data collection strategies to emerge, if needed. Merriam (2009) supports this analytical process as well. Data collection continued with multiple reviews of transcripts. Spreadsheets aided the organization of data according to the Work Sampling System’s categories used for coding. This activity continued until data analysis was finished (Bogdan & Biklen, 2007).

**What is the Pearson Work Sampling System?**

The Work Sampling System is a performance-based assessment toolkit used by classroom teachers to record observations of pre-school and elementary students. One of the System’s goals is to allow teachers to take an individualized approach to academic achievement based upon the premise that children are active constructors of knowledge. The assessment toolkit includes developmental guidelines and checklists designed to aid teachers in their
classroom observations of student performances. National standards and knowledge of child
development are the foundation for the guidelines and checklists (Dichtelmiller et al., 2004).
The purpose of the System is to train teachers to observe, collect, and summarize student
performances via seven categories of the System. The seven categories within the System, also
referenced as developmental domains, are a) Personal and Social Development, b) Language and
Literacy, c) Mathematical Thinking, d) Scientific Thinking, e) Social Studies, f) The Arts, and g)
Physical Development. In this study, I used only one of the seven, the Personal and Social
Development category, as a method of coding 149 interview responses of eight students ages 10-
14. This domain’s guidance and checklist, designed for use by teachers to identify personal and
social competencies of students in classroom environments, offered a practical approach to
organizing and coding interviewee responses.

After organizing the data according to WSS categories, I applied Bandura’s social
learning model as an interpretive tool. His model was helpful in understanding and analyzing
types of experiences student-photographers shared and how their experiences had connections to
efficacy, motivational advantage, and social adjustment.

**Researcher Positionality**

Researcher positionality is dual. Lived experiences are an asset to a researcher and can
bring a unique perspective to a study. However, these same experiences can also act as a
liability (Pesik, 2010). My personal and professional experiences with the education and care of
low-income children led to my interest in this study. As the oldest of four children, I grew up in
a low-income household. My father worked for an aircraft manufacturing company in my
hometown until I reached 18 years of age. During these years, he was laid off work five times.
These sessions usually lasted for a year or more. During some of these sessions, he did not have
work whereas he was willing to relocate during others. When relocations were far from home
the responsibility of raising four children was on my mother. I have worked very hard to move from a low-income status to the financially stable situation I am in today. My own experiences, many of which have been a result of the assistance of others and their belief in my abilities, have grounded my thinking about the potential of the underserved in our community. These experiences have led to development of a personal philosophy and commitment to support early learning as a means to positive life-long outcomes for young children. I have served as an educator for over 20 years as a classroom teacher, a member of a variety of administrative teams in public schools, and as co-founder of a public-private early learning partnership, which operates three early childhood centers serving primarily low-income children. I also have been an executive director of the Kansas Children’s Cabinet and Trust Fund, a state quasi-agency providing guidance to the Governor’s office and state legislature. I currently hold the position of executive director of a new non-profit, Systems of Care Incorporated (SOCl) communities, which is targeted to invest in early learning systems designed to serve low-income families in underserved counties in the state. I have collaborated with Head Start, Early Head Start, and local school districts and was appointed to serve on the Kansas Interagency Coordinating Council on Early Childhood Developmental Services (ICC), which is a board that advises state government on issues involving preschool children at risk of developmental disabilities and delays.

These experiences have grounded my thinking about the potential of underserved children living in our communities and have contributed to development of a personal philosophy and commitment to support early learning as a means to foster positive lifelong outcomes for young children. Educators do not often hear personal accounts from low-income students, and I am convinced we can learn from these children. Therefore, through thoughtful listening and reporting, I aim to illuminate how children who have had access to early childhood
services feel and think about the value of their own experiences. I want to explore how these experiences connect to a child’s sense of efficacy, motivation, and social adjustment. I made every effort in the study to ensure that the student photographers felt they were in a safe and unbiased environment so they could tell their own story in their own way. In order to ensure the interview environment was safe and unbiased, I communicated to student photographers and their parents through both written and spoken directions, that they were in charge of selecting the interview location, time, and date. Parents received invitations to attend the interview, students selected interview photos, students were in charge of arranging the order of the photos for discussion, and students were in charge of the length of the interview.

In order to control my subjectivities from intruding in the analysis and interpretation of the data, I identified and organized student responses according to Pearson’s Work Sampling System criteria (WSS). The WSS criteria offers a framework for aligning interview findings in accordance to WSS themes, and interpretation of the findings is framed using Bandura’s social learning model. Through using both of these conceptual frameworks, I believe I have been able to remain objective regarding what children shared and how their reports connect to the research questions selected for this study.

**Ethical Considerations**

Confidentiality, honesty, informed consent, trust, harm, risk, and privacy are all ethical concerns of the qualitative researcher (Huberman & Miles, 2002; Merriam, 2009). As qualitative practices provide opportunities for individuals to share personal experiences, it is important to address all of these concerns. Additionally, marginalized groups, such as children, are entitled to a guarantee of protection as we present their stories to others so they may understand children’s points of view (Maxwell, 2013). It is also important for us as researchers to provide a clear explanation of the theoretical framework (Lichtman, 2012) used in the study and take into
account that as researchers, our own personal experiences may serve as assets or liabilities in the analysis and reporting of the data collected (Lapan, Quartaroli, & Reimer, 2012). My goal was to work “in the Peshkin spirit” where a researcher brings unique qualities to a study (Peshkin, 1988). This perspective allows the positionality of the researcher to be viewed as an asset, where the researchers position, and the data analysis are joined together to make a distinctive contribution to the body of research.

In order to meet the ethical concerns mentioned above, The Self-efficacy Camera Study participants reviewed the informed consent agreement and discussed the consent agreement with me prior to participation in the study. Our discussion centered on how their identities would remain confidential. We discussed how their participation was voluntary and that they could withdraw from participation in the project at any time during the process as outlined in protocols described in Appendix A. Consent forms used for this study are in Appendix B. All signed consent forms are stored in a secure location and all audio-recorded interviews are labeled and stored to protect participant anonymity and confidentiality. Transcribed interviews are protected and secured online and are password protected for 5 years. Additionally, participants have a number identifier in all interview materials and are discussed in this study with assigned pseudonyms.
CHAPTER IV

Findings

The Self-efficacy Camera Study is an activity designed to promote conversation between a student-photographer and a researcher. Photos taken by the child determine discussion boundaries. Presentation of the photos by the child allows the images to become a springboard for an exploration of the child’s personal and social experiences. Three themes, as directed via The Self-efficacy Camera Study criteria, framed the student-photographers’ portfolios. Children’s portfolios included images of what they found interesting, what was important to them, and what images foretold the future. The photos provided an opportunity for students to introduce themselves to me as they shared perspectives and experiences connected to the images. Photo-discussions focused on important people, ideas, and objects that led to a glimpse of student viewpoints regarding what they know, do, and plan. Students introduced and explained life experiences often grounded in relationships with friends and family. Portfolios also highlighted their interactions with community members in churches, schools, and volunteer projects.

To begin to understand student experiences, I have relied on two approaches to interpretation, one an assessment system and the other theoretical: The Pearson Work Sampling System and Bandura’s Social Cognitive Theoretical Framework. One, the Pearson Work Sampling System, offers five categories useful for coding interview responses. All five represent one aspect of personal and social development and all are equally important in the assessment of personal and social skills. The five categories in Pearson’s Personal and Social Development Domain used for this study include Self-concept, Self-control, Approaches to Learning, Interactions with Others, and Social Problem Solving. I have organized the interview findings in this chapter according to Pearson’s categories. Once findings were coded using the Work
Sampling System’s personal and social domain categories, I used Bandura’s social learning model to explore student experience and student perceptions of efficacy.

As mentioned above, I used Work Sampling checklists as a method to organize data from The Self-efficacy Camera Study transcriptions. The Work Sampling System is a performance-based assessment toolkit designed for use in preschool and elementary classrooms. However, for this study, I used the Personal and Social Developmental Domain categories to code transcription data provided by each student-photographer, ages 10 – 14. All Camera Project students were 6th to 8th graders enrolled in local public schools.

The WSS categories offered a practical approach to organizing student responses. Each section of this chapter includes a table giving the reader an idea of how often children provided responses coded for each category. Tables presented in this chapter were used not to quantify the findings but to illustrate the types of data collected. They helped illustrate whether the findings were an outcome of research questions. Questions focused on learning whether student’s personal and social experiences reflected self-efficacy, motivational advantage, social adjustment, and their beliefs about school achievement, performance, and educational attainment. I believe the data collected and depicted in the tables reveal I asked relevant questions which solicited the qualitative data I was seeking.

Table 1 identifies all five categories, names of student-photographers participating in The Self-efficacy Camera Study and provides an accounting of the frequency of student responses coded for each category. Since there was a great deal of freedom for students in creating their portfolios, some photo collections did not foster information connected to all topics identified within each category. This could explain the variance in the number of responses collected across all categories for each student-photographer. Each of the five categories contains sub-categories. Descriptions for each sub-category are included in each section of this chapter.
Table 1

*Five Work Sampling Personal and Social Development Domain categories: 149 Responses*

<table>
<thead>
<tr>
<th></th>
<th>Self-concept</th>
<th>Self-control</th>
<th>Approaches to Learning</th>
<th>Interactions with Others</th>
<th>Social Problem-solving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andie, 10 yrs.</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Elroy, 10 yrs.</td>
<td>5</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Boyd, 10 yrs.</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Lulu, 10 yrs.</td>
<td>5</td>
<td>0</td>
<td>4</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Harry, 12 yrs.</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Miranda, 12 yrs.</td>
<td>14</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Abigale, 13 yrs.</td>
<td>9</td>
<td>5</td>
<td>0</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Rachel, 14 yrs.</td>
<td>9</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

*Note:* Table 1 displays the names of student-photographers and their age. It also documents the total number of responses coded for each category listed above. Responses are for all five categories for all eight students. Totals equal 149.

**Self-concept**

Within Pearson’s Personal and Social Development Domain, Self-concept has two sub-categories: self-confidence and self-direction. Table 2 provides a frequency count for each of these sub-categories showing the number of responses collected from all eight student-photographers participating in the project.
Table 2

_Self-concept: 56 responses_

<table>
<thead>
<tr>
<th></th>
<th>Self-confidence</th>
<th>Self-direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andie, 10 yrs.</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Elroy, 10 yrs.</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Boyd, 10 yrs.</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Lulu, 10 yrs.</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Harry, 12 yrs.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Miranda, 12 yrs.</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Abigale, 13 yrs.</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Rachel, 14 yrs.</td>
<td>0</td>
<td>9</td>
</tr>
</tbody>
</table>

Note: _Self-concept_ has two sub-categories—Self-confidence and Self-direction. The response total for both sub-categories is 56.

**Self-confidence**

When teachers assess self-confidence using the self-confidence checklist, they search for evidence of optimism and a positive sense of self. Six students, when sharing their photos, described events and people in a positive way. Lulu, Abigale, Elroy, Andie, Miranda, and Harry provided examples of self-confidence when describing their relationships with friends and family, what they thought about group success, individual achievements, and future plans. Their reflections included topics on luck, friendship, being yourself, self-respect and respect for others, accomplishments, achievements, winning, thrills, pride, and plans for independence.

Several examples illustrate how the photos expressed self-confidence. The first example is from Lulu, age 10, who shared a photo from the “important section” of her portfolio. Lulu explained, “It’s a four-leaf clover. It’s important because [luck] runs through our family. I’m kind of Irish… I look a lot like my mom… and that’s lucky.” Another student-photographer explained how popularity was not as important as the quality of friendships. Elroy, age 10, declared he is, “relatively friendly.” In response to my question whether he had many friends at school, he confidently shared, “Not very many, but I have the right friends.” A third student, Abigale, age 13, shared how to navigate barriers while maintaining self-respect. Friends were
important; self-respect was important; but Abigale believed that friendship gained through the
sacrifice of self-respect was unacceptable. Her practical advice on how to get along with others
was, “You just need to be yourself, and if they don’t like you, they don’t like you.” She offered
insight on bullying when describing encounters with a bully she had known for years: “Cause, I
don’t really want you [the student] to bully me all year and treat me like I’m trash and then just
think everything’s going to be ok…” She elaborated, “I’m not going to have somebody treat me
like that. I wouldn’t want to do that to myself.” She stressed she will not accept mistreatment
and no one else should either; it is important to stand up for one’s self.

Examples of self-confidence emerged when students shared snapshots of accomplishment
and achievement. Andie, age 10, and Miranda, age 12, provided snapshots of team sports and
individual competitive events, such as gymnastics. They shared perspectives on commitment,
goals, and fun. Andie and Miranda, both volleyball players, expressed confidence in their
athleticism and pride in their teams.

Andie, also a competitive gymnast, declared she was a winner. When I asked her what
evidence she had to support her claim, she responded, “Sometimes I get first place,” and went on
to detail the thrills of competition. “I like it. It gets me worked up! To kick butt!” She
passionately described how she, “Goes crazy at gymnastics. I go crazy on the floor. Flipping,
flopping, flying… and the trampoline… flipping, flying, flopping off.” Then she added, she
“likes dancing because I like bouncing. I like hip-hop. I get to go free! I get to be wild!”

Miranda’s portfolio offered her the opportunity to share her team pride and a broader
assessment of the sport. “Our team is pretty good at tournaments. We’ve gotten second and
first. I think we got third before but… it was only once.” She then moved from a discussion of
winning to a description of the arena where she plays the sport. She explained where she played
ball was important and enhanced her appreciation of the sport. “I think it’s a good place to play
because there’s not any drama.” The arena staff takes volleyball seriously yet offered opportunities for fun. “The arena held pizza parties after the end of a season for [all of us] like, a good job for everybody, for all the teams who played tournaments this season.” Citizens and events in the arena are an important part of her life; she specifically mentioned the arena owner. Her portfolio included his photo. “He’s the owner and he runs the volleyball club I play for. I want to do what he does for my future. He controls everything and he coaches, too.” She further explained, “Whenever we need help or something, he’s the person we go to.” She valued him because he offered encouragement to her when she was down. She reported he took time to tell her a story of when he did not think he could do something, and “how he shared this with a friend, and explained how his friend encouraged him.” She went on to explain in “sports there are the mean people, rude people, and nice people. You want to be the nice person,” the one who encourages and “helps people.” Miranda has chosen the owner of the sports arena as her role model. She wanted to be the person who encouraged others. “Let’s say [a player is] not doing something right and someone else is making fun of them. You can help them feel like they can. And that’s what [the owner] did for me.”

