

## A QUALITATIVE ANALYSIS OF KINDERGARTENERS' OPEN-ENDED DRAWING AND STORYTELLING OPPORTUNITIES

*Jody M. Pirtle\* and C. June Maker*

Department of Disability and Psychoeducational Studies,  
University of Arizona, Tucson, Arizona

*Abstract.* The purpose of this study was to identify and examine the themes in the written productions of 114 kindergarten students. Participants were from two schools in different regions in the United States and were given an open-ended opportunity to draw and subsequently dictate a story. Content analysis was performed and six themes emerged: (a) family, (b) inanimate objects/personal belongings, (c) activities/events, (d) fantasy stories, (e) self-talk/reflection, and (f) nature/outdoors. Comparative analysis was performed for both gender and ethnicity and few differences were found between boys' and girls' stories or across ethnicities. Recommendations were included for teachers and families to allow young children more open-ended literacy opportunities and future research to analyze children's drawings and stories between classrooms and across grade levels were included.

*Keywords:* drawings, stories, kindergarten, qualitative analysis, DISCOVER project.

Picture for a moment a kindergarten classroom equipped with an extensive array of writing tools and materials with children free to draw what they would like and asked to describe their creations upon completion. Take for example, a child who drew a dragon and when asked about his creation, he replied, "My dragon can make everything frozen." Another child drew ice cream, Pokemon [children's cartoon character], a shark and two Bionicles [children's toy] (Wu, 2009: 72). When asked about his drawing, he stated, "These are my favorite things." A young girl drew a picture and dictated, "This is Shelby writing lots. It is at her house. She has lots of books" (Kendrick & McKay, 2004:

---

\* E-mail: [jbartz@email.arizona.edu](mailto:jbartz@email.arizona.edu)

122). Drawing has allowed children to represent their thoughts, feelings, and interpretations of their lived or imagined experiences (Sylla *et al.*, 2009).

### *Social Development and Interactions*

Lev Vygotsky (1962) emphasized the importance of parent-child talk in the home for the child's later cognitive development and success in socialization with peers. Vygotsky affirmed that language was linked to the brain's construction of knowledge within a social context. According to Vygotsky, in his social development theory, humans have used tools that develop from a culture, such as speech and writing, to mediate their social environments (Yellin, Blake & DeVries, 2000). The transmission and acquisition of cultural knowledge such as literacy has taken place on an *interpersonal* level between individuals before it was internalized on an *intrapersonal* level (Kendrick & McKay, 2004). Learning first occurred on the social level; the child observed the adult or the adult instructed the child. Then, learning occurred on the psychological level; the learning became part of the child (Watson, 2002).

One of the most fruitful experiences in a child's education has been his or her collaboration with more skilled partners. A key concept in Vygotsky's theory has been the notion of the *zone of proximal development (ZPD)*. The ZPD was defined as the gap between what the child knows and can express on his or her own and how the adult or more skilled partner can 'bridge' that gap through information or explicit instruction. Wertsch (1985) explained that the more experienced partner provides help in the way of an intellectual scaffold, which allowed the less experienced learner to accomplish more complex tasks than may have been possible alone. Within a kindergarten classroom, many opportunities have been found for interaction between adults and children of different experiences and developmental levels. Within a social constructivist learning context, expertise has been shared as a way to negotiate and construct meaning (Brooks, 2004). The child would bring prior knowledge to the classroom and combine it with new knowledge through his or her interactions with others. Knowledge would then be co-constructed.

Jerome Bruner (1966) observed that the process of constructing knowledge of the world was not done in isolation, but rather within a social context. Children have always been social beings and, through social life, they acquired a framework for interpreting experiences (Bruner & Weinreich-Haste, 1987). Bruner (1966) noted that no unique sequence existed for all learners, and the optimum in any particular case depended upon a variety of factors, including past learning, stage of development, nature of the material, and individual differences. Learning could be described as an active, social process in which students construct new ideas or concepts based on current knowledge. Effective kindergarten teachers, then, must provide many opportunities and choices for children (Anderson & Pavan, 1993). When varied teaching

methods have been used in the primary classroom, children have had opportunities to construct knowledge in a multitude of ways.

### *Drawing as Communication*

Vygotsky (1985) recognized if children were not prepared to express themselves through traditional forms of writing, they would use drawing to express their feelings or tell a story. Children in the emergent writing stage have written in pre-conventional forms such as scribbling, drawing, non-phonetic letters, and invented or creative spelling before they wrote conventionally (Epstein, 2001). Forms of communication might have included symbols, algebraic systems, art, writing, diagrams, and language (Vygotsky 1962).

