

The Pennsylvania State University
The Graduate School
College of Education

**YOUNG CHILDREN'S JOURNEY INTO A WORLD OF PLAY
WITH OPEN-ENDED MATERIALS:
A CASE STUDY OF THE CREATIVE PLAY CLUB**

A Dissertation in
Curriculum and Instruction
by
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Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Doctor of Philosophy

December 2014

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Abstract

This research is based on previously conducted naturalistic descriptive observation of 13 children ages 6–8 years using open-ended materials in their play at the Creative Play Club (CPC) in spring 2012. The research carefully examines and analyzes how four boys and nine girls in the CPC used open-ended materials in their play over 8 weeks. One aim was to evaluate changes in the quality of play over time. A second aim was to analyze the influence of various factors on children’s social and nonsocial play behaviors. Those factors were the materials’ characteristics and affordances and the social activity setting. The research gave special attention to the possible influences that flatten expression in play and those influences that might reignite play expression within or across CPC sessions.

The research generated evidence that children’s drawing, manipulating objects, and reflecting are meaning making. Interpretations of data were guided by an activity setting model, affordance theory, and a multimodality and meaning-making conceptual framework. The main findings were that the CPC and the case study are good conduits for exploring the possibilities and challenges that emerge from children’s experiences with open-ended materials in play with other children.

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Acknowledgments

I would like to convey my appreciation to everyone who supported me in the completion of this dissertation. They were with me to share in my difficulties, worries, and joy throughout my journey. First of all, my deepest thanks to Dr. James Johnson, my dissertation advisor, for his advice and bountiful encouragement. He has been the play encyclopedia for me and for many of his students. Without his guidance and support, this study would never have seen the light. Thank you for granting me the vehicle to start my journey.

I would also like to thank the members of my dissertation committee for their continued support and encouragement. Special thanks to Dr. James Nolan, Dr. Stephanie Serriere, and Dr. Christine Thompson. I have felt lucky to have this wonderful committee, who guided me throughout my journey with their positive thoughts and encouragement and inspired me to achieve my goals and reach my optimal level.

I want to give a special thanks to Dr. Walter Drew, my play father, who unintentionally was my mentor and coach. I also would like to extend my appreciation and gratitude to all of the play professors, scholars, researchers, and colleagues who have taken me under their wings over the past 5 years—Dr. Marsha Nell, Dr. Michael Patte, Dr. Belma Tugrul, Dr. Freser Brown, Serap Sevimli Celik, Nandini Sengupta, and many more.

Moreover, I would like to especially express my thanks and profound love to my family: To my wonderful and patient husband, Mohammed, who was left alone in Washington, D.C., while I pursued my goal. To my parents, who planted the seed of open-ended materials and always let me and my siblings play, explore the world freely, and embrace challenges. I cannot thank you enough.

To my sisters, Shareefa, Hannan, and Ibtesam, and to my brothers, Hassan, Mansour, Abdulmajeed, and Naif, and to all of my family and friends overseas who have supported me, thank you for the constant prayers and positive energy you have been sending me along the way. I dedicate my success to you all because my success is yours.

I would like to dedicate a special thank you to my children, Ibrahim, Rafaif, Sultan, Rouwa, and Rosie, for the many different ways they contributed to my understanding of the importance of play. My deepest love and thanks to you for all of the love, inspiration, and

support you provided during this period. I am convinced that this dissertation would have never been completed without you.

Last but not least, a special recognition goes to those supportive and inspiring people in my life, my dearest friends in State College, Hessah Ibrahim and Hadia Hashim; thank you for being there for me. My thanks and appreciation extend to Kathy Kelly, my wonderful editor. And I owe a special thanks to my friend Sherry Clarks and her family for continuously supporting me and encouraging me with positive thoughts and warm words. She has always been willing to comment, proofread, and share her advice. Thank you all.

M. Al-Mansour, December 2014

Dedication

This dissertation is dedicated to the soul of my father, the first to teach me; to my beloved mother, for her prayers for me; to my loving and supportive husband, Mohammed Hamdan; and to my brilliant children, Ibrahim, Rafaif, Sultan, Rouwa, and Rosie.

Chapter 1

Introduction

The value of play with open-ended materials in early childhood was recognized long ago. Much of our understanding of the value of play has originated from Piaget (1962), Vygotsky (1978), and Bruner (1990), who focused on the role of play in children's development. They saw children as active explorers of their worlds. With each new encounter or interaction, children are able to discover new meanings, and thus develop more complex understanding and skills.

Children are intrinsically motivated to manipulate, explore, test, and learn as they encounter activities and situations that provide such opportunities. In acknowledging the importance of play, Bruner (1990) showed that children need to be physically active and to have firsthand experiences that offer small sequences that build or scaffold their learning. He also stressed that play needs a purpose.

The value of play with open-ended materials can be recognized when watching children play with things other than toy products, such as found items or recyclable materials, as they manipulate them in ways the materials are not intended to be used. This observation leads some researchers to ask the question: Is purchasing objects and toys necessary to facilitate play for our children? Researchers Adele Diamond and Deborah Leong do not think so. They claim that the best kind of play costs nothing, and that imagination is the only thing that is really required (Bodrova & Leong, 2001; Spiegel, 2008).

No matter where children are, they tend to play and love to play freely. Children naturally use anything—sticks, dirt, water, pots, lids, and any other random materials—to build, construct, and play. They can travel anywhere in their imaginations, even outer space or under water. Children need just a few materials, and sometimes they need only their body. They jump, climb, dig, run, pretend, and get dirty, but at the end, their eyes glow with joy and happiness as they share their stories. These children are immersed in authentic play that engages them physically, emotionally, mentally, and socially (Miller, Tichota, & White, 2009). Authentic play, according to the existing literature, must be pleasurable, enjoyable, spontaneous, flexible, and voluntary; it must involve active engagement and freedom, have no extrinsic goals, and contain elements of make-believe (Brown & Vaughn, 2009; Garvey, 1977; Hirsh-Pasek & Golinkoff, 2003).

Unfortunately, play has changed dramatically, and according to many researchers in psychology, the play that some children engage in today does not help them become creative. Too little time for spontaneous play is leading to increased emotional and physical stress for some children, and they are missing opportunities to develop the cognitive skills they need to take initiative and be creative (Almon, 2003; Elkind, 2007; Spiegel, 2008).

Elkind (2007) noted that we have become a screen culture. We are in a hurried society that produces hurried children. We spend most of our time trying to catch up: catching up with school work, with after-school activities, and with the newest electronic devices. Many parents and teachers say children cannot be isolated from this trend in our society, and that this is the reality children unfortunately have to face. It is a universal issue that “play” has been changed and reduced over time.

According to the American Academy of Pediatrics (AAP, 2007), children need to play and explore, and to do so is their basic right. It is a natural feeling; children like to observe, touch, smell, taste, manipulate, nudge, and even hear any item that comes to hand to discover the essence of a thing and to ascertain what controls it. They also like to discover what such an item lacks and understand the usefulness of it. Children often surprise us with how they use items for purposes different from the items’ intended use. Children like to transform materials into something else using their imagination and creativity (Chang, Miller, & Veselack, 2011). Greenman (1988) suggested that, “It is in messing about that children dream dreams and discover what they might be” (p. 27). “Messing about is when children act on the world and discover what it is made of and how it works.” Children play with intention and meaning, even if, to adults, it appears to be a random experience (Elkind, 2007).

Through play, children develop and exercise life skills, remember past experiences, and draw on existing knowledge. They also practice reasoning skills and use their creative potential repetitively. They tend to be motivated to do so when they get to choose what and how to play. Allowing children to play leads them to better understand and make sense of the world around them (Chang et al., 2011).

Galinsky (2010) identified seven essential life skills that young children need to develop: focus and self-control, perspective taking, communicating, making connections, thinking critically, taking on challenges, and engaging in self-directed learning. Hirsh-Pasek and Golinkoff (2003) noted that although such life skills are not measurable in tests, they enable

children to become competent, capable, and engaged learners. More to the point, play is described in the literature as a medium for promoting all aspects of child development. When children have time to play, their play grows in complexity. Play is a vital experience that increases children's knowledge and ability to understand the world around them, through which they learn social, emotional, conceptual, and creative skills (Johnson, Christie, & Wardle, 2005; Santer, Griffiths, & Goodall, 2007).

1.1 Statement of Problem

Children deserve a rich environment that can fuel their creative potential instead of suppressing it. Children can benefit from being in an environment that has been designed with children in mind and that has rich materials with thoughtfully divided spaces. When given plenty of time to explore, engage, interact and form relationships (with parents, teachers, and one another), and play creatively, children flourish. Furthermore, for children who live in today's commercially saturated culture, opportunities for thinking and problem solving have become limited, despite the great emphasis on buying the newest products, the best electronic toys, and the most advanced toys that teach academic skills and boost brain development. Some experts have expressed their concerns that these kinds of toys might damage some children's imagination, curiosity, resourcefulness, and creativity (Louv, 2005; Rosemond, 2001).

Because school systems have rigid curricula and examinations to evaluate what children have learned in their academic classes, play time frequently has been replaced with study hall, where children are asked to catch up with paper and pencil work that they did not finish during the day. Teachers are rushing to cover the materials in the curriculum.

Drew and colleagues report that children benefit from playing with open-ended materials because such play advances their problem-solving skills and helps them think creatively. Through play, children find answers for their questions and have the freedom to examine their understanding. They know that they can always start over if they are not satisfied with the outcome; they can elaborate and continue to build on their thinking and doing and refine their knowledge (Drew, Christie, Johnson, Meckley, & Nell, 2008).

1.2 Background

I always wanted to closely study children at play, try to understand their many ways of expressing themselves, listen to their voices through play, and figure out the ingredients of

creative play. Of course there is no formula for creative play; but there is the atmosphere that sparks it. This interest led to the heart of my study, which consists of 2 years of observation.

My research began with a foundational study I conducted before 2012 that was based on naturalistic descriptive observation of young children ages 3, 4, and 5 years. The main goal of that study was to explore and identify elements of creative play by listening to children's voices and exploring their dispositions before and while they played and interacted with open-ended materials. Gradually that research grew into the pilot study that in spring 2012 became the foundation for my dissertation work.

At a local charter school in Central Pennsylvania, I came up with the idea of running what I called the Creative Play Club (CPC), an after-school program. The club was intended to give children the opportunity to play freely after an exhausting school day. The club was an avenue to introduce more play opportunities and hands-on experiences. It also was presented as an example for anyone who deals with children, to promote a change in attitudes toward children's play. The experience I gained from overseeing the club, working directly with children, and collecting data became critical to my dissertation work (see the Creative Play Club at the end of this chapter).

Although the participants in this study were children, the information is intended for adults, including any care providers (families, schools, organizations, policy makers, and so forth) that have opportunities to affect the play of children. The study suggested what constitutes play. Moreover, it told us that children like to play with whatever domain is accessible to them and that children need both time and space.

The case study of the CPC is a good exemplar for exploring the possibilities and challenges that emerged from children's experiences of the materials and from their interactions with each other as well as with other children in the room. This research does not measure children's abilities; rather, it aims to understand the processes behind children's actions and expressions and to focus on the strategies the children used for meaning making.

During the study, segments of video clips and assorted photographs were shared with some mothers as dialogical tools to help deepen and enrich the researcher's understanding of the child's play expression. (The data were extracted from this paper and will be saved for a future work.)

1.3 Purpose

The goal of this study was to explore how children use open-ended materials in their play over time and to determine whether it is possible to evaluate changes in the quality of a child's play over time. This study also included observation of the influence of the characteristics of the materials and their affordances on children's social play behavior. Evidence of meaning making through drawing, manipulating objects, and reflecting was collected over eight sessions.

The examination of children's play with open-ended materials aims to add a deeper layer to the expression of children's self-directed play. One mother's input was also taken into consideration. She reported noticing a transformation in her child's identity, although those data are excluded from this dissertation and will be saved for later work, because the focus here is on children and their experience at the club. This study will describe how a child can change in a deeper and more precise sense, over a period of time, when the child is given the chance to play with open-ended materials over 8 weeks.

1.4 Assumptions

The following assumptions guided this study and the Creative Play Club:

1. Children's self-directed play with open-ended materials provides an avenue for direct and clear play expression and meaning making, and draws on their inner resources.
2. Engagement in self-directed play helps children think (using planning, categorizing, problem solving, and ordering), feel (experience neutrality, fear, pleasure, embarrassment, excitement, or disgust), and communicate (including verbally and nonverbally, with adults or children, with or without materials, and reciprocally or non-reciprocally).
3. The key assumption is that children learn meaning making through interaction with their surroundings and with others. Children's strategies to accomplish this mission are determined by the environment in which they practice these strategies and plans.

1.5 Research Questions

As in the pilot study, an important research question remains relevant to this dissertation research:

1. How do young children interact and make meaning with open-ended materials, and what are the consequences?
 - 1a. How can a researcher reasonably and usefully describe children's use of open-ended materials during play time at the Creative Play Club?
 - 1b. How can changes in children's play behaviors and play tendencies be seen or inferred within and across play sessions (if they can be)?
 - 1c. What are the roles of physical environmental and social setting factors regarding children's play behaviors at the CPC?
2. When there is a flat line or decline in play, what creates an uptick or a spark to sustain or improve play? What is the relationship between setting factors (e.g., salience of a material, space, amount of materials, number of children in the room) and children's play behavior?

The following section explains the background and scope of the Creative Play Club.

1.6 Significance

This study uses a case study design to learn how children change through play. The study documented and recorded play activities of 13 young children (four boys and nine girls) ages 6 to 8 years as they played with open-ended materials during their participation in the CPC in spring 2012. The study seeks to describe more precisely how children can change over a period of time. Using an observational approach, the study also seeks to understand how children constructed meaning when they were given the chance to play with open-ended materials over eight sessions. The case study research design is appropriate for examining in depth a particular case or cases that fit within a bounded system, that is, the Creative Play Group.

Another reason for this study is to suggest further evaluative intervention, possibly using the case study as the main tool of evaluation. The research is significant in learning how and why creative play clubs can be used as a form of positive intervention.

1.7 The Creative Play Club

The Creative Play Club (CPC) was initiated to provide a multidisciplinary setting to provide children with opportunities to play. The CPC initiative's philosophy, a product of multiple disciplines, lenses, and paradigms, draws from the Reggio Emilia approach and Remida, the Creative Recycling Center; the self-active play workshops designed by Dr. Walter Drew and

his colleagues; and the Saturday Art School. These three unique perspectives all value (a) hands-on experience, (b) children's control over their own play setting, (c) the belief that children need many opportunities to express themselves, and (d) the belief that the knowledge they have inside is most important (Nell, Drew, & Bush, 2013). These four values helped in constructing the foundation of the CPC.

1.7.1 Reggio Emilia Approach/Remida, the Creative Recycling Center

In summer of 2009 I decided to go to Italy to learn more about the Reggio Emilia approach to early childhood care and education. My primary goal, however, was to attend the World Forum in Reggio Emilia, Italy, to experience firsthand the Reggio Emilia approach; to visit preschools and infant and toddler centers; to conduct intensive observations and interviews, if possible; and to attend presentations, seminars, and research projects in the Reggio Emilia infant and toddler centers and preschools.

A wealth of literature has assessed and reviewed the beneficial effects of the Reggio Emilia approach to early education, both inside and outside Italy. By going there myself, I wanted to achieve the following:

- Gain a better understanding of the learning process and its connections to experiences, communication, background, and creativity.
- Further understand the Reggio Emilia approach and its beneficial effects in early childhood education.
- Collect ideas and proposals for future plans and possible directions to develop an international center.
- Further understand the value of collaboration and dialogue and explore their meanings more deeply in relation to the identity of the international center.

While I was there I hoped to find a way to adopt some of the outstanding principles and discover new possibilities by considering the cultural aspects. The CPC's philosophy draws from the Reggio Emilia approach, where children's minds are respected, their voices are heard, and their creative ideas are escalated (Edwards, Gandini, & Forman, 1993; Project Zero & Reggio Children, 2001). In Reggio Emilia, the municipal schools for young children emphasize that accepting uncertainty should be a regular part of education and creativity, and that creativity needs opportunities to be expressed anywhere and at any time in school (Rinaldi, 2006).

Malaguzzi (1998), the founder of the Reggio schools, points out that, “Creativity seems to emerge from multiple experiences, coupled with a well-supported development of personal resources, including a sense of freedom to venture beyond the known” (p. 68). At the CPC, children are granted the freedom of choice to play with any materials, do anything with them, and play with whom they wish to play.

The CPC offered children lots of reusable and found items, open-ended materials, and materials found in nature. The application of reusable, discarded, and open-ended materials is illustrated by Remida, the Creative Recycling Center, in Reggio Emilia. Remida is a place where discarded materials can become resources and where unsold or rejected stocks from shops are collected so that they can be reused to have a different meaning. Remida is where schools and groups can make the most of waste materials, products considered worthless, and imperfect objects to create a new product that shows respect for the environment (Ferrari & Giacomini, 2005). For those thinking about economic conditions these days, Remida is a great solution to foster creativity with virtually no cost. Inspired by the philosophy of Reggio Emilia and the Remida centers, the CPC uses reusable and recyclable items for free play. The materials are displayed in the center in an aesthetic manner as a form of invitation by organizing them according to their categories, by material, color, form, or shape.

When I entered Remida, I felt that I had discovered my passion and realized my aptitude. The experience reminded me of Sir Ken Robinson’s view on creativity, that creativity is what happens when aptitude and passion find each other. I want my children to discover their natural aptitude and to stick to it. This will happen by exposure to many things.

1.7.2 The Institute for Self Active Education (ISAE)

The CPC is also inspired by Walter Drew’s Institute for Self Active Education (ISAE). It was at the National Association for the Education of Young Children (NAEYC) conference in fall 2009 that I first met Dr. Walter Drew and participated in one of his self-active play workshops. Dr. Drew is the father of open-ended materials, the founder of the Institute for Self Active Education, and the creator of Dr. Drew’s Discovery Blocks. I wanted to participate in the session because I believe in the power of play. I realized how ignorant I had been about the importance of play throughout my professional life. Even though I encourage play and I am a play scholar, I had forgotten how it felt until I experienced it again myself. I realized that, just as

children in today's world can be deprived of creative play, adults go through play deprivation as well. I always thought I was a creative thinker. When I first interacted with the materials, though, I momentarily felt as if I had lost my childlike creative potential. Soon enough I gathered myself, became engaged, and immersed myself in the experience of play as an adult.

I could never pass on to children the joy and freedom I found during self-active play if I did not experience it myself. That was the key component of my journey of change. I then realized that teachers who are working with children are not necessarily playful themselves, or they have never experienced free play, so they don't know how it feels. I believe that when adults experience play themselves, they will be able to understand the importance of it for the child and for the person as a whole. They will therefore provide the children in their lives with the necessary time, space, freedom, and permission to play.

Attending Dr. Drew's workshop brightened my view of the role of play through direct experience. Touching and feeling the materials led me to rethink, reflect, and rediscover what was under the dust. It helped me formulate my own view and perspective, which may or may not be the same as those of others who attended the workshop. The hands-on experience helped me to communicate my knowledge about the importance of play to adults (teachers and parents) and to children.

Dr. Drew's self-active play workshops create great opportunities for quality play experiences for children and adults. Participants engage in hands-on play activities using open-ended materials that stimulate creative thinking, from which they draw insights into and understanding about children's learning. Drew and Rankin (2004, pp. 39–42) identify seven key principles for using open-ended materials in early childhood classrooms, which guided this study:

Principle 1 Children's spontaneous, creative self-expression increases their sense of competence and well-being, now and into adulthood.

Principle 2 Children extend and deepen their understandings through multiple, hands-on experiences with diverse materials.

Principle 3 Children's play with peers supports learning and a growing sense of how to make connections and competence.

Principle 4 Children can learn literacy, science, and mathematics joyfully through active play with diverse, open-ended materials.

Principle 5 Children learn best in open-ended explorations when teachers help them.

Principle 6 Teachers are nourished by observing children's joy and learning.

Principle 7 Ongoing self-reflection among teachers in the community is needed to support these practices.

1.7.3 Saturday Art School

The CPC is also inspired by the work of the Saturday Art School, run by Christine Thompson and her colleagues at Pennsylvania State University. The program, which is inspired by the Reggio Emilia approach, takes advantage of Penn State's resources, with field trips to places such as the Arboretum and the Palmer Museum of Art, and with visits from artists, scientists, and architects. Saturday Art School is an opportunity for local children and teens to come together to explore ideas and materials with advanced art education majors, under the direction of faculty and graduate assistants, over 8 weeks. The program focuses on approaches to learning art that are innovative and exciting and helps students experience art in many forms.

I volunteered at the Saturday Art School from 2010 to 2012, for four consecutive semesters. During that time, I learned that a great deal of what the school provides is giving children the opportunity to express themselves freely and creatively.

The Saturday Art School is not just a place for art making; instead, it is a window that is wide open for children to shine their creativity through. A spontaneous jumping for joy, for instance, can be represented in many ways, such as sketching, drawing, moving, dancing, sculpting, building, manipulating, transforming, and even exploring nature. What is obvious about this school is that the goals of teachers, parents, and children are to communicate, think, and feel, and more important, to share feelings with one another.

1.7.4 From Inspiration to Reality

Inspired by the three programs, the CPC provides an opportunity to closely study children at play, to try to understand their many ways of expressing themselves, to listen to their voices through play, and to figure out the ingredients of creative play. Certainly, the CPC did not

suggest a formula for creative play, but it provides the atmosphere that sparks it. The club is aspirational; it is aiming to inspire, not to prescribe. Nevertheless, the club did not pose any financial burden to the school or families; instead, the club's supplies and materials depended on found and recyclable items. This particular point attracted many families' attention, and they and their children who attended the club expressed their appreciation of the club's environmentally friendly idea.

This unique club is a stepping stone to give young children opportunities to play freely and creatively, to be heard, and to make choices for themselves, even if those opportunities are minor. With this intention, the CPC was established and welcomed by the school and some parents as a part of the established extended day program (see Appendix A to learn more about the extended day program structure). As such, it can be called a form of positive enrichment intervention in school. The club is a showcase to promote awareness and to change attitudes regarding children's play. It is also a means to engender positive change in children and adults.

Chapter 2

Literature Review

The literature review is organized into five main sections. The first section examines play in relation to the Creative Play Club (CPC). The second section reviews the literature concerning children's capacity to invent and imagine using open-ended materials. The third section presents a review of relevant theoretical and empirical research regarding materials and materiality. The fourth section reviews three theoretical frameworks: the activity setting model from a sociocultural perspective, the affordance theory, and multimodality and meaning making. The final section discusses limitations of the literature.

2.1 Examining Play in Relation to the Creative Play Club

Play states have been described and analyzed with respect to duration, frequency, tempo, rhythms, patterns, sequences, and the like (Johnson, Al-Mansour, & Sevimli-Celik, 2014). Play is sometimes predictable, at other times unpredictable. Play goes according to its own sense: the play may be playing with the player as much as the player is playing the play. Sometimes play occurs in cycles, such as the well-known cycle of examine, reexamine, and transform. Sometimes there is regression as the play seems to become less organized and less orderly. Play evolution does occur in the play states and in the players. Such changes can appear to be progress, though that implies degrees of play quality, an assumption that is problematic. What is play quality? Perhaps there are some clues in the literature.

For example, Csikszentmihalyi (1990) described the concept of *flow*, which he characterized as an individual's absorption in an activity to the exclusion of anything else, and which represents an optimal state of intrinsic motivation in which an individual is functioning at his or her fullest capacity. Csikszentmihalyi not only equates flow with happiness but also indicates that it is necessary to allow creativity to flourish (McLellan, Galton, Steward, & Page, 2012).

Some play experts refuse to give an absolute definition of play because it is varied and abstract (Brown & Vaughn, 2009; Johnson, Christie, & Wardle, 2005). In this section, the aim is not to try to define play but to briefly present and illustrate play in a way that is directly useful

and pertinent to the Creative Play Club. The CPC uses reusable and recyclable items, which encourage free and creative play, including all of the types and subtypes of play. The use of open-ended materials stimulates innovative play and broadens young children's imaginations. However, play using reusable and recyclable items presents additional challenges, since play with these items is very low structure.

What does *free play* mean at the CPC? Free play has no external goals. During my observations, play was not preplanned, and the adults did not decide the themes of each session. Adults were there to prepare the environment, materials, and resources, and then to support and facilitate children's play and respond to their cues. Each child took on the role of leading the play scenario or situation. Play consisted of freedom of choice to play with any of the materials offered, to freely manipulate the materials, and to play individually or with a partner or partners of the child's choice. According to Garvey (1977), freedom of choice is an important element of play for young children. However, freedom of choice does not mean absence of boundaries. Boundaries were managed by the researcher (myself), as was the overall agenda of the CPC.

What does *creative play* mean at the CPC? How does children's play progress into creative play? In its operational definition, self-directed play (or creative play) would be described as a product of eclectic ingredients, which include internal and external elements, both of which are necessary for creative play to flourish. In the CPC play study, the external elements of creative play are open-ended materials, along with their affordances (i.e., the player's perceived uses of those materials) and opportunity (i.e., proper guidance, time, and space). The internal elements are (a) curiosity and the internal disposition to explore, form relationships, and become involved and interact with others; and (b) transformation. These internal and external elements interact, resulting in the play process.

The CPC used play with open-ended materials over an extended period of time. To facilitate high-quality play, such as sociodramatic play and constructive play, an adequate amount of time is required for planning and execution (Johnson et al., 2005). Children need time to invite other players, plan, negotiate roles, agree on a story line, assign make-believe characters, and construct objects and props. To go through this whole process, children might need hours or days, depending on the complexity of their stories. The CPC encouraged this process by offering the ingredients necessary for high-quality play to flourish and the time for the child to play; that is, the club offered approximately 100 minutes of play time each day (see

Chapter 3 for more details about the CPC's agenda, summary, and procedure). The literature shows that children need at least 30 minutes to 1 hour in a play period in order for higher quality play to emerge and stabilize (see Christie, Johnson, & Peckover, 1988).

At the CPC, some play types were recognized as usefully nested, such as object play (i.e., manipulation and exploratory play, and constructive play), symbolic play (i.e., pretend play and thematic play), and social play (i.e., solitary, parallel, associative, and cooperative play; Parten, 1932). Sometimes children focus on one type of play; at other times, multiple types of play occur during the same play episode. Adding more to this complicated nest is that the types of play are also divided into subtypes, such as Parten's four levels of social play: solitary play, parallel play, associative play, and cooperative play. Some researchers went into deeper analysis by examining the level of performance of each subtype. For example, parallel-functional play, the least mature type of social play according to many researchers (such as Moore, Evertson, & Brophy, 1974; Rubin, 1982), would be analyzed by looking at parallel play of children who have awareness of peers versus those who do not (see Johnson et al., 2005; Johnson, in press). That makes the play more complex and more difficult for the child to deal with. However, it is critical to know and understand that play develops and goes through stages and different levels of performance depending on the age and maturity of the child and the cultural, environmental, and other factors.

According to Johnson et al. (2005), earlier play skills such as motor play, manipulative play, and exploratory play are precursors to later developing play. Moreover, learning about the developmental sequences of each type of play helps the researcher formulate proper expectations, which are needed to facilitate high-quality play (Johnson, in press). Each play type, however, becomes more elaborate and reaches new heights of sophistication. The qualitative change that is age related and well known in the field would be the Piagetian play stages of sensorimotor play, symbolic play, and games with rules. To avoid a linear and one-dimensional description when studying children's play, researchers need to understand how play itself develops, and the external influences on this growth and development, by considering contextual and cultural factors, individual variation, peer culture, and so on (see Johnson et al., 2005).

Development in children's play must be understood as complex and problematic, with short-term and long-term meanings. Over the long term, months and years, there can be evolutions in the child's identity, leading to different interests and different expressions of those

interests. Since maturation and rapid learning are taking place over long periods of time in childhood, and especially early childhood, new competencies allow for new play forms.

However, more relevant to the CPC are short-term developments in children's play. For example, play that becomes more progressive, balanced, and socially reciprocal over time signals play development. It is not an additive process showing a quantitative increase; instead, it is usually a qualitative change to a higher level of structural functioning. However, the elements of the lower level of play are needed for play to change and to progress to the next level. The play literature gives an illustration of a developmental sequence, when a child who is involved in constructive play incorporates some functional play skills. Progressively, constructive play action can be integrated into dramatic play as children transform the materials imaginatively into make-believe characters. This play could progress to an even higher level, when more children (players) are involved, to become what is known as sociodramatic play (Johnson et al., 2005).

Of particular interest in the CPC, with its use of open-ended materials and presence of peers, is the so-called social constructive play state. The literature usually treats this state as a general undifferentiated state of play. However, it may be possible to find levels of social constructive play. Older children, especially, may be expected to show higher levels of social play, including cooperative and collaborative play, and higher levels of constructive play, even complex and creative constructive play. Furthermore, children may introduce story dramatization or other fantasy making into their social constructive play, which may reach a certain pitch that suggests play quality or play development.

Children at the CPC range in age from 6 to 8 years, which is considered late early childhood. The significance of age is that children attend a primary school. Some children at this age unfortunately face a reduction of play opportunities and an increase in academic pressure, which leads to a negative impact on the quality of play for the specific age group. Some schools incorporate play in the educational setting and believe that play is a pathway to learning, but some schools do not.

The literature shows that school-age children manifest advanced skills and can be expected to achieve more mastery across domains. The use of objects in their play is more elaborate and detailed. As children get older, their use of exploratory and playful objects becomes more systematic, orderly, and planned (Power, 2000). The more knowledge children gain about the world around them, the more detailed their play with an object will become.

Symbolic play also becomes richer, with more elaborate plots and scripts. Children at this age usually use higher levels of meta-communication in play episodes (see Johnson et al., 2005; Johnson, in press).

2.2 Children's Capacity to Invent and Imagine Using Open-Ended Materials

Even the classical Greek philosophers recognized play as the expression of the natural spirit of childhood. Play offers an invitation to the endless possibilities inherent in things around us, and it is usually associated with curiosity, exploration, transformation, and a relationship with things and others. One of the characteristics of play, as explained by Kernan (2007), is that “play enables children to transform reality into symbolic representations of the world, to experiment with the meanings, and to try out different things” (p. 9).

Playing with reusable and open-ended materials brings the old-fashioned play back on track. It is believed to foster creativity with its components, such as playfulness, humor, curiosity, and originality (Spiegel, 2008). Experts highlight the importance of playing with open-ended materials. Almon (2003) points out that when children play with open-ended materials they attempt to solve problems; thus, play encourages creative and divergent thinking. Children take risks and develop confidence when using open-ended materials; there is no right or wrong way to use the materials. The freedom to be in control of the situation can help children achieve a sense of competency and self-worth as they create something new.

Such play encourages creativity and creative expression, and it sparks children's imaginations (Ackermann, Gauntlett, & Weckstrom, 2009). Constructive play and pretend play are forms of creativity, according to many authors (Johnson, Sevimli-Celik, & Al-Mansour, 2013; Russ, 1993; Russ, Robbins, & Christiano, 1999; Singer & Singer, 1990). An interesting study shows that using transformational operations appears to be linked to creative thought; children in their pretend play perform transformational operations on their roles, objects, and themes (Mellou, 1995).

A research study aimed at examining creativity in children's play and their performance using play materials demonstrated that most of the children were not able to show creative expression with different kinds of play materials in their play. In the first study, the results showed that children highly preferred to use toys as play materials. In the second study, it was found that most of the children were not able to use real objects creatively as play materials. It is

hypothesized that children's play was expected to be creative, but the results showed that children need to spend more quality time with free play, and the preschool teachers have to encourage their students to play freely with different unstructured materials and tools and encourage play in different areas and situations (Celebi-Oncu & Unluer, 2010).

Children are born with creative potential; they use their imaginations to observe the world. A study by Berinstein and Magalhaes (2009), which aimed to understand the essence of play experience for children in Zanzibar (the poorest country in the world), found that the play experience in Zanzibar has aspects of creativity and resourcefulness with simple play materials. Children's interactions with the environment around them enable them to generate a range of creative behaviors that may serve their specific needs (Pellegrini, Dupuis, & Smith, 2006).