The students I interviewed understood that to be good at something, you needed skills, practice, and help. Abigale shared, “I started volleyball in 4th grade. I wasn’t that great, didn’t get on the floor on my knees, was scared I was going to hurt myself.” She added that in “5th grade they couldn’t get me off the floor. They were like, ‘Are you cleaning the floor?’ I said no.” She revealed her success was due to her dad who practiced with her every night for a year. She felt this helped her become a better player. When asked why she liked volleyball so much, she explained, “I like to hit. I like the adrenaline. I like to be on the court when everybody is cheering for my team. But mainly the adrenaline just rushes go, go, go.”
In addition to team achievements, students reported on competencies at school and accomplishments at home. Elroy shared a school-related competence: “I’m pretty nerdy. I like school. A lot of my classmates think I’m pretty smart.” For example, “In 2nd grade I read the fastest.” Lulu offered a home accomplishment highlighting how she was influential and respected. She explained her opinions had power and then shared a photo of a detached garage adjacent to her house. She explained she was the catalyst for its demolition by advising her parents who listened and acted on her advice. Lulu explained, “This is the day that we demolished the ugly, broken garage. I said, ‘This needs to be gone.’ My parents said, ‘Yes, it should’ and then they got a dumpster and started throwing things away.” In addition to the garage photo, Lulu shared a selfie. It had been included in the “interesting people” section of her portfolio. When asked about the snapshot, she explained, “I think I’m very interesting. I’m funny, smart, and I just love to do things.”

In addition to Elroy and Lulu’s descriptions of individual achievements, Harry shared his plan for independence. Harry, age 12, pointed out a picture of an apartment in his portfolio. “This is a picture of an apartment because in the future I’ll live [there]. I might live alone. I might live with someone. There’s a lot of possibilities.” I asked him to complete a fill-in-the-blank: The apartment is a symbol of ________ and he responded, “…independence.”

Self-confidence is the first of two sub-categories that define the personal and social development category of Self-concept. The second sub-category, Self-direction, is concerned with observations of initiative, creativity, responsible thinking, and independent action. These traits emerged as student-photographers described snapshots, goals, accomplishments, and career plans.
Self-direction

Seven students shared snapshots connected to action plans targeting activities they believed would aid them in entry to college and career. Miranda, Rachel, Harry, Boyd, Abigale, Elroy, and Lulu all provided input on what was required to reach goals. They focused on targeted accomplishments in high school required for college entry and elaborated on studies required for college completion. They shared hopes for careers in sports, medicine, veterinary science, music, or education and shared dreams of business ownership or management.

Miranda, age 12, currently in middle school, provided a poetic description of how she planned to grow into an Olympian. “At first you start out like a flower. It starts out with you, the seed.” It takes, “Sunlight, dirt. I think the seed represents you starting somewhere and the dirt [represents] a good foundation. You grow the stem, which is you getting better...because you keep trying. You grow and keep getting better, then when you bloom and stuff...you’re in the Olympics!”

Rachel, an 8th grader, revealed she was a quiet person who liked to try new things. “I’m really shy.” However, she rationalized, “Mostly everybody gets shy. I’m comfortable with it.” Descriptions of portfolio snapshots led to a discussion of how she was able to overcome her shyness to gain admittance into a university summer program targeted for talented teens. She explained the program was “a talent search... it helps you decide on what you want in a career.” During the summer, “We traveled on a bus and visited other colleges. I plan to go to college.” This experience gave her the courage to apply for a high school honors program focused on Bio-Med. “And I actually got into it! I get to take all these medical classes in high school. And the teachers will help us with the careers we want in the medical field.” A discussion of challenges emerged, including whether she could handle blood. She provided a practical perspective. “If someone cuts themselves, it doesn’t bother me. It’s not an issue. We all have blood in our veins...
and in our bodies.” When asked what type of medicine she was interested in, she was unsure whether she wanted to be a general surgeon, trauma surgeon, or an anesthesiologist. “Well, I love [science] and medical stuff. I like testing, research, and all the math.” She understood she was facing “lots of years of college.” She knew she would need to capture the attention of recruiters and would require scholarships to pay her way. She confidently shared, “By focusing on my classes and getting good grades and doing internships, I will get the college’s attention.”

Harry, age 12, a 7th grade student, shared photographs of high school, his violin, a concert hall, and a local college. His high school photo represented his acceptance into an International Baccalaureate (IB) program. He shared he was “excited to go there.” Because the “IB program helps [students]. I’ll have a higher step up, be able to get a better high school degree and go to better colleges and stuff.” Next, he shared a snapshot of his violin. “I’m really invested in violin and I might, maybe, be a musician one day.” In a recent solo recital, he performed the Gypsy Dance and shared he was currently working on the first and third movement of Concerto in A Minor. As he discussed music he liked to play, he introduced a picture of a local concert hall. “It’s where a lot of musicians play” and he envisioned performing there. He continued to discuss his love of music and when asked why he chose the violin, he explained it was a family tradition, “My mom passed her violin down to me.” He also explained his appreciation of family and teachers. “My family and my violin teacher are really supportive; it’s really great to have people invested to help me.” Moving on from music to commentary on a college photo, he mentioned, “It’s got good programs. With college degrees you can get better jobs and become a better person and do more with your life.”

Boyd, age 10, a 6th grader, shared his need for good grades, staying out of trouble inside and outside of school, and doing well in college. He explained that in order to get into college, it was necessary to have “a good backstory,” which was his way of saying he would need a good
reputation. He continued to explain his ideas on careers, wealth, and need for a “lot of space.” He reflected, “I don’t really want to be in the Air Force,” which is his father’s profession. “I don’t know what I want my real job to be that I’ll have forever. I might want to buy a business from someone.” He explained that in order to be successful in business, “You have to know what they [customers] want and then you have to have a reasonable price.” He explained, “I want to make a lot of money so I can get nice cars.” He wanted a nice house that was modern with a “little upstairs place.” He also wanted chickens, animals, and kids.” He explained he needed a lot of space, “Cause I don’t like everyone all over me. Sometimes their breath stinks, or sometimes [it’s awful] when they’re eating, and they eat something disgusting.” Boyd’s perception of a successful life is “not being crowded and having enough room for some dogs.”

Miranda, in addition to Olympic aspirations, wants to become an arena manager and own a mansion. To assist with this discussion, she provided snapshots of an arena owner, a college, a volleyball, and a mansion. All of these snaps had relationships to one another, so the discussion hopped from one image to another to support her goals and explanations of the future. Her first image allowed her to elaborate how, as she became interested in participating in the Camera Project, she decided she would approach a friend of hers, a local sports arena owner, to see if he would let her take his picture. He asked her why she wanted the photograph and she explained the Camera Project to him. She wanted him to become one of her “interesting” snapshots. She explained she had been watching him and was interested in his work. As an outcome of the photo shoot, the owner “offered to take me around and experience a day of doing [his job].” She arranged to shadow him one day at work, see him coach, and then “see him deal with all the papers and stuff.” Miranda shared this goal with her mother. “My mom told me you can go to college for that. To be like a sports trainer.” She explained a good education leads to good jobs and new friends. This is why “education is important to me.” She also shared education is
practical. “It’s just good to know things, like math” and elaborated, “Without math you wouldn’t know how much to pay for things.” Math is useful: “Before you [pay at] the cash register, you could just do it in your head.”

In addition to connecting college to a profession in sports medicine and the practical application of skills, she connected college to volleyball, a fabulous lifestyle, and friendship. Miranda had her sights on a local college and explained she was able to visit the school with her volleyball team. “Our coach got us tickets to go to a college volleyball game and we all went together. When we watched them play, I said, ‘Oh, I like how she did that. Maybe I’ll try it.’ Because if they could do it, then I could do it, too.” She then explained how her portfolio of people, places, sports, and wealth were all connected. People led to college, college led to profession, profession could include sport, sport led to the Olympics, and the Olympics led to wealth and friendships. She was able to fast forward and backward map with her pictures during the entire interview. Miranda understood that in order to get her mansion and compete in the Olympics, she would need to go to school. She believed she would receive money after winning the Olympics. The money would allow her to purchase a mansion where she would have room for “my friends or my volleyball team to hang out.” Her picture of a mansion underscored how she wanted “to live in a mansion. I just like things being big.” When I asked what she would need to achieve her goals, she responded, “A good volleyball team, a coach, my mom, and my dad.”

Abigale, age 13, a 7th grader, underscored how college was important and expensive. When sharing her photos, she elaborated on how she planned to pay for college. “Every time I get paid, I might take a little of my paycheck and set it aside. I also [will need] to get a scholarship.” She understood how scholarships worked, and she might not get a “full ride, but maybe halfway, it just depends.” College was a gateway to a career and her career plans
included work where she could help “save people’s lives.” She finds science and anatomy interesting but is not sure she wants to make medicine her profession. She understands there is a downside of a job in medicine. It could take “a really long period of time. You have to go to four schools: college, nursing school, then you go to the hospital for an internship, and then you are a resident.” Other than the length of time, another downside to working in medicine was, “My mom said, ‘You could always be on call.’ Like you’re always at the hospital rather than always being at home.” She is still exploring what she would like to do when she grows up.

Elroy, age 11, when asked about his photo of a poster, explained, “That’s me with a little vet poster. I want to be a veterinarian when I grow up. I like animals a lot and I know a lot about them.” Asked whether he had any idea of what was required to become a veterinarian, he responded, “Lots of college, lots of college.”

Lulu, age 10, also in 6th grade, shared photos of the moon, puppies, and a computer desk. Her moon photo included a quote, “Shoot for the moon; even if you miss, you’ll land among the stars.” She declared the quote was “important because people should know if you make mistakes, you still can have something.” Her photos of puppies and a computer desk reveal her indecisiveness over whether she will become a veterinarian or a teacher when she grows up. She laid the pictures side by side and explained, “These are puppies, and they’re adorable. I love animals.” Then, “It’s the picture of me. I’m at my mom’s work. I want to work as a teacher because I like working with little kids.”

The first category within the Pearson’s Personal and Social domain, Self-concept, is concerned with self-confidence and self-direction. The second category identified in this domain is Self-control. Examples of Self-control include demonstrations of self-discipline, adoptions of rules and routines, responses to change, and elaborations of a person’s sense of responsibility to themselves and others.
**Self-control**

Family, friends, school, church, books, video, and music influence children. All offer input on rules, routines, and change. An understanding of student perceptions regarding rules, routines, and change allows us a glimpse of how they feel about safety, their ability to control aspects of their environments, their willingness to participate in new experiences, and their confidence in predicting and influencing future outcomes. Using the Pearson’s Personal and Social Developmental Domain as a guide, I have divided the Self-control category into two sub-categories. The first is Follows Rules and Routines and the second is Manages Transitions.

**Table 3**

*Self-Control: 18 Responses*

<table>
<thead>
<tr>
<th>Name</th>
<th>Follows Rules and Routines</th>
<th>Manages Transitions</th>
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</thead>
<tbody>
<tr>
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<td>Elroy, 10 yrs.</td>
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<td>Boyd, 10 yrs.</td>
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<td>Lulu, 10 yrs.</td>
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<tr>
<td>Harry, 12 yrs.</td>
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<tr>
<td>Miranda, 12 yrs.</td>
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<tr>
<td>Abigale, 13 yrs.</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Rachel, 14 yrs.</td>
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<td>0</td>
</tr>
</tbody>
</table>

*Note.* Self-control has two sub-categories—Follows Rules and Routines and Manages Transitions. The response total for both sub-categories is 18.

**Follows Rules and Routines**

Children learn life lessons from family and friends, teachers and schoolmates, social institutions, and from what they read, see, or hear. Many of these sources provide guidance on social rules and routines essential for survival. When sharing their photos, student-photographers shared guidance given to them from these sources over a variety of topics culminating in a practical analysis of advice given and lessons learned. However, these students moved beyond an analysis of lessons learned, to sharing philosophy on family, sportsmanship, faith, respect, volunteering, lying, and cussing. Abigale, Harry, Andie, Miranda, and Rachel all
provided insight by connecting their analysis of lessons learned to a philosophical perspective on how to live.

When explaining lessons learned, Abigale shared the importance of thinking beyond what you learn in books. “There’s lessons in books.” For example, “You need to hold on to what you have, because you don’t have it for very long.” And, “You need to hold on to family and you need to be with them because time goes by fast and then the next thing you know they might be gone, and you can’t get that back.” She concluded with, “Be thankful for what you have.”

Harry, when sharing a photo of himself and his mother, explained how his mother, “Lays downs rules for us. Sometimes we think, ‘That’s not fair.’” He added, “She’s a firm teacher, but like, to the point where you can still enjoy [life].” He talked about how “she helps you grow and sometimes you may not like the way she teaches, but you know that in the end it’s going to help you.” He noted, “She has a lot of experience. You can trust her to know what she’s talking about.” He then shared a snapshot of a bowl of fruit. “My mom tries to keep us healthy. She’s a health coach, and good nutrition is [rule] number one.” He informed me, “You’ve got to eat the right things. You can’t eat too much. You have to have a balanced diet.” It was important to “have healthy habits, not just diet and then go back to your old habits that got you to a non-healthy place.”

Both Abigale and Andie provided insight on lessons learned about sportsmanship, gracefully accepting defeat, and working harder for the next game. Abigale shared, “I’ve learned you don’t pout. You don’t cry. You don’t throw a fit. We are supposed to try our hardest and we are never to be disrespectful to each other.” Andie shared that when their team lost, “We just work out more. The coach gets mad. Makes us condition a lot.” The consequence of losing is not giving up.
Miranda shared the advice of a young coach who taught them to “give your best.” Originally, the girls were scared to play. They were “getting down and stuff” and Miranda shared how the coach would talk to them. “It’s ok, just look at their score, and then look at ours. And the coach would ask the team, “Which score do you want to have?” The team responded, “We wanted to have the bigger one.” Then Miranda’s coach replied, “Well then, go get the bigger one.” Miranda explained you were successful when you tried your hardest. Trying your hardest and enjoying what you were doing was a measure of success.

Rachel, Abigale, and Harry shared perspectives they gained from helpful experiences in school. Rachel explained, “School taught me how to be respectful and to focus on what I want in life.” Abigale shared a desire to reach a personal best in sports and classwork based on positive feedback and encouragement from coaches and teachers. “I can always use more practice with everything. If I want to get to where I want to get, I will need a lot more practice.” Harry enjoys volunteering even though it is a requirement of his school. “I do all kinds of volunteering. In the 6th through 8th grade, we had to volunteer hours. I do a lot of volunteer activities to get those hours.”

Rachel shared snapshots of faith and family, both of which have a place of honor in her life. “This picture is of the Virgin Mary. She is one of the main people I praise. She is really, really, important. I don’t know how to explain it. She’s an encouragement to many people.” Family snapshots led Rachel to explain, “It’s important that our family stays together. In our religion, you’re supposed to spend time with family, and you’re supposed to make peace offerings. It’s tradition.” She explained, “Our peace offering is to prepare food. We always make food together.” Rachel shared her understandings of how faith and family can both offer gifts for others.
In Abigale’s experience, there are situations where you need to know where you stand on fights, cussing, and politicians who lie. On fights and cussing, she explained one often follows the other. “When people get in fights, somebody [always] says cuss words.” The temptation is that “the other person is going to probably say them back.” This is where she draws the line. “I’m not. I don’t cuss. I’m not going to say cuss words just because someone else said them.”