Children's first pictorial symbols have consisted of objects that were meaningful to them – people, houses, pets, trees, and flowers (Dyson, 1983). Children have used drawing to sort out relationships, experiment with abstract concepts, and communicate what they think (Epstein, 2001). Kendrick and McKay (2004) discovered that analysis of drawings gave them a glimpse into the 'spontaneous concepts' being developed by children, both inside and outside of school. Children's drawings have helped them communicate the diverse ways in which they see themselves and others as literate beings across contexts such as home, school, and community. In kindergarten, children's drawings have been used to assess what they have learned after a particular activity. Children's drawings have been a form of communication, a demonstration of acquired knowledge, and quite possibly, a social and cultural meaning-making tool.

### *Storytelling*

Storytellers, educators, and researchers have advocated that storytelling was motivating to young children and could contribute significantly to early literacy development (Mallan & Jennings, 1991). Mallan and Jennings described storytelling as a social experience, with oral narrative incorporating linguistic features that displayed sophistication beyond the level of conversation. Using Vygotsky's theory of development, McNamee (1985) explored the significance of storytelling and dramatization activities in the intellectual and emotional development of young children and found that when children dramatized their stories, their storytelling, and ultimately, their literacy skills, were enhanced. Children have been able to think in more sophisticated ways, such as recreating images and ideas from previous experiences, when they have play-like opportunities for dramatizing stories. Adults have been provided with important insights into the way children see, think, and interact with the world by examining their drawings and dictated stories. Wright, Bacigalupa, Black, and Burton (2008) noted four- and five-year-olds "take elements they

have experienced in their real lives and the media, and weave those elements into original, and sometimes quite fantastic, new accounts” (p. 367). Literacy has been defined as a second order language system that requires oral competency as a prerequisite (Dyson, 1988).

### *Gender Differentiation in Young Children*

Boyatzis and Eades (1999) noted the existence of striking differences between boys' and girls' art during later elementary years and recognized the gap in the literature about artistic gender differences in preschool and kindergarten. They tested 20 preschoolers and 29 kindergarteners on three tasks to assess gender-stereotypicality in their drawing skills and preferences for pictures. They found boys chose stereotypically masculine colors (blue, brown, black) when drawing and girls chose stereotypically feminine colors (pink and purple). They discovered boys and girls also chose gender-stereotypical pictures and concluded that gender differences in artistic productions and preferences emerged in the preschool and kindergarten years.

Chen and Kantner (1996) recognized that by 4 years of age, children's social awareness of differentiation began expanding rapidly as they learned to distinguish the roles that various people played and their relationships to these roles. The researchers investigated kindergarten and third grade children's drawings to see whether gender differentiation was shown in the drawings when the young children were asked to draw a picture about people. The children were given the option of choosing the sex of the figure and the content of the drawing. They found that girls were superior to boys in drawing skills and that children preferred to draw their own sex when drawing people.

### *Ethnic Identity and Differentiation in Young Children*

Ethnic identification has implied a consciousness of self within a particular group (Spencer & Markstrom-Adams, 1990). A commonly used procedure in studying ethnic identification in young children has been to present the child with dolls and pictures that were representative of his or her own group and of the majority group. Questions were then posed to participants related to their preferences toward and identification with the different dolls. When studying Caucasian, American Indian, and African American children, Spencer (1986) suggested awareness of ethnic differences appeared in early childhood. However, Ausdale and Feagin (1996) argued that children's ethnic perceptions “arise forcefully within the context of their interactions with others” (p. 790). Additionally, Hirst (2005) reported that a comparison of Japanese and American children's drawings revealed that by the first grade, the Japanese chil-

dren's spatial representations were already more advanced than those of their American counterparts.

### *Purpose of the Study*

The purpose of this study was to identify the themes found in the drawings and dictated stories of 114 kindergarten students and then examine gender and ethnic differences between the identified themes. Students from Southwestern and Southeastern United States classrooms were given an open-ended writing prompt during the DISCOVER written language assessment. The following three research questions helped structure this study:

1. What themes were found in the children's drawings and stories?
2. Were the themes in boys' and girls' drawings and stories different? If so, what were the differences?
3. Were the themes in the drawings and stories of children from different cultural and ethnic backgrounds different? If so, what were the differences?

