Child Development Homes, Play-Based Learning, and Academic and Social-Emotional Skills

Hollie Fairholm

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Child Development Homes, Play-Based Learning, Academic and Social–Emotional Skills

Hollie Fairholm

Capstone Project: An Action Research Project

Northwestern College, Orange City, Iowa
Abstract

This action research study was based on my own need to discern if children who attend child development homes, also known as family childcare homes, are effective spaces for children to learn academic and social-emotional skills using play-based learning. In this action research, child development home, family childcare, and play-based learning were defined, with a review of how children learn. My study was conducted in my child development home family childcare program with children ranging in age from 12 months to 4 years old. In total, nine children attend my program Monday to Friday from 7 a.m. to 5 p.m. This study was conducted through observation, anecdotal note taking, and recording documentation of the Teaching Strategies GOLD assessment in one academic area that included mathematics and one area for social-emotional skills. The study included GOLD assessment scores from Fall 2023–2024 screening time and Spring 2024 screening time. During this time, children used problem solving steps to work through mathematics and social-emotional challenges. Findings from the study showed there was evidence of academic and social-emotional skills growth. From this finding, it is evident using play-based learning and some intentional teaching, from the teacher is an effective way to teach students both academic and social-emotional skills.

Keywords: child development home, family childcare, child development, developmentally appropriate, play-based learning, academic, social-emotional
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Child Development Homes, Play-Based Learning, and Academic and Social-Emotional Skills

Child development homes, also known as family childcare homes, are small, licensed, or registered with the state. Early childhood education and early care businesses operate out of the residence of the provider. Child development homes were started to provide a safe and nurturing alternative for mothers who entered the work field. Child development homes provide child care for a group of children in a home setting (Swartz et al., 2016). In 2022, the U.S. Department of Health and Human Services recorded that 15% of children from infancy to age 1 year old, 14% of children 1–3 years old, and 12% of children 3–6 years old attend family childcare (U.S. Department of Health and Human Services, 2022). The earliest child development homes were primarily friends and family members caring for children. Mothers’ participation in the workforce has expanded dramatically since the 1960s, tripling from 24% in 1965 to 69% in 2018 (Chaudry & Sandstrom, 2020). Family childcare has become a necessity for many families of young children.

Since 1960, requirements for child development homes and family childcare have grown. Professionalism and quality of family childcare have improved over time, leading to professionals providing early learning and care to children from birth to 5 years old in state-regulated environments. The problem is that family childcare has been viewed as a place where children go to “be cared for,” and no academic or social–emotional skills are included in this environment. McMahon (2015) explained, “Debates include the benefits or shortcomings of sending children to childcare and early learning centers” (p. 87). An important consideration is “the structure of the program [and] the quality of the program” (McMahon, 2015, p. 87). Childcare in the home has evolved from friends and family care and “babysitting” to a profession
where childcare providers are becoming regulated for quality. It is perhaps important, too, for policy makers to consider the positive impact that childcare can have on the economy. (McMahon, 2015). Research has indicated numerous benefits for children to engage in quality early childcare and education programs (McMahon, 2015). Quality initiatives include health, safety, nutrition, and education. Quality early childcare education is essential for the health and development of young children (Swartz et al., 2016).

Family childcare providers are increasing their professionalism by adding early childhood degrees, professional development, and participating in quality rating state guidelines. Doherty (2014) shared, “A substantial proportion of American, Canadian, and English preschoolers regularly participate in family childcare making its quality of vital importance, for the children, their parents, the school system, and the society in which they live” (p. 157). With state issued quality improvements, communities (e.g., families, national leaders) continue to view early childhood education and care as a place where children only receive “care” and “babysitting.” Despite the importance of the first 3 years of life, they are the most underresourced time in the human life span (Chaudry & Sandstrom, p. 186).

The purpose of this action research was to analyze whether children from birth to age 3 years old can learn academic and social–emotional skills in child development homes (i.e., family childcare homes) using play-based learning styles. Children participating in high-quality child development homes experience child-directed play experiences. Caregiver–child interactions are a key predictor of children’s learning and development, the most critical component of childcare quality (Chaudry & Sandstrom, 2020). Children are supported in their authentic learning environment. The Nordic model of child development programs, referred to as early childhood education and care (ECEC), has a reputation for providing high-quality care to
children, often described as a social pedagogic approach with a child-directed perspective emphasizing children’s play, social development, active participation, and exploration (Nilsen, 2021).