She also shared her stance on lying and liars. “I do not like it when politicians [lie or exaggerate the facts]. You know how they write and throw something in there [about someone else], ‘Oh, they’re gay or divorced.’ I don’t like that. I think if it’s not true, you shouldn’t say it. It makes me mad.”

Rules and routines offer us ways to navigate our way through life. Often by internalizing rules and routines, they provide a road map for achievement whether defined as personal best or as a member of a winning team. However, Rules and Routines is just one aspect of Self-control.

The second sub-category of Self-control is concerned with how a child manages change.

**Manages Transitions**

We encounter change daily. Whether it is as simple as the weather or as complex as the latest cell phone technology, we must constantly adapt. How we react to the inevitable affects our happiness, health, how we take on new responsibilities, and how we interact with others. We cannot escape change, and neither can our children.

The Self-efficacy Camera Study, directed by photos on what children thought was interesting, important, and how they saw their future, did not result in many student responses on managing change. Perhaps if I had been more proscriptive regarding the pictures students were to take, I could have set up a directive that could have led to a discussion of pictures on change. In spite of this lack of directive, two student-photographers did offer responses connected to
change management. One was from Andie, regarding a physical challenge and one from Harry, who faced a new school environment.

Andie, a self-identified adrenaline junkie, explained her ultimate challenge. “I had surgery [on my back]; I couldn’t do anything.” I asked how she felt about having to stay still. Was it frustrating? “Yes!” How did she handle her frustration? She explained that the only way she could handle her situation was to “read a book.” She was able to manage this change because she “liked reading.”

Harry explained he was fearful of middle school. “On TV and in movies, middle school was this terrible place.” After attending the first months of middle school, he became less fearful and then determined. “It changed my life. Going from elementary to middle school - totally different. A lot of my [new] friends are really great people. I’m glad I could go to school to meet all of them. I like different kinds of people from all over.”

Both children faced scary situations knowing they were not in control over the big picture. One child worked with a lack of physical control due to a scheduled surgery and the other knew he had to face middle school; there was no way out for either of them. Both searched for patience with their situations. They searched for the positive. Both found a way to manage their feelings while they were experiencing the change. Moreover, after they completed the experience, they were able to offer insight on what made the change manageable.

Experience with rules, routines, and change, according to Pearson’s Work Sampling System, all have connections to the development of Self-Control. The third category in the system used to assess a child’s personal and social development is Approaches to Learning. Approaches to Learning offers a way to code a variety of
attitudes children have towards learning. These attitudes include looking at engagement, 
goals setting for future learning, and student satisfaction levels with learning experiences.

**Approaches to Learning**

Approaches to Learning is one of five categories identified in personal and social
development in the Pearson Work Sampling System. This category has two sub-categories, 
Curiosity and Persistence. Interviews with student-photographers revealed they are inquisitive, 
interested in books, the arts, history, and nature. They are interested in knowing more about 
influential people. Many explained they enjoyed learning and were open to new experiences. 
Some wanted to keep an open mind on the future. For example, Harry reflected, “There’s still a 
long time before I get to college. I might pick something else I want to do with my life that 
doesn’t need a degree.” Some shared an interest in knowing something useful. Others wanted to 
understand the mechanics of objects. Others just wanted to understand people. At times, the 
students wanted to understand connections between past and current events. These reports are 
coded examples of Curiosity. Additionally, Camera Project students shared snapshots reflecting 
extamples of tenacity and determination. These reports are coded as examples of Persistence.

Table 4

*Approaches to Learning: 17 Responses*

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<thead>
<tr>
<th></th>
<th>Curiosity</th>
<th>Persistence</th>
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<tbody>
<tr>
<td>Andie, 10 yrs.</td>
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<tr>
<td>Elroy, 10 yrs.</td>
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<td>Lulu, 10 yrs.</td>
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<td>Miranda, 12 yrs.</td>
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<tr>
<td>Rachel, 14 yrs.</td>
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</table>

*Note.* Approaches to Learning has two sub-categories—Curiosity and Persistence. The 
responses for both sub-categories total 17.
Curiosity

Boyd is curious about history and current events. In his interview, Boyd explained, “I ask a lot of questions. I ask what the pyramids are made of. I ask how movies are made. If I hear something, I always want to know if it’s true.” He is one of seven students who expressed an interest in books, the arts, history, and nature.

Discussions of books and their importance emerged in five interviews. Andie, Abigale, Lulu, Harry, and Elroy all identified the types of books they love, why books are important to them, or a fondness of the people who worked with books. Student-photographers shared interests in adventure, entertainment, and relationships. Harry explained, “Books are really important to me.” Harry elaborated on the importance of books. “I like to experience a different life in a book, a different kind of setting, and being in a different world. I just really enjoy it.” Andie likes to read “mystery, adventure, and funny books” while Abigale likes books on friendship. Elroy votes for survival fiction, because characters are “thrown into a survival environment” and are required “to evolve.” “Adaptation, that’s the word I was looking for!” he explained. Andie also noted her opinions on librarians. Librarians were “very friendly” and helpful in finding “books easily.” Lulu shared she enjoyed going to bookstores because “books tell you how to use your imagination.”

In addition to books, two students, Harry and Elroy, are interested in music and drama. One is interested as a player and the other as a spectator. Harry, a student-violinist, is interested in acting, and wants to “try some new stuff.” His mom thought he would be good in drama, so he plans to “check that out.” Elroy is interested in Bluegrass festivals. He has attended many where his brother and father perform. They are accomplished guitarists “because they learned from our granddad, who has a band.” His family members own “a string base, hammered
dulcimers, a mountain mandolin, and a mountain dulcimer.” He simply enjoys watching them play.

Three student-photographers also shared interests in history, museums, and leadership. Boyd explained, “I just like the old wars. I like to see all the old stuff; those huge tanks and big airplanes with that glass.” Lulu likes, “Old things. I like antiques.” Museums are important because “It has stuff from the past and if a museum wasn’t there, you wouldn’t know what happened.” She underscores, “If we didn’t have a history, you wouldn’t know where you came from.” Miranda is interested in Martin Luther King, Jr. “He was a leader during the Civil Rights… he spoke to the people, he said what was wrong, what was right, and explained how they could stand up to people.” These students want to understand war, where they came from in order to understand how they fit in the world today, and how leaders can influence current events.

In the middle of the discussions of books, arts, and history, three students shared additional commentary connected to natural science, technology, and architecture. For example, Lulu loves natural science, specifically wind, movement, and plants. “I like the wind through my hair, I don’t like [being] stationary” and she believes plants “help us breathe.” Elroy, a self-professed science nerd, is excited about his “technology exploratory classes coming up next quarter!” In addition, Harry explained late in his interview, “Architects have always fascinated me from a young age.” Curiosity is one of two sub-categories used to understand children’s approaches to learning. Persistence is the second.

**Persistence**

Persistence is an action associated with perseverance. This sub-category is concerned with how steadily a child adheres to a task, belief, or purpose regardless of the level of difficulty or delay in getting it done. Three students, Elroy, Harry, and Andie shared mental and physical
challenges revealing their tenacity and determination. Elroy’s bane of existence is math. He has “to do it over and over.” His humorous mantra is, “Don’t get it right the first time, try, and try again.” He believes that somewhere in mathematics is some sort of logic. “It is a lot like that with numbers, ‘cause the numbers don’t lie.” However, it seems to elude him. His current advice on solving this challenge is to “ask for help and use a calculator.” Harry understands practice is required for excellence as a musician. “I keep on doing it and not giving up.” He credits his drive for excellence to the generosity of others. His first violin was a gift from his mother. “If someone gets you something or does something to help you out, then you show them that you’re appreciative.” He reasons they “will keep helping you. So, you need to keep caring about it and keep on doing it.” Andie explained when she had back surgery, she would get frustrated because it hurt to move. She would work on her exercises, even when they were painful, and would “try to keep doing it. Whatever I’m doing, when I get frustrated by it, I try to keep doing it.” She explained she had to get past the pain because she would not “give up on gymnastics.” One quality that all three children share is the faith that if they keep trying, then they will master their challenges. Mathematics and becoming a great musician are both life-long efforts. Recovery from back surgery is a shorter-term goal but equally daunting.

Both the sub-categories Curiosity and Persistence contribute to understanding a child’s personal and social development. The fourth category introduced in Pearson’s System provides a focus on children’s relationships with others. Their comments regarding relationships focus on belonging, empathy, and their care for others.

**Interactions with Others**

Interactions with Others, the fourth category in Pearson’s Personal and Social Development Domain, offers insight into student relationships, attachments, and commitments. This insight is important because a study of a child’s relationships often reveals their ideas on
belonging, competence, and flexibility. Confident and flexible students are able to entertain opposing point of views and often have a sense of humor regarding their personal and social circumstances. Many times, social competence is demonstrated when students become interested in helping or comforting friends and neighbors. Asking students to talk about interesting and important people and places offers insight into their ideas regarding acceptance and love.

Table 5 summarizes student responses collected and organized under this category. As with all categories described previously, this one also has two sub-categories. All eight student-photographers provided insightful responses connected to both.

Table 5

*Interactions with Others: 37 Responses*

<table>
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<tr>
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<th>Interacts Easy/ Group Participation</th>
<th>Empathy &amp; Caring</th>
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<tr>
<td>Rachel, 14 yrs.</td>
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</table>

*Note.* Interactions with Others has two sub-categories—Interacts Easy/Group Participation and Empathy and Caring. Responses from eight students for both sub-categories total 37.

Family, friends, and pets are important to all eight Camera Project students. Student discussions highlighting relationships and attachments revealed their connectedness to supportive, reliable, and thoughtful people. Regardless of whether their snapshots depicted family, friends, sports teams, schools, or churches, students described how they were part of something larger than themselves and how they were part of a community. While sharing this
understanding, students also revealed how they, in turn, were reliable and able to provide support to others as well.

**Interacts Easy and Group Participation**

Two students, Abigale and Lulu, emphasized the importance of family. One example is Abigale’s back porch photo, which reminds her of how much she loves her family. “Every night we sit on our back porch in rocking chairs. I sit and read; my brother and my dad either golf or play soccer. And our puppy is just running around.” She explains, “Family is priority one.” There is lots of laughter. “I think the funniest times are when we [are together].” She then reflects, “I feel happy I get to have that ‘cause some people don’t.” Lulu declares her family knows “how to comfort you.” They are dependable. “When you’re alone you can always call them.” Then she underscores, “I think family’s awesome. They’re always there for you.”

Additionally, students provided descriptive cameos of parents, grandparents, and friends. Many of their comments highlighted how people were helpful, talented, and humorous. Four students shared snapshots of their dads. For example, Elroy’s dad is teaching Elroy how to cook. “It’s dad. I love him. I really like his chicken noodles. I baked once, just a little cake thing. He helped me.” Abigale’s dad is a practical joker. “I have these little spray bottles. Dad [knows about them] and shouts out, ‘It’s fun time!’ and he just starts spraying us. Then, we attack each other.” Lulu said her father “can be funny and he’s really old as you can see. Cause, look at his chin. He’s got gray hairs on it!” She added, “Me and him we like to draw a lot. He’s helpful. I got interested in comic books so he’s really proud of me about that.” She also provided a glimpse of his soft side. “He cried when our dog Biff died, because that was his best friend. He and Biff were the only boys in the house.” Boyd offered a sober description of his dad. “He raised me, he’s always there. He goes to all my games, takes me fishing. We do a lot of stuff together ‘cause my mom has business meetings. So, we have boy’s night out.”
Four students, Elroy, Rachel, Harry, and Lulu provided pictures and observations of their moms. Elroy explained his mom is “nice, a social worker. She writes grants and is working on one for my school ‘cause we don’t have anything to type on.” Rachel explained her mother “protects and loves me.” Harry shared his mom is a “very strong person who knows what she wants and how to get it. She’s a good leader, a health coach, and she helps a lot of people by leading them to a healthier life.” He explained, “I can talk to her and she’s my confidant. She’s reliable and she wants the best for me.” Lulu explains her mother has three talents: she sings, earns money, and was a teacher. “Yea, she can sing. She sang the national anthem at a polo game and two baseball games.” The song at the wedding was “Somewhere over the Rainbow and was really funny because the groom started doing the worm.” Lulu underscored her mom “earns more money than my dad does” and that her mother is a hard worker. “She works with kids, last year was a teacher, and now she’s a principal. I think that is cool.”

Students lovingly described grandparents as confusing, generous, supportive, and less than perfect. Elroy, a 6th grader, explains his grandmother is “very confusing.” Shaking his head, he explains, “We’ll go over there and she [tells my dad], ‘You need to lose weight honey’ and then she’ll give my dad a pie.” Abigale’s grandparents are helpful. “If I forget something and I need it the next day, I know [they] will get it to me. Whatever [I need], one of them will be there to help.” Elroy shared a thoughtful observation of his grandfather who had faced a product design failure at work. “He designs rockets. Once he designed a rocket with stuff that took years to make and find the money for, and when it got out of the atmosphere, it exploded. He felt bad about that.”

Additionally, The Self-efficacy Camera Study student-photographers described siblings, friends, aunts, and godmothers. Harry’s brother has “always been there. If I don’t have anyone, he’s there.” Lulu described how her sister, Ciera, “will do anything fun. Even though it’s rainy
outside, she will go outside and just play in the mud.” Rachel described a strong relationship with her oldest sister. “We’re really close; always spend holidays with each other.” Also, she is “Kind. I admire her. She does not give up. She’ll try harder if she doesn’t do something right.”

Portfolios also featured best friends. Andie’s friend Allison is an entertainer. She is “very funny,” likes to laugh, and is a dancer. Andie shared Allison’s recital photo. “She’s pretty good.” Rachel shared a picture of her best friend Karen. “We always have each other’s backs.” Rachel describes Karen as “outgoing” with “a strong character.” If Karen gets an idea, she expects it to happen. “When she doesn’t get what she wants on a first try, she’ll just try harder.” Rachel added, “If something goes wrong, she won’t be disappointed. She’ll just try to figure things out.”

Two students extended discussions of friendship beyond friend photos. Both shared snapshots of inanimate objects. Andie shared a photo of a statue in front of a library and Miranda shared a photo of her phone. These images symbolized how friends are to behave and how it is important to be connected. Andie explained her statue is “of two girls, who are friends, reading a book.” This was an example that “people should be nice to each other.” If a friend needs help, [their friends] will help them, they will cheer them on. Friends stand up for each other.” Miranda’s phone provided an important link to friends and family. “My phone is important because I need it to contact my mom or dad if something happened, and I can just talk to my friends. I don’t like being alone.”