The literature shows that children have a great creative potential (Abdel, 2008; Runco, 2003, 2004, 2006), and creativity is found in every child, not just the gifted or highly intelligent (Runco, 2003). In Runco (2006), the definition of children's creativity is behavior that is spontaneous, original, and self-expressive.

Children need support and guidance in their creative processes and products to find their muse. Many experts stressed that teachers play significant roles in influencing children's creativity. Creativity in children can be manifested in their powerful imaginations and inventive play. Abdel (2008) also stressed that adults' feedback, including teachers' feedback, is a very influential factor in fostering children's creativity. Kyung-Hwa (2005) stated that if children fear new thinking and lack motivation, creative thinking might not be generated. Moreover, managing children's creativity in the current classroom climate is one of the most common problems that teachers and children face. There is a fear that the pressure of doing things while having to follow too many rules may kill creativity in young children.

What do we know about how to teach creativity? The possibility of teaching creative thinking and creative problem solving was best represented by Jerome Bruner. He emphasized that children should be encouraged to "treat a task as a problem for which one invents an answer, rather than finding one out there in a book or on a blackboard" (Bruner, 1965, pp. 1013–1014). The literature shows that a semistructured approach is recommended, which can give the learner the freedom to explore and create, while this creation will be facilitated by having guidelines provided. A semistructured environment is the most productive learning culture that leads to

resourceful outcomes (Abdel, 2008). Smith (1998) identified 172 instructional approaches that have been applied at one time or another to develop divergent thinking skills.

Tools of the Mind, a curriculum developed by Bodrova and Leong (2001), is a great example to improve three core executive function skills: working memory, inhibition, and cognitive flexibility. Preschool classrooms using Tools of the Mind are filled with activities designed to build executive function skills. A study led by researcher Adele Diamond found that the children in the Tools of the Mind program performed significantly better on executive function skills than children in the literacy curriculum. Those two curricula were the same in terms of content; however, they were different in that teachers using Tools of the Mind spent 80% of the time reminding children to think of multiple and alternative ways to solve a problem (Diamond, Barnett, Thomas, & Munro, 2007).

2.3 Open-Ended Materials and Materiality

The literature on materialism is quite broad. It would be enough to serve this paper to clarify what *materiality* means in relation to the CPC. Materiality is defined in the Oxford English Dictionary as: “the quality of being composed of matter; material existence; solidity; material or physical aspect or character.” According to Løkken and Moser (2012), the concept of materiality can be explained as the physical qualities of artifacts and elements of nature as they relate to the nonsymbolic meaning in human experience and action (Dante, 2005). Certainly, materiality with potential social interaction can involve everything, including the human body (Fahlander, 2008), which is relevant to this research project. Fahlander refers to the body as a social materiality that has great effect on the outcome of social practice. Above all, the social dimension of materials (material culture) has been considered for the purpose of the CPC (see Latour 1991, 1999, 2005).

Material culture, in the more recent perspective of the social study of materiality, is described as objects manipulated by humans (Fahlander, 2008). Even past studies showed an increased interest in the social dimension of materiality (see Latour 1991, 1999, 2005). Gibson pointed out that material culture “contains” culture that can be “read off” through contextual analysis (Gibson, 2006, p. 172). Archeologists generally agree that material culture is active because it is “meaningfully constituted” and carries meaning and symbolism (Hodder, 1982,

p. 75; 1992, p. 15). From semiotic perspectives, objects and artifacts serve as signs and can convey a great deal of information (Berger, 2004).

When it comes to materials, it is the social potential of materials that matters within the human mind (Fahlander, 2008; Latour, 1999). Latour (1991) argued on the importance of including the social interaction to better understand objects (what Latour called *actants*). Latour (1991) said, “In order to understand domination (power relations) we have to turn away from an exclusive concern with social relations and weave them into a fabric that includes non-human actants, actants that offer the possibility of holding society together as a durable whole” (p. 103). DeMarrais, Gosden, and Renfrew (2004) provided a similar explanation to what materiality studies would focus on, saying that they “concern not only the study of the characteristics of objects, but also the more general notion that humans engage with the things of the world as conscious agents and are themselves shaped by those experiences” (p. 2).

The CPC used reusable, recyclable, or junk materials. Traditionally, these materials are open-ended. That is, they are the materials that typically would have been thrown in the rubbish bin if their potential for reuse had not been spotted through active source sorting (MacRae, 2008, 2011). The term *open-ended material* covers any materials that are rich, are interesting, have many possible outcomes, present no one right answer or one right way to use them, and can be enjoyed by anyone. Those materials can be found in the recycling box (e.g., tubes, straws, lids, empty bottles, yarn), collections of resource materials that might be found in nature (e.g., sticks, twigs, rocks, logs), or basic art tools that can be bought. These materials can include paper goods of all kinds; writing and drawing implements; materials for constructions and collages, such as buttons, stones, shells, beads, and seeds; and sculpting materials such as playdough, clay, and shaving cream.

All such open-ended materials that were used at the CPC, including the body (human interaction), do not suggest a message about what they are intended for or what their utilization potential is. They inspire the open exploration and play without a specific purpose, in the same manner as natural materials or more open and flexible materials do, such as building bricks or clay (Odegard, 2012, pp. 389–391). The diversity and complexity of those materials open up their use in various forms of play, thereby providing infinite play experiences that are not found using predefined materials.

Simultaneously, children are not told what materials to interact with or how to interact with them at the CPC. For this reason, materiality has open-ended features, including the interactions between child and materials; child and child; child, child, and materials; and child, adult, and materials, and so forth. The social interaction between or among players was usefully delineated by Fullerton, Swain, and Hoffman (2004). Fullerton et al. defined seven different player interaction patterns (single player vs. game, multiple players vs. game, cooperative play, player vs. player, unilateral competition, multilateral competition, and team competition). That scheme influenced this dissertation. However, that model focused on games and competition, which is different from the model used for the purposes of this study. My interests lie more in cooperation and creation behaviors, including interactions of children with an adult.

The CPC provides opportunities not only for play but also for social interactions by facilitating and encouraging the different types of social interaction patterns. Although the CPC had no restrictions on what types of interactions should occur, as Figure 2.1 shows, social interactions at the CPC consisted of eight different types of interactions. Those include child alone (C), child/child (C/C), child/adult (C/A), child/material (C/M), child/child/materials (C's/M's), material alone (M), child/child/material (C's/M), and child/material/adult (C/M/A). This was used for analytical and interpretation purposes, as explained in Chapters 4 and 5.

Materials themselves do not have power without human interactions. Those materials are considered treasures in the child's hands. Otherwise, they would be considered rubbish with no value. Human interaction with the materials and the environment is what activates the power of materials. Generally, intangible materials (e.g., talk, socialization, imagination) are needed to manipulate the tangible materials (e.g., boxes, lids, bottles, sticks), and that is the uniqueness of the CPC.

2.4 Theoretical Frameworks for Children's Understanding of Materials

Analyzing different social contexts requires effective methods. For the purposes of this project, the next section of this literature review focuses on the following theories and methods. First, a discussion of the activity setting model—a branch of the sociocultural perspectives—provides, in a broad sense, a good picture of the child in context, as part of a peer culture, rather than just focusing on the individual child. Second, the affordance theory of materials is reviewed to better understand the effect of materials on children's lives. The affordance theory model is

introduced as a frame of reference for this project because this theory stresses different modes of expression.

Third, the multimodality and meaning-making framework is reviewed. This project builds on the approach that views the child's environment and open-ended materials as texts, and investigates the meaningful potential of these texts through the social semiotic perspective. These theories are intertwined (see Figure 2.2), and the discussion will provide an understanding of children's interactions with the world around them, meaning making, and the changes children go through as they interact with those materials.

2.4.1 Activity Setting Model From the Sociocultural Perspective

Many cross-cultural research scholars exploring children's play highlight the importance of culture-specific activities in structuring the environment in which children's social interactions and play activities take place (see Farver, 1999; Göncü, Tuermer, Jain, & Johnson, 1999). My research at the CPC was designed at a natural setting of a children's school, with the children in the CPC

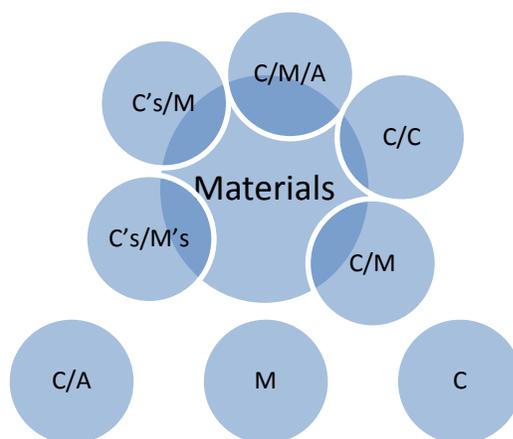


Figure 2.1 Types of interactions at the CPC

incidentally coming from nine different backgrounds. Having participants coming from different racial and ethnic backgrounds shaped the club setting and created what those authors called peer culture. Having the children from different racial and ethnic backgrounds makes for a particularly diversified peer culture.

To be a member of a particular culture would have a psychological meaning. However, being a member of a particular culture growing up in a particular community would also contribute to the individual, which would lead to different psychological meaning (Gauvain, 1995). The cultural diversity of the CPC brought a fruitful structure, along with a unique meaning to that activity setting. Dunst et al. (2001) defined an activity setting as a "situation-specific experience, opportunity, or event that involves a child's interaction with people, the

physical environment, or both, that provides a context for a child to learn about his or her own abilities and capabilities as well as the propensities and proclivities of others” (p. 70).

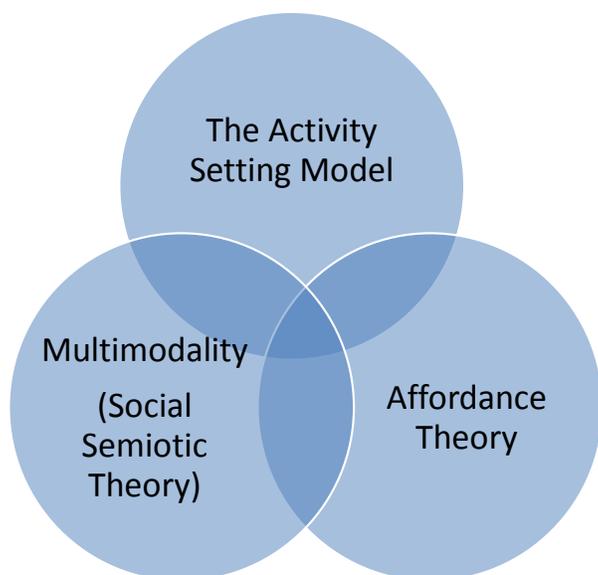


Figure 2.2 Intertwined theories that give a deep understanding of children’s play and interaction with the surroundings

Goldenberg (1993), “Children’s activity settings are the architecture of their everyday life and the context of their development” (p. 315). It is a useful tool for understanding the peer culture brought to the specific setting that was influenced by each individual’s relevant skills and behavior. This model is derived from several viewpoints, including Vygotsky’s (1978) model of socially mediated cognition, the activity theory by Leont’ev (1981), the Whittings’ behavior setting concept (Whiting, 1988), and ecological–cultural models (Super & Harkness, 1986).

To aid educators in understanding an activity setting and its consequences, the activity setting model suggests five components to be considered in analyzing an activity setting: personnel; the nature of activities or tasks; the purpose; the scripts or routines; and the goals and beliefs underlying the activities. For an illustration of the use of the activity setting model, see Farver (1999; as cited in Göncü, 1999; Göncü & Gauvain, 2012).

Understanding peer culture and children’s interactions in play was necessary to understand the nature of children’s play and play behavior exhibited at the CPC. This understanding is a growing area of investigation from a sociological perspective. The participants in this study were coming from nine different backgrounds, which made it hard to know what to expect. However, Corsaro’s (1985, 1997, 2005) work on peer culture has rarely

The activity setting model that was proposed by some scholars (e.g., Farver, 1999; Weisner, Gallimore, & Jordan, 1988) was also proposed in my research as a means of understanding how children’s play behavior is mediated through their routines. According to Farver, this model is a basic unit of analysis in the sociocultural perspective.

According to Gallimore and

considered the influence of children's cultural backgrounds or racial and ethnic identities (Van Ausdale & Feagin, 2001).

In this study, I adopted Corsaro's definition of peer culture. Corsaro (1997) defined peer culture as "a stable set of activities or routines, artifacts, values, and concerns that children produce and share in interaction with peers" (p. 95). He also identified the central themes of children's peer culture. He argued, "Children make persistent attempts to gain control of their lives and to share that control with each other" (Corsaro & Eder, 1990, p. 202). Children share routines and rituals within their group by "doing things together" (Corsaro, 1997, p. 123). Simultaneously, children face conflicts and compete with each other. This can be a positive thing, as conflict among peers strengthens peer culture through a negotiation process (Corsaro, 1997, 2014).

Traditionally, culture is viewed as "internalized shared values and norms that guide behavior" (Corsaro, 2014, p. 121). Corsaro encouraged researchers to stay away from that view and claimed that "kids are deserving of study as kids" and that "children's culture is not something kids carry around in their heads to guide their behavior" (p. 122). Peer culture is formative, collective, and public (Corsaro, 2014; Goffman, 1974). In peer culture, children tend to keep to their interactive space, where they "keep sharing what they are already sharing and see others as a threat to the community they have established" (Corsaro, 1997, p. 124). According to Corsaro, the protection of interactive space is related to how children recognize social differentiation and similarities, and how they understand themselves through this process. At the same time, recognition of social differentiation and similarities is also explicitly or implicitly influenced by adults' values and dominant societal norms.

Peer culture helps children identify themselves as a social group (e.g., leaders, followers). Some of these social relations are horizontal while others are vertical (Johnson et al., 2005). The horizontal peer relations are produced by children of equal status and are characterized by solidarity and trust. Vertical peer relations, on the other hand, are shaped according to a status hierarchy (i.e., dominant children, subordinated children; see Johnson et al., p. 72).

2.4.2 The Affordances of Materials

Children manipulate the things in their environment to prop up their play. Magazines, cereal boxes, milk containers, egg boxes, and many more things that we adults tend to view as

items that need to go to the recycling bin are viewed as treasure in a child's hands (Drew, 2007). These materials allow children to stack, build, create, sculpt, sort, manipulate, imagine, and do endless other things. According to Kytta (2003), children's affordance preferences for things in the environment influence their play and their selection of what props up their play.

The word *affordance* was invented by the perceptual psychologist J. J. Gibson (1977, 1979) to refer to the actionable properties between the world and an actor (a person or animal). To Gibson, affordances are relationships. They exist naturally; they do not have to be visible, known, or desirable (Gibson, 1979). Gibson defines affordances as all "action possibilities" suppressed in an environment, where the potential uses of a given object arise from its perceived properties, always in relation to the actor's capabilities and interests. The concept of affordance is often linked to play value, playability, and the importance of open-ended materials (Kernan, 2007). Rather than being regarded as objects with definite known qualities, objects or materials are studied as dynamic elements in a continuous flow of activity (Costall & Dreier, 2006). This term has been used by many researchers from an ecological perspective to seek an understanding of children's everyday life. Affordance theory has also been increasingly used within early childhood care and education research to describe the relationship between children and their environment (Kernan, 2007).

Children perceive things differently than adults do, and they use materials and objects to facilitate and prop up their play. They transform their world through their active engagement, flexible thoughts, and creative control (Bergen, 2008). Every material in the environment provides affordance that brings forth action. According to the literature, objects and materials are not fixed and independent of human beings; the objects themselves are transformed. Nor can they be understood as fixed things with fixed categories. Things are never entirely resolved once and for all (Costall & Dreier, 2006). So the affordance theory creates a good framework in which educators can better understand objects and materials.

Norman (1988), in contrast, focused on the physical objects of the everyday environment in relation to the design of that environment and the social and material aspects of it. He viewed affordance as a possible key to answering the questions he was working on while writing his book, *The Psychology of Everyday Things*. He was interested in finding out how we manage in a world populated by thousands of objects, most of which we meet maybe only once in our lifetime. He wondered how, when we encounter an artifact that we have never seen, we know

what it does and what we can do with it. Norman was trying to answer these questions by focusing on his own model of action, and he saw affordance as a concept of human–artifact interaction.

Carr (2000) shed light on the transparency, challenge, and accessibility of the materials and processes made available to children. Antle (2009) said that affordances come from embodied cognition, and they have always been considered in a context with the relationship between humans and objects. This perspective aligns with Miller’s (2005) argument that much of what we are exists not through our consciousness or body but as an exterior environment that habituates and prompts us. When children mess about with materials and manipulate the environment around them—ordering things and arranging what comes first and last, and what goes where—they can produce a possibility of things by their temporal arrangement and sequence, which Oliver (2005) described as affordance.

In recent literature, Kress (2010) had modified the term *modal affordance*, which has a strong link to multimodality. It refers to the potentialities and constraints of different modes that are subject to constant social experience. Kress pointed out that affordance is beyond being a matter of perception. Instead, it refers to the meaning that is made with particular semiotic resources used in socially, historically, materially, and culturally developed ways.

2.4.3 Multimodality and Meaning Making

The literature on multimodality is expanding, and discussions of play can be sidetracked by the work of semioticians who are difficult to understand and highly technical. This section focuses on children’s social participation and active engagement in meaning making through their play with open-ended materials and with one another. When playing, children face many naturally occurring restrictions, such as limited space given for play or limited time. However, children follow their own interests as they choose what they want to represent using available social resources. Children tend to work with the values and status that these resources and signs (i.e., the means by which people interpret and express meaning; Saussure, 1966)¹ hold in that setting (Prinsloo, 2008).

¹ Signs provide a material way of understanding how people exchange meaning irrespective of the means by which they do it. These might be the lines of drawing, the sounds of speech or the movements of gesture, and so on.

To children, anything at hand is suitable as a sign-making and meaning-making resource—whether it is a stick that readily becomes a horse (Vygotsky, 1978) or the eclectic materials the children in the CPC use to build a city and tell a story. Many scholars with diverse theoretical viewpoints agree that objects shape children’s play (see Garvey, 1977; Vygotsky, 1978). The question here is: how is meaning generated through play with open-ended materials? Children make meaning in a multiplicity of ways using a multiplicity of modes,² means, and materials for self-expression that are not being recognized (Kress, 1997, p. 97).

I introduced multimodal theory as a frame of reference for my research project because that theory stresses the affordances given by different modes of expression. In addition, multimodality concentrates on individuals’ process of meaning making, in which they choose from a complex of alternatives and select one modal resource over another to make meaning (Halliday, 1978).

According to Bannon and Bødker (1991), human experiences are shaped by this system of signs, by tools, and by the belief that the human mind is a result of the everyday practice and processes of meaning making. Discussions about multimodality or the semiotic approach are always associated with literacy. Although literacy is not the topic of this research, multimodality provides a comprehensive approach to analyze children’s engagement in sign making to better understand meaning making as they move across the modes.

Kress describes multimodality as “an absolute fact of children’s semiotic practice” (Kress, 1997, p. 137). Social semiotics is defined as “a system of meanings that constitute the reality of the culture” (Halliday, 1978, p. 123). Halliday also offers an account of the nature of language use and text construction as taking in the relationship between language and culture. According to Halliday, social semiotics is defined as “interpreting language within a socio-cultural context, in which culture itself is interpreted in semiotic terms—as an information system” (p. 2).

² Mode refers to a set of socially and culturally shaped resources for making meaning. Mode classifies a “channel” of representation or communication for which previously no overarching name had been proposed (Kress & van Leeuwen, 2001). Examples of modes include writing and drawn images on the page; moving images and sounds on the screen; and speech, gesture, gaze, and posture in embodied interaction.

Jewitt and Kress (2003) suggest that a multimodal approach to learning starts from a theoretical position that treats all modes as equally significant for meaning and communication. Multimodality looks beyond language and examines these multiple modes of communication and meaning making (Kress, 2010). Another explanation of modes was presented by Halliday's (1978) classification of meaning and multimodality, and how these meanings are realized in all modes. He suggested three different types of meaning: ideational meaning, in which every sign tells us something about the world; interpersonal meaning, which positions us in relation to something or someone; and textual meaning, which produces a structured text.

Jewitt and Kress (2003) state: "Within a multimodal approach to communication, an assumption is that any mode may become foregrounded; that different modes have potentials that make them better for certain tasks than others; and that not every mode will be equally 'useable' for a particular task" (pp. 2–3). Kress (1997) has shared his study of his own young children's journeys into meaning making. He observed and recorded episodes of his children engaged in multimodal representations, using found materials, household furniture, and objects combined with toys to make worlds in which to act out involved narratives in play episodes, along with using mark-making media such as felt-tip pens and paint to draw elaborate versions of their understanding of the world around them. He calls their representations "the energetic, interested, intentional action of children in their effects on their world" (p. 114). He also underlines the dynamic interrelation between what resources are accessible to children for making representations and the child's "shifting interest" and ability to move creatively from one mode to another. Kress (1997) stated:

It is essential that . . . children are encouraged . . . in their fundamental disposition towards multi-modal forms of text and meaning making . . . Above all there will need to be particular emphasis on developing their awareness about the dynamic interaction between the various modes, and their awareness that all modes are constantly changing in their interaction with other modes; and through the sign-maker's use. (p. 154)

He argues that "children act multi-modally, both in the things they use, the objects they make, and in the engagement of their bodies; there is no separation of body and mind" (Kress, 1997, p. 97). His insightful analysis of the observations of his children at play allows us to

marvel at young children's flexibility of thinking and their ability to flip from one mode of representation to another (Anning & Ring, 2004).

Dyson (1993) is another researcher who focuses on representation and meaning making. She argues that making symbols is "the essence of being human" and that drawing, used as a two-dimensional material at the CPC, is one way for humans to express themselves. Through her model, she highlights the importance of the interrelationship between play, drawing, writing, and gesture for young children. Play provides opportunities for children to draw on texts, images, movement, and semiotically imbued artifacts from their multiple social worlds of home, school, and peer interaction to go through their own meaning-making process (Dyson, 1993; Prinsloo, 2008). Kress added that children make their meanings by drawing from available resources "governed by their interest at the moment of making the sign" (Kress, 2003, p. 155).

Much current research is focused on the multimodality approach to investigate the levels and frequency of symbolism in young children's block play (Kohn & Uhry, 2010). Kohn and Uhry adapted the multimodal social semiotic theory to broaden the view of literacy and play. Their research considered literacy as a broad interaction with symbols and representation, which includes, but is not limited to, dancing, singing, painting, play artifacts, dress-up clothes, sculpting, construction materials, and natural objects (Dyson, 2002; Whitehead, 2004). Kohn and Uhry combined qualitative and quantitative data to observe and analyze 77 block structures. Their observation of frequency of symbolism consists of three levels: presymbolism, first level of symbolism, and second level of symbolism. Results indicated significant differences for first-level symbolism or real objects. Children were able to multimodally encode a computer game played at home to their block play in school.

Open-ended materials (texts) are multimodal when they consist of more than one mode of meaning. Children at the CPC share a notion of values, and explore and exercise with each other the meaning-making resources in an environment that permits freedom of choice, creativity, fantasy, experimentation, and problem solving. Multimodalities take place as a combination of material forms and ways of organization created within a culture.

2.5 An Overview of Some Limitations Within the Literature Review

The literature of multimodality that concerns children's object play and creative play is very limited. The focus is mostly on topics that are related to new media and technologies. It

should be noted, though, that the major theories of multimodality have emerged during a period of rapid technological change in the past 20 years. Although the body of literature that directly relates to multimodality and child play with objects is small, by broadening my search, I have established a valuable theoretical foundation that has supported and informed the research within my dissertation.

An additional limitation within the literature review is that it did not focus on what might be appropriate modes of representation within different cultural contexts or communities of practice, such as home and school. Another significant limitation within the literature concerns the lack of attention to how multimodality affects adults (i.e., teachers, parents, decision makers, caregivers) who are dealing with children. The literature tends to focus instead on the representational possibilities of multimodality without considering the implications.

Chapter 3

Methodology

The study described in this thesis is based on case study research. The use of case study research has a long history across many disciplines. According to Creswell (2007), case study research involves the study of an issue explored through one or more cases within a bounded system (i.e., a setting or a context). Case study research is a qualitative approach in which the researcher explores a bounded system (a case) or multiple bounded systems (cases) over a period of time. The exploration can be conducted through in-depth data collection with multiple sources of information (i.e., observation, documentation, and reporting). In this current research, I selected the Creative Play Club (CPC), a case within a bounded system, to be the case study, which took place over a period of 8 weeks. The current research represents an intrinsic case study of the CPC as an after-school program in which the focus is on the case itself. It involves 13 children from different backgrounds within a particular local school.

3.1 Piloting Data Collection

The initial ambition of the study was based on a descriptive observation of a multi-age group to generate data focusing on the integration of creative play with open-ended materials into the children's routine at the CPC back in the spring of 2012. Ethnographic methods were used to generate understanding and share meaning and to inform theories of human behaviors (Hughes, 2001).

The children were observed using multiple methods: written field notes, children's sketching, photographs, and video recording, which will be described later in this chapter. The data were eventually evaluated by the researcher (myself), who was present during the sessions. I asked questions and talked with the children regarding their interactions with materials and others as needed.

3.2 Current Research

Children were the main focus of the pilot study I conducted in spring 2012 at the CPC. Observations made during the pilot phase raised more questions and helped focus the research. The processes to be illustrated from the pilot study were rather complex. To make them comprehensible within the scope of the research in winter 2014, the CPC was presented as a

unique case study to be examined. That would allow me to gain a deeper understanding of the processes of change in children's play—for example, whether change can be seen across play sessions—and explore a child's meaning making as he or she plays and interacts with open-ended materials and other children. It is assumed that the case of the CPC can reveal different findings if it is conducted somewhere else with different participants.

The findings from the spring 2012 pilot study served as the foundation for this current study by focusing mainly on how children play creatively with open-ended materials within the CPC. The club, however, had another purpose, which was providing children the opportunity to play freely after an exhausting school day.

3.3 Subjectivity

In this case, the interpretation of the situations and the play scenes at the CPC could not be free from biases or subjectivity. My strong beliefs about and valuing of children's play is something I cannot hide. As Peshkin (1988) noted, "Whatever the substance of one's persuasions at a given point, one's subjectivity is like a garment that cannot be removed. It is insistently present in both the research and nonresearch aspects of our life" (p. 17). I worried that an unawareness of my subjectivity could negatively influence my research.

I have been going to conferences about play, coauthored chapters about play, and conducted several research projects concerning play over the past 5 years (see Appendix B for my personal narrative and the changes I went through personally and professionally). When I stepped into children's play experiences at the CPC, I brought with me my previous experiences, preconceptions, and preexisting attitudes in regard to play with open-ended materials.

Being a participant observer who is fully engaged in this research project and at the same time being a researcher who has a strong belief about children's play, I had to be conscious of my subjectivity. It is something I could not ignore completely; instead, I paid attention to it and tried to "monitor myself to sense how I was feeling" (Peshkin, 1988, p. 18). As I was generating data, I isolated what I observed from what I felt (my personal view on the situation). I systematically monitored my own subjectivity. I had to be sure to seek out my subjectivity not only during data generation and analysis, but also while my research was actively in progress. By doing so I attended to my research to shape what I saw and what I made of what I saw (Peshkin, p. 21). The benefits of my being involved outweighed potential problems, and because of that it

allowed me to convey and uncover hidden meanings that might not be immediately visible to others.

3.4 Participants

Thirteen young children³ ages 6, 7, and 8 years were involved in the pilot study. All attended the extended day program at the same local charter school, and all of the children's parents agreed to let them join the CPC. Table 3.1 provides a summary of the participants' backgrounds, along with some striking facts about them to give a perspective of who the study participants were. All children were in the appropriate grade level for their age.

3.5 Informed Consent in Research With Children and Ethical Considerations for Conducting the Research

The first step in conducting my research was seeking ethical approval from the Institutional Review Board (IRB). Once the approval was obtained, I spoke with the school principle, and he directed me to the after-school program to learn all the procedures and steps I needed to take to proceed with my club at their school. Because this study involved my weekly attendance at the CPC to observe the children playing, and I would be using multiple methods to generate data, such as sketching, photographs, video recording, and written field notes, an informed consent was sought from the children's families (see Appendix E). A consent package, along with a brochure for the CPC, was sent to the children's parents or guardians. The consent provided clear information to the families, including the following: the purpose of the study, procedures to be followed, and assurance of confidentiality (e.g., pseudonyms would be used instead of children's real names to protect the children's identity). The consent package also explained the participants' right to choose not to participate or to withdraw at any time. The director of the program helped a lot by contacting families and distributing the brochures and informed consent forms to all parents of children who were planning to attend the CPC. (This is one of her missions to do for all clubs.) I also spent time during the drop-off and pick-up times,

³ The names of the participants in this paper have been changed for confidentiality purposes.

which allowed me to introduce myself to the parents of the children and allowed them to become familiar with me and ask questions or raise concerns about the research.

3.6 Setting

The CPC is set at a local kindergarten through Grade 8 charter school in Central Pennsylvania. There is no preschool in the building. The school's mission and values have an international and multicultural focus, offering programs in English as a second language to help nonnative English students transition into the United States. They also help native English speakers (and any other student who had mastered the English language) adapt to another language. Currently, the school teaches Spanish, Chinese, and Turkish. In accordance with its vision, the school believes in "supporting multicultural events in school." This is seen throughout the school year, with school events such as Turkish Night, Chinese New Year, A Touch of Culture, and others. The school has also created an affiliation with a "Sister School" in China.

The school offers a rigorous academic curriculum as well as an extended day program from 3:50 p.m. to 5:15 p.m. The extended day program has more than 30 different programs, such as foreign languages, sports clubs, art and dance clubs, cultural clubs, and more, and "keeps students active and engaged until 5:15 p.m. daily."

3.7 Procedure

In the CPC, children engaged in activities and play opportunities planned by children as they got the opportunity to play and interact with open-ended materials provided by the researcher. In the case study, the focus was on open-ended materials as a type of play object that can be offered to children to play with alone or with a group of their peers. There was no restriction on how children should play, and no activities were preplanned by the researcher. The CPC as a part of the after-school program took place on Mondays from 3:30 to 5:30 p.m. for 15 sessions (the program at that time was funded and used to be 2 hours in length; the time has since been reduced). Only eight sessions were analyzed from weeks 2 through 9.

In each session, the first thing to do was to clear the classroom of furniture by pushing pieces against the wall to make room for everybody to move freely. Then children were asked to find a comfortable spot on the floor and start sketching their ideas and plan their play for about 10 minutes. After that, the children got to choose any of the materials that were spread attractively in categories on the floor (see Appendix D, Table D-2). Each category of materials

Table 3.1 A Summary of the Participants' Backgrounds

Pseudo- nym	Partici- pants' Initials	Grade Level	Gender	Ethnicity	Facts
Edna	ED	1st grade	Girl	Indian American	Edna is half Indian and half American. She is being raised with a heavy influence of her mother's background as Indian. She is the only child from the same mother and father, but she has half brothers and sisters from previous marriages from both sides. She likes to ask questions.
Rebecca	RQ	K	Girl	Mexico	Rebecca is the only child of an immigrant family that moved to the United States before she was born. She has a strong personality. She can be stubborn.
Piper	PO	K	Girl	China	Piper is originally from China. She was adopted by an American family when she was younger (by the age of 4 or 5, not sure when). On many occasions she talked about her life in China and said that she will visit China one day. She still carries some memory of her being there. Her English is not fully developed. She has a hard time adapting to a new situation, but once she gets familiar, she is more comfortable.
Ellen	EL	K	Girl	Taiwan	Ellen is bilingual, born in Taiwan and raised in the U.S. Her English is developing. Ellen's and Amanda's families are friends.
Amanda	AM	K	Girl	Taiwan	Amanda is bilingual, born in Taiwan and raised in the U.S. Her English is developing. Amanda's and Ellen's families are friends.
Alana	AL	1st grade	Girl	U.S.-White	Alana was born and raised in the same town her parents are from, which is the same town this research took place. She is social, an easy-going child.
Kendra	KE	1st grade	Girl	African American	Kendra resides in this town for the purpose of her mother's education. She is the only child raised by a single mother who is working on her PhD. She loves attention. Kendra and Irene are neighbors.