## METHOD

### *Data Collection*

Data for this study were written stories (one for each participant) developed by children as part of a larger study of DISCOVER implementation. DISCOVER was a performance-based assessment designed to measure a broad spectrum of "problem solving strategies" used by various age groups of differing ethnic, economic, and cultural backgrounds (Maker, 2005). Individuals were assessed across 7 categories: Spatial Artistic, Spatial Analytical, Logical Mathematical, Oral Linguistic, Written Linguistic, Interpersonal, and Intrapersonal. For the purpose of this study, only the Written Linguistic domain was considered.

*Participants and Setting.* The participants in this study were 114 kindergarten students from two elementary schools – one located in the Southeastern United States and the other in the Southwestern portion of the country. Participants included a total of 65 boys and 49 girls when schools were combined. Characteristics of the sample have been included in Table 1.

*Table 1: Characteristics of the Sample and United States Population*

Characteristic	Sample		United States
	N	%	
Gender			
Male	65	58%	49%
Female	49	42%	51%
Total	114	100%	100%
Ethnicity			
African-American	35	31%	13%
Caucasian	21	19%	64%
Mexican-American	47	42%	17%
Other	11	8%	6%
Total	114	100%	100%

*Note.* Percentage of males and females was determined by dividing the number of children within each gender by the total number of students. Ethnicity percentages were determined by dividing the number of children within each ethnicity by the total number of students. United States figures retrieved from U.S. Census Bureau ([www.census.gov](http://www.census.gov)).

*Procedures.* All children were assessed in their classroom setting by their teachers or by the trained individuals who observed and recorded their problem-solving strategies. The researchers did not have access to individual participants' socioeconomic, disability, or immigrant status; however, gender and ethnic differences were recorded. The assessments were conducted in two schools located in low socioeconomic areas, in the children's native languages.

The DISCOVER Assessment included a variety of data collection methods. The following directions were given to the children during the Written Linguistic portion of the DISCOVER assessment (Maker, 2005):

*(For K-1) Administered by the Teacher*

1. After the Observers have gone, give each student a sheet of paper.

Say: *Draw a picture that tells a story. You may draw any picture you would like to draw. Please put your name on your paper. Let me know if you need help with your name.*

Do *not* suggest pictures or stories, but encourage everyone to draw something.

2. After each student has completed his or her drawing,

Say: *Tell me about your picture.*

Write exactly what the student says on the back of the picture. Make sure the student's name is on the picture.

3. *Give students as much time as they need to finish their pictures.*

*Research Design and Analysis.* The drawings were part of a set of assessments performed within an overall DISCOVER assessment of students' strengths in problem solving and multiple domains of ability. Each child was invited to draw about anything he or she would like to draw about, and were told they would not be graded. Researchers and teachers who administered the assessment also assured children that only their ideas were important, not their spelling, punctuation, or story form. Teachers and scorers kept this material for rating and analyses.

To determine the themes found in young children's drawings and related stories, content and comparative analyses were used. Content analysis has been used by researchers to study human behavior in an indirect way, through an analysis of their communications (Frankel & Wallen, 2009). Young children's drawings represented their communications and the researchers used content analysis to organize systematically the themes found within the children's productions. Only in the last thirty years has serious consideration been given to the use of images as a viable way of understanding aspects of humanity (Kendrick & McKay, 2004). Comparative analysis has been a secondary technique that allowed the construction of inferential histories and explanations of certain processes (Peel, 1987). This technique also allowed researchers to compare and contrast different variables based on a specific criterion.

The analysis was comprised of four steps: (a) drawings and stories were examined by the primary researcher a minimum of three times to identify the themes, (b) investigator triangulation was performed between three researchers conducting similar investigations to reach 100% agreement on themes (Gomez & Maker, 2011), (c) drawings and stories were coded, and (d) comparative analyses of children's gender and ethnic differences found within the drawings and dictated stories was completed. To reduce biases during the primary analysis, the researchers did not have access to the children's names, genders, or ethnicities. Given the diversity and small overall number of children within the 'other' ethnicity category (11 in sample), only African American, Caucasian, and Mexican-American children's drawings were considered for analysis of ethnic differences. The final data analysis procedure consisted of a quantitative component to account for the frequency of themes and identified gender and ethnic differences discovered within the children's drawings and related stories.

## *Results*

*Research Question 1: What themes were found in the children's drawings and stories?* Six themes were found in children's drawings and dictated stories: Family, Inanimate Objects/Personal Belongings, Activities/Events, Fantasy Stories, Self-Talk/Reflections, and Nature/Outdoors (Table 2).