Peer-reviewed journal articles were collected using the DeWitt Library at Northwestern College, Google Scholar, and ERIC to collect scholarly journals. The scholarly journals used for this literature review were published no more than 10 years ago. Articles chosen for this literature review focused on family childcare homes, quality, and learning academic and social–emotional skills using play-based pedagogy. The research defines (a) family childcare, (b) quality childcare, (c) play-based learning, (d) academic and social–emotional development for children from birth to age 3 years old, and (e) the impact this child-directed learning has on the growth and development of children.

The early years of life represent a critical window of opportunity for a child’s development, a time when the brain is most sensitive to external influences (Raghavan & Ruta, 2022). Play provides opportunities for young children to explore ideas, experiment with materials, and express new understandings (Edwards, 2017). Analysis of qualitative data may reveal children in ECEC homes can indeed learn academic and social–emotional skills using play-based learning. Developmentally appropriate, ongoing, observation-based learning assessment occurs when teachers observe children during regular, everyday activities throughout the year. Unlike formal or standardized assessments, which offer a narrow picture of a child’s ability at a given moment, ongoing assessments offer a broader and more meaningful picture of development (Louisiana Department of Education, 2022). Though child development homes are underrepresented in the importance of high-quality ECEC that children receive in their first 1,000 days (about 2 and a half years), “infancy to school age is a vital time in the development of
children and the interactions and environments children are exposed to during this time are key in predicting future outcomes” (McMahon, 2015, p.88). In the next section, the literature review, will cover, Family childcare, neurological development, and play-based learning pedagogy.

**Review of the Literature**

**Family Childcare**

Child development homes, or family childcare, are widely used for children each day. Children in these programs experience attachment, nurturing, safe environments, and educational experiences. In the United States, children with employed mothers spend an average of 32 hours per week in care, and approximately 60% of 3- to 5-year-old children are in nonparental care (Sisson et al., 2019). According to the U.S. Census Bureau, family childcare, whether regulated or unregulated, was used regularly by an estimated 946,000 U.S. preschoolers in Spring 2013 (Doherty, 2015). Reports from the National Survey of Early Care and Education Project Team estimated the home-based childcare workforce to have approximately 115,00 listed and 919,00 unlisted providers for a total of approximately 1,035,00 childcare providers (National Survey or Early Care and Education Project Team, 2013).

Family childcare is a place where children are physically and emotionally safe, and the child’s well-being is protected. ECEC has substantial influences on the health of children and positively influences the health behaviors of children (Sisson et al., 2019). High-quality family childcare offers children a nonparent adult relationship where the child is supported in a nurturing environment, which equally provides a provider–parent relationship that is collaborative and professional. Children attend programs that are home away from home spaces and incorporate children of mixed age ranges. High-quality programs incorporate high-quality standards that include qualified staff, low child-to-staff ratios, responsive interaction from staff
and a positive environment (McMahon, 2015). In the earliest times of development is a “time of early childhood and healthy development, particularly of the brain” (McMahon, 2015, p. 88).

Early childhood is a critical period of developmental period and one that largely determines health throughout the life course (Sisson et al., 2019). This critical time is beneficial for neurological development. Neurological development is where the most substantial gains in development occur within the first 1,000 days of life (Sisson et al., 2019). Sensitive periods for optimal childhood development include the period from conception to 2 years of age, considered the first 1,000 days of life, and from 2 to 5 years of age, the second 1,000 days of life (Koshy et al., 2021). Early childhood is a pivotal time in a child’s life where quality care is paramount. Child development homes and family childcare providers include “the ability to build family relationships and community partners to support learning through culturally relevant experiences” (Chaudry & Sandstrom, 2020, p. 178). Early childhood care and education require standards of professionalism and quality to ensure child growth and development. Chaudry and Sandstrom (2020) explained, “Quality systems such as (QRIS) and initiatives to professionalize the early childhood workforce” (p. 181) have been developed, designed, and implemented in child development homes, also known as family childcare, to ensure children are receiving high-quality programming.

Internationally, professionalization has become a key policy strategy targeting quality improvements in child development homes, or family childcare homes, using top-down managerial strategies, including implementation of quality standards and increased workforce qualifications (Irvine et al., 2023). A QRIS is a systemic approach to assessing, improving, and communicating the level of quality in early care and education programs (Chaudry & Sandstrom, 2020). The European quality framework for ECEC was developed by a thematic working group.
consisting of 26 European Union member states and a stakeholder group (Corral-Granados et al., 2021). Definitions of quality ECEC have slightly different meanings to policymakers. Providers identified seven components as necessary for quality family child care: (a) children’s physical and emotional safety and well-being are protected, (b) the provider is affectionate and supportive with each child, (c) the provider–parent relationship is collaborative and professional, (d) the setting looks and acts like a family home, (e) the home and neighborhood are used as learning opportunities, and (f) the presence of a mixed age group is used as a learning opportunity and the provider successfully addresses the challenges inherent in the occupation (Doherty, 2014).