Irene	IN	1st grade	Girl	Pakistan	Irene resides in this town for the purpose of her mother's education. She is the only child raised by a single mother who is working on her PhD. Irene and Kendra are neighbors.
Rhonda	RO	1st grade	Girl	Saudi Arabia	Rhonda resides in this town for the purpose of her mother's education. She is the youngest of five in her family. She is social with a wide imagination; she loves attention.
Cassie	CA	1st grade	Girl	U.S.-White	Cassie came in as a guest in Session 8 and decided to stay for the remaining sessions of the CPC.
Ryan	RY	K	Boy	U.S.-White	Ryan came to the club as a guest only for one session.
Yadon	YO	K	Boy	Korea	Yadon is bilingual, born in Korea and raised in the U.S. His English is developing. He is shy and quiet and seems to follow somebody else's plan. Yadon's, James's, and Leandro's families are friends.
Yakov	YK	K	Boy	Rwanda	Yakov is the only child of an immigrant family who moved to the U.S. before he was born. He seems to be cautious before attempting to proceed in any new situation. He can be loud and gets excited easily. He is social once he gets familiar with a setting.
James	JE	K	Boy	Korea	James is bilingual, born in Korea and raised in the U.S. His English is developing. James's, Leandro's, and Yadon's families are friends.
Leandro	LE	K	Boy	Korea	LE is bilingual, born in Korea and raised in the U.S. His English is developing. He is goal oriented and likes to plan and play with others. Leandro's, James's, and Yadon's families are friends.

was placed on a piece of cloth to give it definition and also to act like an invitation to children. As the children went around the piles of lids, paper towel tubes, sticks, fabrics, and so forth they tried to find props to support their preplanned ideas. Some children did not complete obvious planning prior to play time, so it took them longer to figure out what they were going to do and how to start playing than those children who planned what they were going to do. Other children

also planned ahead of time but changed their plan as they went around and started exploring and manipulating the materials.

Children's play was documented and collected using multiple methods (sketching, note taking, photographs, and video recording). In this club we avoided saying "clean up" when it was cleanup time because, to some children, that means that play is over. Consequently, after an hour of play time, the children were asked to sort, categorize, collect, and put away the materials, which in itself is a fun activity. This aspect of the play time pertains to the topic at hand, such as how play with open-ended materials changes, or the ways that a child can be transformed by opportunities to play over an extended period of time.

Children were going through the same routine each session and were asked to reflect on their play during the slideshow at the end of each session. Moreover, children were engaged in an informal discussion and conversation with me, as the researcher and group leader, to discuss what happened and what they had discovered. This friendly conversation helps develop a better understanding of what has been observed.

The CPC agenda is summarized as follows:

1. Preparation: pushing all chairs and tables against the wall and spreading the materials on the floor) (5 minutes)
2. Sketching task: preplanning (15 minutes)
3. Hands-on experience: free play with no restriction on the types of interactions, either with children, materials, or adults in the room (60 minutes)
4. Putting all the materials back in their categories (during this time I download all the pictures and get them ready for the slideshow) (3–5 minutes)
5. Slideshow, reflection, and briefing (15 minutes)

Total time = 100 minutes

For the purposes of this study, I analyzed eight sessions out of 15 sessions. I initially planned to collect the data over eight sessions. I discussed this plan with the extended day program director at the school and she suggested that I lead the club for the entire 15 sessions of the program, collect the data that I needed for the research, and interact with the club for the rest of the semester as a leader, not a researcher. It would be hard to lead a club at this program and stop in the middle, so the transition worked smoothly.

The first session was an introduction to the routine and roles of the club; then data were generated genuinely and consecutively from session 2 to session 9. Children needed that first session to be habituated to the activity setting and nature of the club and the way of documentation (i.e., my being present with the notebook, snapping pictures here and there, and video recording). I also needed that session to pilot test my position in the room as a participant observer. For sessions 10 through 15, I was present only as a leader of and adult player in the club. The routine remained the same to some degree and was later modified to meet some changes that occurred; children's play was photographed and immediately downloaded to my laptop because it was part of the club routine (in some sessions I was not able to take pictures at all). However, I stopped generating data from a researcher's perspective during that time (see Table D-4).

This study used observation procedure, which was determined by a qualitative methodology known as naturalistic inquiry (Lincoln & Guba, 1985). Observation was conducted in the natural environment of the charter school. This was appropriate for the study of children's interactions with open-ended materials because the familiar and nonthreatening environment helps the children to be more responsive.

3.8 Data Generation

The data collection for this research was based on ethnographic methods. As researcher, I was a participant observer, which gave me access to children's play in a deeper and more precise sense. I was not an ethnographer per se, but I adopted ethnographic methods. However, the approach made me realize that what seems ordinary to me may seem strange to others. This section describes the methods used to collect data for this research.

3.8.1 Participant Observation and the Role of the Researcher

According to Miles and Huberman (1994), it is very important for the readers to know their conversational partner. Therefore, before I proceed in this section, I will provide some information about my background. I am a female, native Saudi, who at the time of this case study resided in the United States for educational purposes. My educational background is a bachelor's degree in early childhood education and a master's degree in early childhood special education (see my vita in Appendix G at the end of this thesis).

Being a participant observer is appropriate for data generation with young children. It reduces the effects of the unequal status—the natural authority adults have over children—between the observer (adult) and the observed (children) (Fine & Glassner, 1979; Fine & Sandstrom, 1988).

The club took place at the school, which was a more comfortable setting and more familiar to the children than if it was done somewhere else. The children were comfortable with me being in the room, and most of them became familiar with the data-generating methods in the first session.

Another factor that helped children to be comfortable with me was that I am not a stranger to them. I know most of them, and their parents are my friends. The children are friends of my daughter, who happened to be one of the participants. Having my own child be one of the participants did not seem to bias the research. I did my best to make it clear to my daughter and the rest of the children that we were all there to play. Mrs. Moni (as they called me) would be playing with them, but sometimes she has to write, take pictures, or help someone who needs help. My daughter has been in my play clubs or seen me in her art classes gathering data many times. So she was habituated and never acted as if she was adjusting or was having more privileges than others.

This facilitated my mission in the club and made the data generation much easier. Recording field notes while observing; taking pictures; responding to children's questions; being a player, a facilitator, and mediator; and providing guidance can all occur at the same time. Although children at the club were informed ahead of time about the methods of the study, some of them repeatedly asked questions, such as, What are you writing? Why do you write in your notebook? Are you taking pictures of us? Why? These kinds of distractions were minimal and did not affect the observation process or the play flow.

It was very important that a participant observer would be someone who was there with the children all the time and was trusted. According to Glesne (2006), being there has to do with the manner in which the researcher is able to experience, explore, and to some degree achieve “the status of trusted person” (p. 49). Schulte (2013) explained that in his experience as a researcher, trust exists as an “uncertain ethic” and through “the momentary occasions of ethicality/uncertainty, children and adults are not only invited to participate, but also dared to create difference through this participation” (p. 2). Not only that, “it is through intensity of a

particular moment (i.e., the relations of a moment, the specificity of its given qualities and correspondences), and the purpose with which this *way of being there* is composed, and thus compelled into action, that both children and adults are permitted greater participatory latitude” (p. 3).

I was there within the children’s experience during their play time, physically nearby or distancing myself a bit. I would say that the intensity of the moment was what determined my participation. I was ready to zoom in or out according to the situation. I had moments when I hesitated to participate or be nearby. My participation was not meant to be fixed or predetermined. Instead, I was going with the flow of what the situation required.

Being with children for this long can be a joyful experience. Sometimes, when a participant observer is caught in the process of joy during the research, it makes it hard to switch roles, to become a researcher, observer, or mediator. I had to teach myself some techniques to control the situation. I found that flexibility is the key word. Schulte (2013) stated: “To participate joyfully then is to be involved in such a way that one’s modes of being there are practices through which the world is continuously yet joyfully organized, appropriated, constructed, and set into an unsettled motion” (p. 4).

Many times I felt that I was more of a participant experiencer than a participant observer, when my role in the club went beyond being the researcher or leader of the club. I was the guide and facilitator, a co-learner, a player, and a partner. In other words, I was fully engaged in some of the situations. Being a participant experiencer depends on the nature of the researcher’s role in the setting (Walstrom, 2004a, 2004b). My engagement was unplanned and went with the flow. I was very flexible and attentive to children’s needs and interests at the club. Being inspired by Reggio Emilia had very much to do with these traits that I demonstrated and the role I took as a researcher.

As a participant observer and experiencer, I used multiple methods to generate data: written field notes, children’s sketches, photographs, and video recording. Observations were unstructured so that children’s play behavior was as self-motivated and spontaneous as possible (Farver, 1999). A brief overview of the methods follows, along with a discussion of the challenges and difficulties that emerged.

3.8.2 Field Notes

I recorded field notes, which included a chronological, noninterpretive description of the events, settings, and children; I noted the time and duration of events and recorded comments in regard to the children's reactions, impressions, and feelings toward something, if necessary. Sometimes I kept sketches of the surroundings because it was faster for me to log, or it helped me remember the situation. Furthermore, I recorded whether any difficulties occurred during observations, such as technical issues with cameras, low batteries, a forgotten charger for the laptop, or a blinking light in the room (Lofland & Lofland, 1995; Mellon, 1990; Patton, 1990). Field note taking was a good method to document the nonverbal play behaviors during children's play time at the club. An example of this is in the following excerpt of my recording of Yakov's nonverbal and nonplay behaviors as they occurred:

Yakov was standing by the door; he stood up for about 5 minutes, looking around the room. He looked at the materials on the floor. He picked up a marble. He held it in his hand and rubbed it. Then he put it on the floor. He sat on his knees and leaned toward the marble (bowing position). He started to spin the marble using his thumb and middle finger on the uncarpeted area of the room. Comments: For the entire 1 hour of playing, Yakov was by himself, interacted with one item, mostly silent and quiet. He did not approach children in the room to play with; at the same time, nobody in the room made any effort to invite him to play. So that worried me and attracted my attention! What attracted my attention more was that he did not show any sign of discomfort, so that was a good sign. (Field notes, S2, January 30, 2012; see Table D-5.)

The field notes provided comprehensive, ethnographic documentation of children's play at the CPC. The field notes were later combined with the secondary methods of recording from the video segments and photographs.

3.8.3 Children's Sketching (drawing)

The child's drawing is still directly connected with play and presents the characteristic traits of the object in a graphic form. Drawing several objects at the same time is nothing other than a purely mechanical combination, a purely external uniting. At the second stage, the circle of the objects the child draws is extended

and machines are included in the drawing. The child draws the external form in detail; the combination of separate objects has a more connected, complex character. (Vygotsky, 1998, p. 111)

Robbins (2007) pointed out that drawing is a form of planning and that it can be a sign that thinking is moving to a higher level. It also gives children a sense of ownership of what they are doing. In other words, children are the teachers in this club. They get to lead their own play with open-ended materials. They learn through what Reggio describes as the hundred languages of children, where children proceed in an investigation of generating and testing their hypotheses (Samuelsson, Sheridan, & Williams, 2006). Learning in this case is not academic; it is about children learning skills that they will never gain from working with paper and pencil. They are encouraged to represent their understanding through one of many symbolic languages, including drawing, dramatic play, and manipulation of the reusable and recyclable items.

Drawing gives children the opportunity to express themselves in many different ways. For children with limited vocabulary, especially bilingual children, it is an effective way of communicating with their peers and adults. Drawing is regarded as a universal language; it offers children a valuable release for emotion, which may not be verbalized, and it serves as a means of communication (Sedgwick & Sedgwick, 1993). Using drawing as a means of communication helps the process of making ideas, thoughts, and feelings available to others (Adams, 2006).

Children have many messages to communicate in their various drawing activities. In the CPC their messages were sometimes related to their play activities and sometimes not. Light (1985) stated that drawing acknowledges the social construction of meaning that children seek to convey.

3.8.4 Photography and Video Recording

In the CPC, the children's play activities were photographed and video recorded (Sawyer, 1997), and toward the end of each session (as inspired by Dr. Drew's workshops) the photographs were played back as a slideshow so the children could respond (MacNaughton, 1999). Video recording and photography have a long history in anthropology. This method, which is called visual anthropology or film ethnography, depends on the visual representations of individuals being observed (Marshall, 2006). It is also used to represent the natural event and can

be used as a permanent record. The assorted forms of photography and video can be used for data collection and for organizing, interpreting, and validating qualitative inquiry.

Researchers choose to use these types of methods because of the methods' obvious strengths. Such methods document nonverbal behavior and communication, such as facial expressions, gestures, and emotions. The film can be used in the future to take advantage of new methods of seeing, analyzing, and understanding the process of change. Visual methods can be an aid to the researcher, especially with some elements that are hard to discover with the human eye (Marshall, 2006).

Some of the weaknesses of using videos that Marshall (2006) mentioned in her chapter are that filming can be disturbing to the setting and event. For example, some children came closer to the camera; they wanted to be filmed and were goofing around in front of the camera. On some occasions, children stopped the flow of their play and looked at the camera when they noticed it. Another limitation is that video segments cannot be published in a dissertation, book, or journal.

Video recording at the CPC was a secondary and complementary resource and was mostly used to validate my field notes and also to catch events that I might have missed. I used my personal iPhone 5 video camera and also iMovie on my personal laptop. Both methods had pros and cons. The iPhone 5 camera was somehow better to use because I got to be closer to the event, the voice was clear enough to hear, and the device was both mobile and easy to carry. However, there were some limitations. The clip was shaky and was distracting to some children. I held the phone over my shoulder on most occasions so my voice was higher than children's voices. Although children got used to seeing me going around with the phone's camera being held that way, there were some children who showed curiosity and wanted to know why I was holding the phone that way. I explained to them during the first session that I would be recording.

For the iMovie, I thought it would be easier to use because I wouldn't have to carry it with me. It was stationed in the corner of the classroom where almost the entire class showed magnificently. However, the method was a failure for many reasons. Although it captured the whole setting, it was confusing, and it was hard to tell who said what. The voices of children were interwoven, and the sound was low. The recorded event was occurring in a place where talking, yelling, and sometimes screaming was allowed, so the background noises and parallel

conversations between children made them hard to distinguish. It was hard to recognize and understand children's talk, especially since I was interacting with 13 young children from nine different backgrounds, some of whom spoke English as a second language. The iMovie segments were therefore not good enough to be analyzed or to be included in the study.

To take photographs, I used the camera on my personal iPhone 5 because it was easy to use, provided clear pictures, and was quick to upload to my laptop. It was very important for me to use a device that I am very familiar with, that was uncomplicated, and that was easy to use in order to expedite the process of generating data—considering that I was a solo researcher who used multiple methods and was required to shift quickly according to the events. Some children asked to hold the camera to take some pictures or record some events. They were allowed to do so when they asked.

I came to realize that even if I adopted the most sophisticated set of methods to generate data and process and analyze them, I could not prevent information from being lost (e.g., the sound quality on a lot of the videos was bad and cannot be heard).

Chapter 4

Data Processing and Analysis

Ethnographic research has a characteristic “funnel” structure, being progressively focused over its course. Progressive focusing has two analytically distinct components. First over time the research problem is developed or transformed, and eventually its scope is clarified and delimited and its internal structure explored. In this sense, it is frequently only over the course of the research that one discovers what the research is really “about,” and it is not uncommon for it to turn out to be about something quite remote from the initially foreshadowed problems.

(Hammersley & Atkinson, 1983, p. 175)

To gain a better understanding of children’s play quality, behavior changes, and meaning-making tendencies when playing with open-ended materials, I processed and analyzed the data generated by the study. My aim was to get a general idea about children’s actions in the Creative Play Club (CPC) across sessions, and at times to zoom in to unearth new realizations that would provide a deeper and more precise sense of the club. This case study of the CPC tried to understand children’s play behavior across sessions. The analysis consisted of describing the case and its setting in detail (Creswell, 2007).

Through the various phases of the data processing and analysis, I discovered new findings and wonders along the way. The preliminary findings of the study focused on the ingredients of the creative play and the play quality at the CPC. After completing the data generation phase and going through the first phase of analysis, I needed to make sense of the data generated as a whole. I came to realize that, as LeCompte and Schensul (1999) noted, “Data analysis means figuring out what to do with the mountains of data that ethnographic research projects generate—drawers full of field notes; boxes of interviews and tests; stacks of documents, maps, logs, artifacts, drawings, and charts; photographs; video- and audiotapes; survey data; and other kinds of material” (p. 147). The data for analysis came from 55 pages of field notes, 94 children’s drawings, 1,108 photographs, and 43 minutes of video recording.

Data processing and analysis used techniques of sorting, reducing, coding, and constructing, which led eventually to an accurate and flowing story of the children’s journeys as

they played and performed other social and nonsocial actions with open-ended materials at the CPC. The general process that I used in analyzing the data consisted of three strategies: (a) preparing and organizing the data; (b) reducing the data into themes using a process of codes; and (c) representing the data in figures, tables, and a discussion (Creswell, 2007).

Generally speaking, the initial analysis of each session took about 2–3 hours (not counting the video segment transcriptions), and I returned to each session's data several times to identify codes, think about possible categories and themes, and reflect on issues such as splitting codes or lumping codes and overall trying to make sense of and construct meaning from the voluminous data. As Patton (1980) said, this process can be overwhelming:

The data generated by qualitative methods are voluminous. I have found no way of preparing students for the sheer massive volumes of information with which they will find themselves confronted when data collection has ended. Sitting down to make sense out of pages of interviews and whole files of field notes can be overwhelming. (p. 297)

Through this initial analysis, some common patterns and themes began to emerge, such as curiosity and exploration, relationship and affordance, involvement and interaction, and transformation. Also, key elements of how children use open-ended materials when playing were identified. However, the data set was hard to manage initially. Any similar research I conduct in the future should have in place (in advance, if possible) a more systematic, methodological approach to better manage and organize the data into codes and categories that could then be analyzed for common themes.

At this step, I combined the codes into broader categories or themes, such as (a) the peer culture and the shared meaning-making practices, subdivided into sets for drawing, constructing, socializing, and playing, and represented by the theme of each session; (b) gender comparison; (c) different levels of social interactions and material interaction effects; and (d) enjoyment. Later, I displayed them in the tables for easy interpretation and analysis.

There were two phases of data processing and analysis. Phase one focused on data management and the investigation of the data. Phase two focused on the social and materials interaction and environmental factors that might have affected play quality.

4.1 Phase One—Initial Analysis

The initial analysis focused on the investigation of data. This analysis depended on the order of the CPC's three major routines: (a) the children's sketching and preplanning for their play, which is also considered to be an avenue of expression using two-D materials; (b) the actual play time with the three-dimensional (3-D) materials, which took the longest time compared with the other two routines; and (c) reflection on the photographs of the children's play at the end of each session.

For this research I systematically studied the children's active play and related behaviors at the CPC within each session's 100 minutes of operation for eight consecutive sessions (weeks 2 through 9). First I started with the children's drawings. I organized them by dates and numbered them according to the session number. Second, I covered the children's names and replaced them with initials and used these initials for the rest of the data generated. Third, I tried to make sense of the children's preplanning, building on the multimodality perspective (Kress, 1997, 2003). I used the 2-D as a semiotic resource of expression by searching for (a) a connection between the preplanning with 2-D materials and the actual play with the 3-D materials; (b) an explanation of the children's play behavior for the entire session; and (c) any connection to what sparks group creative play and whether individual preplanning has anything to do with sparking the theme of play in such sessions.

Then I went down to the second major part of the initial analysis to make sense of the information gathered from the first part. This investigation involved examining my field notes, photographs, and video segments. My analysis of the field notes, transcribed selected video segments, and photographs was carried out by manually and visually searching for identifiable codes (i.e., units of analysis), categories, and general themes. Data were divided into major categories: (a) the peer culture and the shared meaning-making practices, subdivided into sets for drawing, constructing, socializing, and playing, and represented or tagged by the plan or topic of each session; (b) gender comparison; (c) different levels of social interactions, and materials interaction effects; and (d) enjoyment.

At an early stage in the analysis process, I organized data into tables from field notes in the form of narrative descriptive accounts, comments on photographs, and video transcripts; I later used all data sources to create the text for each CPC session reported in Chapter 5. This

method is different from using systematic codes; furthermore, not all information gathered was used in reporting this study (see Johnson, Al-Mansour, & Sevimli-Celik, 2014).

Because I started with a small list of codes (as suggested by Creswell, 2007), repeating the process of analysis many times allowed me to find (or collapse) some codes or categories that I did not catch during the initial handling or walk-through of the data. In the meantime, it provided a means to try to improve the accuracy of the research by seeking more rigorous validity and reliability of analysis and later interpretation.

For this research study, the videos were mostly complementary and were for information gathering only; however, the information gathered from the video recording was mostly useful to answer the first research question, “How do young children interact and make meaning with open-ended materials and to what consequence?” I transcribed the video data from multimodality perspectives using a range of descriptive dimensions (e.g., describing gaze, movement, body posture, the semiotic objects of action, image, design, and speech; Jewitt & Kress, 2003).

Every method has its biases. Using a diverse set of methods helps overcome these biases. The various methods, if they are put together, are complementary, allowing the researcher to cross-check and discover new information (Whyte, 1977).

The steps taken to process and analyze the data are part of more general ethnographic (i.e., case study) procedures aimed at highlighting more generally (a) the meaning of actions in the CPC and (b) the way in which children explore, experiment, and play using various modes to construct, create, and represent the world, often while engaging in social interaction with peers or with a teacher or another adult or adult figure (see Bezemer & Jewitt, 2010).

4.2 Phase Two Analysis

The initial analysis made the second phase of analysis a lot easier. This phase of analysis focused on the social and materials interactions and environmental factors that might have affected play quality. I used the figures provided at the end of each session (shown in Chapter 5) to analyze the types of interactions for that session and to situate play within the children’s experience. I also was able to draw some examples from the CPC to represent children’s social and materials interaction, meaning making, and play behavior. For me to record a child’s interactions in the figure, the child has to be involved in a play scenario that lasts even for a short period of time, whether solo, with partners, or with materials, and that has a beginning and an

end. Also the different interactions that were recorded were either narrative interactions (with or without materials) or silent narrative interactions (with or without materials).

Social interactions at the CPC, as explained in Figure 2.2 in the literature review, consist of eight types of interactions. Social interactions were divided into groups A and B. It is very important to note that there is no difference between the two groups; they were divided as such for easier coding and understanding. Four types of interactions with materials were observed. The different types appear in the figures in codes as follows:

Social Interaction A

- Child alone (C): solo play with no materials. This could also mean a child displaying nonplay behavior or nonsocial interaction.
- Child/child (C/C): parallel play with no interaction with materials. This can be narrative or silent interaction.
- Child/adult (C/A): child interacting with an adult, including different types of interactions, such as seeking assistance or guidance, or inviting an adult to play, with no interactions with materials.
- Child/material (C/M): solo play, interacting with one material.

Social Interaction B

- Child/child/materials (C's/M's): group of children, two or more, interacting with two or more materials. This can be narrative or silent interaction.
- Material alone (M): all children ignoring materials, no interaction.
- Child/child/material (C's/M): group of children, two or more, interacting with one material. This can be narrative or silent interaction.
- Child/material/adult (C/M/A): child interacting with an adult, including different types of interactions, such as seeking assistance or guidance, or inviting an adult to play, with interaction with one or more materials.

Materials Interactions and Exploration

- (X,X): Narrative interactions with materials.
- (X,O): Narrative interactions with no materials.
- (O,X): Silent interactions with materials.
- (O,O): Silent interactions with no materials.

These interactions were recorded on the figures, using the child's initials, from the multiple methods used to observe each session. These figures helped construct the narrative descriptions that are presented in Chapter 5, and they represent how participants were engaged with materials and individuals. To zoom in on one child's interaction at the CPC, a researcher can isolate the child in the figures for each of the eight sessions by deleting all other initials. This way the researcher can know how a particular child is situated in a session or across sessions. Interactions are discussed in more detail in Chapter 5.

4.3 Summarizing Session Actions

I used narrative description when taking field notes so I could account for the behaviors of the participants during the sessions of the CPC when the focus was on how open-ended materials were being used (Johnson et al., 2014). Complementary aids were photos, drawings, and video streams.

I created a list of key behaviors that were anticipated from theory and previous research. The behaviors were then observed and nested with the social form of play and interaction. Although these behaviors were not coded in the figures for each session, they were taken into consideration for the narrative description. The remainder of this section describes the cognitive forms of play that were anticipated.

- Manipulation—"messaging with" kinds of behaviors; simple handling of one or more objects.
- Simple specific exploration—using one-sense modality in relation to focusing on one object.
- Complex specific exploration—using multiple senses.
- Simple diffuse exploration—surveying a larger part of the overall play environment within the field of vision, and scanning to include additional fields of vision.
- Functionality usage—usability.
- Simple combinatorial usage—using more than one object within the same category of materials.
- Complex combinatory usage—using two or more categories of open-ended materials.
- Constructive play—building something using natural and manufactured materials. These constructions can become more complicated as children develop.

- Creative play—exploring and using their bodies and materials to make and do things and to share their feelings, ideas, and thoughts using their imagination.
- Transforming—transcending the ostensive reality of the object or materials in an act of imagination that may also involve pretending.
- Pretend play—using their imaginations. It includes children pretending with objects, actions, and situations. As children grow, their imaginations and their play become increasingly complex. Pretend play refers to make-believe, dramatic, sociodramatic, role, fantasy, and small-world play.
- Symbolic play—trying out ideas, feelings, and roles.
- Solo play—playing alone. Play is nonsocial or solitary.
- Parallel play—playing side-by-side without talking or sharing; typically two children. Different forms include parallel play without mutual regard; parallel play with mutual awareness or regard; and parallel play with some associating, that is, “social bids” among the conspecifics (peers), including smiling at each other, proffering or giving an object, inviting sharing, or verbalizing.
- Group play—playing or negotiating in a social context; two or more children.
- Associative, cooperative, and collaborative play—beginning to play together, such as developing interactions while doing the same activities or while playing with similar equipment, or imitating. Children interact, take turns, share, and decide how and what to play; they collaborate, develop, and negotiate ideas for their play.
- Interactive play that is becoming creative collaborative play—sharing goals by having common ideas in mind, including creative cooperation then creative association. Creative association is considered the highest form of play.

4.4 Reflection on the Analysis

In this dissertation, when describing the processes of data generation and analysis regarding children’s use of materials during play sessions, I wrote myself into the research by using first-person pronouns without taking a self-referential tone (Creswell, 2007). I was, however, an active interpreter throughout the process. As such, I did not distance myself from the discussion or presentation (Atkinson, Coffey, & Delamont, 2003). I was aware of my active role in this research and the influence I might have on the overall findings. I am in agreement

with Atkinson et al. (2003) and Creswell (2007), who said that when we are doing research and trying to gain knowledge, a self-referential work should not overshadow the actual social world. I focused mainly on the research questions, the participants, and the setting, in which I was always aware of my predicted influence as an active researcher.

My first question involved wanting to find out how certain things work—that is, the use of open-ended materials, the change in the individual's play tendencies, and the influence of the environment on children's play behavior. The answer to that question is a mix of trying to learn about the phenomenon under study using objective methods while having theories and methods at hand. I tried to find out the most suitable analytical process by which to answer my research questions in order to find out what is going on in the real world (of the CPC), and what are the meaning, structure, and essence of the lived experience.

In addition, my theoretical perspectives and discussions of these issues rely on a sociocultural perspective that investigated the activity setting model and searched for what could have affected children's play in a particular setting. Also, the discussions rely on an ecological psychology approach, in which the foundational issue is the nature of the relationship between human action and the environment, and the social semiotic approach and multimodality that focus on how people process and make meaning. This wide range of perspectives helped shape the descriptions of the data analysis I have conducted. Therefore, I found it useful and practical to perform analysis within Peirce's (1940) notion of abductive reasoning, whereby I combined exploration of the empirical data with earlier theories.

This approach represents a steady interchange between the ideas, theories, and previous literature review, along with the empirical data, which are themselves colored by my background and creative presentation. Although the coding method I used concerned the theories, the data were allowed to speak for themselves, and the thematic analysis was data driven. This combination led to an abductive process (Coffey & Atkinson, 1996), where the analysis fluctuated between theoretical deductive concepts and data-based inductive concepts.

Chapter 5

Findings and Discussion

The main findings of my research were that the Creative Play Club and the case study of it constitute a good conduit for exploring the possibilities and challenges that emerge from children's experiences with open-ended materials and with other children. The findings are presented by themes that emerged from the data analysis. Those themes are (a) the peer culture and the shared meaning-making practices subdivided into sets for drawing, constructing, socializing, and playing, and represented by the theme of each session; and (b) different levels of social interaction and materials interaction effects. Secondary findings involve themes of gender play and enjoyment, which will be discussed in Chapter 6.

The information in this chapter is presented through a narrative description account (Johnson, Al-Mansour, & Sevimli-Celik., 2014; Johnson, Christie, & Wardle, 2005) that focuses on the following three major routines of the club: first, preplanning through interaction with two-dimensional (2-D) materials (sketching); second, play with open-ended materials with a focus on the theme (tasks and scripts) and social and materials exploration and interaction; and third, reflection and open discussion. The discussion and interpretation in this chapter take into consideration the five components of the activity setting model described in Chapter 2: the personnel present, the nature of activities or tasks, the purpose, the scripts or routines, and the goals and beliefs underlying the activities (Farver, 1999; Göncü & Gauvain, 2012). It is very important to notice that the features of an activity setting are influenced and transformed by children's own contributions.

This case study yields information that supports answering the following research questions:

1. How do young children interact and make meaning with open-ended materials, and what are the consequences?

1a. How can a researcher reasonably and usefully describe children's use of open-ended materials during play time at the Creative Play Club?

1b. How can changes in children’s play behaviors and play tendencies be seen or inferred at the CPC within and across play sessions (if they can be)?

1c. What are the roles of physical environmental and social setting factors regarding children’s play behaviors at the CPC?

2. When there is a flat line or decline in play, what creates an uptick or spark to sustain or improve play? What is the relationship between setting factors (e.g., salience of a material, space, amount of materials, number of children in the room) and children’s play behavior?

To reasonably and usefully describe the use of open-ended materials during play across sessions, I performed analyses within the notion of what Peirce (1940) called “abductive reasoning,” instead of committing to either an inductive or a deductive logic of analysis. One version of Peirce’s notion is that transcendent reality is imagined but never seen because realities are a construction of our making to give us an intellectual tool to arrange and interpret our experiences. According to Coffey and Atkinson (1996), the outset of this strategy fits with the exploratory inquiries conducted within qualitative research. In the context of research, abduction refers to an inferential creative process of producing new hypotheses and theories based on surprising research evidence.

The following narrative description of children’s journey of play with open-ended materials is a response to my first research question. Photographs and figures are presented as galleries to support the presentation and discussion of the findings. Figures convey information about social and material interaction (see Chapter 4 for details on how these figures are constructed).

5.1 Preplanning Through Sketching and Drawing

The intention of the preplanning activity is not to use children’s drawings to identify developmental stages or to use them as evidence of conceptual change; instead, it is meant to be used as a resource for meaning making and preplanning. The CPC was following the steps of the Saturday Art School in using the sketching as a warm-up and preplanning activity. Although drawing with 2-D materials at the CPC did not take a long time compared with the use of 3-D materials, it provided nice variety for the club and served as a tool for organizing thoughts and ideas.

Children got to preplan their play and talk about it beforehand, either solo or with a friend. Planning through sketching gives an avenue of expression of the hundred languages that children have (Edwards, Gandini, & Forman, 1993; Samuelsson, Sheridan, & Williams, 2006). On the other hand, it is believed that drawing might help mediate children's thinking and establish shared meanings (Robbins, 2007). I found it helped the children in the CPC to plan, design, construct, experiment, revise, and revisit their project ideas.

Children have different ways of expressing themselves and making meaning out of the world around them; therefore, the medium of drawing gives children the opportunity to make their thoughts and emotions known to the adult world (Anning & Ring, 1999). Drawing helped children to organize their ideas, thereby constructing meaning from their experiences.