*Table 2: Frequency of Themes in Children's Drawings and Stories*

Themes	<i>f</i>	%
Family	25	22%
Inanimate Objects/Personal Belongings	18	16%
Activities/Events	24	21%
Fantasy Stories	24	21%
Self-Talk/Reflection	20	17%
Nature/Outdoors	3	3%
Total	114	100%

*Note.* Percentage was determined by dividing the number of stories in each theme by the total number of stories.

*Family.* Children in this sample produced 25 drawings about their families (22% of the total). Drawings and stories within this theme often included stick-figure persons and houses. One child illustrated his story and then dictated, “My mother and daddy are going to the store. They would not let me go, I stay at home to play with my sister” (Figure 1).

*Figure 1: Family Drawing*



*“My mother and daddy are going to the store. They would not let me go, I stay at home to play with my sister.”*

*Inanimate objects/personal belongings.* Approximately 16% of the children (18 children) drew or told stories about inanimate objects and/or personal belongings. Drawings and stories in this category included toys, television characters, and random objects (e.g. house, star, Christmas tree). Two children told their stories, “*A game that goes like this...*” (Figure 2) and “*A house, then numbers, stories, windows.*”

*Figure 2: Inanimate Objects/Personal Belongings Drawing*



*“A game that goes like this...”*

*Activities/events/places.* Another common theme found in the children’s drawings was activities, events, and places (21% of the total). Children drew and described simple, everyday activities and events. “*I was going on the bus. Then I was happy. Then we were very quiet on the bus*” (Figure 3). Another young child drew and commented, “*Santa Claus at Christmas.*”

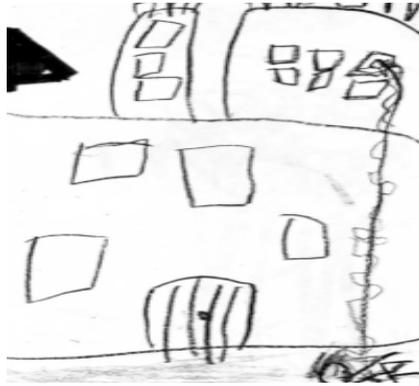
*Figure 3: Activity/Event Drawing*



*“I was going on the bus. Then I was happy.  
Then we were very quiet on the bus.”*

*Fantasy stories.* Twenty-four fantasy stories were drawn and described by children within the sample (21% of the total). As indicated by the title of the category, all drawings and stories were make-believe. As shown in Figure 4, “One time there was a principal in a castle. And the princess lowered her hair. It had no place to go inside, the princess listened to the prince.” Another child drew and dictated, “I have seen a Goosebump and he attacked me and I runned to my room and I hide under my bed and he saw me, then I went to throw stuff at them and then I threw a yogurt and hot Kool-aid at him. I put a chain on him so he could go to the pumpkin patch. Then he came back alive and went to my house and I killed him again.”

Figure 4: Fantasy Drawing



“One time there was a principal in a castle. And the princess lowered her hair.  
It had no place to go inside, the princess listened to the prince.”

*Self-talk/reflection.* The combined sample of children produced 20 drawings in this category (17% of the total). This category included creations by the children about themselves. That is, all dictated stories were in first person. As shown in Figure 5, one child drew and then dictated, “I was a baby and I had four bows on my hair and my hair was big”.

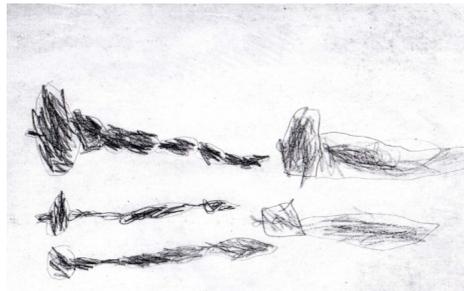
*Figure 5: Self-Talk/Reflection Drawing*



*“I was a baby and I had four bows on my hair and my hair was big.”*

*Nature/outdoors.* This theme had only 3 drawings from the entire sample (3% of the total), with all stories depicting items found outdoors. One child drew and then dictated, *“A picture about caterpillar looking for food”* (Figure 6).

*Figure 6: Nature/Outdoors Drawing*



*“A picture about caterpillar looking for food.”*

*Research Question 2: Were the themes in boys’ and girls’ drawings and stories different? If so, what were the differences?* Little difference was discovered between the themes found in boys’ and girls’ drawings and dictated stories. In Table 3, the comparative analysis of themes for the entire sample differentiated by gender has been displayed.