The early years of a young child’s development are impacted by quality standards. Research has shown the early childhood years are the most rapid period of human development (Chaudry & Sandstrom, 2020).

**Neurological Development**

The early years can have a significant impact on shaping who people become (McMahon, 2015). During a child’s early years, their brains are developing new pathways that are rapidly being formed and forming factors that will determine future behaviors. This time is when the brain is flexible and adaptable. Chaudry and Sandstrom (2020) stated babies are highly sensitive to environmental influences and their caregiving relationships in these years. This time is the most promising for human development. Chaudry and Sandstrom (2020) added, “research in child development and neuroscience shows clearly that children’s very early development and learning occur in the context of relationships and experiences” (p. 173). In the earliest years of life, an infant’s brain is forming at a rapid pace and is at its most flexible and adaptable. Through interactions between caregivers (e.g., parents or childcare givers) and their environments, early
social–emotional and cognitive skills begin to form foundations for later development (Chaudry & Sandstrom, 2020).

As scientific research develops, so does our understanding of the importance of a child’s earliest years on brain development (McMahon, 2015). McMahon (2015) added early brain development and neurobiology include much discussion on how to achieve the best outcomes for children. Raghavan and Ruta’s (2022) mantra, “Eat, Play, Love,” summarized the need for opportunities in environments of young children. At very young ages, children need environments where they receive nutritious meals, safe spaces to play and learn, and a sense of security. Raghavan and Ruta (2022) stated:

Evidence from neuroscience emphasizes the importance of nurturing care adequate health, nutrition, responsive care, opportunities for learning and protection from harm and abuse, to all young children to enable them to reach their full potential the first 1,000 days of life shape a child’s future. (p. A1)

Koshy et al. (2021) stated there are sensitive periods of time for optimal childhood development that include the time from conception to 2 years of age (i.e., the first 1,000 days of life) and from 2 to 5 years of age (i.e., the second 1,000 days of life). Chaudry and Sandstrom (2020) shared, “Despite the importance of the first three years of a child’s life, they are the most under resourced time in the human life span” (p. 165). Despite “debates about child care programs, benefits or shortcomings” (McMahon, 2015, p. 88), research has indicated when ECEC programs have appropriate staffing and programs, childcare centers and child care homes can have a “significant positive impact for children and families” (p. 88). There has been an emphasis on how important the early years are in shaping who one becomes for brain development and setting the foundation for future outcomes (McMahon, 2015).
Children who participate in quality early learning and care programs experience many benefits, such as early recognition of developmental delays, improved cognitive functioning at the time of starting school, improved educational attainment, reduction in poverty, social inclusion, reduction in crime rates, and improved health outcomes (McMahon, 2015). Many theorists have developed research on child development and have offered many “incites on how the performance of individuals is simulated, sustained, directed and encouraged” (Saracho, 2021, p. 15). Child development is not a single unified field with a single integrated set of theories, nor does one theory or set of theories predominate (Saracho, 2021). Saracho (2021) summarized the five child development theories that most impact early childhood educational development: (a) maturation theory, genetically determined traits that contribute to developmentally appropriate practice; (b) psychoanalytic, social–emotional development from human instincts; (c) ecological, environmental approach; (d) behaviorist, modification of behavior through reinforcement; and (e) constructivist theory.

The next section of this review explores constructivist theory. Constructivist theory involves “individuals who energetically construct their own knowledge about their experience” (Saracho, 2021, p. 19). Piaget’s theory stated, children use physical and social knowledge as the basic sources and approaches for information (Saracho, 2021, p. 19). Further described by Saracho, Piaget hypothesized a sequence of stages of intellectual development that characterize the normal order of levels of understanding through which children progress during their development. The stages described by Piaget include (a) the sensory motor stage, from birth to 2 years; (b) the preoperational stage, from 2 to 7 years; (c) the concrete operational stage, from 7 to 11 years; and (d) the formal operations stage, from 11 or 12 years through adulthood (Saracho, 2021).
Child development includes looking at children’s growth and behavior through developmental theories. Saracho (2021) stated children progress at their own developmental rate (p.19). As scientific research develops, so does one’s understanding of the impact of a child’s earliest years on brain development (Saracho, 2021). As children begin to learn, ECECs must take a deeper look at children’s holistic development. Holistic development in children includes the physical, cognitive, social–emotional, moral, and affective development in early childhood education (Lunga et al., 2022). Additionally, Zekarias and Zhao (2023) stated, “early childhood learns trough playing, observing simple concepts using these to construct more complicated ideas and concrete and literal information “(p. 272).