Furthermore, the Reggio Emilia approach, as described by Edwards et al. (1993), acknowledges the fact that children can use graphic and other media to explore and express their feelings and to communicate their constructions much more readily and competently than by using spoken words. Similarly, Hope (2008) argued that sketching and drawing images can be used between children as a tool for them to communicate among themselves; as a result, communication is limited by the ability of children to draw and read drawn symbols. Likewise, children engaged in drawing to communicate can enrich their communication skills at the same time. During my observation, I noticed many times that children planned together as a group. Leandro, James, Yadon, and sometimes Yakov planned as group; there was also evidence of group planning by Amanda and Ellen.

My observations revealed how sketching as an activity was assembled and used by children at the CPC. As indicated before, I did not give any specific structure to guide how sketching should be done. Accordingly, children were sketching for many reasons during this time. Three reasons were outstanding: (a) sketching as a connected activity to what followed; (b) sketching as a standalone activity that was unrelated to what followed; and (c) sketching as an avenue of expression.

5.1.1 Sketching as a Connected Activity to What Followed

In some cases, children's preplanning with 2-D was related to the 3-D play and was metaphorical. The data indicated a transformation in meaning in children's sketching. For example, Rhonda, Leandro, James, and Yadon, and later on Yakov, Amanda, and Ellen,

preplanned their play and transformed the visual mode (the 2-D materials) into 3-D materials with possible meaning most of the time.

For example, Amanda and Ellen cooperatively drew gardens full of flowers, and they were talking about the beautiful colors of flowers. As they were playing with materials, they chose to play with the colorful lids. I came close enough to Amanda and Ellen to listen to their conversation without interrupting:

Amanda: We need to collect all of the flowers. Look! I found one. (Amanda raises a lid that has the shape of a flower. In the big pile of lids they had all of the flower-shaped lids lined up, and they had filled them up with smaller lids of a different color.)

Ellen: Now our flowers have a lot of nectar.

Amanda: We can make the biggest garden in the world.

Ellen: Yeah. (Field notes, S7, March 5, 2012.)

Another example was assembled by Rhonda as she preplanned her play theme during sketching time. Rhonda's 2-D planning and 3-D play activities matched. She was going to play the owner of the dog, and the dog would be Irene. Irene did not preplan this with Rhonda, but during the actual play time, Irene agreed to be Rhonda's dog.

Most of the time, Leandro used to play cooperatively with his peers. During sketching time, Leandro was preplanning, deciding on the characters to be in his play scenario as he retold the game of the Angry Birds. During the actual play time with the 3-D materials, Leandro decided what materials to use to better serve his play themes. He chose the wooden blocks for the structure and the green lids to represent the green pigs. James and Yakov joined in Leandro's creative play. Leandro was one of the children at the club who used to preplan his play across sessions.

5.1.2 Sketching as a Standalone Activity That Was Unrelated to What Followed

During my observation, some children at the CPC, such as Piper and Rebecca, and sometimes Amanda and Ellen, used the 2-D as a free activity without preset goals. I observed children's drawing being inspired by video games, nature, castle life, and a lot of random imaginative stories. Even though children chose not to relate their drawing to the actual play with

3-D materials, they were actually engaged in play as they drew. I observed Amanda and Ellen on a couple of occasions drawing together while discussing the drawing. Sometimes they corrected each other and sometimes they laughed at each other's characters in the pictures. They told each other about the meaning of what they drew. They related to each other as peers, learned from each other, and got inspired.

Sometimes Amanda chose to draw solo. She drew a picture of a child that looked like a girl (it could be herself). She drew a bubble by the figure's mouth, like in comic books. Amanda did not verbalize what the girl was saying in the bubble, and I did not make the effort to know because I had decided at that time not to interrupt the flow of her drawing. Amanda is one of the children who would stop playing if I came by, and my presence near her would interrupt her play. She also drew a rainbow and clouds in her picture.

During the actual play time with the materials, Amanda was playing in parallel, with awareness of her peer (Ellen). They were talking, but softly; what I understood was that they were building a big school, "the biggest school," as Amanda exclaimed. From their short conversation, I did not notice any connection between the sketch Amanda made and the play theme they sparked, building the biggest school with wooden blocks. At the club, children knew that they had no restrictions on what to draw and did not have to have a reason for doing an activity. They set their own goals for their own activities. I believe that doing so gives the children a sense of freedom and ownership of what they can do.

5.1.3 Sketching as an Avenue of Expression

Some of the children (Irene, Edna, Amanda, and Ellen) treated the 2-D activity as an outlet for creative expression that had nothing to do with playing with the 3-D material. Children act in a transformative way toward the "arrested" quality of drawing (Gibson, 1986). While they were drawing they would imaginatively imitate sounds and movements using their bodies, which in turn would give life to the pictures they drew.

From my observation, this type of play while drawing sometimes related to and continued into what followed, which was playing with material. Other times their play theme created with the 2-D materials ended with the end of that period and the children started a new theme when they were introduced to the 3-D materials.

Edna was playing with her favorite stuffed animal, peacock, during the sketching time. She had her peacock in front of her and started talking to her. She drew the peacock in the middle of the page as shown in Figure 5.6 while talking.

Edna: It is ok! Don't worry, I will come and help you! (She drew scribbles around the peacock.).

Me (coming closer to her): What happened to the peacock? Is everything okay?

Edna (changing her voice): She is in the middle of the tornado.

Me (also changing my voice): What are we going to do to help peacock?

Edna (making a sound effect for the tornado): Help, Help! (I had already called for help.)

(Field notes, S5, February 20, 2012.)

The sound effects that Edna made, changes in her voice according to the situation, her engagement in deep play with her stuffed animal, imagined world through drawing, and engagement in conversation with me were all indications of meaning making through play with graphics. Edna did not extend this play episode when playing with 3-D materials. However, she had her peacock be a part of her new theme during the actual play time with 3-D materials.

This observation time in the CPC showed me how children can relate their play time to what they preplanned; for some, their drawing was a starting point to play. Or their drawing might be an avenue of expression that they use to convey meaning to different people. Although their drawing was on a flat surface, the children were able to bring life to their characters, enacting their theme through their body movements and sound effects to dramatize their narratives.

5.1.4 Preplanning Gallery

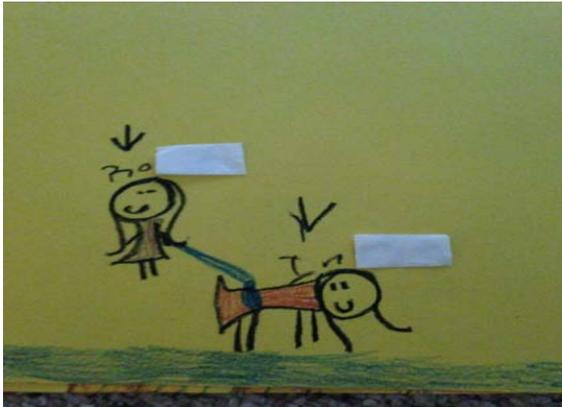


Figure 5.1 Social and Materials Interaction—Session 6



Figure 5.2 Playing with 3-D materials as they had preplanned.



Figure 5.3 Preplanning drawing done by Leandro.



Figure 5.4 Amanda built a construction of a school side-by-side with Ellen.



Figure 5.5 The drawing was illustrated by Amanda.



Figure 5.6 Edna's peacock is in the middle of a tornado.

5.2 Journey of Play with Open-Ended Materials at the CPC

5.2.1 Session 1—Introduction

It was the first day of clubs in the after-school program at the local charter school. When I first entered the room, I noticed that the children, who had been in clubs for the after-school program in the past, already seemed familiar with this type of situation. It was a natural setting for them.

For this particular club, however, there were some necessary steps I had to take before proceeding. First, I introduced myself as Mrs. Moni, the leader of the club. Some of the children knew me and identified me as Rhonda's mom. They approached me with big hugs. I was not a stranger, because most of them had had the chance to see me for one reason or another (drop-off and pick-up time and volunteer activities). I also introduced my assistant, who happened to be a volunteer graduate student. I had had the chance to speak with my assistant ahead of time and had briefly explained what was expected of her. The assistant told me that she would be at my club every Monday, and I showed her how to take field notes of children at play. Unfortunately, we had a hard time getting the same assistant to help with the data collection across all the sessions. Because of this instability, I decided to transfer this responsibility away from the assistant.

I informed the children of the club's schedule and told them that they were signed up to stay for both sessions every Monday after school. I reminded them of their behavioral roles and the school's expectations (routine club procedures). I then explained the agenda and the special routine for this club (see Chapter 3 for more details). I told them that because they are members of this club and because their families gave permission for them to join, they had the chance be a part of my research. I told them that I study children's play. I added that, because they were a part of this club and my study, they would be photographed and videotaped. I also told them that they would see me using my phone camera to take pictures of them at play and writing notes to help me with my research. I informed the children that we would view all the pictures at the end of the day before going home, and that we would have the chance to talk about them if anyone wished to do so. I showed them the laptop and where it would be located, and explained that it would help us with the video recording and the slideshow at the end of the day. Up until now, the

children had not shown any excitement about what had been said. They were listening attentively.

I then moved on to introducing the club's name—the Creative Play Club—and its intention. I told them we would mostly be playing. They were happy to hear that! I continued by saying that before we started to play I would like to show them something that we would be playing with. I asked them to move closer to the boxes, and they saw the reusable, recyclable, and found items that were inside. With a stunned face, one child shouted out, "We're playing with these?" Another one asked, "What are we going to do?" Yet another child asked, "How are we going to play with them?" I told them that yes, we would be playing with these items, but before we do so, we need to plan and think a little bit about what we could do with them.

I should say here that I refrained from giving any kind of instruction in how to play with these materials, and instead I encouraged the children to think and have their own ideas. As an important part of preparation, we talked about the space. We discussed the importance of having an open area for us to move about freely, so we concluded that all the chairs and tables should be pushed up against the walls. Then we started brainstorming. While the children were thinking and talking, my assistant and I passed out construction paper and crayons with the suggestion that they find a comfortable spot and start planning their play, either solo, with a partner, or in groups.

I intended to use the data collected in this session for introductory purposes and for piloting my positions. Another critical aim to familiarize the children with the routine, the methods, and my presence and role during their play activities. During this session, I was able to go through the entire routine successfully and to project enough pictures for the slideshow toward the end. The children were able to preplan, play, and reflect, as well as help with setting up and putting away the materials. Although this first session was not easy to conduct, I can say it definitely was a success!

5.2.2 Session 2—Getting Familiar

Theme

Preparation time went smoothly. Children helped with pushing the chairs and spreading out the materials. Having an assistant who was assigned to this club helped a lot in making the preparation process go faster. I was able to spend less time on direction; it seemed that

everybody knew how to start the club and what to expect. We sat and talked for a minute to refresh the protocols of the club. The children showed excitement and started drawing for about 10 minutes. During this time, the assistant and I finished the laying out of materials. As “stage manager,” I had to make sure we had an open area for play, enough materials, and enough time, by arranging the environment so play could occur (Jones & Reynolds, 2011).

The actual play time with 3-D materials consisted of a lot of exploring, messing about and manipulating objects and materials, with no obvious or specific theme. Two of the boys (Leandro and James) were building a tower using wooden blocks. Amanda was on her own, silently building a wide building using wooden blocks. Edna was exploring some of the materials on the floor. She asked what one of the materials was for. I told her this is normally used to clean monitors, but “it is yours now and you can use it the way you want to.” She smiled and left. Throughout the sessions Edna liked to ask questions and was curious to know about the functionality of things before using them. I found that to be on the path toward a higher quality of play.

Yakov was wandering around solo, sometimes standing up and sometimes sitting down. He saw the tower that Leandro, James, and now Yadon were constructing together; he stood by the construction with no comments, looking at it, then he smiled and left for the uncarpeted area. He sat down on the floor and then kneeled down for a while. Then he moved back to the carpeted area again and roamed around without touching any of the materials on the floor. He repeated this behavior many times during the session, which attracted my attention. I had this conflict inside me, whether to be a facilitator and step in to see what was going on, or just stay back, observe a little bit more to try to read and understand the children’s cues, and give Yakov a chance to make a decision. I really did not know at that point why Yakov did not participate, but he did not show signs of being bored. To me he was exploring his options and he needed time.

Irene focused on small objects from nature, such as stones and seeds, which she lined up. She also collected detergent lids, filled them up with seeds, and lined them up. Figure 5.9 shows Irene exploring by manipulating the assorted lids. She smelled one of the lids and said to me: “It smells like you!” I answered: “Really? That is interesting!” Then she hugged me and left. My initial interpretation of this was that Irene seemed to have no plan for what to do with these materials; she was just messing around with them. But the question that often came to my mind

was, how would I know if she was just messing around with materials? Wasn't it possible that what she was doing was a starting point to her play line?

Alana, Rebecca, and Piper were playing imaginatively with fabrics and trying them on around their waists and shoulders. When Alana was asked what you want to be, she said: "I don't know!" However, Rebecca and Piper said they wanted to be the queen. Later on they both also pretended to have a cast on their arm. They wrapped a scarf on each hand and Rebecca said: "I got hurt, I have a cast, I am pretending!" Piper was jumping and faked whining with pain.

Social Interaction

In this session, solo play and exploration were noticeable. Irene, Yakov, Rhonda, Amanda, Ellen, Alana, Edna, Rebecca, and Piper were mostly playing solo with different types of materials. Leandro, James, and Yadon were playing together as a group with one type of material (wooden blocks).

Amanda and Ellen, Rhonda and Edna, and Alana and Edna participated in parallel play for a short time. Although Rebecca and Piper were seen together a lot in this session, they were not playing with each other; they were playing side by side. Rebecca was a dominant player and had a stronger personality, and Piper was mostly imitating and following Rebecca. Piper was not seen to initiate or interact with other children. She was mostly interested in whatever Rebecca was doing.

Kendra and Cassie were absent. Yakov remained an observer for the entire session. A few times he came closer to the group of boys but did not initiate or get involved in their play (see Figure 5.7 for more details).

Materials Exploration and Interaction

The majority of children at the CPC were playing with one material at a time, though a few times the children mixed materials. All of the children explored and manipulated all of the materials on the floor, including Yakov, who did not show any excitement about manipulating or interacting with the materials. In this session, the children mostly explored and played with the wooden blocks, assorted lids, and scarves. Edna showed an interest in finding the actual functionality of things by asking, "What is this?" "What is this for?" "What do you do with this?"

Session 2 Gallery



Figure 5.8 Amanda building with wooden blocks



Figure 5.9 Irene manipulating assorted lids



Figure 5.10 Cooperative play with fabrics



Figure 5.11 “Hot beverages” that had been prepared for me by Piper and Rebecca

5.2.3 Session 3—The Scarf Wonder

Theme

The major theme of this session was playing with scarves. The girls (except for Amanda & Ellen) played the girl who wears a scarf around her head or around her neck! Edna asked me about my scarf and why do I wear one? Irene wore the scarf and looked at me with no comments. She was looking at me every time she wore the scarf. She appeared to be looking at me seeking approval. During this session, I wore my scarf differently than I usually do. I had it tied at the back of my head and around my neck. Four girls (Alana, Edna, Piper, and Rebecca) were shifting

between wearing their scarves the usual style or the “new way.” It was new to them, of course, because the first two sessions I was wearing my scarf a certain way and the third session I wore it differently.

Rebecca was trying to play with Irene, who decided to sit in the uncarpeted area by the corner of the classroom. They were playing with a different type of scarves; Irene did not cooperate with Rebecca but sat in the same corner. Later, she grabbed a big piece of cloth, went back to the same corner and hid under the cloth for a long time, and then she played dead. She peeked from underneath the scarf, saying nothing. None of the children in the room paid close attention to this or tried to understand what she was doing. The group of girls shifted from playing covered-up girls to zombies. Irene participated and pretended to be a zombie with them.

My interpretation of this behavior from a multimodality perspective is that Irene was trying to communicate something about wearing the scarf but was not comfortable verbalizing this. According to Kress and van Leeuwen (2001), she was referring to a set of socially and culturally shaped resources for making meaning. Irene is a very energetic and excited girl, and that was her first time showing a lack of interest in participating or being involved in group play. She instead used gestures, body movements, and different positions to express herself. During the reflection time, Irene refused to talk about that picture and crouched down and put her head between her knees.

Yakov found a marble and was playing with it for the entire session. Yakov was observing the group of boys as they planned and constructed. They were too focused and did not invite him to play. It looked as if they knew each other from before and knew what they were doing. Yakov hovered around them, then left to the uncarpeted area many times during the session.

During this time, the club room was to be used for the book fair, so it was crowded with many boxes. The children managed to play and roam around without being distracted. The children wanted to use the camera and wanted to take pictures of me. This was their first time asking for the camera and they were allowed.

Social Interaction

Although Alana, Edna, Piper, and Rebecca were all playing with scarves, they were mostly playing solo as opposed to in a group. Edna sparked the idea to be a zombie, and a lot of

girls were interested in switching from dressing up like me to becoming a zombie. During this session, there were a few instances of parallel play (Alana and Edna; Rhonda and Edna). It seemed that Edna was making an effort to play with someone (see Figure 5.12 for more details).

Materials Exploration and Interaction

Ellen and Amanda concentrated individually on building with wooden blocks for the entire session. Amanda integrated some of the colorful lids into her construction. In Figure 5.13 and 5.15, Yakov found a marble and began manipulating it. He put it inside a paper towel roll and shook it up and down, and rolled it around on the floor. Wooden blocks and the assortment of fabrics were popular compared to the other materials.

During the first 10 to 15 minutes of active play time with open-ended materials, Yakov was the only one who did not interact with any of the materials in the room and did not interact with anybody else. After he found the marble, he was sitting on the uncarpeted area and manipulating the marble and integrating another material in his explorative solo play with no narrative (see Figure 5.12 for more details). At some times girls (e.g., Irene and Rhonda) were playing with materials and using their bodies as a material as well. They were carrying each other and rotating during this activity. Rebecca was jumping, dancing, and pretending to fly across the room.

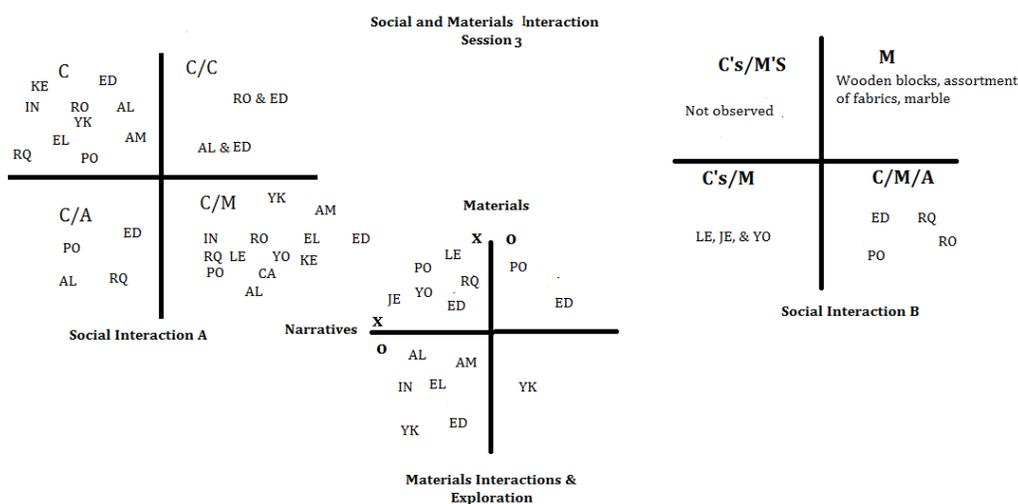


Figure 5.12 Social and Materials Interaction—Session 3 (for abbreviations see Appendix F).

Session 3 Gallery



Figure 5.13 Yakov spinning the marble



Figure 5.14 Irene and Rhonda using body as material



Figure 5.15 Yakov combining two materials



Figure 5.16 Irene pretending to be a zombie



Figure 5.17 Irene pretending to be dead

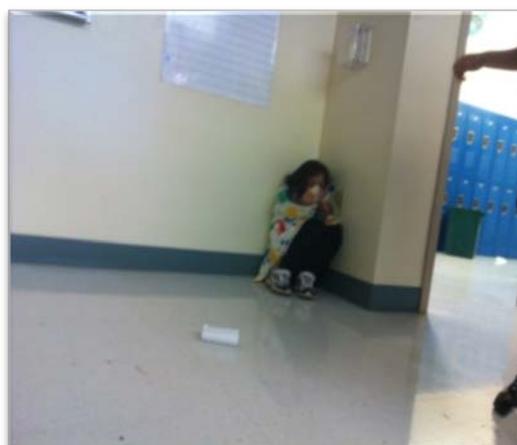


Figure 5.18 Irene covering up with a big piece a fabric

(continued)

Session 3 Gallery (continued)



Figure 5.19 Ellen building solo with wooden blocks and combining two materials

5.2.4 Session 4—Fabrics...Fabrics...Fabrics

Theme

In this session the children at the CPC continued what they had started the previous week. The girls immediately jumped on the pile of fabric, and they each took a scarf and started dressing up. Rhonda came to me and said, “Look, I am a Muslim.” Knowing that Rhonda was a Muslim girl, I was not surprised with her comment. It could be that she was bringing some of her own culture into the club and feeling comfortable with sharing it. Kendra said, “I look like a Muslim too!” Piper said, “Me too, me too!” as she jumped. It was noticed that Piper was struggling with wrapping the scarf around herself. Her right hand was not as coordinated as her left hand, which explained some of her frustration. Later, I learned that Piper receives occupational and physical therapy. Piper asked the assistant for help, and the assistant helped her wrap the scarf around. Then she came to me and said, “Look, I am a Muslim!” All of the girls except Amanda and Ellen were playing dress-up like Muslim girls. Even Irene, who was uncomfortable wearing the scarf like the other girls at first, wore it and was walking around with it with a big smile on her face.

Rhonda sparked a new idea; as she was yelling “Kiai!” loudly, she said, “I have a red belt, I am strong!” She made some karate moves and two other girls (Irene and Kendra) joined in. Kendra said, “I am a red belt too!” Irene tied a golden piece of fabric around her waist, but

did not determine if it was a level in karate. The three girls were pretending to do some karate moves. Rhonda was showing Kendra how to do a karate stance, form a fist, and punch the air.

Irene then sparked another play idea that made the same group of girls switch from karate. She asked the assistant to tie the golden rope to her back and to make one end longer so she could be a dog and the assistant be her owner. Rebecca immediately followed the assistant and asked her to do the same. She did, and she became the owner of two dogs. Seconds later, the rest of the girls were playing the owner and the dog. Rebecca played the hyperactive dog who wants to run away from her owner, who happened to be Kendra. At that moment, the assistant withdrew gradually and was standing by to step in as needed.

On the other side of the room, Leandro and Yadon added more details to their construction. I noticed that every time I came closer to them, they tended to speak softer, look at me, and stop talking. It was clear to me at that point that my presence would interrupt the flow of their play and conversation. So I stepped back and I started listening to their conversation. They had an in-depth conversation on how to make the tower more complicated. Yakov was standing in front of the construction (tower) that Leandro and Yadon had built. He gave a comment here and there on the construction. The following is an example of their conversation:

Leandro (excitedly): We made it to the 8th level!

Yadon: We need to make it to the 12th level . . . But- but we can't make it higher.

Leandro: Yes, we can!

Yadon: Actually, if we make it higher, it will collapse.

Yakov held one of the blocks and said, "If you put it that way, it won't collapse." Yakov kept eye contact while he was making suggestions to Yadon. On the other hand, Yadon was looking toward the floor where the pile of blocks was. Yakov repeated himself in a screechy voice while he peeked at Yadon's face. It seemed that he just wanted to make sure that Yadon was listening to him.

Leandro agreed and said, "Let's try, and then we can knock it down." Yadon said, "We can kick it." Leandro said, "No, wait. Let's make it higher first." (Field notes and video transcript, S4, February 13, 2012.)

After that, Yakov sat with them but did not participate in their conversation. He was searching for something in the pile of lids that was near the boys (moving the lids with his hands

to the right and left). Suddenly he yelled, “I found it!” He raised a small plastic container and one marble and showed them to me. He had been searching and searching for almost half an hour. He went to the uncarpeted area and started spinning it on the floor. He invited Leandro and Yadon. He said, “Come, I will show you!” All three of them gathered around the marble and started to spin it on the floor and passed it to each other. Yakov kept the small plastic container in his hand; he preferred to use only the marble as an invitation to his peers. They were giggling and laughing comfortably.

Social Interaction

Kendra wanted to play with Irene, but Irene had some other plan to work on. Kendra was acting kind of forceful and insisted on playing with Irene. Kendra came and asked me to ask Irene to play with her and then started crying. When Irene saw her crying, she played with Kendra a little, then left to continue her own play on the floor, playing with the lids.

Amanda and Ellen did not participate in any of the dress-up or make-believe for the entire session. However, they had been noticed playing together in parallel play. They did not play with any of the girls in the room. Yakov made an attempt to participate with the boys’ construction play and suggested a solution. He even invited the boys to join him and made a good lead on that (see Figure 5.28 for more details).

Materials Exploration and Interaction

Amanda and Ellen explored more materials during this session. They were actually playing with an assortment of plastic lids. There was a lot of categorizing and sorting of the lids. They made many small constructions on the floor out of the colorful plastic lids. The rest of the girls focused on fabrics and their bodies. Boys focused on wooden blocks; Yakov spent time searching for something and then seemed to be happy with a small container and the marble. It served his play plan (see Figure 5.20 for more details).

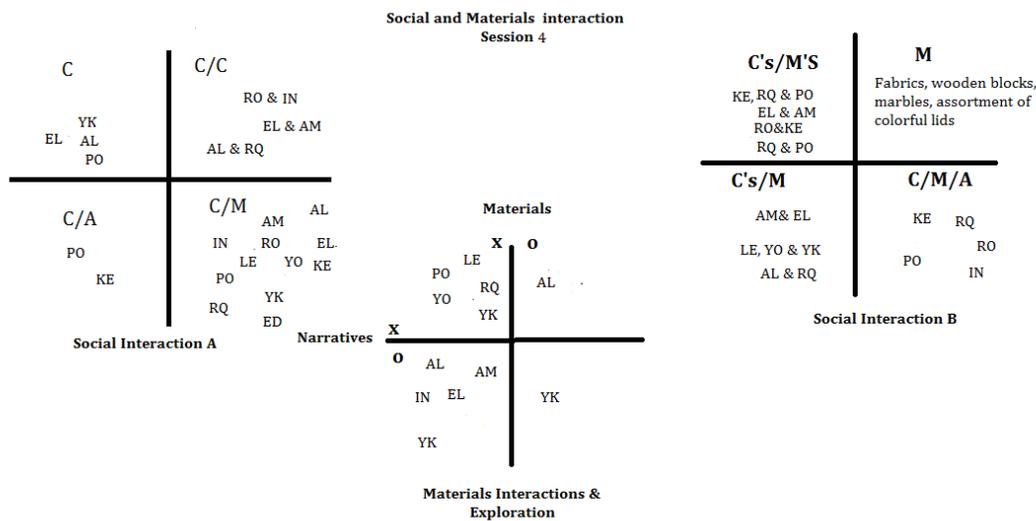


Figure 5.20 Social and Materials Interaction—Session 4 (for abbreviations see Appendix F)

Session 4 Gallery



Figure 5.21 Piper seeking an adult’s assistance



Figure 5.22 Rhonda yelling kiai!

(continued)

Session 4 Gallery (continued)



Figure 5.23 Yakov excited to find what he was searching for



Figure 5.24 Amanda and Ellen playing side by side



Figure 5.25 The dog and the owner game



Figure 5.26 Irene sparked the idea of the dog and owner game



Figure 5.27 A group of girls pretend to play karate



Figure 5.28 Yakov invited Leandro and Yadon to play with the marble

5.2.5 Session 5—The Dog and the Owner

Theme

We started this session talking about what we did last time and what we are planning to do today, as we usually do. As part of the club's routine, children get to help with spreading the materials out on the floor. As I had noted before, the girls took the bag that was full of fabric, and the boys took the wooden block container. By that time, I was not surprised with their selections. Switching to my role as a stage manager, I had to make sure that the room was prepared for play time, so the assistant and I finished setting up, while the children worked on their preplanning and sketching.

During play time, the first thing the girls did was play the dog and owner game. A group of girls were barking around the room like little puppies. They gathered around me and grabbed onto my legs to the point that I was about to lose my balance. I started to tell them, "Calm down, puppies, calm down! Sit, sit! Here is your treat!" I pretended to give them some treats and they pretended to take the treats as puppies would. That was an invitation from those girls for me to participate in their pretend play. Meanwhile, Amanda and Ellen were busy sorting the pile of colorful lids.

Later on in the session, the girls switched their pretend play and make-believe to constructing with materials. The girls who started off with the dog and owner game switched to a new theme in their play. They were actually building for the first time since the beginning of the club.

The boys were working on building towers as usual. In this session, I found out something interesting about their different towers. They were actually re-creating them from the video game Angry Birds. These tower constructions were getting more complicated by the moment. Leandro and Yadon decided that they needed to hide the eggs from the pigs.

James: We need to hide the eggs, the golden eggs!

Leandro: But we don't have the eggs.

As Yadon turned to the pile of lids and grabbed one green lid, he said, "I got the pig."

Leandro and Yadon went over to the pile of lids to collect the pigs and the eggs. James and Yakov were working together to perfect their construction. They were trying to hide the

golden eggs and put the pigs in the openings in their construction. Yakov and James had the chance to roam around looking for “the perfect golden eggs,” as they exclaimed.

Yakov grabbed three yellow caps and I asked him, “What is this?” He said, “These are the three eggs. We need three special eggs and we need to hide them.” I asked, “Where are you going to hide them?” He said, “We can’t tell you because the pigs are evil and they are going to find them!” Interestingly, Yakov is not very familiar with this game Angry Birds, according to his mother (see Appendix C for mother’s response). Yakov started to be familiar with the characteristics of the game that has the eggs and pigs in it as an important cornerstone.

Social Interaction

There was a lot of parallel, cooperative, and group play among the boys and girls in this session. Edna was the only one who did not really participate in any activities and preferred to play solo. She seemed sad and did not participate much with any activity or with anybody in the room. She found the marble and kept herself entertained with it.

Yakov noticed Edna playing with the marble, and interrupted his own play with the boys to crawl over to her. The following is the action and conversation between Edna and Yakov:

Yakov: What are you doing?

Edna: Nothing!

Yakov: Then can I have it?

Edna (with a determined voice): No!

Edna held the marble tight in her hand and turned her back on Yakov.

Yakov shrugged his shoulders, opened his eyes wide, and went back to his group. Edna found a big tube from a paper towel roll, put the marble in it, covered it with two lids, and started shaking it to the right and left.

Yakov’s participation with the group of boys made the game public. He was louder than the rest of the boys, and they started to speak louder as well. Yakov invited himself into the group of boys, and they accepted him. Playing as a group was rich and full of conversation, problem solving, compromise, and a lot of negotiation.

Materials Exploration and Interaction

Rhonda, Irene, Kendra, and Rebecca cooperated in building a castle using wooden blocks, paper towel tubes, and fabric.

I was not sure if the boys chose to make a tower for the Angry Birds game because they were interested in it or because of the presence of the Angry Birds poster on the wall as shown in the gallery of photos. There is no indication that the poster had anything to do with the boys' game. It is just an observation.

Rhonda was observed playing solo with one material type (plastic lids), trying to write Penn State:

Rhonda: I don't know how to spell Penn State.

Me: Let's sound it out. P-E-N-. . . (Rhonda did not let me finish sounding it out.)

Rhonda: Now I know.

Me: Just write it like you say it.

I stepped back for observation. Rhonda wrote the first three letters and left it at that (Field notes, S5, February 20, 2012).

I wondered if what she wrote was what she heard from me and she was satisfied with it, or whether she got distracted by something else. This was the first time a child at the CPC used writing to make meaning using semiotic resources. Another thing I wondered was why she chose to write Penn State and not her name, for example. I asked her, "Have you been in Penn State before?" Rhonda responded, "My mom goes there. My brother and my sister too!"