Students also explained how teams served as extended family who offered pep talks and life-long friendships. Miranda referred to her volleyball team as a group of sister-friends. All received invitations to her birthday party and “almost everybody showed up.” She predicted, “We’re going to be playing with each other until we’re in college.” Moreover, she shared how teams are beneficial. When “you’re feeling down you have someone there.” For example, if you
are “feeling down about the sport” because “you messed up.” You could get discouraged and “say you aren’t good enough.” If you were on your own, “you wouldn’t have anyone there to bring you up.” However, a team will encourage you, “they will tell you ‘It’s ok, it’s ok, you’ll get it next time.’” Boyd also shared his experience with teams. While presenting a picture of a soccer ball, he explained he had been playing with a team for a long time. Although some of the original players are off his current team, he underscored, “They’re still my friends.”

Connectedness, inclusion, and belonging were associated with snapshots of school and church. Harry shared a photo of his yearbook. “My school is important to me because it’s where I met a lot of good people.” He added, “It’s an environment where I can be with people that like stuff I like and are like me. And that always makes things better.” When sharing pictures of his church, he elaborated, “They’re accepting of other ideas. They [read the] Koran and [texts from] other religions and they don’t think Christianity is the one right way the world has to run.” He noted church members “accept other kinds of people, different races of people, and different religions of people. Everything is diverse.” He provided an example of belonging while describing a recent mission trip where, “I had a lot of fun. We volunteered. I just enjoyed hanging out and doing good stuff for the community.”

The Interacts easy/Group Participation sub-category seeks to evaluate how comfortable students feel as they interact with friends and family. The second sub-category for Interactions with Others is Empathy and Caring. This sub-category pinpoints character traits such as tolerance, compassion, responsibility, and loyalty. Students who shared snapshots of pets and volunteer projects introduced ideas coded within Empathy and Caring.

**Empathy and Caring**

The Empathy and Caring sub-category in Work Sampling is concerned with a child’s awareness of the feelings of others. Examples of caring behaviors emerged as students talked
about the personalities of their pets. Several children regard pets as family. Often their ideas regarding pets are extensions of their perspectives on how people are to be treated.

Five students explained animals are loveable, deserve respect, are good friends, are mysterious, and apparently have super powers. Abigale provided a couple of examples. She declares, “Dogs have different personalities,” are “adorable,” and “are not treated with the respect they deserve.” She declares, “I want to make a change about that.” Harry shared photos of two rescued hounds who are his friends. One was Ronnie, who had been kept in a crate all day. “This was a sad life for a growing puppy.” His family rescued her and it “changed her life.” It changed her personality. “Now she plays with toys and is really good company.” Next was Sasha. His mom found her tied up. She “didn’t look like she was having a good life.” After adoption, she became “a feisty old spirit,” who “likes to snuggle up and be a good dog.” Lulu, whose dad cried when their dog Biff died, mentioned an additional pet, a cat named Caterpillar. According to Lulu, Caterpillar is bold and possesses surveillance skills, skills Lulu thinks are valuable to have. “Caterpillar will fight for food. She lurks around the house, lurks outside like a cat should, but really, really mysteriously.” She admired Caterpillar’s style. In addition to dogs and cats, student-photographers shared their admiration of chickens and turtles. Even birds and amphibians have human attributes. Andie shared a picture of baby chicks with a protective mother. “Waddle, waddle, waddle. They’re cute. They like to follow their mother. It’s cool when they hide under their mother when people come close.” Elroy shared his photo of Melman, the turtle, basking on a rock. “He’s super cute and he does this weird thing on his rock where he’ll look like he’s flying, like Superman.” Children who have affection for animals often are rehearsing how to care about people.

Several discussions focused on respect and animal rescue led to talk of obstacles people faced in the past and students currently encounter. Abigale, an advocate for both animals and
people, shared a situation from a book she was reading and a situation she personally experienced in school. Both were examples of how to advocate for what was right and be assertive when it was important to do so. “In the book I’m reading, it’s back in the day. It’s about black and white people.” She explained children in the past faced segregation in schools and if children tried to go to each other’s schools, “they were called names and stuff.” One white girl was friends with one of the “black persons and she stands up for him. She says, ‘He’s my friend. Don’t mess with him or I’ll mess you up.’” Then to drive home her point, Abigale shared an example from her own experience where she had to find the courage to stand up for herself. Her classmate “said something, I said something back, and said, ‘Well, why don’t you come fight me about it?’” along with a bunch of bad words. It had to be taken to the office.” Then surprisingly, Abigale shared compassion for her classmate. “I don’t want to be like her or attack her.” She elaborated: “At the end of the day I feel sad; she doesn’t have role models like mine. She doesn’t have what I have. She doesn’t know what else to act like.”

Harry, in his interview, talked about enjoyable volunteer experiences where he felt he could be helpful to others. The first was at a food bank where he helped “package and sort things” and the second was where “we volunteered at an adult day center.” In both cases, he mentioned, “We talked to people, did games, puzzles, and colored with them. It was really fun to talk to them and listen to their stories.” His third experience entailed serving breakfast every month at different neighborhood centers where “they have a breakfast thing and food pantry for families to get food and supplies that they need. Families can sit down, and we serve them pancakes, eggs and sausage. It’s all free.” He has also volunteered in preschool classrooms. “I’ve gone into classrooms, played with Legos, and I just go and pick a book. Then they come in and I read to them.”

Regardless of whether snapshots depicted family, friends, pets, sports teams, schools, or
churches, most The Self-efficacy Camera Study students seemed to have a sense of how they fit in their family or community. Their portfolios portrayed an understanding of how they belong. Some students discussed the importance of responsibility and shared how they are able to provide support for folks who are less fortunate. The Interactions with Others category from Pearson’s Personal and Social Developmental Domain is the framework used to code these ideas. The last of the five categories in Pearson’s Work Sampling System is Social Problem Solving. This category is concerned with how students settle personal and social conflicts. Camera Project students used photos of books, music, and technology, to discuss topics ranging from asking for help, how to talk through anger, and how to use negotiating skills.

**Social Problem-solving**

Proficiency in social problem solving, according to the Work Sampling System, includes an understanding of conflict, gaining an awareness of alternatives to solving conflict, and development of negotiating skills. Student concerns included discussions of large-scale social problems, to reflections on small group conflict, to a humorous conflict with a little sister. Discussion included ideas about gun control, energy, coping strategies, heroes, money, bullying, burglars, religion, and mathematics.

Table 6

*Social Problem-solving: 21 Responses*

<table>
<thead>
<tr>
<th></th>
<th>Seeks Help and Resolves Conflicts</th>
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<tbody>
<tr>
<td>Andie, 10 yrs.</td>
<td>6</td>
</tr>
<tr>
<td>Elroy, 10 yrs.</td>
<td>3</td>
</tr>
<tr>
<td>Boyd, 10 yrs.</td>
<td>0</td>
</tr>
<tr>
<td>Lulu, 10 yrs.</td>
<td>5</td>
</tr>
<tr>
<td>Harry, 12 yrs.</td>
<td>1</td>
</tr>
<tr>
<td>Miranda, 12 yrs.</td>
<td>1</td>
</tr>
<tr>
<td>Abigale, 13 yrs.</td>
<td>3</td>
</tr>
<tr>
<td>Rachel, 14 yrs.</td>
<td>2</td>
</tr>
</tbody>
</table>

*Note.* The response total for Seeks Help and Resolves Conflicts is 21.
Two photos, one of a happy-faced balloon and the other of a farmer’s market, led two students to elaborate on large-scale problems in their community. Andie, age 10, when introducing her balloon picture, said in fact, many people were the opposite of her snapshot. They actually were unhappy. She claimed their unhappiness stemmed from meanness; meanness made people angry; and angry people resorted to violence. She rationalized, “If people wouldn’t be so mean, people wouldn’t [get] mad.” She provided an example from school. “So, at school, if somebody says, ‘I don’t like your shirt,’ somebody might punch him, because you don’t say, ‘I don’t like your shirt.’” She continued, “People get offended and think their only reaction is…violence!” She added, “Angry people look to guns as a solution” and thought this was unacceptable. “There’s too much violence.” She did not have suggestions on how to reduce meanness, but her solution addressing violence was to “make guns illegal in the United States.” Lulu, another Self-efficacy Camera Study 10 year-old, introduced her photo of a farmer’s market with her belief we build too many stores. “People should stop using stores [as a food supply]; stores use electricity and take [up] a lot of room from the animals and the trees.” We need to “start going to farmer’s markets. They have delicious stuff. It’s really cool. They sell fresh food and self-made stuff. They grow fruits and vegetables themselves. The clothes you see down here, people made those.”

Both 10 year-olds recognize large-scale social problems and understand it will take many people to create solutions for solving them. However, in spite of a current understanding they have regarding their lack of power or influence on solving these problems, at this point in their lives, both seemed optimistic. For example, Andie continued to explain that even though most people were unhappy due to violence, her balloon picture was actually a snapshot of hope and optimism. “For the future, I’ve got a smiley face balloon. It’s to represent in the future people
will be happy!” She did not know when they were going to be happy; she “was just guessing.” When asked, “You are hoping?” she responded, “Yes, very much so.”

In addition to thinking about large-scale national challenges such as gun control and environmental concerns, children talked about problems and solutions related to tragic incidents, anger management, fostering positive work group dynamics, and team motivation techniques. For example, one student reported two tragic events regarding her pets; one outcome was due to family neglect and the other an outcome of irresponsible neighbors. Both resulted in the deaths of her pets. As Lulu explained both situations, she offered a reflection on how adults could be irresponsible at times. She connected both events to problems created by adults. Her first story was about their dog, Biff. “We live in a bad neighborhood and people have these really big dogs. One [neighbor] wasn’t keeping an eye on their dog and [the dog] got out while Biff was outside. The big dog bit him.” Lulu’s parents “took Biff to the vet and he was bleeding out his guts. We had to put him down.” Her parents “told me while I was at school and I got so sad. I started crying really bad and had to leave. He was the first pet I had.” Her second story described how her family had purchased a small mammal, called a sugar glider, from a pet store. “You have to give it attention,” she stressed, “and we didn’t give it enough attention. He died. It was sad. His grave’s in our back yard.” In regard to lessons learned from these problems, Lulu understands she does not have much power to resolve what happens in her neighborhood, except to talk to her parents and hope they could do something, even if that meant moving. When she shared her sugar glider story, Lulu indicated she would never allow neglect of a pet to happen again.

Of the seven The Self-efficacy Camera Study students reporting out problems they encountered, two students provided insights into effective coping strategies for anger management. Andie pointed out, “At school, there is this thing called the STAR. You breathe in
and hold it for 3 seconds and you breathe out. STAR stands for Smile--Take a Deep Breath--Relax.” Next, she shared a breathing exercise. “Blue skies in and gray skies out. It’s like happy skies breathing in and the sad one’s breathing out.” Her third strategy was to “Breathe or just walk away!” Elroy offered a similar technique that worked for him. He described it as, “We both walk away for a while thing.”

Students also talked about strategies for motivating work groups and sports team members. Rachel and Abigale explained how they faced challenges and resolved problems using negotiation and pep talks. Rachel offered a strategy aimed at increasing group participation and compromise. She explained, “There was a group project in school and not everybody liked each other.” The teacher decided who was going to be in each group. “One person wanted to go with their friends and be in their group. But we had to [stay in assigned groups] for the project because it was for a grade.” Rachel assumed a leadership role and found common ground. “Everyone wanted a good grade, too.” She pointed out, “They had to work. I asked them what they [would enjoy most] in the project. How would they want to help with the good grade?”

Abigale simply wanted to win some games. “We need to talk to each other on the court. We work too hard to lose! That is what it takes to win.” She explained they needed less individual showboating and more collaboration. She noted, “Sometimes we try to individually be perfect and that’s when we make mistakes.”

The Self-efficacy Camera Study students identified family role models as sources for coping strategies, solving everyday problems, and resolving conflicts. Three of the students mentioned how their parents assisted others and coped with problems of everyday living. Andie explained her mother was an everyday hero who saves people and does good things! When asked for an example, she elaborated on how her mother, “Does good things, puts food on the table, works, and gives people rides when their cars break down.” Her mother offers advice to
friends and neighbors by “telling people they are not in a good place. She’ll tell them, ‘Why don’t you go here instead?’” Rachel explained her mother was able to manage a life fraught with problems. “She works out problems as best as she can. If she has money problems, she’ll borrow some or she’ll work longer hours.” Rachel also shared her mom would “sell stuff she doesn’t need. We have garage sales a lot. My mom is very hardworking; she’ll try her best at anything.” Elroy’s mom also faces money problems. “She might change jobs again” so she can make more money. He explained she does impress employers “because [as a grant writer] she’s already raised half a million dollars in the two years she’s been there.” He goes on to explain, “That’s one thing that I really like about her. She’s very with it.”

Additionally, parents served as counselors, helped children master skills, and provided protection. Abigale’s mom counseled on school bullies, offering advice such as, “She’s just trying to get under your skin, just ignore her.” Abigale ignored the bully and “that kind of worked.” When the student persisted, Abigale’s mom suggested a more active approach. Abigale then directly told the bully, “You can’t just beat me up and pick on me. I’m going to do something about it.” Abigale felt confident to stand up for herself and the bully backed down. Abigale also explained how her dad was helpful “when I couldn’t hit overhand [serving a volleyball]. He put up some tape and said, ‘Don’t hit under this, hit about this.’ So, I stood there until I got it right.” Another student shared how her dad protected her home. Lulu, explained, “Someone tried to burglar in our house. My dad, he punched him, he took care of him.” The burglar escaped and “was riding a bike. They caught him. I don’t know if they’re going to do a hearing, we’re still working with that.”

Two students highlighted coaches as role models. Abigale’s volleyball team was full of drama queens. “Let’s say I have two friends who don’t like each other. They’re not going to help each other out on our team. Our coach would step in and say, ‘Whatever’s going on at
school you keep that off the court and you work as a team.’” Eventually her team did work “as a team and we cheered each other up when we were down.” Miranda told a story of team members who pushed the envelope on rules. Her coach, in turn, clarified and then enforced the rules. “Well, he just told them nicely if they did it again, which they did, then they would be kicked off the team. And they got kicked off the team.”

Religious figures also provided role models to students. Rachel shared a photo of the Virgin Mary. The Virgin “sacrificed a lot to be who she was.” Rachel explained the Virgin and her Catholic faith helped her reflect on her actions when facing adversity and disappointment. “I just think about how I got into a situation and ask myself, ‘What’s the worst that can happen?’” Rachel tries to think about multiple ways of how to solve problems and “tries not to think about the bad stuff and only think about the good stuff.” Overall, Rachel’s goal is “to be myself, a person that is caring and kind and tries to see the best in everyone else.”

In addition to drawing attention to large-scale problems such as challenges in neighborhoods and schools, two students, Elroy and Lulu, shared problems of a simpler nature. Elroy noted that something good could come out of something scary. He explained, “Luckily, my fear of spiders actually saved our class. I was trying to plug something in for the teacher when I felt a spider web under one of the classroom tables. I pulled my hand out and jumped up on the table. A spider came sauntering out. It was a venomous spider found in Kansas.” He concluded noting they killed the spider before it could bite anyone. Lulu shared a problem in sister dynamics. “My sister’s about to go to kindergarten with me in my school. I’m terrified. I’m terrified she’s going to embarrass me. She has too many facts on me.” Lulu did not know how she was going to resolve this situation, but she had the summer to figure it out. “She keeps an eye on me and she finds facts to keep and so I’m scared she’s going to share those facts at
school with her little kindergartener friends. Yes, she has information!” It would be interesting to talk to her again in a couple of years to learn how she resolves this dilemma.