**Play-Based Pedagogy**

Play-based pedagogy includes children’s activities associated with childhood and fundamental to their development (Ljubetic et al., 2020). Zekarias and Zhao (2023) added, “Children’s play is described as optimal learning times by Piaget’s (cognitive and physical development) as well as Vygotsky’s (socio-cultural experiences) theories” (p. 273). Play is beneficial and critical for helping children accomplish important social, emotional, and cognitive developmental milestones (Zekarias & Zhao, 2023). Moreover, Nilsen (2021) stated, “Play is essential in children’s’ lives and children’s right to play is a human right, stated in the United Nations Child Convention article 31” (p. 32016).

Play-based learning is a context for learning through which children organize and make sense of their social worlds as they engage actively with people, objects, and representations (Edwards, 2017). Additionally, Lunga et al. (2022) stated that play-based pedagogy is a comprehensive incentive that may be the most substantial element contributing toward the well-being and development of young children within their early years of life (p. 1). ECEC professionals understand that child development occurs from the bottom up. Lunga et al. (2022)
further explained children begin foundational sensory skills (i.e., see, hear, feel, touch, smell, and taste), and these must be mastered before the next developmental step. As children age, Lunga et al. (2022) added the years of childhood between 0–9 years are most receptive to learning during play and exploration, stating that a play-based pedagogy is globally regarded as the best approach to learning in the early years.

Lunga et al. (2022) stated, “Children learn through different age-appropriate teaching and learning pedagogies, it is important that we implement play-based methodology in the early years” (p. 1). The Reggio Emilia approach (1950s–1970s), an approach to ECEC developed in childcare centers in Reggio Emilia, Italy (Stone, 2012), involves teachers supporting the child’s interests. Stone (2012) emphasized the active participation of the practitioner during play with the children in a valuable, co-learning atmosphere by sitting alongside children and facilitating play (Dotson-Renta, 2016; Lunga et al., 2022). Lunga et al. (2022) explained play-based education and playing for children supports the child in a holistic approach. Further, holistic development refers to:

All areas of development in young children, as moral, affectionate, physical, intellectual (cognitive), emotional and social development, as well as language development. The holistic development of young children equips them with skills to resolve problems, communicate and interact with others, build friendships and relationships with peers and significant adults. (Lunga et al., 2022, p. 2)

Additionally play-based education and holistic learning support fine motor development, gross motor development, self-regulation skills, language, and literacy skills (Lunga et al., 2022).

Despite research, many guardians still believe structured activities have more learning value than play-based learning (Grob et al., 2017; Kessel, 2018). Play-based learning should be
valued not only for academic skills but also for self-regulation, emotional control, executive functioning, social understanding, and creativity (Bergen, 2018). Play is much more than just playing with toys or children running around without structure, play-based learning, according to Nilsen (2021), involves activities that children perform for the sake of enjoyment. Children have play experiences that include dramatic play, fantasy play, exploratory play, manipulative play, small-world play, and games with rules (Lunga et al., 2022). Ljubetic et al. (2020) added, “the benefits of children’s play are multiple” (p. 122). Play supports development of speaking, listening, and observation skills, development of the ability to follow complex instructions, to wait for one’s own turn, perseverance, building self-esteem, respect for others, tolerance, honesty, empathy, responsibility, and recognizing and understanding one’s own and other peoples’ feelings (Ljubetic et al., 2020). Providing education about how children learn in play-based environments is critical for parents and administrators to understand the value of play-based learning in family childcare programs, also known as child development homes.

**Methods**

**Participants**

This action research paper was designed to determine if using play-based learning pedagogy supported children’s academic and social–emotional skills by placing materials in the environment, providing minimal teacher direct instruction, and using observation tools (e.g., video documentation, anecdotal notes using the Teaching Strategies GOLD web). This action research study took place in a family childcare home in Winterset, Iowa. The study was completed in a mixed setting that operates 5 days per week from 7 a.m. to 5 p.m. The children who attended the program ranged in age from 15 months to 4 years old and were made up of six girls and three boys. The children were all White and spoke English. Research and
documentation using Teaching Strategies GOLD Assessments for this program began in Fall 2023 and Spring 2024. Observational notes and data were based on GOLD standard assessment, which is an authentic, observational assessment system for children from birth through kindergarten, designed to help get to know children well, what they know and can do, their strengths, needs, and interests (Louisiana Department of Education, 2022).