The girls played with more of the materials (e.g., paper towel tubes, wooden blocks, plastic lids, and fabric). The boys integrated plastic lids with wooden blocks to enrich their construction play. (See Figure 5.29 for more visual details on the social and material interactions.)

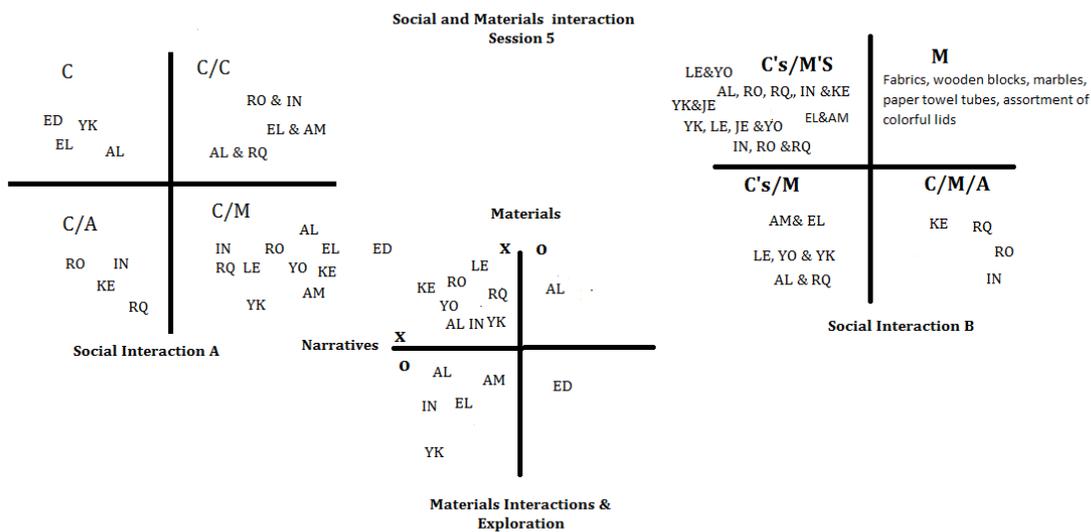


Figure 5.29 Social and Materials Interaction—Session 5 (for abbreviations see Appendix F).

Session 5 Gallery



Figure 5.30 Busy moving around, pretending and constructing



Figure 5.31 Amanda and Ellen collecting nectar for their flowers

(continued)

Session 5 Gallery (continued)



Figure 5.32 Moni being attacked by little puppies



Figure 5.33 Group play building and negotiating



Figure 5.34 The three golden eggs that Yakov and his group are searching for



Figure 5.35 Adding more details



Figure 5.36 Yakov trying to get the marble back from Edna



Figure 5.37 Pretending with fabrics, building with blocks

(continued)

Session 5 Gallery (continued)



Figure 5.38 Two boys and two girls playing parallel.



Figure 5.39 Edna feeling comfortable after talking to an adult



Figure 5.40 Rhonda writing with lids



Figure 5.41 Group play among girls

5.2.6 Session 6—The Acceleration of the Angry Birds Game

Theme

In this session, the children chose specific materials to spread out in the room. They helped pick the materials when I asked them, “Now what materials should we put on the floor for you to play with?” Kendra, Irene, and Edna helped take the paper towel tubes out; Yakov, Yadon, and Leandro took the wooden blocks out; Leandro and Yadon took the plastic lids out; Rebecca took the fabrics out. Rebecca was the only one who played heavily with the fabrics. She dressed up like a grandma whose hand had been hurt; she wrapped up her hand with a small piece of cloth. Piper was standing near Rebecca, observing her. Then she went over to the pile of fabrics. Soon enough, I observed her interacting with the materials and wrapping herself with

them. She followed the line Rebecca started. She did not necessarily play with Rebecca, but she was inspired by her play theme. So far, Piper did not initiate or start any play idea or theme.

During preplanning, Piper drew a picture of a big house in “nature,” which had nothing to do with her actual play with open-ended materials. When it came to open-ended materials, she got frustrated and did not know how to start. She seemed to feel safer copying someone she knew, such as Rebecca. It could be that the amount of materials and children in that setting were overwhelming to Piper. From a developmental perspective, possibly her maturity level had something to do with her choices at the club. From a sociocultural perspective, her behavior and choices at the club might be interpreted differently, such as the influence of environmental factors or how Piper was raised. Occasionally, I observed her playing creatively, though solo, with materials, using her imagination. But these episodes were infrequent.

The boys, on the other hand, were playing with each other, continuing what they had started in the previous sessions—the Angry Birds game. The group’s enthusiasm to advance their game was noticeable through their discussion, planning, and giggling. The quality of play remained the same. However, I noticed that Yakov planned his own view on the Angry Birds structure. He then came to discuss his idea with James, while Leandro and Yadon were busy collecting the perfect green pigs and golden eggs. Then Yakov built his own structure beside James.

James (talking to Yakov): If we connect them, it will make it big and it will be fun.

Yakov (yelling): That is a great idea!

They started building the bridge to connect the two structures together.

Yakov: It is going to be real fun.

James: Yeah!

(Field notes, S6, February 27, 2012.)

Social Interaction

Alana and Rhonda had a wonderful time playing together and making the longest telescope to see the sky, as they exclaimed. They were giggling and laughing about their silliness. Then Edna, who had been playing solo, joined in the play. She came toward Alana and Rhonda, marching with her instrument (about three paper towel tubes attached end to end and

wrapped with fabric) on her shoulder. Piper had been observing Alana and Rhonda for a while before coming closer to the girls, which did not bother them. Piper had a history of being rejected by Rebecca many times at the club. Piper took some paper towel tubes and struggled in attaching them. Sometimes Piper—who experiences weakness in her right hand—works around her limited ability. In this case, Piper wanted to attach the tubes together to make it long like her friends did, but in the end, she decided not to. She used only one tube, pretended it was a sword, and waved it right and left. She was observed in a similar situation in which she was facing a struggle, asking adults for assistance. Piper was more comfortable during this session; she was facing her struggles and frustrations, solving her own problems, and getting along with things and the other girls. She needed time to bloom and to figure out ways that make her feel satisfied.

Materials Exploration and Interaction

The dominant materials in this session were the wooden blocks. The boys and most of the girls were playing with wooden blocks. The second dominant materials were the paper towel tubes.

During the preplanning and sketching period, Rhonda wrote Penn State using 2-D materials. She used the 2-D to complement the 3-D play activity that she started in Session 5. Preplanning is not only to plan what is coming up, but also to perfect what has been started previously and to find solutions to perfect the plan. She told me, “Look! I wrote Penn State!” She wrote Penn and only the first two letters of State, perhaps because she ran out of space on the construction paper. Later she built the Penn State building with wooden blocks because that is where her mom goes. Ellen and Alana were beside her and were building as well. Each individual had a specific plan and meaning to make using the wooden blocks. They were talking to each other about their constructions and what it meant to them. For example:

Rhonda: This is Penn State.

Alana: Is this your mom’s work?

Rhonda: This is my mom’s class. She teaches teachers to be good teachers.

Irene who was not close by was not afraid to join in the conversation and share her idea: “Look! I made skyscrapers!” Irene was focusing on her building and did not make eye contact with Rhonda and Alana. In fact, all of them were focused on their buildings, adding details to their construction while chatting.

Irene: In my city everybody is happy.

Alana: I made a house for my dog.

Rhonda: Do you have a dog?

Alana: No, I told my mom to get me one but she said I am not ready for it.

Rhonda: I don't like dogs.

(Field notes, S6, February 27, 2012.)

The most interesting part of this conversation was that it actually started with the construction and led to the girls spelling out their feelings and emotions about things: Irene's dream of the happy city, Alana's dream of owning a dog one day, and Rhonda's feelings toward dogs. Messing with materials was an outlet for these children to express their feelings freely without any fear of being judged, trying to make meaning of the world they live in through the use of social semiotic resources.

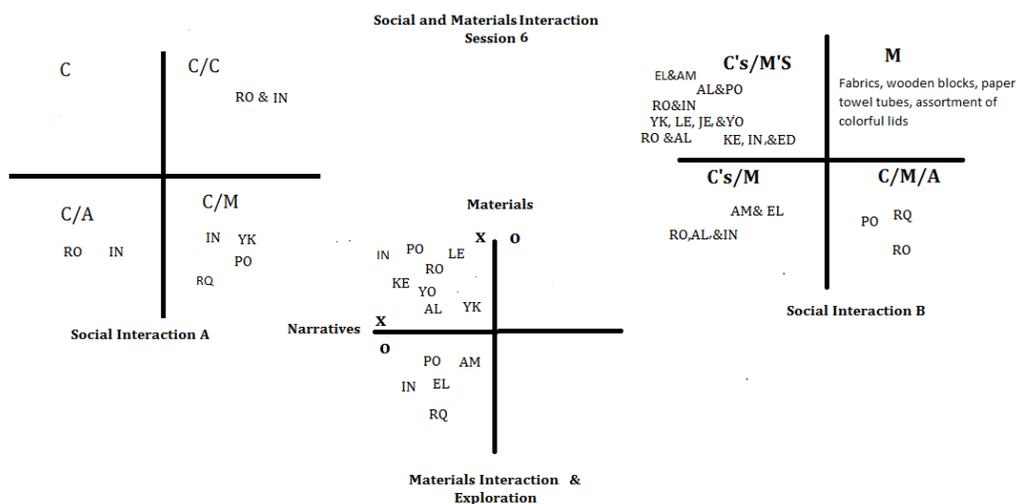


Figure 5.42 Social and Materials Interaction—Session 6 (for abbreviations see Appendix F)

Session 6 Gallery



Figure 5.43 Pretending to be the grandma with fabrics



Figure 5.44 Everybody busy playing at the CPC



Figure 5.45 Discovering more affordances to the paper towel tubes



Figure 5.46 Revisiting previous work using 2-D



Figure 5.47 Chatting while constructing



Figure 5.48 Skyscrapers by Irene

(continued)

Session 6 Gallery (continued)



Figure 5.49 Pretending to reach the sky



Figure 5.50 Rhonda and Alana connecting the tubes together



Figure 5.51 Connecting the two constructions



Figure 5.52 A big house in nature by Piper



Figure 5.53 Yakov talking to the girls and complimenting their work



Figure 5.54 Marching

(continued)

Session 6 Gallery (continued)



Figure 5.55 Preplanning with 2-D



Figure 5.56 Piper is messing with fabrics

5.2.7 Session 7—The Broken Arms and the Casts

Theme

The dog and the owner game and the Muslim girls were once again the theme of the session. The girls were showing me some ways of wearing scarves and veils. Rhonda was playing the dog and the owner game along with Irene, which was preplanned by Rhonda. Rhonda show discomfort being the dog and did not say why. Rhonda enacted her experience and tried to make meaning through sociodramatic play; her play explained it all. Rhonda acted like the Muslim owner to her dog (Irene) through this following play episode:

Rhonda: “I am not supposed to touch you because you are a dog.”

Irene (crying like a dog): Whine whine whine.

Rhonda: It is ok, it is ok, doggie; I am Muslim. I cannot touch dogs, but I will play with you. (Field notes, S7, March 5, 2012.)

Some of the other children may not have understood Rhonda’s feelings toward dogs. (It could be fear or just discomfort; she expressed that she does not like dogs in her conversation with Alana in the previous session.)

Rhonda was walking her dog Irene across the room and pretended to be a gentle owner. The dog Irene got sick, and the owner Rhonda was trying to help the dog. Although Rhonda had said in her earlier play that she did not want to touch the dog, when her dog Irene got sick, her

earlier feelings did not prevent her from touching and caring about her dog. She communicated that being nice with animals has nothing to do with her strong belief toward dogs.

Among girls, there was a lot of drama, with lots of casts and broken arms as well. During the preparation time, Alana shouted: “Edna has a cast on her arm and she will go home.” Rhonda added: “Her arm is broken.” This is not the first time the girls acted out being injured and having imaginary casts on their arms, but this time they were trying to make meaning of what they had experienced watching their classmates, trying out how someone with a cast would function through acting it out. Again, this assumption may or may not be true; we cannot determine what is in a child’s mind. Each child has his or her own agenda.

Amanda and Ellen, as usual, did not get involved with any of the girls’ dramatic play. They focused on the assorted lids, sorting them by color. The garden full of flowers was a good example to represent here. During this play episode, Amanda and Ellen were having a serious conversation. They were talking about their flowers and garden and their dream to have the biggest garden. In the previous session they were observed talking about building the biggest school. Later in this session they took the baskets and decided to sort all of the lids by colors so they could find the right flowers and nectar for their garden.

Coincidentally, this sorting that Amanda and Ellen completed served a lot of other children at the club. It supplied the boys with the golden eggs they had been searching for a long time. It also came in handy for Rebecca, to serve her script. Rebecca started her solo play with having a picnic. She prepared a basket and filled it with items for her picnic. Then she had a big cloth on the uncarpeted area, away from everybody, and was sitting there manipulating some of the materials at hand. Once she discovered the baskets full of sorted lids, she went and got one basket that had the pink lids and started lining them up. She said, “These are the ants... I have to save them from the water.” Once she was done she said, “I need a lot of stuff!” then went to the area where the baskets were and got the green and transparent ones. She started lining them up. Rebecca had a script and was enjoying what she was doing without necessarily narrating it. She was brief with her answers to my wonderings (Field notes and video transcript, S7, March 5, 2012).

Social Interaction

Rebecca was playing solo most of the time. Parallel play was observed between Amanda and Ellen for the majority of the time; however, their parallel play was associated with some social bids (e.g., sharing, smiling, verbalizing).

The four boys were involved in group play with deep conversations and negotiations on how to build and destroy the Angry Birds thematic constructions and on the best ways to make the constructions the biggest and widest. They also were discussing the best ways to hide the golden eggs.

Yakov was observed playing solo with the wooden blocks and some lids when his buddies left early. He did not make any effort to play with the rest of the children at the club. Leandro, James, and Yadon had the same ride, so when one left, the rest had to leave as well.

Materials Exploration and Interaction

In this session, the materials that were selected by children were the same popular ones: the wooden blocks, fabrics, paper towels tubes, and assorted lids. Amanda and Leandro made use of the baskets, and some other girls, such as Rebecca and Piper, paid attention to the baskets and started to use them to prop up their play.

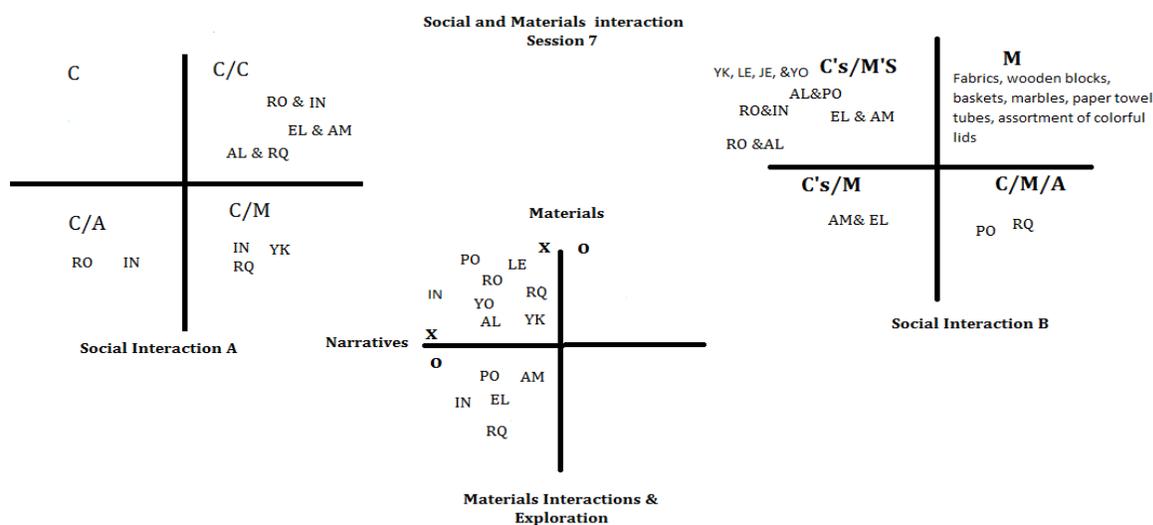


Figure 5.57 Social and Materials Interaction—Session 7 (for abbreviations see Appendix F)

Session 7 Gallery



Figure 5.58 The dogs and the owners



Figure 5.59 Rhonda preplanned the dog and the owner game



Figure 5.60 Irene wearing a veil



Figure 5.61 The Muslim girls



Figure 5.62 Rhonda caring for the sick puppy



Figure 5.63 The broken arm

(continued)

Session 7 Gallery (continued)



Figure 5.64 Having a discussion about how to sort the lids



Figure 5.65 Using the baskets to sort lids by colors



Figure 5.66 Piper having a picnic with a broken arm



Figure 5.67 Making the constructions more complicated and more detailed

5.2.8 Session 8—The Chaos

Theme

Three important incidences occurred. First, Edna came in with a cast on her hand. Second, we had a male assistant for the first time. Finally, we had two new children that came to the club because their club leader was absent and there was no substitute, so they had to send the children to the other clubs.

I was not sure at first if these occurrences would interrupt the flow of the club or if it would just be an addition. Sometimes we have things in life that are beyond our control; accordingly, the children and I dealt with these changes. Having the male assistant turned out to be just fine because many different assistants had been coming in and out across sessions

already. My initial reaction about having a male assistant was that children might react differently and behave differently. Up to this session the children were used to having two female adults (myself as the leader of the club and my assistant). In fact, I had not planned to have a female assistant all the time, but it had happened that way thus far. As a researcher I had to look at this as a change to the routine of the club that we had developed over time, and that change might affect the flow and quality of play at the club. I noticed that having a male assistant actually did not affect the flow of the club in any way. Moreover, children did not notice or care about this change. The change turned to be just my observation as a researcher.

The two children were really excited; they went everywhere in the room and made quick observations. Cassie, the female guest, knew many girls at the club, so she jumped in and joined their play of the dog and the owner game. Randy, the male guest, came in and was fascinated by the wooden building block construction. Without asking, he started taking some of the pieces from the construction and wanted to show the boys how they worked. He was moving fast, and that stressed the boys out. James shouted at Randy as he was taking the piece: “No, leave it!” Randy took the piece anyway and showed the boys a flying motion with the piece, making a sound affect like an airplane. Leandro, James and Yadon (Yakov was absent) were trying to protect their Angry Birds construction using their hands. Within seconds, Randy turned away, and during this moment Yadon added a blue lid to the construction. Leandro, between being frustrated and excited, said, “Yeah, blue pig!” Yadon was confused as to whether this was a good addition or not, so he removed it, which caused a part of the construction to collapse. Leandro gazed at Yadon out of the corner of his eyes and holding that gaze for a while; then Leandro said with a determined voice: “Fix it!” Yadon fixed it right away (Field notes and video transcript, S8, March 12, 2012).

The boys were very frustrated but still enjoyed their time. Having the visitor join them was obviously not a pleasant or acceptable experience for them, but they tried to continue their plan regardless. Randy did not seem to pick up the cues of being rejected; he did not give himself a chance to understand the game that had been established. He did not even try to introduce his line in an acceptable way. Later, Randy found a pile of blocks and started building.

Piper was wearing the pretend cast almost all of the time; she was the only one who continued this theme from the previous sessions. A group of girls (Alana, Rebecca, Kendra, and sometimes Piper), including the guest, played varied scripts. One of those was the dog and the

owner game. Rebecca was the hyper dog who tries to run away, Kendra was switching between being the owner and the friendly dog, Alana was the owner of two dogs and was acting as if she was busy taking care of them, and Cassie was being a dog and its owner at the same time. She was following along the play line. The most interesting observation in the dog and the owner theme was the personality of the dogs they wanted to be (hyper, friendly, running away, nice). There were no mean dog so far. Children at the CPC were making sense and meaning of their social life outside the club. Their life experience might not have included a mean dog.

Social Interaction

Amid a lot of moving around and a lot of noise, the visitors took the setting in a different direction. Sometimes a small change will add inspiration and stimulation to contexts.

Amanda and Ellen were playing parallel again this session, enjoying their constructions and their own script line. When I came closer to them, they continued their play and actually were telling me what they were up to, unlike in the past, when they tended to be silent every time I tried to interact with them. When I prepared my camera to take a picture of them, they got ready for that. I usually took pictures naturally and never asked children to pause for the picture. I thought that was interesting that they started to feel comfortable around me.

Having Edna coming back with a real cast on brought some attention to her; the girls were surrounding her wanting to play with her. Edna spent most of her time sitting on the floor building with Rhonda in parallel play or with a group of girls (Irene, Kendra, and Alana).

Materials Exploration and Interaction

Building with wooden blocks was popular among boys and girls. There was some integration of assorted plastic lids as well. Irene was observed playing solo with lids. Alana, Cassie, Kendra, and Rebecca were playing with fabrics and sometimes with blocks. The paper towel tubes were selected to be on the floor but were ignored for the entire time. Rhonda built Penn State along with Edna; she used more materials and made the construction bigger than in the previous session. Rhonda's building with 3-D materials was what she imagined Penn State would be in her 2-D drawing.

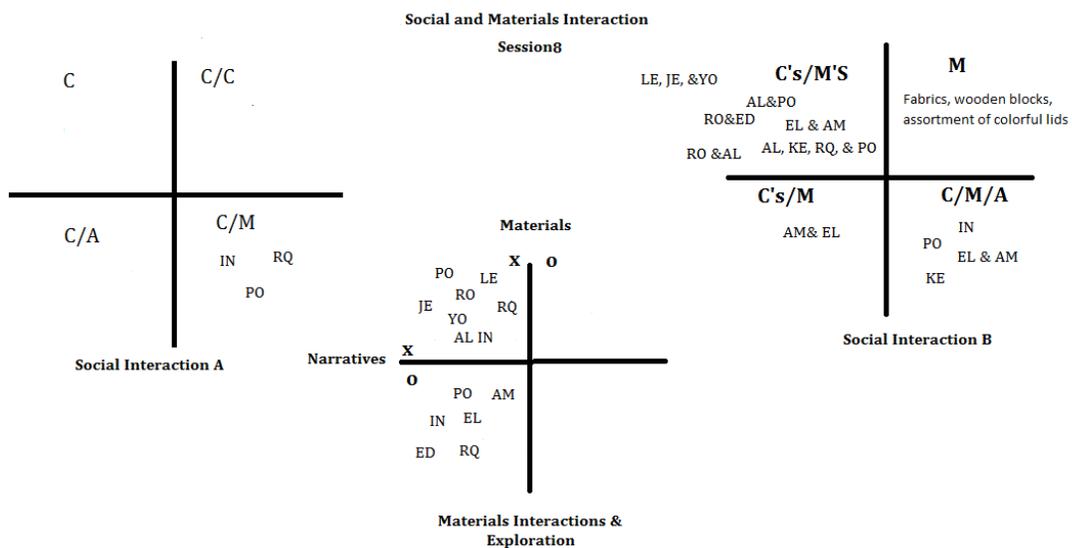


Figure 5.68 Social and Materials Interaction—Session 8 (for abbreviations see Appendix F)

Session 8 Gallery



Figure 5.69 The hyper dog playfully running away



Figure 5.70 The guest boy immediately joining in the group of boys' play

(continued)

Session 8 Gallery (continued)



Figure 5.71 Group and cooperative play among girls



Figure 5.72 The guest girl joining in the dog and the owner game



Figure 5.73 Building a city so that everyone can work on it



Figure 5.74 Building Penn State together



Figure 5.75 The boys are frustrated but still constructing



Figure 5.76 Rhonda imaginatively constructed a Penn State building

(continued)

Session 8 Gallery (continued)



Figure 5.77 The noise at the CPC has accelerated

5.2.9 Session 9—The Mandala

Theme

This session was unusual; we all just came back from spring break. Besides, three of the boys, Leandro, James, and Yadon, were absent, which left Yakov alone. At the same time, Cassie, the visitor from the previous session, decided to join us. So I decided to make a small adjustment to the materials. Usually I asked the children to unload the materials with me and help with setting up. This session I decided to hide all of the materials and focused only on the assorted plastic lids and the baskets to see what we could do with them (Amanda and Ellen sparked this idea unintentionally in Session 7). Some children wondered why, and some were disappointed not to have the fabric or wooden blocks. However, Amanda and Ellen yelled “Yeah!” in favor of playing with lids. Yakov did not have a say. This decision came about to create some changes to the club, *not* to create restrictions or limit the children’s freedom. The aspect of freedom of choice was still present in the materials offered. I made this decision as a leader and stage manager in an attempt to highlight some materials that were not as popular as the wooden blocks or the fabrics. The lids were always secondary and supplementary to other materials. But in this session the popular material was the assorted and colorful lids.

We started with our small open discussion as usual and talked about what we were going to do with the lids. Ellen suggested: “Sort them.” Some children in the background shouted “Yeah!” Then I projected a small clip about the different types of mandalas. The children were

amazed by the nice artistic work. In our small discussion, I focused on several points: first, how a mandala starts with a center; second, how a story is built around the center of the mandala. The children could choose to work solo, with a partner, or with a group of children. We all agreed to start to create the biggest mandala for the CPC by connecting all the stories together. Then we would discuss our mandala's story.

I reminded the children of Ellen's suggestion to sort the lids using the baskets. This time we started sorting and manipulating the lids in the hallway outside the classroom. That was not the usual setting, but the children felt more freedom and wanted their work to be seen by others. Rebecca said excitedly: "Everybody will see our mandala." The location of the class happened to be at the end of the hallway where the lockers were for that section. Working with our mandala at that place in the school would not cause any distractions or be in the way of others.

These changes in the setting and materials added more motivation to the club. I was worried about Yakov being the only boy during that session. At the very beginning of the session he was searching with his eyes for his buddies. He said, "Leandro, Yadon, and James are not here today." He added, "What I am going to do?" I said: "We will play and have a lot of fun." He shrugged his shoulders and sat on the floor waiting for what was next. He showed signs of being bored. That change to the CPC agenda was a very beneficial step for him and he got very involved for the entire session.

The sorting mission started with the children jam-packed around the lids like bees in a beehive. They were working and cooperating, having a smooth discussion on how to sort the lids. The following exemplifies their discussion:

Cassie: Where are all the baskets?

Alana: Here they are!

Cassie: I don't have one!

Yakov: We can use this box! (It was an empty zip lock box found in the classroom.)

Kendra: Can we use the cookie dough containers, Mrs. Moni? (Again, they were found in the classroom.)

Me: Why not! You can use whatever you think is helpful for sorting the lids. Just make sure you return them back where you found them once you are done with them.

Yakov (explaining to Piper): “This is a see-through water bottle cap. We cannot mix them with solid white. We can put them by themselves.”

Rhonda: Look, we have silver and gold. That is cool.

(Field notes, S9, April 2, 2012.)

Rhonda and Kendra had a small conflict over who would start the center of the CPC mandala. I reminded them that they could start their own mandala. Rhonda was trying to compromise: “But we want to play together, and I said it first. I want to start the center and you can start the story.” Kendra unhappily agreed. There was not anything special about who would start the mandala, but Rhonda felt confident enough to start the mandala, so she took the lead.

Then a group of children gathered around the center that Rhonda had started and immediately started to tell the story to each other as they added pieces. It was nice to hear them telling the story together, which followed the story as the group had preplanned it to be told. The creative expression and innovative flow of stories using the open-ended materials was rather exceptional.

The following exemplifies the discussion and cooperative group play that would result in a story built out of lids. Kendra, Irene, and Rhonda were busy placing all the people, as Kendra exclaimed, “Those are the people in the city.” Yakov brought one of the golden lids and added it to the story as he sang: “Golden, golden, golden.”

Irene gave him a quick look and got back to work on adding more people.

Yakov brought more of the silver and gold lids and surrounded the people with them.

Irene: We need blue.

Rhonda: That could be the swimming pool.

Rhonda went to get the basket that had blue and white lids. Then she sat in a different spot and joined Cassie, suggesting they make the swimming pool together. She said: “Do you want to make a swimming pool with me?”

Cassie grabbed the yellow basket and said: “Yeah, this can be the sun.” Then they started building it together. (Field notes, S9, April 2, 2012.)

Rebecca was sitting by the locker and was away from everybody. She was interacting with the materials silently, so I came to her and had a little conversation with her:

Me: Rebecca, what are you doing?

Rebecca (connecting the “sea” of lids together): I am connecting them together.

Me: Why?

Rebecca: So they are not different sizes!

Me (pointing to the pile of large lids): So what are you going to do with the big ones?

Rebecca: They are going to be the ocean.

Me (pointing at the small connected lids): What are these going to be?

Rebecca: This is the shore.

Me: Are you going to connect your story with their story?

Rebecca: I can’t connect it because this is the ocean. It is big.

(Field notes, S9, April 2, 2012.)

The ocean in Rebecca’s world that she was trying to make sense of is big and far from the city, and it should not be connected. If I was not a participant observer and tried to understand Rebecca’s position, I would assume that Rebecca preferred to play alone and far from her peers. In fact, her story line required that position to be a bit far away because it made sense to her and also served her play theme. Piper, on the other side of the group, was making a garden with a big yellow flower.

Social Interaction

Although Rebecca and Piper were observed playing solo for the majority of the time, the group play was striking. Rebecca and Piper were stationed in two different places and were across from each other. Later, they refused to connect their story with the big story that had been built by the rest of the children, and that was fine.

Materials Exploration and Interaction

The popular material in this session was the plastic assorted lids; the baskets were complementary. Children also found empty containers and a small box that they used to sort the lids. The interaction with materials involved a lot of narratives. This construction started with the big city, which has a lot of people, buildings, skyscrapers, and stores. In the hallway, the swimming pool started, then lots of nature surrounded “the biggest swimming pool in town,” as Rhonda exclaimed. Then we had the ocean on one side, constructed solo by Rebecca, and on the other side Piper constructed the garden. Piper did not want to include the garden with the rest of the story. She did not want to be connected, and that was still fine.

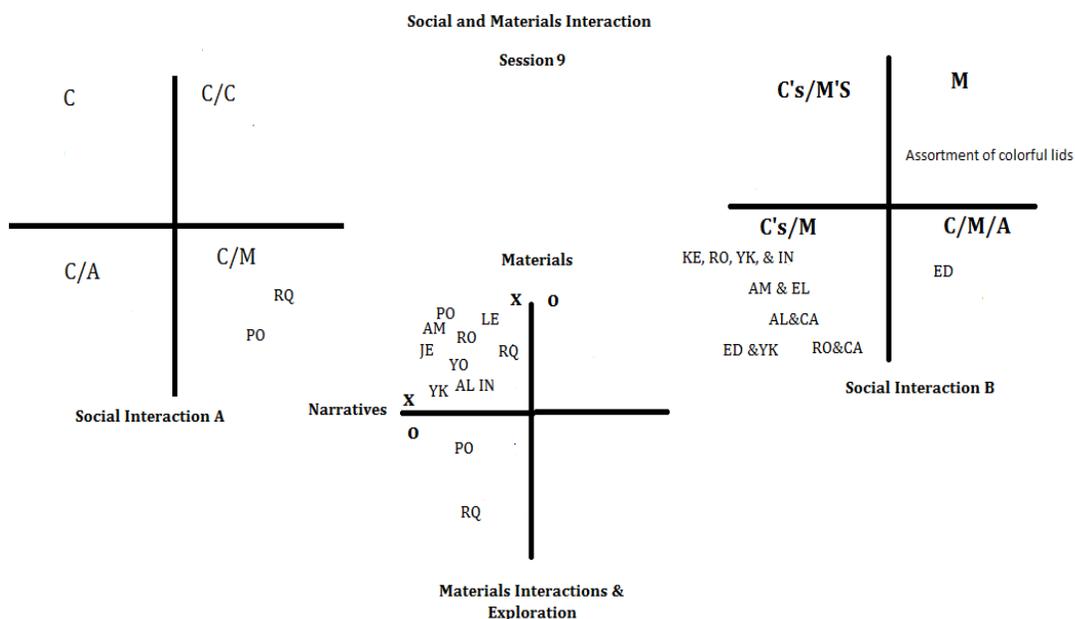


Figure 5.78 Social and Materials Interaction—Session 9 (for abbreviations see Appendix F)

Session 9 Gallery



Figure 5.79 Bees in a beehive



Figure 5.80 Sorting lids by colors



Figure 5.81 Kendra was not happy about Rhonda starting the mandala's center



Figure 5.82 A group of girls gathered around the center and started building right away



Figure 5.83 Yakov added details to the center



Figure 5.84 Rhonda and Cassie building the pool cooperatively

(continued)

Session 9 Gallery (continued)



Figure 5.87 Adding more details, negotiating, and telling their stories out loud



Figure 5.86 Piper and Rebecca playing solo outside the mandala



Figure 5.85 The mandala got more complicated and had lots of stories to it

5.3 Reflection and Open Discussion

This part of each session is the down time, in which children relax, enjoy the slideshow, and engage in an open discussion to reflect on and review what the club has done. It is the opposite of the first period of the club session, when children are encouraged to plan a future activity. During this time children are encouraged to reflect on past activity. Research shows that when children are encouraged to plan and reflect, they exercise their higher level thinking and problem solving skills (National Research Council, 2000). Planning and reflecting are two important components that adults (caregivers) should be aware of when planning a play program for young children (NAEYC, 1998; U.S. Department of Health and Human Services, 2002).