The Work Sampling System has offered a practical process for observing, collecting, and understanding student experiences and how these have connections to development of personal and social competencies. Five categories--Self-concept, Self-control, Approaches to Learning, Interactions with Others, and Social Problem-solving--have assisted in systematically coding interview responses noted in this chapter.

**Experience, Efficacy, and Human Agency**

My next step in the coding process was take the 149 personal and social experiences collected using the Work Sampling System and look at them again from a different perspective. I reframed student experiences using Bandura’s social learning model, a conceptual framework exploring the development of self-efficacy and human agency. According to theory, our experiences are sources of information we use to build efficacy (Bandura, 2001; Bandura et al., 2001). Efficacy is a set of belief systems supported by our perceptions regarding our capacity to perform. These belief systems help us answer questions such as, “What am I capable of?” and “What do I believe I am capable of?” Additionally, Bandura’s social learning model includes his theory on how we move from building belief systems to acting on our beliefs, which he identifies as human agency (Bandura, 1989).

**Experience and Efficacy**

Efficacious people believe they have potential and have an ability to control what happens to them (Bandura, 1986). It is a type of confidence resulting from synthesizing knowledge. Knowledge gained through experience establishes belief systems that support strong personal commitments to goal completion (Bandura, 1977). These personal commitments are maintained over time, even when a person faces diversion or failure. What we learn from
student interpretations of their experiences may lead to an understanding of how personal and social experiences shape beliefs of capacity. I have used Bandura’s social learning model as an interpretive tool in my efforts to understand how children may build belief systems and how those systems may have connections to the development of soft skills such as motivation and social adjustment.

Since efficacy, according to Bandura’s theory, is built upon experience, I have used his four categories of experience, identified as “sources of information” (Bandura, 1977) for coding. These four sources of information include Affective States (how we feel), Vicarious Experience (social cues, what we see people do), Social Persuasion (what we hear), and Mastery Experience (what we accomplish). An exploration of experience, according to Bandura’s learning model, offers a way to think about how experiences impact and develop effort, commitment, perseverance, and supportive self-talk, all of which impact student well-being and success later in life (Bandura, 1989).

Table 7 offers a snapshot of 84 personal and social experiences shared by students identified as at least one of Bandura’s sources of information.

Table 7

<table>
<thead>
<tr>
<th>Sources of Information: 84 Out of 149 Student Responses Are Coded as a Source of Information (Type of Experience).</th>
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<tbody>
<tr>
<td><strong>Type of Experience</strong></td>
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<td>Totals</td>
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**Affective States**

Out of the four sources of information cited in Bandura’s work, Affective States emerged most often in interviews. Primarily students shared experiences describing how they felt about their relationships with friends and family. According to the social learning model, Affective
States is a source of information connected to developing a high-level of confidence in the ability to face difficult challenges amid perceived chaos and disarray (Bandura, 1977).

The following seven responses are a subset of the 34 responses noted in Table 7. All seven examples are grounded in student assessments of their experiences and they provide a sampling of student-photographers’ insight regarding of self-respect and confidence. Two experiences reflect standards students set for friendship. An additional two reflect student experiences connected to sports, one highlights individual achievement, and the other from teamwork. The final three examples are metaphors reflecting optimism regarding potential.

Two students, Abigale and Elroy shared experiences reflecting their ideas on self-respect and the importance of quality over quantity. Abigale explained the importance of self-respect. “You just need to be yourself, and if they don’t like you, they don’t like you.” And offered insight on bullying: “’Cause, I don’t really want you [the student] to bully me all year and treat me like I’m trash and then just think everything’s going to be ok…” She elaborated, “I’m not going to have somebody treat me like that. I wouldn’t want to do that to myself.” She has set an internal standard that mistreatment is unacceptable and standing up for one’s self is important. Elroy also offered insight on friendship. He confidently described himself as friendly and explained he did not have many friends but had “the right friends.” According to Elroy, quantity is not as important as quality.

The two examples focused on sports came from Andie and Miranda. One example reflects Andie’s confidence and the other reflects Miranda’s altruism. Andie’s confidence is grounded in her physicality and a love for freedom. She places first in gymnastics, is competitive, and “kicks butt!” She is a performer who “likes dancing” because she is “free! I get to be wild!” Miranda based observations and interactions with team members, shared how she aims to be a person who encouraged others. She explained, in “sports there are the mean
people, rude people, and nice people.” Miranda confidently shared, she will be the one who encourages and “helps people.”

Additionally, two of these students, Miranda and Lulu, articulated visualizations of optimism and a positive sense of self through metaphor. Miranda’s metaphor reflects growth over time and is a symbol of her own growth. “At first you start out like a flower, you just grow and keep getting better.” Lulu shared the importance of taking risks. “I thought it was important to ‘Shoot for the moon; even if you miss, you’ll land among the stars - people should know if you make mistakes you still have something.” And later in the interview, shared a second symbol of good fortune. “It’s a four-leaf clover. There’s luck in our family.”

The second source of information with the highest frequency of responses was Vicarious Experience. According to the social learning model, vicarious experiences are social cues, providing children a framework or guide for corrective action or for a measurement of success (Bandura, 2005). Out of the four sources of information for developing efficacy cited in Bandura’s work, Vicarious Experience came in as a close second in highest frequency mentioned in student interviews.

**Vicarious Experience**

Twenty-nine observations shared by eight interviewees provided eyewitness reports of behaviors, consequences, and observed outcomes experienced by family, friends, peers, and pets. Student photographers offered insight into their relationships, attachments, and commitments when referencing sports events, school experiences, church activities, and books. Mothers and fathers both received honorable mention.

Five students talked about their mothers. Rachel, Lulu, Harry, Elroy, and Andie explained how their mothers “lay down rules for us” and Harry elaborated, “Sometimes we think that’s not fair. But I know this is to help us grow and be good a person.” Mothers were
identified as trying their best to work out [problems]. Students described their mothers as talented, they can raise “a half a million dollars in two years,” sing the national anthem, and help their children understand that “not everybody’s perfect.”

Additionally, four students featured fathers as fun, reliable, and a source of safety. Elroy, Boyd, Abigale, and Lulu reported their fathers could cook, offered helpful instruction, and provided protection. There were reports of spray bottles used in mock battles, “really good chicken noodles” and of baking cakes. Fathers were “always there.” They provided encouragement such as, “If you keep doing this, you’ll experience success.” One protected his family by standing up to a “burglar in our house. My dad took care of him.”

Students, in addition to parents, featured friends, teachers, coaches, and inspirational figures in interviews. They described friends as “always kind” and reliable: “We always have each other’s backs.” Friends were also fierce: “If she gets an idea, she’ll expect it to happen.” Teachers are important: “I learned most of the things I know now [from] my teachers” and school was “really great. I’m excited to go there, I’ll have a higher step up, get better degrees and go to better colleges.” Coaches explained, “When we lose, we just work out more.” In addition, one student reflected on a team event, “I would think to myself, ‘I like how she did that. Maybe I’ll try it.’ Because if they could do it then I could too.” Students also reported how inspirational figures provided guidance. The Virgin Mary “encourages many people.” and “Martin Luther King, Jr. spoke [about] what was wrong, what was right and how [you] could stand up to people.”

Students shared the importance of books. Harry explained, “I like to experience a different life in a book.” Elroy describes how he likes how characters were “thrown into a survival environment, they had to adapt.” Abigale elaborates, “Books give you information to
help you decide how to be. Am I going to stand up for myself? Even if it makes things worse?” and “Books tell stories that help me find ways to solve my problems.”

**Social Persuasion**

A third source of information used to develop efficacy discussed in the social learning model is Social Persuasion. Social persuasion is a form of encouragement that lays a foundation for an individual’s expectations and influences beliefs regarding capacity to set and accomplish goals (Bandura, 1977, 2005). I coded 13 student interview responses as social persuasion.

Five of eight students found encouragement in books, from coaches, fathers, schools, and the community. Encouraging messages cited include commentary from Abigale: “All that matters is you tried and tried your hardest;” Lulu: “He’s really proud of me;” Andie: “STAR stands for smile, take a deep breath, and relax;” and Harry: “Accept other ideas and different kinds of people.” Lulu also shares, “If we didn’t have a history, we wouldn’t know where we came from” along with exonerating us to “Try some new stuff.” A final example is from Abigale, “Books give you information on how you would like to be.”

**Mastery Experience**

Within the social learning model, Mastery Experience is essential for building self-confidence and a sense of control over conflict (Bandura, 2005). I coded eight student responses from six students as mastery experience. These examples include experiences tied to accomplishments, trying something new, taking risks, and learning from mistakes.

Examples of mastery experience include, Elroy’s account of reading excellence, where he “read the fastest” in the second grade. Harry is a member of the school orchestra, where his “teacher helped me grow as a violin player.” Andie explained how a friend’s parents taught her to waterski, “Every time I was invited, I got better [at skiing]. Now I’m on a dock start.” Miranda shared how her team was “good at tournaments.” We come in “first and second.”
Andie explains, “In gymnastics I get first place and yesterday in volleyball our team won all three games.” Abigale reflected, “I started volleyball in fourth grade; I wasn’t that great. At first, I was scared, but in fifth grade they couldn’t get me off the floor.” Rachel confirmed she took risks that paid off, “I turned in two applications for two programs last March.” One was a talent search for a University summer program that helped students decide on a career and the other was an application for a program “at my high school called Bio-Med. I got in both programs.” And Abigale volunteered a lesson learned regarding perfection: “Sometimes we try to be perfect…and that’s when we make mistakes.” Her solution? “Have fun. Be flexible. That is the only way you can learn from…the mistakes you make.”

Self-efficacy, according to Bandura, is a product of personal and social experience. But human beings are not just products of a social system, they are also producers (Bandura, 1986, 1988). We act on our experience to build and strengthen beliefs about our capacities to perform (Bandura, 2001). In this way, efficacy beliefs are the foundation for human agency.

**Efficacy and Agency**

When we combine input from emotions, thoughtful processing, physical experience, and environmental influences, we build and revise personal standards and belief systems. Our standards and belief systems, support our decisions on when and how to act for a given purpose (Wood & Bandura, 1989). Bandura’s social learning model identifies four core types of personal agency. They include Self-reflectiveness, Self-reactiveness, Forethought, and Intentionality. Sixty-five student interview responses provide examples of at least one of these four types of personal agency, depicted in Table 8.
Table 8

*Types of Agency: 65 Out of 149 Student Responses Are Coded as Agentic.*

<table>
<thead>
<tr>
<th>Human Agency</th>
<th>Self-reflectiveness</th>
<th>Self-reactiveness</th>
<th>Forethought</th>
<th>Intentionality</th>
<th>Total of 4 types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>22</td>
<td>13</td>
<td>18</td>
<td>12</td>
<td>65</td>
</tr>
</tbody>
</table>

**Self-reflectiveness**

Self-reflectiveness is a type of agency concerned with seeking an understanding of self-development, along with how one can adapt when presented with change (Bandura, 2001). Individuals establish belief systems of morality, friendship, loyalty, and respect as they examine thoughts and actions. Bandura claims this reflectiveness culminates in the creation of value systems. Six of the eight student-photographers provided 22 responses coded as self-reflective.

Morality, friendship, and respect were topics reflected in commentary from Abigale, Elroy, Andie, and Rachel. Abigale asserts we need to stand up for what we think is “right” in a dicey situation. “I said [to a school bully], I wasn’t going to be like you, you are mean to me, [you] treat me like I’m trash and then just think everything’s going to be okay.” Elroy reveals his loyalty when he underscores, “I have the right friends.” Andie advises, “People should be nice to each other. If a friend needs help, help them. Cheer them on. Stand up for each other.” Rachel provides a glimpse of how she learned respect, when she elaborates, “School taught me how to be respectful and to focus on what I want in life.”

Students also offered insight on family, religion, community involvement, following the crowd, diversity, empathy, good fortune, taking risks, and friendship. Examples include two comments from Rachel, “It is important that our family stays together.” and “In our religion you’re supposed to spend time with family, and you’re supposed to make a peace offering.” Abigale adds, “Family is priority one.” Henry explains, our church is “really accepting, everything is…really diverse. They have good intentions and I really like the way they teach.”
and adds a note about his community service work through his church, “I just enjoyed hanging out and doing good stuff for the community.” Abigale contributes an additional affirmation regarding a standard of behavior, “I’m not going to say cuss words just because she said them.” and provides a thoughtful response regarding her nemesis, “At the end of the day I feel sad; she doesn’t have role models like I do.” Therefore, “you know she doesn’t have what I have--she acts like that because she doesn’t know what else to act like. I’m not allowed to act like her.” She elaborates, “My role models tell me I can’t act like her.”

**Self-reactiveness**

Self-reactiveness is a type of personal agency that involves active interpretation of experiences and personal standards, leading to potential corrective actions (Bandura, 2001). The interpretive process may include questioning one’s own actions or ideas or may include an examination of what we value. Self-reactiveness aids an individual in assigning meaning to experiences. According to Bandura, self-reactiveness is an active process where interpreting experience guides an individual in their journey towards an understanding of their circumstances. Outcomes of self-reactiveness reflectiveness may include a wide range of decisions such as choosing to be optimistic about the future, setting an internal standard, facing a fear, understanding sportsmanship, making a difference, or creating a practical approach to problem solving. Student-photographers shared 13 responses coded as examples of Self-reactiveness.

Andie, Rachel, Harry, and Abigale provide a sampling of these responses. Andie shared, “My picture of the smiley face balloon represents that in the future people will be happy!” Rachel emphasized, “I want to be myself. A person that is caring and kind and tries to see the best in everyone else.” Harry reasoned, “It changed my life, going from elementary to middle school.” These schools “are totally different. I met different kinds of people from all over. Middle school was not as bad as people said. [For me] it was really good.” Abigale shared, “I
have learned that you don’t pout. That is bad sportsmanship” and later in the interview asserted, “Sometimes pets aren’t treated like they need to be treated. [Pets should be given] the respect they deserve. I want to make a change about that.” Rachel, later in her interview shared her approach to problem solving. “I just think about how I got in that situation, [I ask myself] what is the worst that can happen, and [try to come up with] the many ways of how to solve it.”

Bandura’s next type of human agency is concerned with goal setting referenced as Forethought in the social learning model (Bandura, 2001). According to Bandura, personal goal setting, influenced by both a self-appraisal of capabilities and a strong perception of self-efficacy, often results in the creation of rigorous goals accompanied by firm commitments to achieving them (Bandura, 1989).