During this time, no other assessments were needed to provide information on each child’s development in the academic area, focusing on specified mathematics and specified social–emotional domains. Using Assessment GOLD documentation is a reliable source of information and assists teachers when guiding informed planning and instruction and aids in identifying children who might benefit from special help, screening, or further evaluation (Louisiana Department of Education, 2022). Moreover, Teaching Strategies Assessment GOLD allows ECEC professionals to communicate and send any reports to the families. The second part of Teaching Strategies GOLD assessment is to collect and gather child outcome information as part of a larger accountability system to provide reports to administrators to guide program planning and professional development opportunities for ECEC professionals (Louisiana Department of Education, 2022). For this research, the primary focus was providing children with a rich play environment, including materials needed for students to use and develop specific mathematic skills, adding new concepts and skills. A rich play environment utilizing social–emotional problem-solving materials was designed to support children with how to solve social problems, and each aided in determining if children learned using play-based pedagogy.

**Variables**

For this action research, the independent variable I studied was play-based learning in a childcare setting versus a care provider’s direct instruction. The dependent variable was the
children’s growth in their academic and social–emotional skills. There were confounding variables in the study, including gender of the children, their ethnicity, differing age ranges, and their socioeconomic status. All children in the family childcare early learning program were English speaking and did not need individual education plans. Data collection included using observational notes of students during their play time and information collected was uploaded to Teaching Strategies GOLD to assess the information as an indicator of development and individual growth. The observations are considered qualitative data, and the data from GOLD assessment are quantitative and qualitative. The confounding variable data was quantitative.

Research done by the family childcare early learning provider do not have the reliability and validity of information that would be available, such as GOLD data that comes from Teaching Strategies GOLD and has completed studies to determine validity and reliability (Louisiana Department of Education, 2022). GOLD data are from Teaching Strategies, a curriculum and assessment tool implemented in the child development home. All information on children, such as age, gender, and family payment, were listed on the intake form in GOLD assessment. All observable information and data were put into the GOLD standard assessment portfolio, organized by child and objective, and were used on my computer, app on a phone, or app on an iPad. The following is an assessment cycle, according to Teaching Strategies GOLD assessment, is a continuous cycle of observing and collecting facts, analyzing, and responding, evaluating and summarizing, and planning and communicating with others (Louisiana Department of Education, 2022).

To be considered reliable with teaching strategies GOLD, educators are required to become interrater reliable using teaching strategies GOLD interrater reliability screening certification. Interrater Reliability Certification is a certification tool. It is not designed to train
the teacher or evaluate a person as a teacher. Its purpose is to support the teacher’s ability to make accurate assessment decisions. Teaching Strategies GOLD is rigorously and regularly tested, GOLD yields reliable, valid, and culturally sensitive information. With interrater reliability certification for teachers, administrators can ensure a valid and reliable assessment process at scale (Louisiana Department of Education, 2022).

**Research Questions and IRB Exemption**

The research questions this study attempts to answer are as follows:

- How does play-based pedagogy enhance and provide academic growth for children?
- Can a play-based child development home increase social–emotional skills?

The educational practice to be evaluated will be the normal educational practices that are activities that are routinely used in similar educational settings and have an institutional review board exemption. No student names are given in the data and analysis, and there was no disruption to students’ normal preschool days.

**Data Collection**

To begin the action research, observational documentation was collected and analyzed by the child development home provider. The information was evaluated for qualitative review using Teaching Strategies GOLD assessment scores from Fall 2023 assessment and Spring 2024 assessment data to determine if growth occurred. I used a mixed-method study to obtain qualitative and quantitative data to support the research questions. Using a dependent variable $t$ test to determine Fall 2023 to Spring 2024 changes.

Knowing that my age groups were between 15 months and 4 years at the time of the study, some areas of observation may not have applied to students younger than 3 years old because of developmental readiness. The data include the math portion, such as number
identification, connecting numerals with their quantities and shape identification. Using the Teaching Strategies GOLD Mathematics Objective 20 uses number concepts and operations. Dimension A counts, Dimension C connects numerals with their quantities, and Objective 21 Dimension B understands shapes (Louisiana Department of Education, 2022). The child development home placed intentional materials such as puzzles that included numbers 1 to 10 and their quantities, numeral cards to place objects on to match the number listed, and opportunities for children to count at mealtimes (e.g., how many napkins were needed). Additionally, the attendance chart gives children the opportunity to count the number of students at school and those who were not at school. In conversations students had with one another, the teacher observed students who could identify and name numbers on number cards. Materials such as blocks, magnetiles, and shape puzzles were included in the space to allow children to explore and classify shapes, letting children manipulate, draw, compare, describe, sort, and represent the shapes in a variety of ways. (Louisiana Department of Education, 2022). During free play, students used these materials to work independently. Direct instruction is limited during independent play time. In this child development home, children are given 90 minutes of free play to choose materials and centers to play in. During this time the teacher took observational notes using the Teaching Strategies GOLD child portfolios to collect notes that are analyzed and evaluated and used to determine child developmental level.