Table 3: Themes in Children's Drawings and Stories  
Differentiated by Gender

Themes	Males <i>f</i>	%	Females <i>f</i>	%
Family	15	23%	10	20%
Inanimate Objects/Personal Belongings	10	15%	8	16%
Activities/Events	12	19%	12	25%
Fantasy Stories	15	23%	9	19%
Self-Talk/Reflection	12	19%	8	16%
Nature/Outdoors	1	1%	2	4%
Total	65	100%	49	100%

Note. Percentage was determined by dividing the number of stories within theme by the total number of stories for each gender.

*Family.* Within this sample, 23% of boys' drawings and 20% of girls' drawings were about family. One boy told the story of his drawing, "*Stuart and his brother John compare to see who has the biggest Christmas trees.*" Another boy shared, "*My mother and I are walking in the park. Having so much fun.*" After drawing his picture, another boy stated, "*I am about to slide on my sliding board. I fell. Then my momma called the doctor. The doctor said, "No more skating." Then me and my momma lived happily ever after.*" A young girl dictated, "*A picture of the family playing together.*"

*Inanimate objects/personal belongings.* Boys and girls drew equally about inanimate objects and personal belongings (15% and 16% respectively). One young boy drew and told the story of his picture, "*A picture of a flying toy*" and a young girl stated, "*There was a house. It had a Christmas tree and nothing else.*"

*Activities/Events/Places.* This was the third largest category for young boys (19%) and the largest category of drawings for young girls (25%). A young girl told the story of her outing at a baseball game, "*I was at the Diamond Backs game and I saw a monster man who said they were beginning the game.*" A young boy told about playing with his friend, "*Me and my friend, we went inside my house and we played with my toys. And we saw T.V. And we saw cartoons and my friend had to go home. I asked my mom if I could go to AJ's house and she said yes.*"

*Fantasy.* In addition to stories of their families, fantasy was the most frequent theme among young boys' drawings (23%) and the third largest for young girls (19%). A young boy told the story of his picture, "*It's about Spi-*

derman,” and a young girl stated, “A bird and a lady just met. They are both so sweet, but they don’t know their color words but when night came they had a party.”

*Self-talk/reflection.* Young boys within this sample produced 12 stories about themselves (19%) and young girls created 8 drawings within this theme (16%). “I was playing baseball. I broke the window,” described one young boy and a young girl stated, “I want to be a cat woman.”

*Nature/outdoors.* Young girls produced 2 of the 3 drawings in this category. A young girl described her drawing, “A picture about flower.”

*Research Question 3: Were the themes in the drawings and stories of children from different cultural and ethnic backgrounds different? If so, what were the differences?* When considering ethnicity as a variable, the largest difference emerged within the Fantasy theme. The comparative analysis between children of different ethnicities (African-American, Caucasian, and Mexican-American) across themes within the sample has been displayed in Table 4.

Table 4: Themes in Children’s Drawings and Stories Differentiated by Ethnicity

Themes	African American	%	Caucasian	%	Mexican American	%
Family	8	23%	6	28%	9	19%
Inanimate Objects/Personal Belongings	6	17%	2	10%	9	19%
Activities/Events	9	26%	5	24%	9	19%
Fantasy Stories	5	14%	4	19%	15	32%
Self-Talk/Reflection	7	20%	1	5%	5	11%
Nature/Outdoors	0	0%	3	14%	0	0%
Total	35	100%	21	100%	47	100%

*Note.* Number of themes less than total number of participants as 11 participants’ ethnicity coded *other* and were not included in this portion of analysis.

*Family and activities/events.* Within the drawings and stories of the African American children, 23% of them were about their families. “That’s my mama and she’s laying in bed” [African American boy]. Mexican-American children produced 28% of their drawings and related stories about their families. “My mamá she’s gonna get ice cream” [Mexican-American girl]. Within

the sample, Caucasian children produced 19% of their stories about their family. "*That's me and my mom pretending*" [Caucasian boy].

*Inanimate objects/personal belongings.* Mexican-American children produced 19% of the drawings, African American children produced 17% of the drawings and Caucasian children produced 10% of the drawings. A few examples were "*This is my bunny. This is my square and this is my square and this is my square*" [Mexican-American child]. "*A wrote a Christmas tree and a stocking and a pumpkin and a star,*" [African American child], and "*Pumpkin*" [Caucasian child].