Forethought

Efficacy is a type of confidence resulting from synthesizing knowledge resulting in strong personal commitments to goal completion, which are maintained over time, even when a person faces diversion or failure (Bandura, 1986). As an individual assesses the strength of their capacity, they consider career options they believe is a good match for their abilities and interests, and consequently set educational goals targeted for these occupations (Bandura, 1989).

Student-photographers shared 18 responses coded as examples of Forethought. Seven student-photographers shared at least one goal they had set, many grounded in recent achievements. Four of these students focused on graduation from college, two mentioned potential occupations, and one student elaborated on the importance of adopting a specific social goal. Miranda, Rachel, Boyd, and Elroy all contributed goals connected to college. They noted a need to perform well in middle and high school to obtain college entry. Their short-term goals included gaining good grades, internships, a good reputation, and scholarships. Miranda’s goal is to become a successful arena manager and believes college is necessary to achieve this goal. She
understands she will need experience as a sports trainer and in coaching. Rachel also regards college as a stepping-stone as she emphasized, “Education is important to me.” She plans to go to college. “I want to be a surgeon or an anesthesiologist. I love medical stuff. I like the testing, the research, and all the math.” She feels that by “focusing on my classes, getting good grades and doing internships [I will] get the college’s attention. Getting involved in clubs in school will also help.” Additionally, Boyd speculated on his future, “I don’t know what I want my real job to be that I’ll have forever. I might want to own a business. I might buy a business from someone.” He elaborated that in order to be successful, “You have to know what customers want and then you have to have a reasonable price.” Boyd knows he will “have to have good grades” and go to “a good college. Or, I could just go to a mini-college.” Regardless, “You have to have a good backstory.” This means having good grades, not going to the principal, and not getting into trouble, inside or outside of school. Elroy, when discussing his future, simply shared, “I want to be a veterinarian when I grow up. I like and know a lot about animals.” He expects needing “lots of college, lots of college.” In addition to contributions from the four students mentioned above, two students shared goals connected to occupations. First is Harry’s note, “I’m really invested in violin.” His goal is to be a musician. Furthermore, he wants independence. “This is a picture of an apartment building ‘cause in the future I’ll live in an apartment. I might live alone. I might live with someone. There are many possibilities. The apartment is a symbol of…. independence.” The next example was provided by Lulu in her debate regarding the merits of two professions. Her discussion was not about whether she would or would not enter into a profession but was concerned with which would be the right fit for her talents. She vacillated between becoming a teacher, “I like working with little kids and working with adults,” or a veterinarian, due to her “love for animals.” In addition to discussions of colleges and vocations, one student emphasized how society needs a unified goal. Andie
insisted, “There is too much violence.” Her solution: “Make guns illegal in the United States.” She asserts we must reduce conflict. “If people wouldn’t be so mean to people, people wouldn’t be mad. Anger causes violence.” She shares an example, “At school if somebody says, ‘I don’t like your shirt’, [they might get] punched, because [at school] you don’t say you don’t like my shirt. To diffuse the situation, someone else could step in and “say something.” She underscores that it is unfortunate when “people get offended and they think their only reaction is… violence!” Andie did not have specifics on how to reach this social goal but knew violence was destructive, knew how people escalated social situations into acts of violence, and knew there could be a way to address it. She just did not know how to do that at this time in her life.

Experience provides a foundation for the development of effort, commitment, perseverance, and supportive self-talk leading people to believe they have potential and an ability to control what happens to them. Student-photographers demonstrated an ability to set goals as they assess their potential in order to control future outcomes. A natural outcome of this goal setting is development of a fourth type of human agency called Intentionality, centered on creation and completion of action plans.

**Intentionality**

The ability to assign and organize actions for given purposes is a key characteristic of personal agency and within the social learning model is referenced as Intentionality (Bandura, 2001). Intentionality is concerned with mental commitments such as goal setting, establishing and working through action plans, and reflecting on the meaning of our experiences. Out of seven student-photographers, three shared action steps within established plan, one articulated a vision for an improvement within their community, and four students articulated obstacles connected to their plans.
Rachel, Abigale, and Lulu shared action steps they could take today to prepare for completion of a future goal. Rachel and Abigale’s action steps centered on college entry and financial support for college, whereas Lulu’s plans focused on several topics connected to improving the quality of life within her community. Rachel is one of the two students who shared a plan connected to college. Her aim is to gain college entry. As an interim measure to help her be a competitive candidate, she applied for admission into a summer program designed to help students sample a variety of career choices. “Every Wednesday we traveled. We got on a bus and visited colleges that focused on technology and engineering.” She explained how this summer activity had three outcomes. The experience allowed her to sample areas of study connected to professions of interest, she could document these activities on a college application, and she felt this experience gave her a competitive edge in applying for scholarships. Abigale also mentioned college as a goal. Action steps in her plan included a two-pronged approach to saving money for college. First, she will get a job and save her money. “Every time I get paid, I will take a little of my paycheck and set it aside.” She knows this will not be enough to cover all of her expenses, so she has a second part to her plan: “I also want to get a volleyball scholarship.”

Lulu’s wants to improve the quality of life in her community by replacing supermarkets with farmer’s markets. Her plan is to convince us that we should all adopt this goal. One step she thinks we should take is to “stop using stores and start using farms.” She asserts, “Stores use electricity and take a lot of room up from the animals and the trees.” Additional strengths of farmer’s markets include, “They sell fresh food and self-made stuff. It is a lot of fun and they have delicious stuff. They grew these themselves and the clothes you see down here, people made those.” Lulu did not have any concrete action steps on how she was going to influence her
community to make this change. However, she was clear farmer’s markets were important and would be a community improvement.

Four additional students talked about goals, their plans to reach them, and explained how they strengthened their commitments as they faced obstacles to their goals. Andie, Elroy, Harry, and Rachel described situations where they experienced personal or social obstacles and how they either worked through or are currently working through these challenges. Andie experienced frustration and physical pain due to a back surgery. She wants to be a competitive gymnast and to regain her status as a first-place contender. As she continued to practice gymnastics, she discovered she could not reach her performance standards due to pain. She channeled her frustration with the pain into determination. She was determined to “keep doing it.” She explains, “At first I couldn’t do gymnastics, it hurt.” Her strategy was to ignore “my frustration and physical pain. I kept [practicing]. I don’t give up.” Elroy’s goal is to master mathematics. Mathematics is not an area of strength for me; it has always been a struggle. He has adopted three strategies to conquer math. First is sheer willpower. With “mathematics, you have to do it over and over. If you don’t get it right the first time, try and try again. It’s a lot like that with numbers, ‘cause the numbers don’t lie.” If that fails, he has two backup strategies, “asking for help” or “using a calculator.” The third student, Harry, explained his overall goals are to do well in school, become a musician, and be a source of pride to friends and family. His obstacle is fear of disappointing his friends and family. He is grateful for supplies and tools given to him and feels family and friends have expectations tied to his success. For example, his first violin came from his mother. “When friends and family support you, you have to keep working on your goal.” His solution is to respect their gifts and not give up. “If someone gets you something or does something to help you out then…, you have to show them that you’re appreciative [by working hard]. You have to show appreciation by caring about your goals and
not giving up.” He interprets their support as an investment in his success and wants to rise to their expectations.

Rachel views good grades, teacher recommendations, and high school graduation as stepping-stones to college entry. Acquisition of these came to a screeching halt when she was assigned to a required group project. Rachel typically worked alone but now she had to figure out how to work within a group and help the group become successful enough to “get a good grade.” As she explained, “There was a group project in school and not everybody in the group liked each other. One person didn’t want to be in the group because they wanted to be with their friends.” This discord affected the level of group participation, which was one of the factors determining the group grade. Any member who chose to disconnect with the project could produce a low grade for all group members. Rachel’s strategy was to try to get the group to recognize a common goal, agree they all “wanted a good grade,” and accept they all “had to work.” She was able to get all members of the group to compromise and decide what they “would be willing to be responsible for. I asked [group members] what they were most comfortable with doing in the project.” For example, “How would they want to help with getting us the good grade?” This experience helped her learn to be a leader as well as getting the good grade.

According to Bandura, personal and social experiences shape beliefs of capacity (Bandura, 1989). His four sources of information and four types of human agency provide a framework within this study for coding and exploring student perspectives. All eight student-photographers shared interpretations, beliefs, plans, and future accomplishments.

Social learning theory proposes that experiences are sources of information that build efficacy (Bandura, 1986). Efficacy is a type of confidence resulting from synthesizing knowledge gained from doing, seeing, hearing, and reflecting, all contributing to building
confidence helpful for adapting to and surviving within socially constructed environments. An efficacious outlook has connections to productivity, personal accomplishments, and to the reduction of both stress and depression. In Chapter Five, I interpret my findings and offer a theory of how they are related to motivational advantage and social adjustment, both of which are regarded as influential for positive life-course outcomes and success in school (Reynolds, Rolnick, Englund, & Temple, 2010b). My discussion of the findings includes special attention to how such connections influence student achievement.
CHAPTER V
Analysis, Discussion, and Implications

Communities targeting investments in education often support vision statements articulating how their children will thrive in school, work, and life. Influential community members such as educators, doctors, social workers, economists, civil rights activists, parents, and politicians have collaborated over the last 5 decades to empower students to become agile, authentic, self-aware, and resilient with a collective hope that children will become productive and engaged community members with strong families. One increasingly common rationale for grounding these aspirations for early childhood investments is that 80% of a person’s neural connections form by age three in direct response to a child’s daily environment (Shonkoff & Phillips, 2000). A focus on early childhood experience underscores an understanding that the social-emotional climate of a child’s immediate surroundings exerts a powerful influence on the child’s potential for healthy growth. Connected to these aspirations are investments that support the development of attention span, self-control, an ability to work cooperatively, and problem solving. These attributes are collectively known as soft skills and are now considered as important as literacy and numeracy in determining future success (Nores et al., 2005a; Reynolds, Rolnick, et al., 2010a).

A focus on the theoretical relationships between experience and soft skill development has been central to my examination of childhood academic self-efficacy. Students enter their classrooms already equipped with a variety of talents and expertise; capacities now recognized by experts as strongly influenced by prior experiences. Experiences, skills, and confidence help shape a student’s initial sense of academic self-efficacy and continue to influence a student’s self-efficacy for learning new materials (Schunk, 1984a). In this study, I analyzed the experiences, reflections, and beliefs of eight middle-school aged student photographers where
the children became active co-researchers sharing perspectives on a variety of topics they captured with their cameras. Snapshot discussions between me and the five female and three male students focused on group success, individual achievement, future plans, luck, friendship, self-respect, respect for others, accomplishments, pride, and plans for independence. What they captured photographically served as an introduction to examining their ideas and points of view. Their ideas reflected beliefs, motives, and performance, all recognized in the literature as components of self-efficacy (Bandura, 1989).

My purpose in exploring childhood academic self-efficacy was motivated by the realization that self-efficacy has garnered little attention in longitudinal studies. In response, I designed a qualitative study about the relationship between self-efficacy and student success that would open up a useful line of research for researchers and policymakers interested in understanding how personal and social experiences affect childhood motivation and social adjustment. The premise underlying my interpretivist research is rooted in the idea that by looking primarily at the quantification of academic outcomes (e.g., test scores, GPA, class rank, graduation rates), leaders miss an opportunity to understand the influence of non-cognitive skills associated with individual success. A complementary purpose in conducting the study was to explore self-efficacy from the perspectives and experiences of children themselves, predicated on a belief that their emic perspectives are central to understanding the impact of personal and social development’s influence on motivation and social adjustment.

My original focus in Chapter One was to collect student perspectives in order to see if their reflections and aspirations would align with theoretical concepts provided by social cognitive theory. Over my five-year research journey, I did find that co-researchers shared a variety of perspectives that matched up with Bandura’s experience categories which he references as sources of information in his publications. Some of their perspectives also aligned
with theoretical themes which were attributed to components of human agency. What I did not predict, but what I eventually came to terms with, was my disconnect with how efficacy development is presented within publications of the theory itself. Based upon my readings, I originally visualized efficacy development as path a person travels through during their lifetime and at times, visualized efficacy development as something one built over time, establishing a foundation of efficacy as a young person, and then developed stronger efficacy over time as experiencing life-lessons over many years. This disconnect led me to review my interpretations, read more publications, and the end result was a new way for me to understand efficacy development. This new way incorporates feedback loops and is further discussed in this chapter (Bandura & Shunk, 1981; Multon, Brown, & Lent, 1991; Schunk, 1984a, 1987; B. J. Zimmerman, 2000). The Efficacy Venn is an emergent phenomenon and was not presented in Chapter One as a framework for this study.

After I finished collecting data on student experiences, reflections, and beliefs, using photographs as a catalyst for shaping discussions with my participants, I coded 149 responses using two different approaches to identifying components of self-efficacy. The first was Pearson’s Work Sampling System, which was employed as a method to sort a variety of personal and social experiences shared by student photographers. The Work Sampling System allowed me to examine human experience and use the structure of the system to push the findings through Bandura’s social learning model, which is a well-established conceptual framework for exploring self-efficacy development and human agency. Self-efficacy is a set of belief systems supported by each person’s perceptions regarding their individual capacity to set goals, complete tasks, and overcome obstacles to achievement. Included in Bandura’s social learning model is his theory on how people move from building belief systems to acting on their beliefs, which he identifies as human agency (Bandura, 1989).
Prior to this study, I had anticipated students would openly share their experiences. However, I did not anticipate the scope and depth of personal and social experiences shared by these eight children. What students shared has helped me better understand how experiences shape student beliefs of capacity and motivation and how these beliefs influence student perspectives of achievement. The perspectives of everyday adolescent life collected in this study have allowed me to look deeply into student ideas about motivational advantage and social adjustment. Along with structures provided through Work Sampling and Bandura’s social learning theory, my interpretation of these ideas has led me to comprehend how sets of behaviors, attitudes, and strategies can provide insights into student perceptions of short- and long-term outcomes such as getting good grades, going to college, and owning a business.

Findings also suggest young children exposed to a quality early childhood program may evidence self-efficacy and human agency in adolescence, especially among low-income children (i.e. my co-researchers in this study) who are often not credited with possessing high academic and social value. I do not claim there is a cause effect relationship, only that there are significant findings that warrants further research. This finding seems consistent with the Perry HighScope and the Abecedarian longitudinal studies that have correlated high quality early childhood experiences with improved adult outcomes. In this way, this study of student perspectives adds to existing literature by opening up new avenues for exploring the influential role played by non-cognitive developmental factors in contributing to student success.

**Efficacy Development: Moving from Themes to Interactive Relationships**

Initially, as I organized my thoughts regarding efficacy development, the collection and coding of student experience, and my interpretation of the components of social cognitive theory, I sought to create a visualization to aid in my analysis of efficacy. My first attempt in constructing a visualization relied upon a metaphor – comparing efficacy development as if it
were similar to building a house – starting with a foundation (experience), constructing walls (belief systems/soft skills), raising a roof (motivation/agency), and installing windows and doors (performance outcomes/goals), with each component culminating in a final structure (self-efficacy). This metaphor provided a way to visualize efficacy development as an accrual process where efficacy grows by layering current experiences on top of prior experiences.