Free play is a time when students are free to choose what work they want to do or what interest area they would like to be in. As a child development home provider, guidance was limited, and it included reminding students they should tidy up the area to make the materials ready for the next person who would like to work with the materials when they were finished with an area. For example, one student may want to take puzzles to the table and then put their
materials away, or another student may want to join in. They may choose to take their puzzle to
the blocks and make believe they are creating a world where the blocks are like people and the
blocks become the homes of the puzzle pieces. With a mixed age group, care providers must
continue to create safe environments. Safe could mean art materials are put away prior to leaving
the table and materials such as counting cards be placed where small children cannot reach them.
Using observational analysis and evaluation the observational data, in each student’s portfolio, is
used to determine development and learning. After evaluating student data, data were analyzed
and evaluated for what level each child has reached using the objectives and their examples to
guide the analysis of information-based pedagogy.

Development of social–emotional skills were collected using the same method as the
mathematics portion of this actions research, Teaching Strategies GOLD assessment, using the
social–emotional objective and dimension. Using observational documentation in each student’s
portfolio, analyzing and evaluating collected observations is used to determine development and
learning. These were the objectives that were measured: (a) Objective 1: regulates own emotions
and behaviors, Dimension A: manage feelings; (b) Objective 2: establishes and sustains positive
relationships, Dimension 2B: responds to emotional cues; and (c) Objective 2: establishes and
sustains positive relationships, Dimension 2C: interacts with peers, learning to recognize and
respond to the emotional cues of other people involves learning a set of skills that adults model
(Louisiana Department of Education, 2022).

ECEC professionals need to see if the student was able to regulate their emotions and
behaviors (Louisiana Department of Education, 2022). Additionally, the ability to enter
successfully into ongoing social interactions is an important social skill. The final measurement
is Objective 3: participates cooperatively and constructively in group situations, Dimension 3A:
balances needs and rights of self and others and 3B: solves social problems (Louisiana Department of Education, 2022). Data on GOLD assessment also gave me quantitative data to determine growth in social–emotional development. Prior to the beginning of this study, students were taught how to use problem-solving steps in whole group settings. The problem-solving steps (Solution kit: Classroom edition (large) - national center for ... 2024) asked students the following:

- Step 1. What is my problem?
- Step 2. Think, Think, think of some solutions.
- Step 3. What would happen if? Would it be safe? Would it be fair? How would everyone feel?
- Step 4: Give it a try!

This social skill has visuals that support children who are unable to read. Students used visual problem-solving steps to solve a social problem between students. The teacher would observe students in free play, using the observational tool from Teaching Strategies GOLD, collecting video documentation of students using the problem-solving poster and solution choices. The GOLD documentation in each student’s portfolio would include notes with each video documentation, using Teaching Strategies GOLD would be analyzed and then evaluated to compare a child’s skills and behaviors to research-based indicators of learning and development. The scores from Fall 2023 and Spring 2024 were put onto a graph. Using the graph, information was then used to determine if student growth had been made using play. When the child would attempt the problem-solving steps, often with teacher support, the teacher would guide the student to the solution cards. These cards are pictures of possible solutions to help the children solve their social problems. The scores from Fall 2023 and Spring 2024 were put onto a graph.
Using the graph, the information was then used to determine if student growth had been made using play.