Some scholars believe that the complexity of these two components—engaging children in planning and reflecting—corresponds to their development of play (Epstein, 2003). According to Epstein, planning is making a choice with *intention*; the child has goal in mind that would result in the choice. Reflection, by comparison, is remembering past activities with an analytical view. Encouraging children to reflect on what they have done is more than reporting the activity. Children become aware of their own learning when they are reflecting—noticing the interesting parts, paying attention to their feelings—and they also learn how to extend their activity and what to focus on next time. Epstein believes that “planning and reflection, when they bracket active learning, are part of an ongoing cycle of deeper thought and thoughtful application” (p. 29).

Giving the child the freedom of choice at the CPC went beyond offering adult-selected options (e.g., asking if the child would like to play with wooden blocks or fabrics). When I encouraged children to plan their play, I put into consideration the importance of this step for children’s play development. The first thing I would focus on at the beginning of each session was to encourage children to set goals for what they wanted to achieve. For example, I would ask: “What will you do at the club today? Think of who you want to play with and where; what materials you will select to play with.” I also encouraged children to ask for help when they need help. A lot of children at the club used the preplanning period to plan their play, but other children did not. That was fine; it did not interrupt the flow of the club. The same was true with reflecting on past work; it was an open discussion. Even though reflecting time was open for any child to participate, it was not a requirement. If a child felt shy and chose not to participate, that

was okay. The point was to have those children learn from others, who perhaps are outgoing, and gradually build on this trait and learn to elaborate and spark their own ideas. In the following example, some children and I were gathering on the floor watching a slideshow at the end of Session 5. The following is an example of reflecting on one of the pictures (the picture was of me standing while a group of girls were holding onto my legs pretending to be puppies).

Me: What is going on in this picture? Who is holding onto my legs?

A group of girls raised their hands.

Rhonda (shouting): We were puppies.

Me: Why were you gathering around me?

Alana: We wanted a treat.

Me: You did not take any treat, Rebecca!

Rebecca: I ran away from my owner.

Me: Did you come back?

Rebecca (giggling): Yes! I wanted some treats too.

Me: What was about to happen when the four puppies were holding onto my legs?

Rhonda and Irene (giggling): You were about to fall down.

Me: Why?

Irene: You lost your balance.

The girls and I were laughing during that reflection. During the same session we ran into a picture of a group of boys (Yadon, James, Leandro, and Yakov) building the Angry Birds construction. Only Yakov was still at the club that day when it was the open discussion and reflection time.

Me: It looks like there is a serious meeting there! (Children giggled in the background.) And look at this construction! Where are the builders of this construction?

Kendra: Yadon, James, and Yakov are not here. They were called to go home.

Yakov: I did not go home! That was Leandro.

Me: tell us what was going on here!

Yakov (with a high-pitched voice): We were trying to protect the eggs from the pigs. Finally we found the golden eggs, and we only needed three golden eggs. We were trying to protect them from the pigs; they are evil. But for some reason every time we would try to hide the eggs, the construction would fall down.

Me: I wonder why?

Yakov: Because we did not put the eggs in the right place.

Engaging children in reflection to evaluate their experience helps them see for themselves how to carry out projects, how to solve problems when they occur, how to develop a sense of control over situations, and even how to notice their interests. According to Epstein (2003), when children are encouraged to reflect and analyze their work, they transform a simple memory exercise into a thoughtful procedure.

5.4 Conclusion

Children like to play, and it is an important aspect of their daily lives. Play is the fundamental way children learn about themselves and the world. Children explore the world by playing and interacting with what they discover in their environment. The forms of play that I present and discuss in this dissertation are similar to what Corsaro (1997) calls fantasy play, in which children create imaginary worlds in a spontaneous and improvisational manner. It is also similar to sociodramatic play (Wood and Attfield, 2005), which involves cooperation and verbal interaction between children as they play with objects and create roles.

This case study has shown how activity settings, the uniqueness of the members of the group, and the availability of play materials can influence children's play—the type, quality, or intensity and complexity of play, as well as the people with whom children play. As shown throughout many occasions in the Creative Play Club, children's own contributions influenced and transformed the features of the activity setting, that is, the CPC. For example, one child sparked an idea for the day and it turned out to be the theme of the session. Rhonda summed it up one day during reflection time at the end of a session. She said: "One person wants to play and everybody wants to play." A group of girls shouted: "Yeah!" The answers to all of our

wonders are out there; it only requires listening to children's voices and paying attention to their body language through play.

The reflection time also helped me understand some of the puzzles. In Irene's case of withdrawal in the third session, she showed discomfort through the multiple modes of expression, that is, body movement, gaze, crouch position (head down between her knees), and so on. She acted out something that was bothering her that she did not necessarily want to discuss in words.

Many incidents at the club also showed how an assumption could be incorrect. At times, with closer attention and careful examination, I found out something was completely different from what I first assumed, and most of the time it was unexpected. For a while, I thought Amanda and Ellen were English language learners, students who have English as a second language; I also assumed that Leandro, James, and Yadon were speaking limited English, but that was not true. They are just calm children. The literature shows that Asian child-rearing customs discourage children from expressing their own opinion or asserting themselves, especially if those ideas differ from the family. Asian children tend to be observers in front of authoritative figures so as to learn from them (Farver, 1999; Göncü, 1999). However, I would not generalize and say that all Asian children are discouraged from expressing themselves in front of adult without knowing the individual and how he or she is raised. Judging children's behavior based on what the literature tells us about their ethnic background and how children from certain cultures act and behave would be a very outdated approach. People who come from one culture are not the same. Just like the five fingers on one hand, they all come in different sizes and shapes.

Learning about individuals requires an effort. It would be easy to make an assumption that boys will be the most energetic and be everywhere in the room. In fact, the boys in the room were focused, goal oriented, and cooperative in their play. Girls, by comparison, were loud, were very energetic, and used their bodies as a material. Pretend play was noticed in their play. Even if they were playing as a group with the same theme, they had different agendas and plans to serve their play. The dog and the owner game in Session 7 was one example of this. The girls had the same theme in general, to play the dog and the owner, but Rhonda was trying, through her play, to make sense of how, as a Muslim, she was raised not to touch a dog. On another occasion,

Alana was dealing with her two dogs, one of which happened to be Rebecca, who was the hyper dog who tried to escape from the owner. Alana wished to own a dog one day.

Children at the CPC created their own peer culture, even as they brought with them their own culture and tried to make meaning of the world they live in to help them adapt. Through cooperation, all modes at the CPC were treated as one connected cultural resource for making meaning by members of a social group at a particular moment in a particular setting.

A very important point about the activity setting analysis is that it addresses the ethnocentric biases by allowing researchers to investigate and look into children's development in context, according to Farver (1999). He explains that by examining diversity in an individual's experience, researchers can isolate what is similar to their own and start to understand the roles of rearing and where people are coming from that determines behavior.

Children's engagement was mediated through artifacts and guidance that ranged from playing to observational opportunities and sometimes explicit instruction. By participating in cultural activity mediated as such, children negotiate the meanings of their culture, accepting, rejecting, or transforming them. Thus, sociocultural views do not see development as predetermined. The contributions and goals of the participants are what determined the developing mind within a dynamic context.

The CPC routine and agenda did not remain the same for the entire time as anticipated, particularly in the way it affected children's play quality and engagement at the club. Toward the end of the CPC, we faced some changes and challenges that were beyond our control. The modified agenda for the club considered the affordances of the environment where children play, that is, how children use their environment for play and activity purposes (Gibson, 1979). The concept of affordances includes both the environment and the individual, meaning that the affordances are unique for each individual and correspond with the individual's ability, strengths, skills, motivation, and so forth. The affordances of the environment of the CPC consisted of what it "invited" children to do.

In addition, the children participating in the CPC theoretically had a lot of freedom of choice to do what they wanted to do with materials. However, in practice, the club was regulated by some school rules that restricted our freedom to go beyond the space or time offered or to take any furniture out to make more space for children to play freely. What constitute the prospective

affordances available in a child's play environment are the characteristics in the environment that influence what the child is able to actualize and make use of. This means that affordances influence how a child will be able to actualize his or her propensity to play freely. Moreover, the child's propensity to play freely and interact with the materials and others will influence the child's engagement and anticipation to join in. It is a two-way scenario.

Chapter 6

The Magnifying Glass

In this chapter I felt as if I had to have a magnifying glass to zoom in on the data generated to gain a deeper understanding of what was going on at the Creative Play Club. This chapter highlights important components of and discovery findings from the CPC. The first section focuses on meaning making using open-ended materials in one specific activity setting model (Creative Play Club). The second section presents gender play in specific play contexts. The last section spotlights the enjoyment of play versus a flat line or decline in playing with open-ended materials at the CPC.

6.1 Meaning Making Using Open-Ended Materials at a Specific Activity Setting Model (Creative Play Club)

Children's meaning-making practices are found to be relevant at the CPC as related to Kress's (1997) analyses of young children. Kress says that signs children produce to reflect their own interests and perspectives on the world can be seen as metaphors, in which they are made and remade in transformative processes (p. 19). Children in the present study play with the possibilities and availabilities of making meaning and signs; drawing is a visual resource in a meaning-making activity used to share information. Children in the CPC also used their body language (gestures, gaze, and positions) to mediate their actions. From my observations, body language was used as a material of expression. Children used a combination of body language, drawings (2-D), and open-ended materials (3-D) to make meaning at the CPC.

It is common sense that in a resource-rich room, children are likely to achieve more than in a boring room. Children have been known to change their behaviors dramatically in response to a new teacher or a new setting. In the case of the CPC, children showed some changes in their behavior and attitudes from the beginning until the end. For example, Yakov was an observer for a long time, then gradually he got involved. Leandro, James, and Yadon were quiet and more serious with their construction play, but when Yakov joined them, they changed dramatically to be expressive and loud.

Children came to the club with lots of ideas and experiences in life, and at the club they communicated these ideas to partners through play. The following section discusses play

activities according to the activity setting model and how the particular setting shaped the children's play behavior. As described in Chapter 2, the model suggests five components to be considered: personnel; the nature of activities or tasks; the purpose; the scripts or routines; and the goals and beliefs underlying the activities, following Farver (1999), as cited in Göncü, Tuermer, Jain, & Johnson, 1999).

According to the activity setting model, the personnel present and their availability in children's activities throughout play time at the club were steady. I as the researcher and leader of the club was present at all times and ready to play and interact with the children while I was also generating data. Other adults in the club included the assistant, who was a graduate student. Most of the time, we had the same assistant, but other times we had someone else to assist at the club. The original assistant was taught to gather field notes, but because she was not always there, she was not a reliable resource for collecting data. Nevertheless, the availability of the assistants provided variations in the club as a setting. This different combination of people may produce different kinds of roles to play at the club.

The data that were gathered focused on children's involvement in the tasks being performed. The club focused on the creative or active play of children, although activities other than play also took place at the club. Although the children were given a lot of freedom, there were some chores and a schedule to follow. An example of the chores would be setting up the club at the beginning, putting the materials away at the end, and helping to return the classroom back to normal. The setting up and putting away of materials were part of the club activities, and they were introduced to children in a way that was fun and playful. Children enjoyed participating in these two tasks, especially because it did not sound like a burden but instead was a kind of play. All the sorting, categorizing, organizing, and some other skills involved made it a pleasant task to do.

Another component of the activity setting analysis focused primarily on the purpose of the task. This involved participants' understanding of the meaning and the reason for doing an activity (Farver, 1999). Sometimes the same activity across settings carries a different meaning; the opposite is also true, that different activities across settings might have common meanings for the participants. Farver points out that motivation is crucial because of its influence on how participants behave, interact, and accomplish the task. That was quite obvious at the club,

because most children came in motivated to continue the script they had started or started a new theme to make sense of their world.

The scripts (e.g., routines, patterns of children's social interactions, everyday tasks, and the cultural norm for self-expression) that guide children's participation in many activities provided valuable information to the researcher (Farver, 1999). In the case of children's participation in the CPC, there was a routine that was established, the peer culture that children created, and the social interaction pattern that children developed. Also children at the CPC came from different cultures and backgrounds, though they were raised and maybe born in the United States, so one would not say Taiwanese, Rwandan, Saudi, or Indian child anymore. The children's involvement in the play activities depended on many factors, and one of them is how they were reared.

Last, Farver explains the importance of collecting data on the main cultural values, goal, and beliefs of the participants. Generally, adults organize children's environments according to what they believe would help their children become good and productive members in their communities. However, children inevitably brought their values, beliefs, and attitudes into the club, and one way or another shaped the activity settings.

6.2 Children and Gender Play

During our CPC sessions, the children grouped themselves in a way that appears to be gender separation, but after reviewing the data many times, I found nothing to hint that children positioned themselves that way because of gender. The study of gender play is pretty broad, and it was not the intention of this thesis to focus on gender play. However, the arrangement of that specific group of children and how they interacted with one another was something I could not ignore.

6.2.1 Interactions by Session

The following snapshots across sessions provide an overview of how girls and boys played and interacted within and across sessions.

Session 2 Boys mostly sat on the floor, had open discussions on how to construct their creation, focused more on the wooden blocks, and were relatively quiet. Pretend play did not exist with the boys, while construction play was more apparent. Girls were all over the room,

moving quickly from one thing to another. They explored small and big artifacts. Pretend play was much more apparent.

At times, Rhonda, Amanda, and Ellen observed the boys' construction and appeared to be paying close attention to their conversation. They observed the boys while sitting on the floor without any materials in hand, and with no interactions with materials, with one another, or with the boys.

Session 3 Girls were all around the room, playing mostly with the scarves. The boys were on the floor playing with wooden blocks, with a lot of planning on how to perfect the tower they were building.

Session 4 Up to this session, the boys played with boys and the girls played with girls. Among the girls, dress-up and make-believe were noticeable. Amanda and Edna were building with plastic lids the entire time. The boys were playing together, building towers with wooden blocks. Yakov was either by himself or hovering around the boys, but he never made any attempt to play with the girls.

Session 5 Leandro and Yadon were observed exploring the big pile of assorted lids, along with Ellen and Amanda. From a distance, I assumed that they were playing together. I did not want to come much closer because, from my experience, this specific group of children tended to speak less when I was present. So I stayed at a reasonable distance so as not to disturb the flow of their play. I noticed that the boys and the girls were physically together but they had different agendas. The boys were searching for the green pigs and the golden eggs to serve their play, while the girls were discussing how to sort this whole pile of lids by color. Once the boys left, the girls started their actual sorting. The group of four boys plus Amanda and Ellen typically moved around the room less, while the rest of the girls were everywhere within the classroom.

Session 6 From a closer look, I notice the patterned arrangements of children's play behaviors and choice of activities and peers. Although I did not notice any new pattern, the only thing that was worth highlighting was when Yakov paid attention to the group of girls playing with the paper towel tubes. He commented on their work in an excited voice, saying, "Wow, that is cool! How did you do that?" He stood for a while, then went back to the group of boys and continued with what had been started.

Session 7 The patterns of the gender-based play remained the same as the previous sessions. An observation that is worth highlighting was as follows. Ellen and Amanda sorted the majority of lids into the baskets. One of the categories was gold (it was also mixed with yellow). So they collected all of the gold lids in one basket. It was a great discovery for the boys when they found a basket that was full of “golden eggs.” It was Yakov who found the perfect golden eggs, as he called them. Ellen and Amanda did not mind sharing them with the boys because that was not a part of their play. They were looking for the flower-shaped lids and some other small colorful lids for the nectar. The golden lids meant nothing to the girls at that point but meant a lot to the boys, so they took them without hesitation. There were no direct interactions between the boys or girls. They were neutral.

Session 8 Cassie, a guest, played with the group of girls and joined the script of their play. Even though Ryan did not seem to know the boys closely, he went immediately to the group of boys anyway and played with them using his own script, which was very frustrating to the boys.

Session 9 This session was different. A slight change in the setting; fewer children due to the absence of the three boys (so Yakov was the only boy); the new girl (Cassie) insisting on joining the club; and last but not least, the change in the materials selection all contributed in shaping how children played and interacted with each other and with the materials offered. Yakov had no problem playing with the girls and sharing his story with them after all. In the past, he did not refuse to play with the girls (neither do the other boys at the club), but at the same time he would never initiate any play activity with them.

6.3.2 Insights

When I first recognized gender comparison as a discovery theme, I realized that I needed to dig deeper into the literature to find out what gender play is and what it meant within the CPC. I realized then that the subject of gender-based play is more complicated than I thought. Although the materials provided for the CPC were open-ended (reusable and recyclable materials) and not gender specific, I observed gender-based patterns in play and examined them from my viewpoint as a researcher. On many occasions, I noticed myself making a verbal mark of children’s gender by saying, for example, “What are the *girls* doing there?” or “There are a group of *boys* building together.” My observation revealed that children at the CPC, especially

the girls, tended to jump from one idea to another within one session while boys were focused and goal oriented for the entire eight sessions. However, there was no one incident across sessions where children identified themselves as being boys or girls or created a play scenario according to their gender. Instead, children were attracted to the activities and materials that they were interested in the most. The observation to highlight in this discussion is that boys and girls were together but were playing apart for the entire time of the CPC sessions.

In my review of the literature, some scholars, such as Johnson, Christie, & Wardle (2005), pointed out that a gender-based play pattern is a matter of an individual's value system. According to Schneider, Gruman, & Coutts (2005), gender is socially constructed and affected by the individual's sociocultural influence, which differs from one society to another. In the United States, where it is a melting pot, gender identity can be influenced by the different ethnicity groups, social class, race, cultural background, family values and religion, and sexuality (Thorne, 1993). Children at the CPC were perfect examples of this, with 13 children coming from nine different backgrounds. When I made my observations, gender difference was not one of my concerns or my focus. Now I wish that I paid closer attention and gathered more detailed data in regard to gender play.

One can see gender separation in our society; just a quick visit to a toy store gives a perfect example of a gender-oriented society. The toy aisle at any store is organized to promote gender-stereotyped play, which makes best-selling toys nowadays (Linn, 2008). The aisles are color coded, mostly pink and purple for girls and red and blue for boys. The media also have a strong influence on gender identity. The media have long been targeting children with advertising for a huge number of products, including toys, food, clothing, and a lot more, telling boys and girls how they should dress, eat, play, and be entertained (what show to watch). The literature on the topic of the commercialization of childhood is vast.

School is considered a source for children's socialization and gender identity as well. My personal observations of the several schools and child care centers I have visited for one reason or another disclose gender differentiation through the arrangement of the environment. Most schools have a housekeeping area, a doll house, and a box full of dolls that attract girls on one side of the room, and on the other side of the room are tool kit items, a race track, and a box full of cars. Those areas are where girls and boys, respectively, mostly play and gathered. The hidden curriculum that Martine (1998) discovered in her study has controlled children's bodily practice

within gender differences. As an example of this, teachers might give specific directions to girls on how to play such games; boys are more likely to be asked to stop doing certain behavior, whereas girls are asked to speak softly.

The increase of gender segregation becomes noticeable as children grow older; children as young as 3 years show preferences in playing with a same-sex group (Corsaro, 2014; Thorne, 1993). According to Corsaro, this increase in gender segregation can be the first sign of social differentiation in children's peer relationships, which is a central element of peer culture.

Although the literature shows an increased tendency toward gender separation among children, and that might be universal, cross-cultural comparative research warns about looking at the issue from one angle. Moreover, researchers or educators should be careful not to assume the same patterns of relationships as those of White, middle-class children as a model for understanding children's culture (Corsaro, 2014; Göncü et al., 1999). Children at this specific setting of the CPC were in an environment that did not encourage gender separation during play time; however, girls and boys still played separately. It is hard to determine that the children grouped themselves according to their gender and were more comfortable playing with a same-sex group, since this separation was not expressed or hinted. Listening to my researcher voice, I would give explanation to what I have observed that children play in separation based on their gender. However, it did not occur to me to understand this point from the children's viewpoint. Children may have chosen to play with a specific group because they were more familiar with the other participants, or because children in one group share the same interests, or they might be friends outside of the club. When children play in an environment that encourages a wide range of positioning in play, they tend to develop new positioning (Martine, 1998).

6.3 Enjoyment Versus Flat Line or Decline of Play at the CPC

Many times during the reflection time, including during the slideshow viewing, the children expressed that they had a lot of fun and enjoyed their time. Rebecca repeatedly mentioned: "That was fun!" Rhonda said, "I have a lot of lids that I will never run out of"; and Yakov said, "I was looking for the perfect golden egg." When he was asked why he was hiding the eggs with his friends and then finding them again, he said, "Because it is fun." Children showed their enjoyment through their actions throughout and across sessions. They were laughing, giggling, talking, negotiating, jumping, and acting. There were of course times when

one child would feel less excited, but those times were rare, and the expression of enjoyment among children outweighed the discontentment. The last point is related to the second research question.

Research question 2 asked: When there is a flat line or decline in play, what creates an uptick or a spark to sustain or improve play? What is the relationship between setting factors (e.g., salience of a material, space, amount of materials, number of children in the room) and children's play behavior? In answering the questions, it was very important to go through the data many times to search for examples.

Children's play quality is not always following a linear increase. There are factors that affect children's play behavior from time to time. Some factors really depend on the child's personality. Some children are leaders by nature, while others are not. Children are not always accepting of other children's signals, their invitation to play, or even their presence as a partner to play with. No two children are alike. Every child is born with his or her unique way of approaching the world. This temperament is something none of us chooses; some children are shy and others are ready to jump in. Other factors could be personal, such as a sudden or temporary change in the child's life that could affect the child's feelings and emotions. A child's experience of some negative or strong feelings in general could be externalized through withdrawal or loss of interest in play.

Another explanation concerning the variables of individual differences and fantasy-making tendencies in children's play was proposed by Singer (1973). He pointed out that children with a high fantasy-making tendency tend to be confident, be cooperative during play, have social interactions, and show a high level of imagination, compared with children with a low fantasy-making tendency, who show a low level of imagination (such as the case of Piper, who had a hard time playing imaginatively with open-ended materials). The level of a child's fantasy-making tendency also has something to do with the ability to control impulses and delay gratification, according to Singer (1961).

Singer and Singer (1980, 1990) also suggested that the expressions of fantasy-making tendency through play and other inner channels would be the result of the child's positive relationship with the social and physical environment. In the case of Yakov, the barrier to proceeding and taking initiative did not necessarily reflect his level of tendency and propensity as much as it was a cultural expectation. Yakov's mother indicated that the way he was raised, in

a Rwandan household that set many expectations for him, meant that it was considered rude to act goofy in the presence of an adult. He was expected to be shy or self-conscious in the presence of an adult (see Appendix C for the mother's response). It took Yakov a while to absorb the peer culture and the expectation, and to accept the freedom given to him. Once he picked up the cues, he became an important member of the group play and was heavily involved.

Children are born to play naturally, which is beneficial to their well-being in general, but a lot of environmental factors can disturb that. The environment, space, materials offered, temperature, and weather all are factors that could affect the quality of a child's play behavior. It is hard to determine the direct cause of children's decline to play. Literature shows that there is a decline in children's play nowadays due to many reasons such as the increase of technology demands, computer games and the push for more academics (Gray, 2011). Gray pointed out that the absence of play in children's lives leads to failure to acquire the social and emotional skills essential for a psychologically healthy child.

The following section will display some examples of children's play activity that reaches a flat line or in some cases declines at the CPC.

In Session 2, Piper and Rebecca were pretending to be the queen. Rebecca grabbed a purple see-through scarf that she claimed was special and started wrapping herself with it. When Rebecca finished wrapping herself with the scarf in an X shape from the front, she moved freely about the room exclaiming, "I am the queen!" Piper was struggling to wrap herself the same way, and she said to Rebecca, "No, I am the queen!" Rebecca said confidently: "No, I am the queen! You can't be the queen." I said, "Would it be possible to have two queens?" Piper immediately responded by saying, "Yeah!" but Rebecca said, "No, I am the queen." Piper was struggling to accept and was unhappy, then I said, "You can be the princess?" Piper nodded and smiled. A few minutes later, I observed Piper following Rebecca everywhere, asking for the scarf that Rebecca was wearing so that she could be the queen. Rebecca told her, "You can only be the queen if you wear this scarf in this way." Rebecca refused to share the scarf and kept going around the room saying, "I am the queen, I am the queen!" That made Piper upset, and she said: "I am not playing" and started whining. I told her, "Rebecca is playing with the scarf now, and she will share it once she is done with it." I tried to get her engaged with some other materials, but she was not interested. I sat in the corner and wrote my notes to give Piper a chance to figure out a solution to this conflict. Piper was messing about with a pile of scarves,

and suddenly Rebecca unwrapped herself and threw the purple scarf on the floor. She took a solid pink scarf and wrapped it on her arm and came to me and said: “I am hurt, I am pretending!” Piper took the purple scarf from the floor and struggled to wrap her arm like Rebecca, but she was satisfied and said, “I am hurt too. I have a cast.” Rebecca pushed Piper and said, “No you are not hurt. You can be the queen. I am hurt.”

This struggle between Rebecca and Piper was continuous during that session. Rebecca continued to challenge Piper, and Piper continued to follow Rebecca and wanted to do what Rebecca was doing. Across sessions, Piper showed a lack of initiative and imagination to play. She tended to follow what others started, especially Rebecca. One explanation of this is that they are classmates, so Piper felt more secure following Rebecca. Piper also had a hard time solving problems. Although, Piper had a hard time taking comfort from adults or children, she was seeking adults’ attention a lot during the sessions. For me, switching between being a researcher and a facilitator did not help in this situation. At that time all I thought of was giving Piper a chance to problem-solve this conflict independently and make a decision for herself. I could have done more as a mediator. My observation revealed that Piper is a less-skilled player and required adult attention. I should have increased my involvement to help Piper develop higher skills to be able to play and interact with materials and others and to socialize her into the CPC culture. In the end, it is about a decision I should make as an adult in the room who is not only the leader of the club but also a researcher, facilitator, and mediator. Deciding whether to participate or not depends on the children’s need for challenge and how skillful they are at sustaining play (Jones & Reynolds, 2011).

In Session 5, Edna was not in her normal mood; she acted sad and withdrawn. I asked her about it.

Me: “What is going on, Edna? Why don’t you play with others?”

Edna (responding sadly): “I don’t want to play.”

Me: “Why? Is there anything bothering you, honey?” Edna (with a sad look in her face): “I miss Daddy.”

Me: “Where is your dad?”

Edna: “He is out of town.”

Me: “When is he coming home?”

Edna: “Tomorrow!”

Me: “That is cool. Do you want to make something for daddy to surprise him when he comes home?”

Edna (cheering up and nodding yes).

Me: “Do you know that you can make anything for daddy out of these things, and do you know that daddy will be happy to see that?”

Edna was actually satisfied with this conversation and gave me a hug. Soon enough, she was noticed having a conversation with Kendra with a smile on her face (Field notes, S5, February 20, 2012).

This was a perfect example to represent my role as a facilitator. My sensitivity and response to Edna made me decide quickly that this was not the time to act like a researcher, because I had to respond to Edna’s cues and give her some comfort.

Another example of a flat line in play at the CPC was noticed in Session 13 and again in Session 15. (This portion of data was not included in the analysis, but this situation is worth mentioning.) Children did not want to play indoors because it was a special and sunny day. Children were peeking out the window, and some other children came to me and said, “Can we go outside? Please?” The weather was wonderful and the children had been indoors almost all day, so we broke the routine of our club and went to play with our materials outside. I consider this a flat line when it came to playing inside. The weather had an impact on the children’s indoor play behavior. Playing outdoors was quite different; children were playing freely, and there were more things to attract their attention outside other than playing indoor with open-ended materials. There was nature, which itself is open-ended.

There are a lot of examples to represent here, but the most important thing is that adults try to understand the cause for a decline in play instead of making assumptions. Reading about child psychology and understanding the children’s developmental level from books and theories are important but are not enough. At the club, it was essential to understand each individual and where they came from. For example, Yakov was, for the first four sessions, more of an observer; he did not show any interest in playing at all. He found a very basic material (a marble) to play

with. It was easy for any adult to assume that he was bored, lacked imagination, or had a problem interacting with people and materials. With close attention to Yakov's behavior, I could see that he was not bored. He showed signs that he was interested in being a part of the club. He was an observer, but he was not considered a slow bloomer. Instead, he was like an outsider looking and observing and picking up the language of the boys' game of the Angry Birds, which he was not really familiar with. Later, he joined the play, even though he did not have prior knowledge about the game. He stayed back long enough to pick up some of the vocabulary. Those interactions were remarkable and were mediated by the materials.

Through an activity setting such as the CPC, children learn and develop skills through many forms of social experience. Also, the particular structure of the setting will have a profound impact on the kinds of skills developed. Some children adapted to the new environment, the setting of the CPC, faster than others. Social interactions or human mediations through the use of open-ended materials that occurred at the CPC were varied and depended on children's tendencies or propensities (Singer, 1973). Playing with open-ended materials was not the only factor to consider that determined the child's play behavior at the CPC; children brought things with them to the peer culture—norms, artifacts, initiative, values, rituals, and so forth—that made meaning socially.

When there is habituation, the novelty wears off, which might be a cause of a flat line. Children were showing habituated behavior through their adaptive behavior. After Session 8, there were many things occurring besides the habituation. Children were off school for spring break; three boys (Leandro, James, and Yadon) did not come back to the club, and two girls (Amanda and Ellen) attended only half of the time because of their involvement in other after-school activities (see Table D-1 for children's attendance). For these reasons, children at the beginning of Session 9 were not as excited and energetic. I found out from the drawing and preplanning time that, for example, Yakov did not want to draw anything and was standing up looking at the room. He said to me, "Yadon, James, and Leandro are not here." At that time, I immediately changed the plan and the routine for the club. I said to them, "Today we will start something new." Then I added that we would be playing with "only" those colorful plastic lids. This addition to the club consisted of decreasing the building and constructing materials; nonstackable materials such as small gravels, seeds, and beads; and all of the fabrics.

With only assorted lids we worked on building a mandala. It was a big mandala that required all the children to cooperate and work together to construct it. The mandala had a story to it, and each child added something to make meaning by telling their story from their imaginations. It was hard to tell if these stories were a part of their life or were just random. Later, they connected their stories together.

The nature of the club is based on a routine; the novelty wore off after a while when the children became habituated. So change was a must, and it was needed to bring play to life again.

Chapter 7

Conclusion and Implications

7.1 A Concluding Reflection

Children's play has been studied from a multiplicity of perspectives. On the basis of the Children's Play Club and the case study of it presented here, findings show that children's play with open-ended materials is affected by the environment of the club. It is tempting to say that any children's play at a certain age in a specific environment is almost the same. However, children's play scenarios change constantly depending on the ingredients of it, such as the activity setting, space offered, time, materials, opportunities, guidance, and the uniqueness of the participants.