In retrospect, this layered mental model, even though it offered a way to interpret my findings holistically in which I constructed the concept of efficacy from the ground up, did not provide a model of analysis that moved beyond a simplified view of a complex inferential process. One strength of the house metaphor was it allowed me to look at efficacy development as possessing distinct characteristics (i.e., categories or themes). This allowed me to gather, view, sort, and assign 149 student experiences to Work Sampling System (WSS) categories and then review and code student perspectives according to emerging themes within Bandura’s social learning model. The visualization was helpful in managing 149 WSS coded responses along with the 149 responses cross-referenced using Bandura’s theory. By creating a mental model, I was able to begin to understand how to look at 298 responses over 13 different coding categories.

This view was initially useful in identifying a high frequency of student responses describing experiences attached to relationships, social cues, confidence, social problem solving, and student interpretations of experience. But as I thought about the significance of student responses, I returned to a review of scholarship on efficacy (Coutinho, 2008; Landine & Stewart, 1998; Moores, Chang, & Smith, 2006; Schunk, 1989; B. J. Zimmerman, 2000). I determined my analytical house model did not offer a way to situate potential interactive relationships among components of efficacy development. Confronted with this limitation, I turned to using a Venn as a mental model in order to visualize self-efficacy as an interactive feedback loop.
As I moved to viewing self-efficacy development as an interactive process, I began to think of how to depict relationships between experience, efficacy, and agency in order to reflect how efficacy components influence, build, and strengthen one another. My first efforts at Venn design were to depict these relationships as feedback loops. This iterative analytical process produced a graphic organizer depicting three circles I labeled Beliefs of Capacity, Motivation & Agency, and Skills & Outcomes. Additionally, due to the foundational role of experience in efficacy development, I placed these three circles as an overlay on top of a large square labeled Experience. This was an effort to visually represent the foundational importance of experience within this theoretical perspective. Experience provides sources of information, which in turn, are used within feedback loops to enhance the development of belief systems, motivation, skills, outcomes, and self-appraisal.

Upon completion of this version of the Efficacy Venn, I returned to a review of the literature and my study findings that led me to think about the influence of self-appraisal in self-efficacy development. This step then led me to envision self-appraisal as a supple, flexible, adaptive component whose interactions with beliefs of capacity, motivation, agency, skills, and outcomes serves a metacognitive executive function (Bandura, 1977, 1977a, 1997; Bandura & Shunk, 1981; Multon, Brown, & Lent, 1991; Schunk, 1984a, 1987; B. J. Zimmerman, 2000). Placement of self-appraisal at the center of the Venn enabled me to view self-appraisal as a common synergistic element within each of the feedback loops. Within this more refined mental model, belief systems, behaviors, and performances are simultaneously looped through self-appraisal as skills within self-appraisal are strengthened. By using the Efficacy Venn to frame my data analysis, I grew to understand the dual role of appraisal—an interactive process that strengthens the development of Beliefs of Capacity, Motivation & Agency, and Skills & Outcomes while it simultaneously strengthens components of the self-appraisal process.
I depict the final step in the development of the Efficacy Venn in Figure 2. At this point, I overlaid the 13 coded areas from the Work Sampling System and Bandura’s social learning model documented in Chapter IV. This version of the Efficacy Venn provided me a way to visualize how input from emotions, thoughtful processing, physical experience, and environmental influences looped through self-appraisal might lead to building and revising personal standards and belief systems. With this overlay in place, I began to analyze efficacy development to understand how self-appraisal influences childhood academic self-efficacy.
Figure 2. Efficacy Venn: Self-appraisal Feedback Loops
Academic Self-Efficacy and the Benefits of Self-Appraisal

According to social cognitive theory, efficacious people synthesize input from physical experiences, environmental influences, and through emotions producing belief systems, decisions, motivation, and actions (Bandura, 1986). This ability to synthesize is a benefit to learners because self-appraisal allows students to utilize a strategic approach to understanding their capacity for achievement while they monitor commitments to goals and determine whether they have the knowledge and skill required for academic achievement (Schunk, 1989; Zimmerman, Bandura, Martinez-Pons, 1992). Within the Efficacy Venn, I strive to depict how self-efficacy development is an outcome from a confidence building process resulting from synthesizing knowledge gained from adapting to and surviving within socially constructed environments (Bandura, 1986, 1988). An efficacious outlook is a desirable goal to strive for among children in school because it has positive links to productivity, personal accomplishments, and the reduction of stress and depression. This is encouraging news for educators interested in increasing self-efficacy to enhance student performance and the quality of their learning experiences (Coutinho, 2008).

Viewing each of the three overlapping circles in the center of the Efficacy Venn as a discrete but interactive feedback loop, self-appraisal stands out as performing a key role in the development of all three. The first interactive feedback loop, labeled Beliefs of Capacity, is a placeholder for 56 co-researcher responses coded using the Work Sampling System. These responses highlight co-researchers ideas about future achievement and illuminate activities they believed to be required for college admission and future careers. Additionally, co-researchers shared thoughts and actions connected to morality, friendship, loyalty, and respect. All of these responses provided insight in how interactive processes affect goal setting to maintain strong commitments, gain skills, and achieve outcomes.
The second interactive feedback loop, Motivation & Agency, is a placeholder for 30 co-researcher responses, highlighting ideas that serve as examples of forethought and intentionality (Bandura, 1986). Outcomes depicted in this interactive feedback loop include action plans, action steps, community activism, and social adjustment. Co-researchers shared an ability to act strategically and reflect analytically on experiences as they worked to complete plans to graduate from high school, compete in sports, and contribute to their communities (Bandura, 2001). Additionally, co-researchers shared perspectives on effort, perseverance, and supportive self-talk, all of which are important in developing academic commitments and making adjustments to feel safe and accepted in a variety of social situations (Wood & Bandera, 1989; Zimmerman, Bandura, Martinez-Pons, 1992). Motivation and agency were reflected in co-researchers’ responses as they shared goals, commitments, and plans for earning good grades and reputations, internships, and scholarships.

The third feedback loop, Skills & Outcomes, is a placeholder for 56 co-researcher responses, highlighting their abilities to execute, monitor, and reflect upon the development of skills and outcomes. Co-researcher responses reflect an adoption of rules and routines, a willingness to consider or participate in new learning experiences, curiosity and persistence, understandings of conflict, awareness of problem-solving alternatives, and the development of negotiating skills. Not only did my participant co-researchers cite concerns with large-scale social problems such as gun control and a sustainable energy future, they reflected on coping strategies and bullying and offered insights on various topics ranging from heroes, money, burglars, and religion.

The center of the Venn, Self-appraisal, is a placeholder for 35 co-researcher responses. The responses highlight interactive processes identified as Self-reactiveness and Self-reflectiveness. According to Bandura (2001), Self-reactiveness guides an individual in their
journey towards understanding their emotional, psychological, and material circumstances. The Self-reactive process focuses on interpreting, monitoring, and questioning experiences and personal standards. The process includes questioning one’s own actions or ideas, examining individual values, and at times, providing a foundation for corrective actions. Self-reflectiveness, in contrast, is a process that seeks to understand how one can adapt when presented with change (Bandura, 2001). This process aids an individual in assigning meaning to experiences that provide a foundation for developing perspectives such as optimism, determination to make a difference, or courage to face a fear. Self-reflectiveness aids in setting internal standards, understanding social constructs such as sportsmanship, or creating a practical approach to problem solving. Both self-reactiveness and self-reflectiveness seek to understand the meaning of experiences, aiding self-development.

When students gain an ability to execute, monitor, and reflect on different aspects of learning and are able to make present-time adjustments in their life trajectories, they are providing evidence of self-appraisal. By exploring student perspectives regarding their personal and social experiences, this study provided a way for co-researchers to reflect on past and current events. It was significant that co-researchers were also able to share their predictions of later life outcomes because it suggests the study evolved into something larger: an exploration into thinking about how these experiences highlight the role of self-appraisal in feedback loops and how the self-appraisal process is helpful in understanding the impact of personal and social development on student success.

**Implications for Classroom Instruction**

Family, friends, church, books, video, music, and schools provide children opportunities to experience life. Social environments provide role models, mastery experiences, persuasion, and opportunities to interpret feelings. All of these experiences contribute to positive personal
and social development feedback loops, which is why I focused this study on examining the theoretical underpinnings of the relationships between personal and social experiences and the development of self-efficacy. Bandura’s theories suggest that experiences are sources of information used to build a person’s beliefs about their capacity to perform (Bandura, 2001; Bandura et al., 2001). Within his framework, what students believe, how students motivate themselves to act, and how students think about and use information as they design goals and address obstacles to goal achievement are connected to perceptions of personal and educational success. Perceived competence, persistence in learning, and self-efficacy have each been identified as components of motivation or motivational advantage (Reynolds, Rolnick, et al., 2010a). Efficacious people believe they have power and potential and preside over an internal locus of control they can influence to shape events and their outcomes (Zimbardo, 1985). These individuals seek an understanding of their self-development along with building their capacity for applying a range of viable alternatives when presented with imperatives for change (Bandura, 1989).

In this study, I theorized self-appraisal serving an executive function within feedback loops central to the development of self-efficacy. This is good news for community members, parents, and educators because as students monitor and evaluate classroom experiences, they form beliefs regarding their capacity for academic achievement (Bandura, 1986; 1997). With an improved ability to monitor and execute their own learning, it is reasonable to expect that students will experience an increase in their perceived levels of self-efficacy and be more likely to develop intrinsic motivation for classroom learning (Landine & Stewart, 1998).

In terms of pedagogy, understanding the interactive relationships between self-appraisal, capacity, motivation, skill, and action serves as a prerequisite body of knowledge that encourages teachers to design self-appraisal support systems in which students build strong beliefs regarding
their capabilities to successfully perform academic tasks (Bandura, 1991a; Locke & Latham 1990; Zimmerman & Bandura, 1992; Coutinho, 2008; Gist & Mitchell, 1992; Stajkovic & Luthans, 1998). Educators who include the self-appraisal process along with content knowledge in lesson planning can reasonably expect to maximize learning outcomes (Corno, Collins, & Capper 1982; Jacobs & Paris, 1987). Understanding the interactive role of self-appraisal within efficacy development can inform brain-friendly curriculum design by utilizing the teaching of metacognitive strategies to enhance student performance and the learning experience (Coutinho, 2008). Since I have not been a classroom teacher for over twenty years, I find it a challenge to be prescriptive or specific regarding advice on how teachers should “teach” self-appraisal. My approach would be to gather teachers together and have a conversation on what they thought about the Efficacy Venn, how it may or may not reflect aspects of their current work with students, and if they feel they currently do not incorporate components of self-reflection or discuss self-reactiveness with students, how would they begin to do so. I think teachers would then be able to experience the self-appraisal process, attached value to this aspect of learning and begin to think of productive ways to incorporate opportunities to explore appraisal with their students. And of course, these teachers cannot begin this journey effectively without the endorsement of their leadership. Principals, curriculum specialists, superintendents, and parents will have to weigh in on the importance of self-appraisal in their classrooms, schools, and districts. Teachers will need their endorsement in order to build time in their classrooms for the planning and delivery of meaningful experiences supporting discussions and reflections supporting self-appraisal.

The student co-researchers in this study were inquisitive, hungry for useful information, eager to understand people, and impatient for insights into relationships, attachments, and commitments. Their doppelgängers are in classrooms across the nation. These students want to
understand conflict, gain awareness of alternatives in solving conflict, and develop effective negotiating skills. Co-researchers in this study expressed optimism, a positive sense of self, and an ability to control aspects of their social environments. They were excited about participating in new experiences and confident in predicting and influencing future outcomes. Furthermore, findings suggest young children exposed to a quality early childhood program may evidence self-efficacy and human agency in adolescence, especially among low-income children who are not often credited with possessing high academic and social value. This study’s co-researchers shared experiences reflecting perceived competence, self-efficacy, persistence in learning, attempts at classroom adjustments, concern with peer relations, and self-regulation. Student reflections are a product of interpretations of social, emotional, and metacognitive experiences, and their interpretations collectively influence academic performance. This is a significant finding that warrants further research.

**Inferences for Grounded Theory**

It became apparent to me when analyzing the findings of this study that I was inadvertently entering into a substantial critique of Bandura’s theoretical underpinnings. This was not what I had intended to do when I designed the study but something I felt compelled to do soon after I began working with my data. The design of the Efficacy Venn is an outcome of an iterative analytical process and not an anticipated outcome articulated in the original purpose of the study. I am not a trained psychologist; my expertise is grounded in crafting practical approaches to understanding theoretical concepts and working to apply them to everyday life. In my attempts to understand how “things work” I often find it useful to design visual representations of my ideas. The Efficacy Venn is an example of my approach.

As the Venn developed, I began to be drawn to focus not only on aspects of self-appraisal, but on forethought, intentionality, self-reflectiveness, and self-reactiveness, all
attributed as types of personal agency. My review produced the notion that the four concepts support two different outcomes connected with efficacy development, two supporting the development of motivation, and two supporting the development of self-analysis. For example, there is a consensus among researchers that forethought and intentionality influence levels of motivation while self-reflectiveness and self-reactiveness support and strengthen the development of self-analysis skills. With this premise in mind, I separated these four categories from one another and placed them in distinct areas of the Venn.

The four categories were placed strategically within the graphic organizer in order to study relationships between and within feedback loops, allowing me to think about how synergistic relationships between feedback loops may exist and how self-appraisal is central to development and strengthening of self-efficacy. The Venn, as a visualization of synergistic relationships between and within feedback loops, offers two distinct but interrelated vantage points. One vantage point allows an alternative method to view how efficacy components influence, build, and strengthen one another. A second is a way to view and think about self-appraisal’s role within the efficacy process.

The Efficacy Venn reflects the hypothesis that self-appraisal is central to the self-efficacy process, is interactive with all types of experience identified in social cognitive theory and serves as a metacognitive executive function which influences development of beliefs of capacity, motivation, skills, and outcomes. Hypothesizing self-appraisal as central to self-efficacy development allows a study of how one procedural soft skill interacts with and strengthens other types of soft skills in tandem with strengthening the products of the self-appraisal process itself.

This proposition opens the door to a hitherto uncharted exploration of how students may synthesize input from physical experiences, environmental influences, and through emotions culminating in the production of decisions, motivation, and actions grounded in forethought and
intentionality (Bandura, 1986). It also allows a focus on how sources of experience may be synthesized through feedback loops to aid and support development of student confidence in academic and social potential and in their ability to influence or control what happens to them (Bandura, 1986). The Venn I designed expands on previous studies focused on the interactive nature of self-appraisal and its role in the synthesis of personal and social experience (Bandura, 1977, 1977a, 1997; Bandura & Shunk, 1981; Multon, Brown, & Lent, 1991; Schunk, 1984a, 1987; B. J. Zimmerman, 2000). The Venn also reconfigures theoretically accepted connections to the development of effort, perseverance, and supportive self-talk, all of which are important in developing confidence in academic commitments and in the adjustments students feel required to make in a variety of social situations (Wood & Bandera, 1989; Zimmerman, Bandura, Martinez-Pons, 1992).