**Findings**

**Data Analysis**

**Quantitative Data**

**Table 1**

*Title of Table 1*

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</table>

APA Write-up: $(M = 5.83, SD = 2.56)$ $(M = 5.67, SD = 2.16)$

The goal of this action research was to determine if children in child development homes using play-based learning develop academic and social–emotional skills. The table used for this action research represents the quantitative data for Fall 2023 mathematics dimension, social–emotional dimension Teaching Strategies GOLD objectives, and dimensions for mathematics using Fall 2023 and Spring 2024 scores from Teaching Strategies GOLD assessment (see Appendices A and B). During the 90-minute free play, observational notes were used to analyze, evaluate, and determine the skill and behavior of the student to the research-based indicators of learning and development. The table indicates Fall 2023 dimensions averaged a mean of 5.83 $(M = 5.83, SD = 2.34)$, and Spring 2024 mean of 5.67 $(M = 5.67, SD = 1.97)$ using the same dimensions for both mathematics and social–emotional skills. Results of the dependent samples’
two-tailed $t$ test indicated a difference between the winter and spring observational analysis of 5, indicating that Fall and Spring scores differentiated by 1. The qualitative data on the graphs indicated intentionally placing materials in the environment supporting math objectives and domains included 20A: counting materials, and 20C: connects objects with their quantities. Children were observed counting out blocks, ensuring there were equal amounts being used by each, noticing at times that one child had more than the other child, and for 21B: identifies shapes, children were observed using blocks asking for the rectangle block or the square magnetic tiles. The fall graph indicated for Objective 20A, 11.11% of students were below expectation, 77.78% of students met expectations, and 11.11% of students exceeded expectation. The spring graph showed 22.22% of students were below expectations, and 77.78% met expectations.

The fall graph indicated Fall Objective 20, dimension 20c: connects numerals with their quantities. Results suggested 11.11% of students fell below expectations, 77.78% of students met expectations, and 11.11% of students exceeded expectations. Spring indicators for Objective 20, dimension 20C, 22.22% of students fell below expectations, 77.78% of students met expectations, and 0% of students exceeded expectations. Fall Objective 21-dimension 21b, identifies shapes, indicated 11.11% of students were below expectations, 77.78% met expectations, and 11.11% exceeded expectations. Spring indicators for this objective included 22.22% of students were below expectations, 77.78% met expectations, and 11.11% exceeded expectations. This information became inconclusive because a student in the GOLD standard assessment incorrectly listed the birth year of one student. Because of this, the class graph was determined inconclusive at this point of the GOLD documentation.
Teaching Strategies GOLD observation, anecdotal documentation, and video documentation of students during free play specifically were used to determine if students’ social–emotional skills were enhanced and learned. Appendix A indicated the percentages of students below expectation, meeting expectation, and exceeding expectation for all objectives and dimension for social–emotional skills. Specific attention to Objective 3-dimension b, solves social problems, indicated in the fall, 33.33% of students fell below expectations, 55.56% of students met expectations, and 11.11% of students exceeded expectations. Spring indicators for Objective 3, domain b, solves social problems, stated 11.11% of students fell below expectations, 66.67% of students met expectations, and 22.22% exceeded expectations. As indicated in the math data collection, this information collected in each graph is inconclusive. Human error listed a child’s birth date incorrectly by 2 years. As a result, the information would be inconclusive. Using individual student information would indicate information in a different outcome. For the protection of the children’s identity per IRB, a class graph was used.

After reviewing the objectives included in this study, information gathered from the spring checkpoint data could still be reviewed for individual students with correct variables and used to support students during free play time to make purposeful play-based learning activities in each center space and time despite the incorrect birth year. When thinking of how to prepare centers for play-based learning activities for each age range of students, teachers engaged in hands-on play-based learning activities. These activities included the interests of differing age groups, strengths of each individual student, and areas of need for each student. During free play times, as the observer for students, there were times when providing suggestions, modeling problem-solving skills, offering solutions cards, and advising in communication skills for those students who have not developed the skills needed. The whole class data for Spring 2024 has
proven inconclusive, due to human error—one child had an incorrect birth year by 2 years. When a child’s birth year is not accurate, the child’s individual data in social–emotional skills and mathematics would read differently. The child’s birth year indicates the class and grade range for expectations. When a child’s birth year is off by 2 years, the scorer indicates the child is at a higher level class and grade range. This would indicate the child’s analyzed data score is higher than they would have scored in Teaching Strategies GOLD assessment. This was concluded by reviewing and comparing Teaching Strategies GOLD Fall 2023 and Spring 2024 checkpoint data.

**Discussion**

**Summary of Major Findings**

The action research was to determine if children in child development homes that use play-based learning learn academic and social–emotional skills. During this study, an area of major finding was that human error does affect the outcome of indicators in Teaching Strategies GOLD. I did not include the graphs of percentages for developmental growth, the major area of finding included accuracy of variables. Without accurate variables such as birth year, when using Teaching Strategies GOLD, analyzing and evaluating the reasonable expectations of development and indicated the child was above expectation. Using tools for observation of play-based learning was a valid source of documentation for accurate student information.