My observations and the other methods I used helped me create an image of children's interactions at the CPC. Children in this study used the open-ended materials for mostly construction and dramatic play activities, accommodated by small groups most of the time. The group play at the club provided opportunities for children to express themselves through negotiating, sharing, and enacting fantasies. The complex buildings (Angry Birds construction) using the wooden blocks and some lids, which developed over time, increased children's ability to understand space and scale and encouraged creativity. Playing with other children with fabrics, lids, paper towel tubes, and a lot more led to dramatic and fantasy play (presented through the themes such as the dog and the owner, the broken arms and casts) and therefore increased the opportunity for group creativity. The uniqueness of the members of the club led to the uniqueness of the outcomes. This means that if the club had different ingredients, including a different group of children, the outcomes would not be the same.

Although this study does not intend to give answers, guidelines, or checklists, the Creative Play Club, and the case study, is a good conduit for exploring the possibilities and challenges that emerge from children's experiences with open-ended materials and other children. The club provided children with opportunities for free and creative play through its design and agenda.

Children's selection of activities and action at the club was not according to their gender per se but was based more on their interests. The stereotype that girls are quieter and boys are louder and more energetic is not true with this specific group of children. In fact, the girls were

roaming the room, were mostly very energetic, and tended to be loud. The boys, on the other hand, were quieter (to a certain point), goal oriented, and comfortable within the same spot in the room that they chose to play in. Children's selections of activities and peers were what determined their reactions at the club.

The complication of this study lies in the uncertainty and nonproductivity. It was hard to predict what to expect. But aren't these aspects considered to be characteristics of play? Uncertainty, flexibility, novelty, nonproductivity, adaptiveness, routine, and so forth are the characteristics of play, in that they contribute to raising the level of pleasure and enjoyment and therefore trigger the motivation to play. The chain of positive reward that children gain from free play—it promotes social-emotional skills, advances problem-solving skills, and builds the imagination—outweighs any other alternative that we can provide and offer our youngsters.

The crisis of reduced time for play in schools and replacement of after-school free play with more organized activities may hinder cognitive performance and can be considered counterproductive (Pellegrini, 2008). Groups such as the creative play club children to play freely, a necessary opportunity in a community that otherwise encourages more organized activities. This study not only highlighted children's free and creative play but also focused on the factors that could enhance it. Open-ended materials, space and time, and permission to play freely within familiar places are very important to children's play. Moreover, adults' involvement and their positive attitudes toward children's free play influence the development of children's play into creative play. Adults must consider a culture of tolerance toward children's play and deepen their understanding of play as a tool for achieving other outcomes. When children follow their own rules, act according to their own time, have a sense of control over the situation, and make decisions for themselves, they can harvest the benefits of play.

This research has demonstrated that children's creative play at a specific activity setting carries a lot of meaning that may not be easily interpreted by the adult. However, being there with children has motivated me as the researcher of this study; therefore, I plan to encourage other adults to go through this unique experience and peek through the hole to witness children's play progression over time. I also encourage adults who are dealing with young children to recognize play and its importance in early childhood education and welfare. Further research should be conducted that zooms in on the importance of parents' and teachers' contributions to children's free and creative play using open-ended materials.

Although the different roles of the researcher and adult were very critical to the club, it created a dilemma of needing to gather data and simultaneously respond to children's needs and cues. Giving children permission to play freely in an environment where they feel safe and valued will definitely benefit them to advance their play, which leads to creative play. For this reason, adults need to pay closer attention to children's need to play freely, keeping in mind that children's play is their world that they create and enjoy. The CPC can be considered and used as a source for caregivers to learn more about children, to scaffold their knowledge of the world, and to help them find what is meaningful to them. Accordingly, adults can take the journey into children's worlds but not take it away from them.

The CPC can be adapted at different activity settings, including home, school, community center, and other cultural contexts. The CPC is like water that takes the shape of anything that you pour it in; that is how flexible the club is. In fact, what shapes the club is its ingredients (e.g., the uniqueness of its members, the materials, time, and space). Economically, the cost of the club is minimal, which makes it adaptable anywhere with a very low budget. Part of that advantage is that the open-ended materials used by the club came from nature or recycling bins, or were found items. Having said that, the CPC can be supplied by the children themselves; they can bring in the materials, which makes it even more fun. This way children sense ownership of the place and feel they belong to the club.

This research and its methods are appropriate for young children. Through observing the children's expressions during the group discussion and during my overall study, I think that children enjoyed their time and experience at the CPC. Their giggles, silliness, laughs, and good attitudes were evidence of this.

The findings provided a deeper understanding about the significance of the ingredients to creative play. Implementing creative play is an opening to more opportunities for our children to play and more for us (adults) to learn about our children. Thus, my study, "Young Children's Journey Into a World of Play With Open-Ended Materials: A Case Study of the Creative Play Club," contributes to the studied field of children's play, and empowers children to *plan*, *play*, and *reflect* toward creative play with peers and open-ended materials.

All in all, children's play worlds are owned by the children. Children create their own peer culture whether we adults like it or not. What children create should be respected; adults should not colonize, destroy, or control children's own worlds to pursue an adult agenda based

on what is thought to be best for children. Adults should be aware of the importance of play for children, and instead of improperly intervening, they should support and protect children's play through their actions. Any intervention in children's free play should be invited, needed, unpredicted, and flexible.

7.2 Implications and Further Research

One of the crucial roles of the researcher is to listen directly to children's stories in their own voices, in which all of the meaning, experience, values, and attitudes are integrated and embodied in all their richness and truly cannot be analyzed in isolation. An important part of listening is paying close attention not only to the voice of the child but also to any other form of expression.

To understand a child through his or her play is to understand the individual as a whole (how the child behaves, interacts, and carries out a task). A researcher has to consider the ecological factors as well as cultural features to better understand the meaning of children's play (Farver, 1999; Göncü & Gauvain, 2012). Berger (1995) highlighted the importance of finding meaning in text. He pointed out that most people, when asked about the meaning of symbols used in the 1920s or 1930s, would not know what they represented; for example, in a painting, a bride's hand on her stomach would be a symbol of the woman's willingness to bear children. His point was that just as we may not be acquainted with the meaning of symbolic phenomena from earlier times, we may be blind to the symbolic meaning of phenomena from different cultures. Thus, educators who are dealing with young children who are from different cultures than their own should consider the nature and nurture in determining the children's play behavior.

This current research study is not a verification phase, testing a theory; instead, it is a discovery phase, in which one might see a model emerging that could be evaluated in subsequent research. It will be good in the future to have a verification phase of some initial formulation that was inspired by this dissertation.

As depicted in Figure 7.1, play has to be viewed in two dimensions, with cognitive and social forms nested (with a list of key behaviors anticipated from theory and previous research, as mentioned briefly in Chapter 4). Play using open-ended materials starts with exploration, which generally is seen as a lower quality of play. When a child's play develops but reaches a dead end—that is, it does not pass the exploration level—the play is of a lower quality (see

figure 7.2). Adults (caregivers, teachers, and parents) should pay attention to how children progress in their play. Sometimes they need to step in to mediate or facilitate children's play to help them progress and reach an optimal level. At the same time, adults should be careful of intervening; some children need time to explore, and intervening would interrupt the flow and the chain of thoughts the child is developing. For example, in Yakov's case, when he was exploring (or seemed to be stuck in the exploration level) for a long time, there was no sign that he actually needed help; he did not ask for help, nor did he show signs of being bored. He just needed time to enter play by helping himself, by gaining enough knowledge to enter the play, and by progressing toward creative play without any intervening. The bottom line is that not every child who spends a long time exploring needs outside assistance.

The child's play progression from exploration to a higher level of play is a positive developmental level (see path B in Figure 7.3). However, this path uses lower quality of play to reach creative play. When the child crosses this bridge to creative play, he or she actually takes a shortcut and misses out on a quality of play that requires higher level thinking.

When a child crosses the bridge from point A to point C, toward creative play (see figure 7.4), he or she gets to explore the functionality and the usability of materials before reaching the point of transformational use of materials. The child is then considered to have achieved a higher quality of play.

The current research project is designed for children, but the implications extend to adults who work with children, such as families, caregivers, educators, and so forth. I would like to continue this research in a pyramid format that includes the child, the family, and the school. Speaking to all participants at once to serve the child will hopefully lead to a better community. Including families in future work with children (such as in a club or any after-school activities) would provide a comprehensive tool to better understand the phenomena of children's play and activity. A club could be designed for families and cover similar ideas of hands-on experience. It would be important not only to include the families in play, but also to include them as a source of data gathering through reflection time with parents, focus groups, or interviews.

The club is a showcase to represent one way to provide children with free, unstructured, and affordable ways to play. Having a club provides a way for families, caregivers, and educators to learn how and why to have creative play clubs as a form of positive intervention. The club could be after school, during school, or even at home. The most important parts of

providing children with such an opportunity is to believe in the club's goals and to understand them. For this reason, I provided multiple workshops designed to give preservice teachers a hands-on experience of play. This approach comes from the belief that "if you have it you can give it." If adults are not playful themselves, then they won't support play for children. They even have to master play facilitation techniques (Johnson, Sevimli-Celik, & Al-Mansour, 2013).

The following section presents a synopsis of the research that I conducted with preservice teachers in the spring of 2013, and that I plan to do with families in the near future. The need to hear teachers' voices and to get them engaged encouraged me to design a workshop for preservice teachers. I concluded that being an active learner, living the experience, and participating in hands-on opportunities are the key factors in embracing change in preservice teachers' values and beliefs, tying together the reality of current practice and the substantial improvement necessary to their future teaching profession.

In the past 2 years my work with preservice teachers, either in the supervision course or while providing multiple workshops, has illustrated the importance of professional development within the teacher preparation program. In the spring of 2013, I once again provided a workshop for preservice teachers for the purpose of research. During that workshop, preservice teachers had a heavy dose of hands-on experience playing and interacting with open-ended materials. There was no prescribed formula for change applied; instead, the research depended on the informally collected data concerning preservice teachers' need for more hands-on activities.

That research, titled "Uncovering PreService Teachers' Perception About Children's Play: A Reflective Play Experience," explores how preservice teachers remember their own childhood play and how they perceive children's play today. The understanding of the significance of play today and descriptions of play could be increased by preservice teachers' examination of their own experience of play in their childhoods and through their current reflection of their hands-on experience playing with open-ended materials.

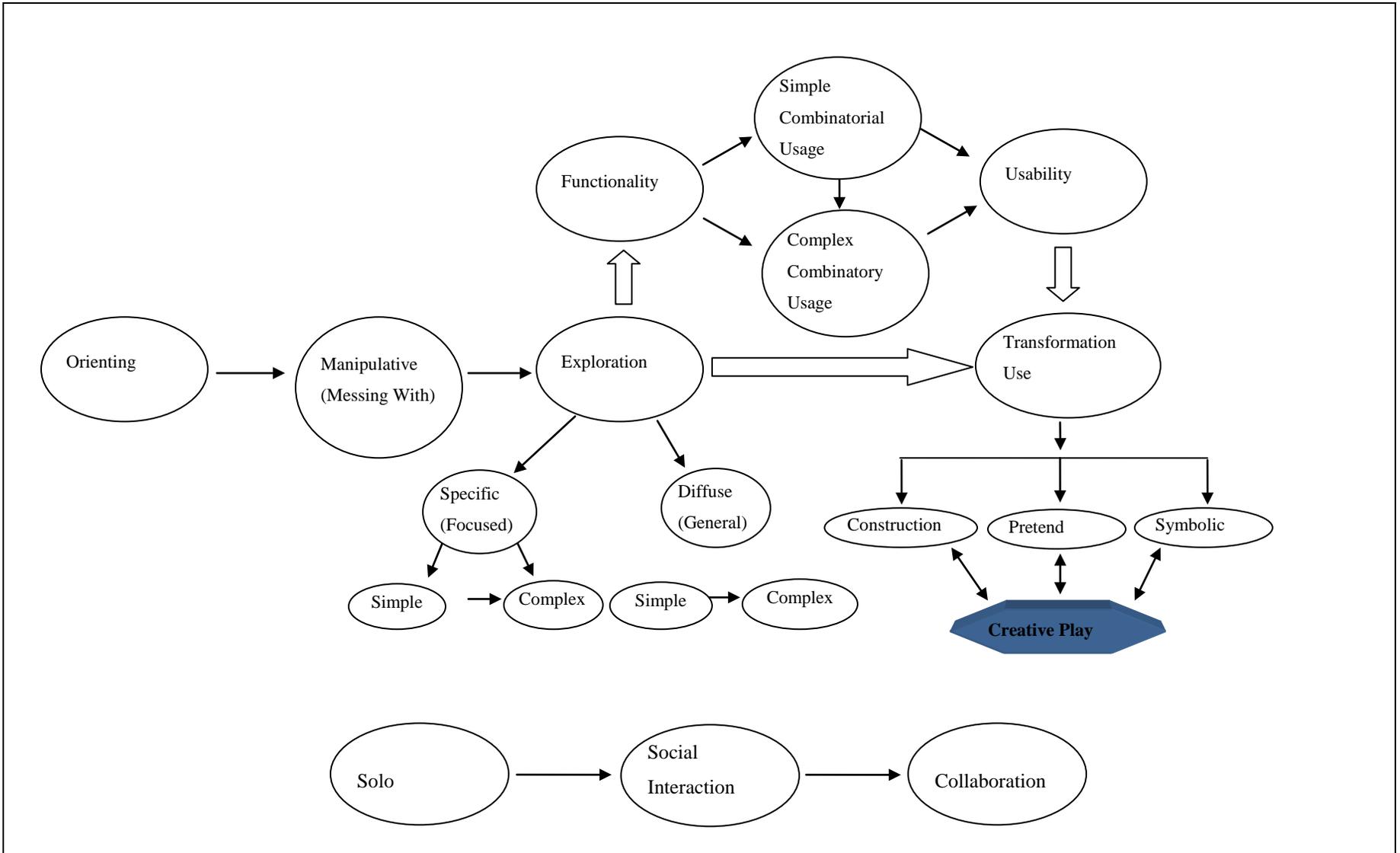


Figure 7.1 Hypothetical model of children's play at the Creative Play Club

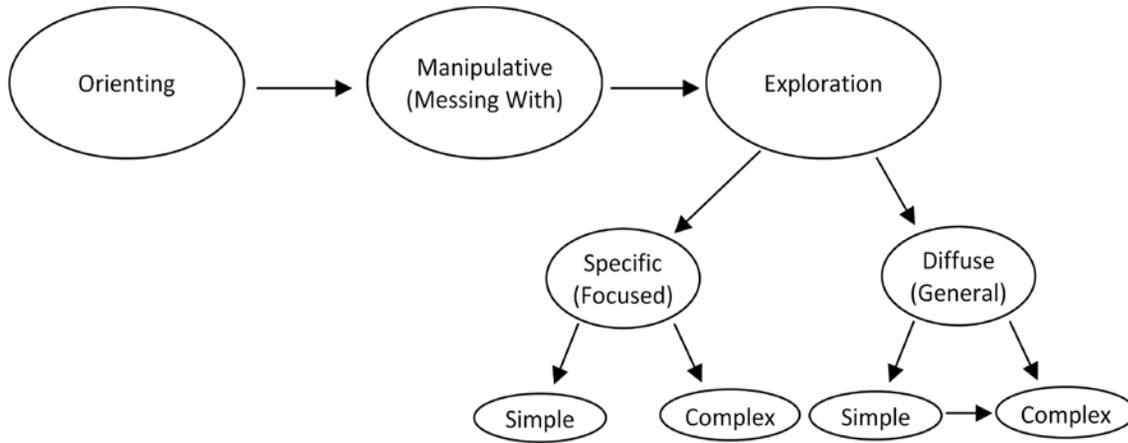


Figure 7.2 Children’s play development reaching a dead end

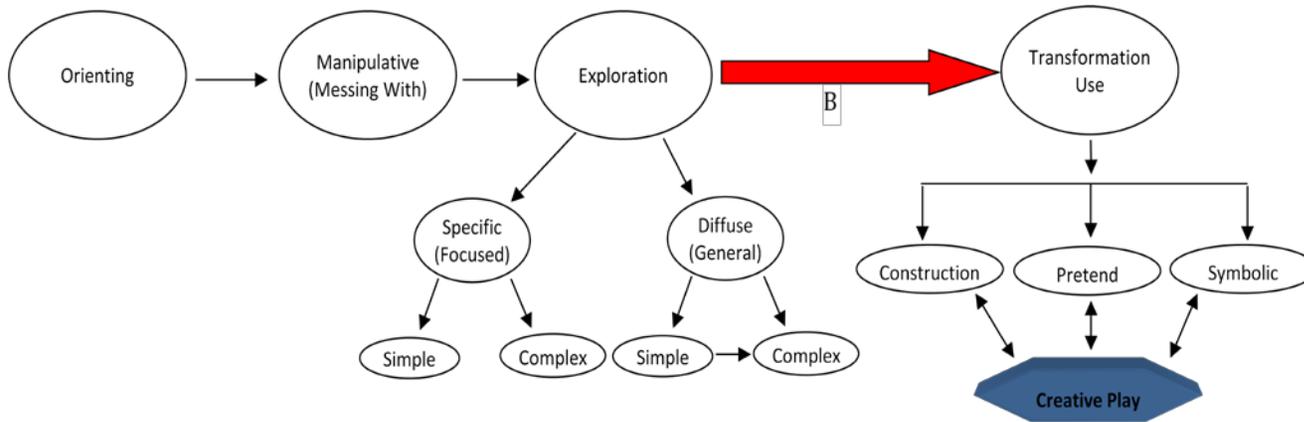


Figure 7.3 Path B—Lower quality of play on a path to creative play

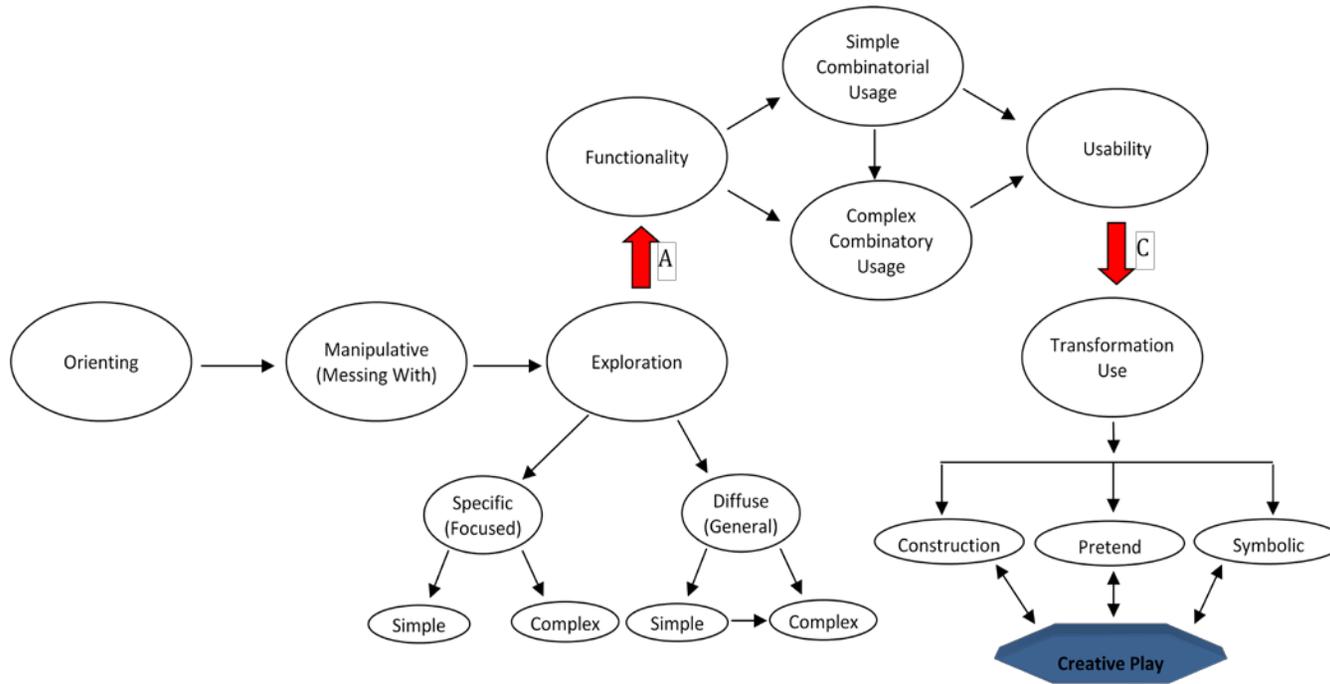


Figure 7.4 Path A–C—Higher quality of play on a path to creative play

This starting point might lead us to another research question: How do preservice teachers remember their own childhood play experiences, and how do they perceive children's play today? The workshop provided the best opportunity to bring everything together and discuss how open-ended materials can be linked to learning through creative play. Discussion included how important it is to have daily access to open-ended materials, especially in classrooms for young children, to encourage not only creativity but also the child's overall development (cognitively, socially, emotionally, and linguistically).

The intent of the workshop-based research is to allow preservice teachers to recall the value of play and playful interaction with things and people, with the hope that they will carry this favorable experience with them as they grow professionally. The plan was to have preservice teachers live the reality and analyze it to infer solutions before they enter the teaching profession. Through their participation in the workshop, the students were encouraged to make their teaching public and to share and exchange ideas and thoughts, live the experience, make intensive observations, learn the importance of documentation, revisit their work, and reflect upon it. The workshop also promoted open-mindedness, reflection, and interaction, and the importance of building good relationships with one another. In addition, the workshop was relaxing and fun for the participants, since they were playing freely with their peers and the materials provided. All in all, this workshop was conducted with and for the participants.

It is assumed that if the research goals can be met throughout the workshop, it will contribute to changes in teachers' beliefs and attitudes toward play and playful practice. This change, however, is not a top-down change model; it is a horizontal change in which preservice teachers are encouraged to cooperate and collaborate. It is uniquely designed to include participants in the process, thereby ensuring that they are responsible individually and collectively for what happens. The result is more likely to provide important implications for preservice teacher education and early childhood education in general. Moreover, it is more likely that preservice teachers will (a) develop a deeper understanding of the importance of play to young children, (b) develop a more positive attitude toward play, (c) rethink teaching approaches to incorporate a more playful approach, and (d) encourage more early childhood teachers to adopt a play-based curriculum.

7.3 Strength of the Study

The use of multiple methods applied in this research allowed for clarification of the findings at each stage of the research, and the contribution provided by the participants helped to ensure the internal reliability of the study. In addition, this study may provide some awareness of the relevance of the research on a local and global scale. Despite the fact that the findings are limited to one local school, they may be applied in schools or community centers to ensure that children's play is valued everywhere; it is adaptive and can be adjusted to fit any cultural contexts.

7.4 Limitations of the Study

The obvious limitations of the CPC study would be the need for generalization. This limitation is due to the relatively small population under study as well as the fact that participants were recruited from one local school within one city in Pennsylvania.

The findings in the present study would be most transferable to schools within the United States, while generalization outside the United States might be difficult because of restrictions on kinds of format. For example, in Saudi Arabia, establishing an after-school program requires a long process to get permission, or if the program will involve families, taking pictures might be an issue, especially with mothers. Being inspired by the Reggio Emilia approach, the club was set up in a way that cannot be taken as a package and applied directly somewhere else. To be transferable, it needs to be flexible and considerate of the cultural aspects as a number one concern.

Another limitation is the chance of an observer effect on the children being studied. Observations are interactive, and both the observer and the participants being observed unavoidably affect each other (Angrosino, 2008). It is hard to assume that my presence as a participant observer being close to children in play did not affect them at all, even though my impression was that it did not affect what and how they played, given the freedom of choice in the CPC. Moreover, the observations were naturalistic, which gives the benefit of observing the children's authentic action and play, but it also involves a rather uncontrolled setting of research. There could have been factors influencing what I observed that I was not able to control or did not know about.

The findings of this case study of the CPC might be misleading for some readers. They might think that providing play opportunities would always lead to a positive ending and that it is linear. However, a section of this report discussed possible play decline at the club. If this club were done again with a different group of children in a different place, it might lead to different findings.

Last but not least, my experiences and prior knowledge as a participant and experienced observer who was heavily involved at the club, and who held a central interpretive role, as explained earlier in this paper, might tint the interpretation and result.

7.5 Trustworthiness of the Present Study

The traditional debate on research quality criteria has been between quantitative research's positivistic concepts of assessing reliability and validity and the question of how they should or could also apply for qualitative research (Creswell, 2007; Flick, 2006; Patton, 2002). Qualitative research has gained acceptance and respect during recent years, with a growing consensus on the importance of appropriately matching methods to purposes, questions, and issues instead of committing to one single methodological approach (Patton, 2002). Although Patton pointed out that qualitative research represents a uniform perspective that is a real misunderstanding, the qualitative research area is itself complex and diverse. "People viewing qualitative findings through different paradigmatic lenses will react differently just as we, as researchers and evaluators, vary in how we think about what we do when we study the world" (Patton, 2002, p. 543). These issues involve the complexity of representation in how and what to interpret (Denzin and Lincoln, 2005).

The readers of this thesis, with their paradigmatic lenses, worldviews, personal backgrounds, and experiences, will apply their own judgment. Accordingly, the trustworthiness of the study will, in the end, be the readers' experience of trust in what is presented.

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APPENDICES

Appendix A

Extended Day Program (EDP) Structure

The [REDACTED] of Central PA Charter School ([REDACTED]) Extended Day Program (EDP) is available to [REDACTED] students, kindergarten through eighth grade. The students in the program are provided with a closely structured and supervised schedule of activities and care. Time will be provided each day for snack, extra-curricular, Multi-cultural clubs, and homework assistance, as well as a variety of activities within the daily program. Daily snacks will be provided at no additional charge. Extended day (ED) is an extension of the school day and the services are only available on school days.

The EDP provides enrichment and development opportunities for students beyond the traditional school curriculum. The program gives youth a safe, supervised place to explore interests, learn new skills and spend worthwhile time with peers and adults. The extended day hours are an important time that can be used to enrich learning and social skills. All students can benefit from the safe, structured environment offered by the program.

The quality of EDP is the expanded learning opportunities that support developmentally appropriate cognitive, social, physical, and emotional outcomes. In addition, the program offers a balanced academic support, arts and cultural enrichment, and recreation.

It is important to define what EDP is at the outset, as the recent growth in the field has been guided by three commingling philosophies, rather than one unifying vision of how children's time should be spent. These philosophies are referred to as "youth development," "school-age child care," and "expanded learning programs."

The Extended Day Program also provides the children with:

- ongoing relationships with caring adults
- an environment that strengthens social skills and character
- healthy snacks and/or meals to meet students' nutritional needs
- safe and well-designed indoor and outdoor spaces

Key Principles of Developing an Extended Day Program Curriculum

1. Provide Structure With Flexibility. One of the most important things to remember in designing a curriculum is that children need a balance between structured activities with flexibility.

2. Plan a Variety of Activities. When it comes time to plan activities, we try to provide a wide range of opportunities for learning. Include a mix that develops academic, social, physical, and emotional skills, global knowledge, while giving students the chance to develop hobbies, skills, and interests they might not otherwise be able to explore. The hands-on activities can help students cultivate positive character traits, and enhance their sense of community. The extended hours provide an ideal time and get students excited about learning to pursue their own interests, and it helps them develop self-confidence as they explore new talents in areas that may not be addressed by the regular school curriculum. We make sure the activities we offer are fun and engaging. Most kids are tired after a long day at school, and they will be best able to absorb the content of a lesson if it looks more like play and less like a traditional classroom lesson.

3. Give Students Choices. Some of the days of week students have choice to choose their club/s. This encourages students to take responsibility for their own learning, and allows the program staff to better meet the needs of all their students.

4. Provide Opportunities for Student Input. By working with students to develop curriculum activities, we allow them to develop a sense of ownership of the program, develop responsibility, and select activities that reflect their interests.

5. Pay Attention to the Particular Needs of the Program. A thorough knowledge of the needs and desires of our students, staff, and families, will allow us to fine-tune activities for the best possible fit with our unique population.

6. Pay Attention to Time, Environmental, and Staffing Constraints. We make sure activities work within the time allotted for the program, and for the environment in which it will be performed. We make sure that there are sufficient numbers of qualified staff/volunteers to meet the requirements of the activities.

The various ranges of activities this program offers are quite broad. In general, though, quality of Extended Day Program creates a safe, healthy, and stimulating place for school-age children. The [REDACTED] Extended Day Program offers about 25+ various activities each week. The activities are listed below:

Foreign languages—Chinese, French, Spanish, Turkish

Academic skill-building—Engineering club, homework club, technology club, book club

Sports and recreation—soccer, badminton, basketball, scooter, jump rope, dodge ball, martial arts, yoga, Lego building, clogging, etc.

Exploration of special multicultural interests—art, music, drama and theater, computers and technology, crafts, games, food and nutrition, scouts, knitting, strategy games, etc.

Multicultural activities—cooking, dance, world culture and history

Creative activities—art and drawing, strategy games, readers theater

Source: [http://www.\[REDACTED\].org/new/index.php?option=com_content&view=article&id=16&Itemid=303](http://www.[REDACTED].org/new/index.php?option=com_content&view=article&id=16&Itemid=303)

Appendix B

Personal Narrative

My attraction to open-ended materials is not coincidental. From the time I was a young girl, I loved to play with found, discarded, and recyclable items, as well as items that are from nature: sand, water, clay, and so forth. I grew up in a house that widely supported open-ended play with such materials.

Spinning the wheel of time backward made me realize how lucky we were as children. It made me realize that playing was all we did when we were little. Playing was our window to explore the world, discovering how imaginative we were and how creative we were. It is very sad to see this window closed to some children.

When I was a little girl, I used to put my head on my mom's lap and enjoy listening to her stories. When she ran out of stories to tell me and my siblings, she would talk about her childhood, how they used to play, and about some funny incidents that occurred back then. We used to laugh, and enjoyed listening to her stories.

My mother used to live in a predominantly agricultural town not too far from Riyadh, the capital city of Saudi Arabia. Almost everyone had a farm and livestock. Everything was organic and green. My father, on the other hand, spent his childhood on the east coast, where there was a shore nearby. He used to go fishing with his older brother; so his childhood was full of sand, shells, castles, and water.

In my mother's town, many children played outdoors. They played in groups, pairs, or even solo. The boys and the girls played separately, because that is how the culture is, especially with older children. They played using their own resourcefulness, with limited or no prefabricated props. They would use the environment around them, playing with sand, stones, branches, sticks, water, cloth, wood, and so forth. Their play involved different physical activities, including jumping, running, throwing, and climbing. They invented and organized their own sports games; they used these to solve their own problems. At the end of the day, everybody went inside tired and dirty, but happy!

I still remember the story of the game that my mother played along with her neighborhood friends. They waited impatiently for their families to finish their meals. They used to collect the remaining bones from the table, clean them, and save them for their game. Later

that day, they gathered outside with their collections and started sorting the bones based on size, thickness, and length. They then tried to build a figure connecting these bones together. The figures that they built were random, with no specific shape, but the most important aspect was that the figure should be a three-dimensional figure that would be able to stand up. When they successfully finished constructing their figure, it then became time to decide how to knock it down so that it all came down at once. They measured a distance away from the figure and drew a line. A child was then selected by the group to knock the constructed figure down. They also created the tool they used to knock the figure down. They used the longest bone and had two rubber bands bound tightly at each end. Then they chose the smallest or the shortest bone, attached it to the rubber bands, wound it up, and shot it at the structure in an attempt to bring it down.

They used to spend hours and hours doing that. With freedom, space, and time, the result was creativity. I was laughing at my mother and the fact that they played with bones, but when I thought about it, they were much more creative than we were. The originality of the idea and the way they solved their problems was amazing. Their imagination led them to create many, many interesting *things out of nothing*. It was a spontaneous play that was full of curiosity, imagination, and creativity.

Even though I think that my mother's generation was more creative than my own, I can still say that my generation was more creative than my children's generation. Growing up in a family that supports open-ended play with open-ended materials helped me a lot in becoming a creative thinker. In my younger days, I collected different type of boxes, tubes, Styrofoam, beads, candy wrappers, and so on; the list of my collections was endless. I used to build and create interesting things out of them. I also used to collect lost playing cards and cut them up in random shapes and challenge my parents to put them back together (like a puzzle). I was allowed to collect the reusable materials, and the good thing was that it was never annoying to my parents. As I grew older and became a teenager I was very interested in crafts, and I used to create beautiful and useful products. Looking back, I realize that my childhood was rich with play. I was allowed to play outside with the neighbor's children, and often we played in the sandbox that happened to be in our yard. My older sister used to make up stories using sand as the starting point. There were no props, no fancy toys, or expensive tools. The only thing that she really used was her own imagination. I told myself that when I grew up, I would remember the

importance of that. Cobb (1977) hypothesizes that our innate connection with nature in childhood is the root of our creativity as adults. Froebel (1826) emphasized in his book, *The Education of Man*, the idea that it is through creative play that the child discovers and expresses the power of his own creative spirit (cited in Wolfe, 2002).