Research has positively linked self-efficacy, perceived competence, and persistence in learning to productivity, personal accomplishments, and the reduction of stress and depression (Coutinho, 2008). These are encouraging outcomes for those interested in incorporating self-appraisal to enhance student performance and the learning experience. As individuals examine their thoughts and actions, they also establish systems of morality, friendship, loyalty, and respect (Bandura, 1986, 1988). These interactive processes converge to produce a direct impact on levels of confidence, influencing how individuals set goals, maintain strong commitments, gain additional skills, and achieve outcomes.

In this study, I applied a conceptual framework of self-efficacy to explore children’s personal and social experiences to understand how their experiences connect to motivational advantage and social adjustment. What emerged from co-researcher reflections and the construction of the Efficacy Venn was an insight into the efficacy process. This allowed me to identify student responses that reflected self-efficacy, perceived competence, and persistence in
learning along with an insight into student perspectives of classroom adjustments, peer relations, and self-regulation. In my journey to understand efficacy development, I was able to move beyond identifying a variety of experiences that build belief systems about capacity and enter into a robust exploration of the interactive nature of efficacy feedback loops (Bandura & Shunk, 1981; Multon, Brown, & Lent, 1991; Schunk, 1984a, 1987; B. J. Zimmerman, 2000). This interactive nature between sources of information and reflection is, in my opinion, the heart of the efficacy process. I propose that self-appraisal is central to the developmental process and serves as a metacognitive executive function. The Efficacy Venn, with its focus on the synergies of the self-efficacy process, represents a new way of looking at self-efficacy development. It encapsulates my ideas and suggestions for how to modify and improve on what educators and researchers know and accept about self-efficacy theory. Future studies of motivational advantages such as self-efficacy, perceptions of competence and persistence along with studying the social adjustments children have to make to thrive in socially constructed environments may allow researchers an opportunity to explore the synergies embedded in the self-efficacy process leading to a deeper understanding of how students construct both short-term outcomes and perceptions of long-term success. In this way, the Efficacy Venn may be useful in addressing a gap in the existing literature by allowing an opportunity to understand more fully how non-cognitive developmental factors contribute to student success.


APPENDICES
APPENDIX A

Sample Invitation/Recruitment Letter to Parent

Dear Parent,

Hello, my name is Janice Smith, and I am a doctoral student from Wichita State University. I would like to invite your child to participate in a WSU study. I hope to learn what children think is important to them. Their points of view will be helpful in understanding how students view themselves, view other people in their lives and what they predict of about their future. The information from the study will be shared with early childhood teachers to understand preschool graduates' points of view which may help create classroom experiences that are beneficial to children.

If you give permission for his or her participation, your child will be asked to take pictures in response to the following directions: 1) Take pictures of what is important to you. 2) Take pictures of people you think are interesting. 3) Take pictures of what you imagine will happen (to you, to your family, others) in the future. These pictures will be used in interviews where each student will be asked to look at and talk about photos they have taken. The pictures and your child's explanations of the pictures will help me understand her or his point of view and what is important in their lives.

Any information collected about your child will remain confidential and will be disclosed only with your permission. The enclosed consent form does not give me permission to release any information about your child by name. Study results may be published but no individual study participants will be identified.

You are under no obligation to allow your child to participate. You may withdraw your child from this study at any time. Your decision whether or not to allow your child to participate will not affect your future relations with Wichita State University.

If you have any questions about this study, you may contact me at: Janice Suzanne Smith, telephone (316) 619-1940, email kentsuzanne@me.com, or Dr. Eric Freeman, telephone (316) 978-5696, email eric.freeman@wichita.edu. If you have questions about your child's rights as a study participant, or about a study-related injury, you may contact the Office of Research and Technology Transfer at Wichita State University, Wichita, KS 67260-0007, (316) 978-3285.

Your signature on the consent form included with this letter, indicates that you have read the information above and voluntarily agree to have your child participate in this study. Please provide your phone number on the consent form you sign and contact me using the information listed above. We can then arrange when I can collect the consent form from you. I will also make sure you get a copy of your signed consent form to keep.

I appreciate your consideration and hope you will allow your child to participate!

Best wishes,

Janice Suzanne Smith
APPENDIX B

PARENT CONSENT FORM (FOR CHILD)

**Purpose:** Your child is invited to participate in a Wichita State University doctoral study. If you give permission for his or her participation, your child will be asked to take pictures in response to directions I provide. These pictures will be used in interviews where each student will be asked to look at and talk about photos they have taken. The pictures and your child's explanations of the pictures will help me understand her or his point of view and what is important in their lives. What I learn from each student will help me put a group of students perspectives together in order to understand how they view themselves, view other people in their lives and how they predict what may happen in the future.

**Participant selection:** Your child was selected as a possible participant for this study because your child is a graduate of a local preschool program. I plan to invite between 8-10 students to participate in this study.

**Explanation of Procedures:** Your consent is for your child's participation in two parts of the study. The first part is a photo collection exercise and the second part is an individual interview that I believe will take 30-45 minutes. With your permission, I will audio-record the interview to facilitate transcription which will allow me to examine the responses more carefully.

**Photos, part one.** If you decide to allow your child to participate, she or he will take pictures using a camera that I provide, and later those pictures will be shared with me in an interview. This part of the study will involve three short meetings.

First, and I will provide background on the study and then provide an assent form to your child for her or his signature. I will stress that participation is voluntary. After, your child assents to participate in the study, I will provide a short introduction on how to use the camera. I will ask your child to take pictures within two weeks. The directions for taking photos are: 1) Take pictures of what is important to you. 2) Take pictures of people you think are interesting. 3) Take pictures of what you imagine will happen (to you, to your family, others) in the future. When the two weeks are up, please contact me either by phone or e-mail (which is provided below).

The second meeting will be when I pick up the camera and transfer the pictures to my computer.

The third meeting is when I return the camera to your child. The camera is her or his to keep.

**Interviews, part two.** After I collect the photos and return the camera to your child, I will ask to arrange an interview appointment for your child. My plan is to use a neighborhood library as a location for the interview. Before the interview begins, I will provide information on how the interview will be conducted and ask your child if they wish to participate. Participation is voluntary. If your child agrees, then your child and I will begin the interview by sorting her or his photos according to the photo directions listed above and will have a conversation about the content of the photo and why they chose to take the picture.

**Discomfort/Risks:** During data collection, your child is encouraged to be open in his or her responses. All responses will be kept confidential and there are no anticipated risks. All participation will be voluntary, and student-participants will be informed of the research purpose and their rights as research subjects. If your child is uncomfortable with any question during the interview, she or he may skip it. You may attend the interview as an observer if you wish to do so.
APPENDIX C

STUDENT ASSENT – AUTO-PHOTOGRAPHY & INTERVIEW

I have been informed that my parent(s) have given permission for me to participate, if I want to, in a study where I will be asked to take pictures in response to research questions. I understand that I will not be taking pictures of myself. The pictures I do take will be of: 1) what is important to me, 2) people I think are interesting, and 3) what I imagine will happen to me in the future. The pictures will be used in interviews where I will be asked to look at and talk about photos I have taken. The pictures and my explanations of the pictures will help the researcher understand my point of view and what is important in my life. My participation in this project is voluntary and I have been told that I may stop my participation in this study at any time. If I choose not to participate, it will not affect me in any way.

__________________________________________  ________________
Student’s signature                          Date

__________________________________________  ________________
Parent’s signature                           Date
APPENDIX D

PHOTO RELEASE

Background information: I am assisting Janice Suzanne Smith with a Wichita State University doctoral study. Janice is interested in understanding how a group of students view themselves, view other people in their lives and how students predict what may happen in the future. The information she learns will be used to assist early childhood teachers in creating classroom experiences that are beneficial to children. For this study we want to be sure we have your permission to take your picture. It is generally not necessary to obtain written releases to take photographs in public places, such as a town square or park. However, there are exceptions and we want to make sure you know what I am doing and that it is okay with you.

What I am to do: I am to take pictures with my digital camera. My directions are to: 1) take pictures of what is important to me, 2) take pictures of people I think are interesting, and to 3) take pictures of what I imagine will happen in the future. These pictures will be used in interviews where I will be asked to look at and talk about photos I have taken. The pictures and my explanations of the pictures will help Janice understand my point of view and what is important in my life. Janice plans to share the results of this study through presentations at state and national conferences and publications in scholarly journals.

Confidentiality: Any information collected about you will remain confidential and will be disclosed only with your permission. This consent form does not give me permission to release any information about you by name. Study results may be published or used in presentations, but no individual’s names will be identified. Images can be blurred or blacked when requested by study participants.

Refusal/Withdrawal: Your decision whether or not to allow me to take your photo is entirely voluntary. If you choose at a later date that you do not want the photo to be used in the study, we will not use it.

Contact: If you have any questions about this study, you can contact Janice at: Janice Suzanne Smith, telephone (316) 619-1940, email kentsuzanne@me.com, or Dr. Eric Freeman, telephone (316) 978-5696, email eric.freeman@wichita.edu. If you have questions about your rights as a research subject, or about research-related injury you can contact the Office of Research and Technology Transfer at Wichita State University, Wichita, Ks.

If you are an adult, your signature below indicates that:
1) You have read the information provided above.
2) You are aware that this is a research study.
3) You have had the opportunity to ask questions and have had them answered to your satisfaction, and
4) You have voluntarily decided allow me to take your photo.

You are not giving up any legal rights by signing this release.

_________________________  __________________________
Signature of Adult  Date

If you are a child, then I will need you and your parent’s signatures. This requires a different form.

WICHITA STATE UNIVERSITY | CLES - College of Education 1843 Fairmount Street  | Wichita, Kansas 67260-0142
tele: (316) 978-3325  | fax: (316) 978-6996 | web: www.wichita.edu
APPENDIX E

PHOTO RELEASE FOR STUDENTS

Background information: (Student photographer to person they want to photograph) I would like to take your photograph. I am working on a study with Janice Suzanne Smith with a Wichita State University. Janice has asked me to take pictures of what is important to me. For this study we want to be sure we have your permission to take your picture. We want to make sure you know what I am doing and that it is okay with you.

What I am to do: I am to take pictures with my digital camera. My directions are to: 1) take pictures of what is important to me, 2) take pictures of people I think are interesting, and to 3) take pictures of what I imagine will happen in the future. The pictures and my explanations of the pictures will help Janice understand my point of view and what is important in my life. Janice plans to share the results of this study through presentations at state and national conferences and publications in scholarly journals.

Confidentiality: Any information collected about you will remain confidential and will be disclosed only with your permission. This consent form does not give me permission to release any information about you by name. Study results may be published or used in presentations, but no individual’s names will be identified. Images can be blurred or blacked when requested by study participants.

Refusal/Withdrawal: Your decision whether or not to allow me to take your photo is entirely voluntary. If you choose at a later date that you do not want the photo to be used in the study, we will not use it.

________________________________________               _____________
Student’s signature      Date

________________________________________                           ____________
Parent’s signature      Date
APPENDIX F

Script: First Meeting with Student(s)

Student Meeting #1:

In the first meeting,

- We will introduce ourselves to one another,
- We will share information about my study,
- I will provide general information,
- I will give students time to practice using a digital camera to ensure the camera is working properly and to
- I will answer any questions students may have about the camera.
- Students will be encouraged to take photographs at home, at school, and in the community.
- Students will be encouraged to take as many or as few pictures as they wish.
- I will ask them to contact me within two weeks so that I may download the photos they have taken.
- This meeting will be conversational and flexible and will not be audio-recorded.

Rough script for meeting #1/General instructions for auto-photos:

Introductions: Hello, my name is Janice Smith, and I am a doctoral student from Wichita State University. Before I begin, I would like to share some information about my study, give you some general information, and provide instructions on how to use the camera. Ask students (and parents) to introduce themselves

Information on the study: You were selected as a participant for this study because you are a graduate of a local preschool and I am interested in learning your ideas about what is important to you. I appreciate your willingness to help me. What I learn can help teachers create great classroom experiences for other preschoolers.

If you decide to participate in the study, I would like you to take pictures over the next
two weeks using a digital camera that I will give you today. I am interested in 1) pictures of what is important to you, 2) pictures of people you think are interesting, and 3) pictures of what you imagine will happen (to you, to your family, others) in the future. When the two weeks are up, please contact me either by phone (619-1940) or e-mail (kentsuzanne@me.com) and then I will pick up the camera and will transfer the pictures to my computer. After I download the photos, the camera will be returned to you and is yours to keep.

The second part of the study is where I will ask you to meet with me for an interview where you and I will talk about the pictures you have taken. Participation is voluntary and I will provide an assent form to you for your signature. If you sign the form, you are telling me that you feel comfortable about participating in the study – both as a photographer and as an interviewee.

Would you like to participate in this camera project? (Sign forms if they agree to participate.)

If the student agrees to participate, then:

**General information:** First of all, I wanted you to know that we can use each other’s first names in our conversations, but I will not use anyone’s name in my final report. This is to keep your identity confidential. Do you have any questions about confidentiality?

I want to talk to you about asking people for their permission to take their photo. I have a photo release with me today and I thought we could talk about it so you can use it when you take photos of people. (Share photo release form with student). Do you have any questions on when to ask for permission to take someone’s photo?

**Camera instructions:** Today, we will figure out how to use the camera and take some practice pictures. (Power button, Zoom, Picture button. How to view pictures taken. How to delete pictures.)
APPENDIX G

Camera Project Instructions (to take home)

• I am involved in this project because I am interested in learning your ideas about what is important to you. You are also important to me because when you participate in this project you are becoming a member of my research team.

• Please feel free to take photographs at home, at school, and in the community.

• You may take as many or as few pictures as they wish.

• I would like you to take pictures over the next two weeks. When the two weeks are up, please contact me either by phone (619-1940), text or e-mail (kentsuzanne@me.com) and I will arrange to pick up your camera in order to transfer the pictures to my computer. After I download the photos, the camera will be returned to you and is yours to keep. When I return the camera, we can set up a time to meet for our interview.

• I am interested in pictures from you for all of the three categories listed below:

  A) Pictures of what is important to you,
  B) Pictures of people you think are interesting, and
  C) Pictures of what you imagine will happen (to you, your family, others) in the future.

• When taking pictures of people, you will need to ask them for permission to use their photo for this project.
  o You have a form for people 18 and under (student/child photo release) and one for adults. Please collect these and give them to me when I pick up your camera.

• Let’s practice. Find the power button, the zoom, the button to take the picture, and we need to figure out how to delete pictures as well.

Thank you for your willingness to be a member of my research team. You are helping me get my diploma and I hope we can have some fun together too!