A second major area of finding included origins of developmental theories, maturation, constructivist, behaviorist, psychoanalytic, and ecological theory. Child development and learning is complex (Louisiana Department of Education, 2022). Ljubetic et al. (2020) added depending on the child’s age, development, and personal characteristics may invite into their play. Further, if adults are included in child’s play, they may play different roles (e.g., observer,
manager, facilitator, mediator, active participant) in the play (Ljubetic et al., 2020). Deepening an understanding of developmental theories of how children learn, broadens one’s thinking that maybe one way of learning may not be every child’s way of learning. Saracho (2021) stated developmental theories offer early childhood education researchers and educators’ information about young children’s interests and capabilities at various age periods. Saracho (2021) further stated, “consequently, children should be considered separately and be assessed based on developmental norms before beginning a research or educational plan and establishing expectations.” Teaching Strategies GOLD assessment addresses this when observational data is collected. Student age is considered using the color bands that represent the differing age groups or classes and grades. Teaching Strategies GOLD reflects the knowledge there is not a typical progression for each objective. Development and learning are uneven, overlapping, and interrelated (Louisiana Department of Education, 2022). Observational anecdotal evidence was recorded by individual child and can be graphed as an independent child’s observational growth. For this research, the whole class profile was used when graphing objectives and their dimensions. This was done to protect the children used in this study.

**Limitations of the Study**

Limitations of this study include the number of students, the mixed age ranges, and ability of each student. Although there were specific scientific data in peer-reviewed journal articles to support play-based learning being an effective tool in child development homes, there are limitations to findings. The study took place from Fall 2023 to Spring 2024. During this time, developmental growth occurs naturally, so it is difficult to prove a play-based environment enhances a child’s maturation.
The study was limited to observation. Attempts to small groups were made as well. Interruptions from younger age children often occurred, limiting focus from students. The area of the study was limited in space. Students’ centers included material for ages 12 months to 4 years old. This often-frustrated older students because younger children took the toys. Younger children’s learning styles include exploration of materials and cause and effect. Social skills are limited compared to 2- and 4-year-old students.

To depict enhancement of development and learning in academic and social–emotional skills accurately, adding to the sample size, similar environments, and specific child development home provider instruction could change the outcome. In addition, observing children with the same developmental age range, would aid in accuracy of determining growth and development of children in play-based atmospheres.

Further Study

A next step to further this action research could be done on a larger scale, including more child development homes and over a longer period. This would include interventions in place for other child development homes to put in place. The interventions included are developmentally appropriate play-based learning environments for Fall 2024 checkpoints into Winter 2024 Teaching Strategies GOLD checkpoints. Using a control group and an experimental group may give broader outcomes of growth or decline in scores where play-based learning is being implemented.

A second future step could be to educate and promote more parent involvement to help students develop their social and emotional skills. Child development home providers can provide families with educational materials that include ways families can support their child’s learning through play. The information to families would include what play-based learning is and
the benefits of play-based learning at home and in child development homes. The information would show how to set up positive learning environments to encourage the child or children’s skill development, and potentially, this information could be given to other child development homes to use as family communication. It is also information for the child development home provider to set up their professional environment.

In ECEC, there is a split on when and where children can learn. Child development homes are spaces where children learn attachment and safety. Both are important when children begin to learn. A child’s first 2,000 days of life are the most influential. Parents, society, administrators, and legislators can learn from research that shows how impactful play-based learning environments can be in academic and social skills of children.

**Conclusion**

This action research project gives information to support the use of play-based learning in child development homes. Play-based learning environments support and enhance academic and social–emotional skills in child development homes. When child development home providers use developmentally age-appropriate material and create engaging learning experiences this can enhance growth in academic skills and social-emotional development of children. The nine mixed-age children in this child development program included in this action research gained skills from the experiences that took place during their play. Though the data are inconclusive in this action research as a class, individual growth could be concluded. Continued research on a larger scale would be beneficial to this action research.
References


Luckenbill, J., Subramaniam, A., & Thompson, J. (2019). *This is play: Environments and interactions that engage infants and toddlers*. National Association for the Education of Young Children.


Appendix A

Fall 2023/2024 – Widely Held Expectations

Social–Emotional

Below Expectations Meets Expectations Exceeds Expectations

Mathematics

Below Expectations Meets Expectations Exceeds Expectations
Creative Play Space Early Learning and Care Appendix B
Spring 2023/2024 – Widely Held Expectations

Social–Emotional

Below Expectations Meets Expectations Exceeds Expectations

Mathematics

Below Expectations Meets Expectations Exceeds Expectations