In the past two decades, major shifts happened in my professional life. I became a college student and decided to pursue early childhood education as a major. I found it interesting that, as a requirement for some courses, I had to create games to encourage different types of domains. I found myself using open-ended, reusable, or discarded materials to do that. My focus was to use open-ended materials for many purposes; one of the main reasons I did so was that I could do anything with them. They are affordable and accessible, so rather than spending a lot of money buying expensive toys that would end up in a storage room anyway, I decided to use materials that could elicit spontaneity and fun, while at the same time costing basically nothing.

While working on my undergraduate studies, I was already a mother of two beautiful children who were full of imagination and curiosity. My children's opportunities to play with open-ended materials were limited compared with mine and with my mother's, especially with the increase of activities such as technology, sports, and other after-school programs. I got my children all the toys that any child dreams of, thinking that this is modern life and we are keeping up with current society. I figured that there must be some type of benefit from these toys that claim to enhance creativity or stimulate brain development. I was pressured by all the commercials and the context of our current life. I noticed that my children did not actually value all the expensive and fancy toys that I got for them. It was very hard to find a toy that encouraged imagination. I then realized that there must be something wrong! Why would my children get bored so quickly with their toys? Besides that, they always asked for more! It was as though their curiosity was never satisfied, they always wanted more. Were they looking for amusement but not imaginative inspiration when playing with their toys (Elkind, 2007)? Would that explain why they used to jump from one toy to another while not spending time on one particular toy? I felt as if I was in a battle and wasn't sure what I should do.

In 1997 I decided to travel to the United States to work on my graduate studies. During that time, I had three more children, who are no less curious than my older children. I earned my master's degree in early childhood special education from George Washington University. It was a very strong program and added to my knowledge; however, when I graduated, I was not really

satisfied. It did not fulfill what I knew was my highest potential. During that time I was struggling with many issues stemming from being so far away from my family and dealing with the language barrier and with the different cultures. I was struggling to find meaning, and my children were as well. Their daily life became boring. They went to school and worked on academics, with little to no time for play. They were discouraged from using their own creative ideas; they felt that they were merely accepting information rather than seeking and discovering knowledge. That definitely was not what I wanted for my own children. This struggle and conflict inside me did not hold me back, however. It actually prompted me to go forward and search for balance in both my own and my children's education and life.

This pressure comes not only from school. As Elkind (2007) stated, our society has become a screen culture; we are in a hurried society that produces hurried children. We spend most of our time trying to catch up: catching up with school work, with after-school activity, and with the newest electronic media. I could not isolate myself or my children from this society. It is a universal issue, not only in the United States: play has been changed and reduced over time. A clinical report in the journal of the American Academy of Pediatrics (AAP, 2007) cited play as the right of every child. The report highlighted the importance of play for normal childhood development and expressed concerns that many children are not allowed enough time for play, even in wealthy families. Many children are raised in an increasingly hurried and pressured style that may limit the protective benefits they would gain from child-driven play.

My major focus was to rescue my children and help them cope with this dilemma. And I call it a dilemma because I realized that I could not change it, while at the same time I could not ignore it. I realized that alone I cannot change the world, but I can start with my own children. I can also start by nurturing my children's creative life by modeling it myself.

Ever since I was accepted to Pennsylvania State University for my PhD studies, many things have changed. Does that mean that I have a full understanding of how can I bring creative play back to my children's life? No, but the fog has started to clear up and I now have a better understanding. I feel that at this period of my life, I have moved from the survival stage to the wondering stage. Truly, with this phase of my life, I believe that a lot of doors have opened for me. I am traveling, networking, attending and presenting at conferences, and a lot more. I am curious and ready to learn, and as long as I have this ability and attitude, I think I am on the right path.

To bring creative play into my home and my children's lives, I brought back old-fashioned play. I introduced open-ended play with open-ended materials. Soule (2008) said: "Living a creative life is all about imagination. . . . We do need not only to support and encourage the growth, stretching and development of their imaginations, but to model the use of our own" (p. 55). Accordingly, I have provided my children with three major things: opportunities (*time, space, and permission*), materials, and guidance (Johnson, Christie, & Wardle, 2005). The consequences were amazing. Hence, I tried to seek a balance in their life. This balance was best illustrated by David Elkind in his book *the Power of Play*. Elkind (2007) viewed the balance of play, work, and love as three essential elements of a full and productive life. This kind of balance would nourish the child's curiosity, imagination, and creativity. These abilities are like muscles, and as Elkind suggested: if you don't use them you lose them! This formula that Elkind analyzes has inspired and provided me with a lit candle to carry with me when digging inside the power of open-ended play with open-ended materials.

Accordingly, I decided not to eliminate television because I was able to manage and limit the amount of time they would be watching it. I have sound control over the type of shows watched, using my parental guidance to help them pick and choose. Before watching, we sit and talk about the shows and critique them together. Most of the time, my children decide not to watch, because more negatives than positives come out of our discussion. It is amazing how they have drifted away from television watching, with less direct pressure being put on them by caring adults, and with the decision being made by them. I have also limited after-school activities and organized sports and have substituted free and spontaneous play. I limit electronic game playing, and as a substitute, have introduced reusable and other types of open-ended material to my children. I realized that old-fashioned, spontaneous, creative, and unstructured play can be the best substitute for the pressure of media, extensive after-school activities, and video games. Frost (1998) emphasized the importance of age-appropriate open-ended materials, saying that free, cheap, and natural materials are good as long as they are safe.

As Almon (2003) explained, working with open-ended materials is effective as children attempt to solve problems. Open-ended materials encourage creative and divergent thinking. There is no right or wrong way to use these materials. Therefore, children take risks and develop confidence. Each time they use these materials, they are creating something new. The freedom to be in control of the situation helps children achieve a sense of competency and self-worth

(Almon, 2003). I believe that rather than wasting time telling my children about concepts, open-ended activities let them learn concepts through the manipulation and exploration of these open-ended materials. My children seem happier than ever.

When I step back a little, I ask myself, did I play like my mother? Did my children play like me and like my mother? No, the products of our play were different, the opportunities were different, and the time was different; however, all of us share one common thing: we grow from the use of creative play when we get the opportunity, the materials, and the proper guidance. I learned about Friedrich Froebel, the Father of Early Childhood Education, who created 20 open-ended gifts that allow children to create. Froebel believed that play helps the child discover and express his or her inner creative power (Wolfe, 2002). Like Froebel, I believe that within the child there is a creative being, a spirit that seeks to express itself in joyful ways. My own children did not accept the idea of playing with items that looked like trash at one time. However, that was a misconception; I believe I was wrong because it was not about acceptance! Their creative play with open-ended materials was like what Almon (2003) describes, a spring that bubbles up from deep within them.

My children may have taken longer to accept recyclable materials because it took them longer to explore them, form a relationship with them, figure out their affordances, and understand that they can transform the objects into whatever they want. While they were playing, I was not just being a passive observer; in fact, I was a researcher, a guide, and a facilitator. I was trying to provide enough assistance to enable them to perform at a skill level beyond what they could do on their own. Evidence shows that higher level play does not unfold on its own (Hirsh-Pasek, Golinkoff, Berk, & Singer, 2009). So what I was trying to do was ensure that play reaches my children's potential. I enjoyed observing and interacting with my children (with their different ages and genders) during their play with these materials.

Journey of Change Through Inspiring Conferences and Trips

When I was accepted into the PhD program at Penn State, a lot of doors opened up for me, including traveling. To begin my journey of pursuing change in my children's life, I started to travel and promised my children that I would take them with me, to whatever country I traveled to. I was trying to seek balance in making this decision. What I really wanted for my children was to see them grow and connect together. I felt bad that I had lost something along the way, something called creative play. I wanted to bring that back to my own children, and I

realized that traveling is one way to enhance their exploration, curiosity, and imagination, as well as a way to broaden their knowledge.

My first trip was to Italy. I had two major goals in mind. When I went there, my goal was to expose my children to cultural differences to broaden their imaginations. I believe that by using their imaginations, they can be explorers. I was trying to challenge their creative thinking by stretching their imaginations. Also, the second goal of the trip was to develop myself professionally, expand my own knowledge and network. I learned things from that short trip that I was not able to learn by reading books about Reggio. It was a valuable firsthand experience.

We went to Italy in the summer of 2009 and visited Reggio Emilia, Venice, and Milan. My visit to Reggio specifically had educational goals. Although I did not have any direct educational goals for my visits to Venice or Milan, they turned out to be educational as well. The geographical differences, historical buildings, museums, and art and culture had a tremendously positive impact on my children's thinking and imagination. My goal was to attend the World Forum in Reggio Emilia, in order to experience firsthand the Reggio approach to early childhood care and education.

I believe that the Reggio philosophy, with its unconditional respect for children and their ideas, feelings, and experiences, can positively influence the learning process for children who are at risk or disadvantaged in Saudi Arabia. Often the focus of education there is on memorizing with the old-fashioned teaching style, but there should be higher expectations for children who are at risk of underachievement, because they need opportunities to reach their fullest potential rather than a drilled approach aimed at their catching up with learning the basics.

One of the visits I made was to Remida, the creative recycling center and cultural project. It is considered an ethical, educational, ecological, and economic challenge. It is a place where discarded materials can be resources and where unsold or rejected stocks from shops are collected so that they can be reused for a different purpose. Remida is where one can make the most of waste materials, worthless products, and imperfect objects to create a new product that shows respect for the environment. It is run by Friends of Reggio Children Association, with the contributions of many volunteers. The center distributes materials to anyone who lives in the territories of Reggio Emilia, Parma, and Piacenza, including teachers, students, scholars, parents, administrators, environmentalists, and more. The Remida center also organizes workshops and training courses, seminars, and exhibits (Ferrari & Giacomini, 2005).

In general, I believe that the Reggio philosophy can positively influence the learning process for children in Saudi Arabia. They can benefit from the idea of having a creative recycling center such as Remida. For those thinking about the economy these days, Remida is a great solution to foster creativity with little or no cost. I would like to see the preschools in Saudi Arabia adopting some ideas similar to the Reggio approach, which encourages parents' involvement; fosters creativity; and offers child-centered, hands-on, cooperative learning. Methods like Remida offer endless possibilities, and when I return to Saudi Arabia, I will find a way to adopt what I have learned and to discover new possibilities that fit our cultures and beliefs.

This approach is best seen in the schools in Reggio Emilia, and the study tour is a critical link in ensuring a real understanding of the approach and its successful implementation. My memories of this visit are filled with elegant images. The experience provided me with a deeper understanding behind the Reggio school's philosophy, and the school visits allowed time to reflect on my own direction and understanding of the field of early childhood education.

The National Association for the Education of Young Children conference in fall 2009 had a great impact on my network, as I went there knowing that I would be meeting important people. After reading Walter Drew's articles and browsing his website, I got the chance to have a productive meeting with him, during which I shared my research interests. Since that time, I have known that Dr. Drew will have a great impact on my future studies. He is truly an inspiration.

Attending the "Play Experience" workshop by Drew and his colleagues at the NAEYC conference, and having hands-on experience with open-ended materials, had a great impact on me both personally and professionally. I found out a lot about myself. Although I consider myself a "play" person, I came in all dressed up, hesitating at first to let go and loosen up! What was going on? Had I lost my inspiration? Where had my imagination gone? After a while, and after becoming involved with play, I decided to conquer my terror of letting go.

Getting all dressed up and being fancy from the outside should not deter me from being playful. I think I was too serious. After the hands-on experience, it was time for journaling and reflecting on how this affects us professionally. At the time, I did not think of anything because I was recovering from the shock that I just experienced. Sadness hit me in the heart about the fact that I did not know how to play the way I could when I was a child. I thought that with my

wealthy history of play as a young girl, a task like this would be easy. This was disappointing and sad, because I forgot how to play.

During that moment of inner struggle, one woman—a university professor—stood up and yelled out her frustration, that this workshop is misleading! She pointed out that she had come a long way for this workshop, along with her students, expecting them to learn something valuable, but she simply could not understand the nature of the workshop as she experienced it. I realized that many others in the room shared her frustration. From my inner dialogue and this declaration of frustration, I made a decision to immerse myself in play and started manipulating the materials in front of me.

As I got involved, I became engaged and got lost in play, sparking many ideas. Toward the end of the 4-hour workshop, the same professor stood up, apologizing for her outburst. I asked myself: what happened to this woman and what happened to others who did not express their frustration as she did? What did we go through during this workshop to help us change our beliefs? If one could say that the self-active play was like a chime to arouse my creative potential, suppressed over time, then yes! It was. It helped me reconnect with my childhood years with its spontaneity, peace, and freedom.

That day I brought home with me some of the materials from Dr. Drew's workshop and I gave them to my children. It was the best souvenir that my children were ever given, they exclaimed. That night they created a clubhouse, and one clubhouse after another has been created. They have had so much fun playing with pieces of fabric, Styrofoam, rolls, zippers, and other random recyclable items. So the journey of change has begun.

In spring 2010, I attended and was a presenter at the annual conference of TASP (The Association for the Study of Play) in Atlanta, Georgia. This trip was one of the most important trips of my professional life. I visited the Waldorf School of Atlanta, which in itself was very informative. The balance between curriculum, academic requirements, and artistic and practical life skills was quite obvious and observable. It had the balance that I am seeking for my own children. TASP's mission is to respect the unique abilities of each child by fostering his or her ability to think with clarity, to feel with compassion, and to act with purpose and social responsibility in the world. It was there that I made my first presentation, "Things from Nothing." Important people attended my session, Walter Drew being one of them. The

audience's contribution, feedback, and critique were very beneficial as they added to my growth as a researcher and provided me with a lens to see things from different perspectives.

Another obvious benefit from this conference was that I was expanding my network; I was able to meet with Brian Sutton-Smith, Bernie Deckoven, Freser Brown, Stuart Brown, Joe Frost, Joan Almon, Walter Drew, and many more. It was a rich experience, being among people important to the field. I learned a great deal from them in those few days. It was a pleasure and an honor meeting all of them.

Another impact on my philosophy was through my involvement with Saturday Art School, Penn State University, State College, Pennsylvania. The school is run by Christina Thompson and her colleagues. I was a volunteer at the Saturday Art School from 2010 to 2012, across four semesters. During that time, I learned through my observation a great deal of what it is to give children the opportunity to express themselves freely and creatively. The Saturday Art School is not just about a place for making art; instead, it is a window that is wide open for children to shine their creativity through—a spontaneous jumping for joy that is represented in many ways, through sketching, drawing, moving, dancing, sculpting, building, manipulating, transforming, and even exploring nature. According to Greenman (1988) “Messing about is when children act on the world and discover what it is made of and how it works.” (p. 27). While it may be difficult for adults to see the intention and meaning behind what appear to be random experiences, children play with great purpose and intention (Elkind, 2007).

What was obvious to me was that teachers', parents', and children's goals of engagement are to communicate, think, and feel, and to share that feeling with one another.

Other Research and Workshops

My other research aim concerns teachers' perspectives and perceptions of using open-ended materials as an effective way of enhancing creativity in the classroom, by exploring specifically whether teachers are able to recognize creative play behavior in young children while playing with open-ended materials and by highlighting the importance of using open-ended materials in the classroom. Accordingly, I would develop a framework for teachers that shows the importance of using open-ended materials to foster children's creativity, as well as explore the difficulties that can deter teachers from using open-ended materials in the classroom.

To do so, conducting a literature review is one of my top priorities. I read and analyze the most recent literature in relation to open-ended materials, creative play, imaginative play, and object and symbolic play. I also read, in depth, the latest on professional development for early childhood education teachers. In addition, I read and analyze theories that bridge research and practice to gain a better understanding of the relationship between variables, including theories such as Berlyne's theory, affordance theory, Sutton Smith's work, and a lot more.

Accordingly, I developed a series of workshops targeting preservice teachers (inservice teachers will be my future aim) to contribute to professional development. These workshops became a source of data collection for my future study. The intention of the workshops is to provide exposure to and hands-on experience for preservice teachers. It is very important for the adults who are working with children to be creative themselves and recognize their roles. Adults who are working with children need to consider what to teach, how to teach, when to ask, what to ask, when to intervene, and when to step back in children's creative play; they need to understand what materials are needed and how to organize them, and also to think of time and space.

Final Thought

Throughout my professional life, I have learned a great deal about myself as an educator. Looking back on my growth, I realize I have made great progress, and I am proud of what I have accomplished. This does not mean I have reached the end. As I look to the future, I recognize I am still growing and have more of a contribution to make. I feel comfortable with my ability as an educator to accomplish any goals I set for myself. I can see myself as an advocate for play and for children's right to play. My dream is to return to Saudi Arabia and help provide better and stronger early childhood education programs that raise awareness of the importance of play and other issues. I want to bring play back to life in our early education. I also want to provide children with opportunities to have hands-on experience. In this personal narrative, I have included examples that best illustrate my growth and progress throughout the years. On a personal level, I always enjoy being with my children, playing with them, and teaching them. I want to give them a love of learning that they will be able to use throughout their educational careers and lives.

Appendix C

Response Letter from Yakov's Mother

Author: G. M. H. (Yakov's Mother)

After viewing a clip of your son at play, please share with me your reaction to this clip and any thoughts that come to mind.

While watching the video of Yakov and his friends during creative play, my initial reaction consisted mainly of laughing at all the silly things the children were doing. It was also nice to have a glimpse into my son's behavior when he is not in my presence. Actually, I did not know where my son learned about this game; as far as I know, he is not familiar with it because he basically does not have video games. That is interesting!

In a way, the video reinforces my perception of Yakov as a child who likes to have fun, while making sure that he does not hurt his playmates in any way. Besides all the playfulness, one thing that made me laugh is the moment when Yakov noticed the camera and became a bit conscious about his actions.

Also you briefly talked to me about the differences between two cultures. Would you share that as well?

Watching Yakov play also reminded me of my childhood, and I was thinking of how there are cultural differences in what is considered appropriate play. Comparing my Rwandan cultural norms to the American norms that Yakov lives under presented me a stark contrast in how different our childhoods are. In the Rwandan society where I grew up, it is considered rude and insulting for a child to act in such a way in the presence of any adult, especially a figure of authority such as a teacher. As a child, I would have never even imagined behaving in a goofy and whimsical manner as Yakov and his friends were. I found it surprising to see the kids not being shy or inhibited by the presence of an adult.

How does watching your son play that way affect your values and beliefs in children's play?

This thought made me think about something else, which is often on my mind: the conflict I face in raising Yakov with the same values that I have. I would like my son to share the values and lessons that I learned as a Rwandan girl. Among these values are things like

respecting adults, behaving appropriately in their presence, and not always speaking what's on one's mind, especially if it is impolite. But I realize that some of these values are in direct conflict with American values, such as being bold, confident, and always speaking your mind. As Americans, I feel we hold these values as important to the achievement of the American Dream; and therefore, I believe it is necessary that Yakov should have these values too. Ultimately, I may have to compromise on some of my values, or wait until my son is old enough to learn to use values from both countries, according to what the situation calls for.

Appendix D

Tables

Table D-1 Children's Demographic Information and Attendance at the CPC

Demographic Information	Test	Actual observation time								Regular club time without genuine data generation						Comments
	S1 1-13	S2 1-30	S3 2-6	S4 2-13	S5 2-20	S6 2-27	S7 3-5	S8 3-12	S9 4-2	S10 4-9	S11 4-16	S12 4-23	S13 5-7	S14 5-14	S15 5-21	
ED /g India	P	P	P	A	P	P	A	P	P	P	P	P	P	P	P	
YK /b Rwanda	P	P	P	P	P	P	P	A	P	A	P	P	P	P	P	
RQ /g Mexico	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
PO/g China	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	
JE /b Korea	P	P	P	A	PL	P	PL	P	A	A	A	A	A	A	A	Registered for another after-school activity by May 2
EL /g Taiwan	P	P	P	P	P	P	P	P	P	PL	PL	PL	PL	PL	PL	Attend only half of the time. Registered for another after-school activity by May 9
AM /g Taiwan	P	P	P	P	P	P	P	P	P	PL	PL	PL	PL	PL	PL	Attend only half of the time. Registered for another after-school activity by May 9

LE /b Korea	P	P	P	P	P	P	PL	P	A	A	A	A	A	A	A	Registered for another after-school activity by May 2
AL /g US- White	P															
KE /g US- African A	A	A	P	P	P	P	A	P								
IN /g Pakistan	P															
RO /g Saudi	P															
YO /b Korea	A	P	P	P	P	P	PL	P	A	A	A	A	A	A	A	Registered for another after-school activity by May 2
<p>Key: The two capitalized letters represent the children's initials. I have changed the names of all children mentioned in this paper and used initials instead for confidentiality purposes.</p> <p>Gender: g = girl; b = boy. Attendance: A = absent; L = left early; P = present. S1–S15 represent the sessions.</p>																

Table D-2 Materials Interaction and Popularity at the CPC

	Est	Actual observation time									Regular club time without genuine data generation					COMMENTS	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Paper towel tube					*	*	*										
Fabrics		*	*	*	*		*	*									Popular
Stones		*															
Gravels		*															
Seeds		*															
Wooden blocks		*	*	*	*	*	*	*									Popular
Plastic lids		*	*	*	*	*	*	*	*								Popular
Yogurt containers																	
Marbles																	
Baskets							*		*								
Wooden Sticks																	
Pipe cleaner																	
Foam beads																	
Monitor cleaner																	

*The material was explored and manipulated at least once; **the material is popular during the session; if it is not marked, it means that the material was ignored during the session. The highlight indicates the popularity across sessions.

Table D-3 Analyzing the Materials Affordances by Each Material in the Room

Materials/ affordances	Bend- able	Attach- able	Stack- ing	Catch- ing	Build- ing	Pull- ing	Explor- ing	Dressing up	Lining up	Sort- ing	Cyclin- g	Balan- cing	Look- ing out	Imagin- ing	Manipu- lating
Paper towel tubes		*			*		*		*		*	*	*	*	*
Fabrics						*	*	*	*	*				*	*
Stones			*	*			*		*	*		*		*	*
Gravels				*			*		*	*				*	*
Seeds				*			*		*	*				*	*
Wooden blocks			*	*	*		*		*			*		*	*
Plastic lids		*	*	*	*		*		*	*	*			*	*
Yogurt containers		*	*		*		*		*	*	*	*			
Marbles				*			*				*				*
Baskets		*	*		*							*			
Wooden Sticks			*		*				*			*		*	*
Pipe cleaner	*	*						*		*				*	*
Foam beads		*							*	*	*			*	*

Table D-4 Methods Used in Each Session

	est	Actual Observation Time									Regular Club Time Without Genuine Data Generation					COMMENTS	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14		15
Video	*	*	*	*	*	*	*	*	*	*							No videos from sessions 10–15
Photograph	* *	* *	*	*	*	*	*	*	*	*	*	*	*	*	*		Photographs was not consistent during Session 10–15
Drawing	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		No drawing in the last three sessions
Field Notes	*	*	*	*	*	*	*	*	*	*							No field notes from 10–15; some general comments and notes
<p>* means the method was used</p> <p><i>Note:</i> Session 13 was a special day; we broke the routines of our club and went to play with our materials outside. It was a sunny day and children insisted to play out-door. It was different; children were playing freely and there were more things to grab their attention out there, other than the open-ended materials. There was nature that itself is open-ended.</p> <p>Session 15 was the last day of the extended day program and it was a special day too. We spent most of the day outdoors again.</p>																	

Table D-5 Sample of Field Notes After They Were Inserted in Tables for Easy Coding

Field Notes and Comments, Session 2—January 30, 2012			
Time	Observation	Reaction & Impression	Comments
3:30 (Opening discussion)	Children helped with pushing the chairs and spreading the materials.	Children were excited and want to play right away	Preparation time went smoothly The room was full of furniture Less direction than S1
3:34 (Sketching time)	PO was drawing solo; got distracted and come to me to ask questions Back to drawing	PO was talking to me and trying to get my attention PO seemed hesitant and did not know what to draw	The assistant and I finished the layout of materials
3:10 (playing with materials)	LE, JE were building a tower using wooden blocks AM was building a wide building silently using wooden blocks ED was exploring some of the materials on the floor ED asked about what one of the materials was for. I told her this is normally used to clean monitors, but it is yours now and you can use it the way you want to. She smiled and left. YK was wandering around solo YK was standing up and sometimes sitting down YK saw the tower that LE, JE, YO constructed cooperatively and	YK has attracted my attention (he did not make any attempt to play or interact with peers); he did not show any signs that he did not want to be at the club either.	Lots of exploring, messing about, with no specific theme Lots of solo play and exploration Girls move fast in the room and boys were mostly sitting

	<p>stood up by the construction with no comments and looked at it, smiled and left to the uncarpeted area</p> <p>He sat down on the floor and kneeled down for a while</p> <p>He roamed around without touching any of the materials on the floor</p>		
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Appendix E Informed Consent Form



Informed Consent Form for Social Science Research
The Pennsylvania State University

Title of Project: Young Children's Actions with Open-Ended Materials: Recognizing short Term patterns of change and transformations.

Principal Investigator:

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Advisor:

Dr. James E. Johnson
Professor, Early Childhood Education
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University Park, PA 16802
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Academic Advisor:

Dr. Christine Thompson
Professor, Art Education
School of Visual Arts
The Pennsylvania State University
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Purpose of the Study: This study is based on naturalistic descriptive observation of young children aged 5-8 years old. The main goal of this study is to explore and identify elements of creative play when playing with open-ended materials. The purpose of the study is to explore how children use open-ended materials on their play over time, and whether it is possible to evaluate changes in the quality of play a child goes through. Also in this research study, the influence of the characteristic of the materials and their affordances on children's social play behavior will be observed. Evidence of meaning-making through drawing, manipulating objects, and reflecting will be collected.

Procedures to be followed: Your child will engage in activities during the 'Creative Play Club' provided by the researcher at the [REDACTED] of Central Pennsylvania Charter School. In this pilot study, the focus will be on open-ended materials as a type of play object that can be offered to children to play with solo or with a group of their peers. All of the children in your child's group will share and participate in the activities as a part of the extended day program, Mondays from 3:30 pm – 5:30 pm. The participants will not be asked to complete any activities that are not already a part of the Creative Play Club. Your child will be engaged in an informal discussion and conversation with the researcher in what happened and what has been discovered. This friendly conversation will help to develop a better understanding of what has been observed.

The children will be observed using photographs, video, voice recording and written field-notes, and eventually evaluated by the researcher, who will be present during all the sessions. The researcher will ask questions and engage in talk with the children regarding their interactions with materials as needed. The data that is collected will be stored on the researcher's computer in password protected files, where the researcher will be the only person with access. And with your permission, the data will be archived for future research purposes, thus the data will be organized and stored using code numbers to maintain the participants' confidentiality and will not be destroyed after the completion of the study. The name of the child will be changed if used in a paper or presentation to protect the identity of the child. Your child's participation in this research is confidential.

PERMISSION TO ARCHIVE DIGITAL IMAGES and AUDIO RECORDINGS:

_____ I give my permission for my child's digital photographs and audio recordings to be archived for use in future research projects in the areas of education, and/or child development.

_____ I give my permission for my child's digital photographs and audio recordings to be archived for use in educational and training purposes.

_____ I do not give my permission for digital photographs and audio recordings of my children to be archived for future research. I understand the audio recordings and photographs will be destroyed on May 30, 2015.

_____ I do not give permission for my child's digital photographs and audio recordings to be archived for educational and training purposes. I understand that the audio recordings and photographs will be destroyed on May 30, 2015.

Benefits: The benefits to your child include the opportunity to come together and spend time playing and interacting with open-ended materials and learning with their peers. As part of a process that helps to strengthen higher order thinking skills, the ability to play, talk and learn from peers also supports children's language development, planning skills, flexibility, and problem solving which all lead to creative play and creative expression.

The benefits to society include the opportunity to understand the complex ways that learning and knowing take place thus providing insight to educational models and teaching practices that are inclusive of the everyday lives of children in classrooms.

Right to Ask Questions: Please contact Monirah Al-Mansour with questions, complaints or concerns about this research at the number or e-mail provided.

Voluntary Participation:

Your decision for your child to be in this research is voluntary.

Your child can stop at any time.

Your child can choose not to answer certain questions.

Your child's participation in this study is confidential.

If you agree for your child to take part in this research study and the information outlined above, please sign your name and indicate the date below

I give permission for my child, _____, to participate in this research.

Parents/Guardian Signature, _____ Date: ____/____/____

Person Containing Consent, _____ Date: ____/____/____

PLEASE KEEP A COPY OF THE CONSENT FOR YOUR RECORDS

Appendix F Abbreviations

Abbreviation Summary

Social Interaction A	Social Interaction B	Materials Interactions and Exploration
<ul style="list-style-type: none"> • Child alone (C) • Child/child (C/C) • Child/adult (C/A) • Child/material (C/M) 	<ul style="list-style-type: none"> • Child/child/materials (C's/M's) • Material alone (M) • Child/child/material (C's/M) • Child/material/adult (C/M/A) 	<ul style="list-style-type: none"> • Narrative interactions with materials (X,X) • Narrative interactions with no materials (X,O) • Silent interactions with materials (O,X) • Silent interactions with no materials (O,O)

Participants' Names and Initials

Girls		Boys	
AL	Alana	JE	James
AM	Amanda	RY	Ryan (guest)
CA	Cassie (guest)	YK	Yakov
ED	Edna	YO	Yadon
EL	Ellen	LE	Leandro
IN	Irene		
KE	Kendra		
RH	Rhonda		
RQ	Rebecca		
PO	Piper		

Vita

Monirah Abdullah Al-Mansour

Education

- *Ph.D. in Curriculum & Instruction* (2014). The Pennsylvania State University, University Park, PA, US.
- *Master of Art in Early Childhood Special Education* (2002). GWU, Washington, DC, US
- *Bachelor of Art in Early Childhood Education* (1996). King Saud University, Riyadh, Saudi Arabia.

Professional Experience

Teaching and Supervising Pre-service Teachers as a part of 602 C I Course, (2011-2012). The Pennsylvania State University, University Park, PA, USA.

Staff Member, Early childhood Education (1996-Present). Education, King Saud University, Riyadh, Saudi Arabia

Teacher for the ISA-Islamic Saudi Academy (2000-2004). Fairfax, VA, US.

Supervisor for Pre-service Teachers (1996-1997). Education, King Saud University, Riyadh, Saudi Arabia

Book Chapters

Johnson, J. E., Al-Mansour, M., Sevimli-Celik, S. (2014). Researching Play in Early Childhood. Handbook of Research Methods in Early Childhood Education. Routledge.

Johnson, J. E., Sevimli-Celik, S., & Al-Mansour, M. (2013). Play in Early Childhood Education. Handbook of Research on the Education of Young Children, 3rd Edition. Routledge.

Correspondence

Johnson, J. E., Sevimli-Celik, S., & **Al-Mansour, M.** (2013). Correspondence: Through the lens of participatory photography. *International Journal of Play*, vol.2, no.1, 45-47.

Other Related Experiences

Participated in a 3-day study tour to gain in depth knowledge about Reggio Emilia Approach as a part of the world forum, (Summer 2009) Reggio Emilia, Italy.

Selected Conference Presentations

Al-Mansour, M. (2013). A journey into children's world of play with open-ended materials. Presented at the Association for the Study of Play's 39th Annual Conference, Newark, DE.

Johnson, J., Johnson, K. M., **Al-Mansour, M.** & Sevimli-Celik, S. (2013, November). Play as an Educative Process Goes to Scale: Implementing and Evaluating Activity Components of a Required Course for Early & Primary Teacher Candidates. Presented at the National Association of Early Childhood Teacher Educators Annual Conference in Washington, DC.