*Fantasy stories.* More fantasy stories were generated from Mexican-American children (32%) than from African American (14%) or Caucasian (19%) children. One Mexican-American boy said, "*It was driving in the night, Monster Truck, it was practicing. Then he ran out of gas. Then when is was sunny time he went to go put some.*" A young African American child stated, "*Little Red Riding Hood ran around the clock. She ate ice cream and cake. It was her mom's birthday*" and a Caucasian child commented, "*A picture of a magic man.*"

*Self-talk/reflection.* African American and Mexican-American children both produced greater numbers of Self-Talk/Reflection drawings than their Caucasian counterparts (20% and 11% versus 5%, respectively). One young female Mexican-American student dictated, "*I want to be a teacher*" and an African American child told the story of his drawing, "*When I woke up it was raining. And I was mad.*" A young Caucasian student described her drawing, "*I had ladybug and papers. I read a book. I draw a chicken and a person.*"

*Nature/outdoors.* Caucasian children produced the only 3 Nature/Outdoor stories within the sample (3%). One child dictated, "*A little girl planted all the seeds in the big yard until there were no more seeds.*"

## Discussion

Clearly, young children will produce a variety of creations when given an open-ended opportunity to draw and then dictate a story. Drawing has allowed young children to be able to make their ideas visible (Brooks, 2004). Support, time, and opportunities for children to pursue complexity in their drawings must be considered an integral part of the classroom environment. To determine the communicative intent of children's drawings, the focus of discussions between educators and their students about drawings should be on the meaning and information the drawings contain rather than on drawing skills and aesthetic qualities. Most children within this age group used emergent forms of writing and few, if any, had made the transition to conventional writing (Dyson, 1988).

Writers and researchers have focused on the developmental stages of conventional writing and analysis of the mechanics of young children's drawings. This leaves three gaps in the literature: (a) identification and analysis of the-

mes in young children's drawings, (b) comparison of the gender differences between the drawings of young children, and (c) analysis of differences in themes within drawings of young children from varied ethnicities. Because of these gaps, comparing and contrasting the results of this study to existing research is difficult.

When all stories were combined, they were divided similarly between themes with the exception of the nature/outdoor theme. Similar to the findings of Wright, Bacigalupa, Black, and Burton (2008), young children in this sample drew and told the largest number of stories about their families (22% of the drawings). Activities/Events and Fantasy stories were the second most frequent categories (each 21% of the drawings). Given the chronological ages of the children in the sample, these findings are not surprising. Kindergarten often is the first school setting children experience outside the home and naturally, they will draw pictures and tell stories of their most recent social situations – their family and recent events. Fantasy stories were centered on children's toys and cartoon shows found on television. Drawings and stories about inanimate objects and personal belongings comprised 16% of the sample. Interestingly, the 3 drawings (3% of the sample) categorized in the Nature/Outdoors theme were produced solely from the school in the Southeast portion of the United States.

Boys and girls produced similar numbers of drawings for each theme and demonstrated few gender differentiations within drawings and related stories. This is in contrast to the findings of Anning and Ring (2004) who observed girls playing out the female roles of their mothers and boys playing out the male roles of fighters and adventurers within their drawings. However, the drawings considered for this study were produced by children in kindergarten and Anning and Ring (2004) analyzed the drawings of seven-year-old children. The results of both these studies can be explained as Yee and Brown (1992) suggested, the "apparently critical period at around age 5 in which children demonstrate self-esteem and group [gender] identification" (p. 626). Further analysis of gender differences in young children's drawings is recommended.

The schools in this study were strikingly different in their ethnic makeup, however, children of different ethnicities within this sample showed few overall differences in what they drew and the stories they told. One exception to this was that Mexican-American children drew far more fantasy pictures than their African-American and Caucasian counterparts. One-half of the stories in the fantasy theme came from one of the classrooms in the school in the Southwest where 90% of the Mexican-American children attended school. Cautious consideration needs to be given to the geographic locations of the schools. A possible explanation for the difference in number of fantasy stories could be that the children in the Southeast have more natural opportunities to play outdoors, whereas the children in the Southwest may spend greater time indoors, allowing for more opportunity to watch television. Interestingly, mo-

re Caucasian children were in the Southeastern school (41%) than in the Southwestern school (5%) and the Caucasian children produced all of the Nature/Outdoors drawings and stories. To examine the impact of different teaching styles and curriculum choices, future analyses of similarities and differences between same-grade level classrooms within a school is recommended.

A strong point of this study is the in-depth analyses and description, which assists in filling identified gaps in the literature. A limitation, however, is the inability to generalize the results due to the qualitative nature of the study. The children's creations that were analyzed were from two schools in strikingly different regions of the country and the productions were a single demonstration of children's open-ended opportunities to draw and tell a story.

Drawings and stories analyzed in this study were part of an open-ended task for children to draw and subsequently narrate without restrictions. Often, writing becomes a mechanical task in which children must adhere to certain instructions and parameters and then produce a specific product. When children are allowed to express their perceptions through open-ended drawings and stories, without rigid structure from the environment, they can express themselves more creatively and openly. In addition to celebrating academic achievement, parents and educators must value the creativity and wealth of information available in young children's drawings and related stories. Therefore, open-ended drawing and storytelling opportunities should be encouraged in both school and family settings to help children express themselves.

Family members and educators should acknowledge and respect the diverse perspectives found in young children's drawings and subsequent stories. By valuing young children's drawings and listening to their stories, implicitly, we appreciate young learners as active members of society (Gomez & Maker, 2011). Respecting children's cultural and ethnic diversity is an important aspect of any educational setting. This means respecting cultural values, beliefs, and traditions of young learners and their families.

Additionally, future research focused on analyzing the content of young children's drawings and dictated stories across grade levels has the potential to provide broader perspectives of the dynamic and evolutionary nature of children's literacy development. The use of children's drawings and their related stories in this study is limited to 'snapshots' of their literacy experience. A comparative, longitudinal study that involves collecting and analyzing a series of images and stories over an extended period would have the potential to provide unique insights into how young boys and girls from diverse backgrounds represent themselves and their literacy experiences across times and places.

### *References*

- Anderson, R.H. & B.N. Pavan (1993): *Nongradedness: helping it to happen*. Lancaster, PA: Technomic Publishing Company.
- Anning, A. & K. Ring (2004): *Making sense of children's drawings*. New York, NY: Open University Press.

- Ausdale, D.V. & J.R. Feagin (1996): Using racial and ethnic concepts: the critical case of very young children, *American Sociological Review*, Vol. 61, 779-793.
- Boyatzis, C.J. & J. Eades (1999): Gender differences in preschoolers' and kindergartners' artistic production and preference, *Sex Roles: A Journal of Research*, Vol. 41, No. 7-8, 627-638.
- Brooks, M. (2004): Drawing: the social construction of knowledge, *Australian Journal of Early Childhood*, Vol. 29, No. 2, 41-49.
- Bruner, J. (1966): *Toward a theory of instruction*. Cambridge, MA: Harvard University Press.
- Bruner, J.S. & H. Weinreich-Haste (1987): *Making sense: the child's construction of the world*. New York: Methuen.
- Chen, W. & L.A. Kantner (1996): Gender differentiation and young children's drawings, *Visual Arts Research*, Vol. 22, No. 1, 44-51.
- Cooper, P.J., R. Collins & M. Saxby (1992): *The power of story*. Melbourne: MacMillan.
- Dyson, A.H. (1983): The emergence of visible language: interrelationships between drawing and early writing, *Visible Language*, Vol. 16, No. 4, 360-381.
- Dyson, A.H. (1988): Appreciate the drawing and dictating of young children, *Young Children*, Vol. 43, No. 3, 25-32.
- Epstein, J.L. (2001): *School, family and community partnerships: preparing educators and improving schools*. Boulder: CO: Westview Press.
- Frankel, J. & N. Wallen (2009): *How to design and evaluate research in education*. New York: McGraw-Hill.
- Gardner, H. (1983): *Frames of mind*. New York: Basic Books Inc.
- Gomez, M.P. & C.J. Maker (2011): What are the themes in young children's stories? An analysis of the content of children's written productions, *Journal of the Institute for Educational Research*, Vol. 43, No. 1 (86-105). Belgrade, Serbia: Institute for Educational Research.
- Hirst, K. (2005): Book review: Making sense of children's drawings, *Journal of Early Childhood Research*, Vol. 3, No. 2, 220-222.
- Kendrick, M.E. & R.A. McKay (2001): Images of literacy: young children's drawings about reading and writing, *Canadian Journal of Research in Early Childhood Education*, Vol. 8, No. 4, 7-22.
- Kendrick, M. & R.A. McKay (2004): Drawings as an alternative way of understanding young children's constructions of literacy, *Journal of Early Childhood Literacy*, Vol. 4, No. 1, 109-128.
- Maker, C.J. (2005): *The DISCOVER project: improving assessment and curriculum for diverse gifted learners* (RM05206). Storrs, CT: The National Research Center on the Gifted and Talented, University of Connecticut.
- Mallan, K. & C. Jennings (1991): *Children as story-tellers: developing language skills in the classroom*. Melbourne: Oxford University Press Australia.
- McNamee, A.S. (1985): *Inviting stories to help young children cope with stressful life experiences*. Retrieved from <http://eric.ed.gov> doi: 10.1080/0031383880320104
- Peel, J. (1987): History, culture and the comparative method; in L. Holy (ed.): *Comparative Anthropology* (88-118). New York: Blackwell.
- Spencer, M.B. & C. Markstrom-Adams (1990): Identity processes among racial and ethnic minority children in America, *Child Development*, Vol. 61, 290-310.
- Spencer, M.B. (1986): Risk and resilience: how black children cope with stress, *Social Science*, Vol. 71, 22-26.
- Sylla, C., P. Branco, C. Coutinho & M.E. Coquet (2009): *Storytelling through drawings: evaluating tangible interfaces for children*, Paper or poster session presented at the meeting of ACM Special Interest Group on Computer-Human Interaction. MA: Boston.
- Vygotsky, L. (1962): *Thought and language*. Cambridge, MA: Harvard University Press.
- Watson, M.W. (2002): *Theories of human development* (Part 2). Chantilly, VA: Teaching Co.

- Wertsch, J.V. (1985): *Vygotsky and the social formation of mind*. Cambridge, MA: Harvard University Press.
- Wright, C., C. Bacigalupa, T. Black & M. Burton (2008): Windows into children's thinking: a guide to storytelling and dramatization, *Early Childhood Education Journal*, Vol. 35, No. 4, 363-369.
- Wu, L. (2009): Children's graphical representations and emergent writing: evidence from children's drawings. *Early Child Development and Care*, Vol. 179, No. 1, 69-79.
- Yee, M.D. & R. Brown (1992): Self evaluations and intergroup attitudes in children aged three to nine, *Child Development*, Vol. 63, No. 3, 619-629.
- Yellin, D., M.E. Blake & B.A. DeVries (2000): *Integrating the language arts*. Scottsdale, Arizona: Holcomb Hathaway Publishers.

Примљено 14.11.2011; прихваћено за штампу 31.05.2012.

Џоди М. Пиртл и Си Џун Мејкер  
КВАЛИТАТИВНА АНАЛИЗА ЦРТЕЖА И ПРИЧА  
ДЕЦЕ ПРЕДШКОЛСКОГ УЗРАСТА  
*Анстракт*

Циљ овог истраживања је да се идентификују и анализирају теме које се јављају у писаној продукцији код 114 детета предшколског узраста. У истраживању су учествовала деца из две школе из различитих региона Сједињених Америчких Држава, којима је дато да нацртају, а затим и издиктирају причу. Анализом садржаја издвојено је шест тема: (а) породица, (б) неживи објекти/личне ствари, (в) активности/догађаји, (г) фантастичне приче, (д) говор о себи/размишљање, и (ђ) природа/свет ван куће. Компаративна анализа извршена је према полу и етничкој припадности и утврђено је да постоје одређене разлике у причама дечака и девојчица, као и деце са различитом етничком припадношћу. У раду се наставницима и породици дају препоруке да би млађој деци требало омогућити да се у већој мери креативно изражавају. Препорука се односи и на ауторе будућих истраживања која ће се бавити анализом дечијих цртежа и прича у различитим одељењима и разредима.

*Кључне речи:* цртежи, приче, обданиште, квалитативна анализа, пројекат DISCOVER.

Джоди М. Пиртл и Си Джун Мейкер  
КАЧЕСТВЕННЫЙ АНАЛИЗ БЛАГОПРИЯТНЫХ ОБСТОЯТЕЛЬСТВ  
ДЛЯ РИСОВАНИЯ И РАССКАЗОВ В ДОШКОЛЬНОМ ВОЗРАСТЕ

*Резюме*

Цель настоящего исследования – выявить и проанализировать темы, которые появляются в письменной продукции у детей дошкольного возраста. В исследовании участвовали 114 детей из двух детских садов из различных областей Соединенных Штатов Америки, которым было задано нарисовать, а потом и продиктовать рассказ. На основании анализа содержания выявлено шесть тем: (а) семья, (б) неживые объекты/личные вещи, (в) поступки/события, (г) фантастические рассказы, (д) беседа о себе/размышление, и (е) природа/окружающий мир. Сопоставительный анализ проведен по критерию пола и этнической принадлежности, и выявлено наличие определенных различий в рассказах мальчиков и девочек, а также детей неодинаковой этнической принадлежности. В работе воспитателям и семье предлагаются рекомендации о необходимости создания условий для творчества детей в максимальной возможной степени. Рекомендации относятся и к авторам будущих исследований, которые будут заниматься анализом детских рисунков и рассказов в разных классах.

*Ключевые слова:* рисунки, рассказы, детский сад, качественный анализ, проект DISCOVER.