Observing of the Effect of Personal/Cultural Interaction on Creative Expression in a Young Child's Drawings

Tsui-lien Shen professor
National Formosa University
E-mail: tlshen@nfu.edu.tw

Mei-Lan Lo professor National Dong Hwa University E-mail: mei@mail.ndhu.edu.tw

Abstract

Early childhood drawings reveal what young children see, know, feel, and think. The purpose of this study was to explore the relationship between the development of creative expression in early childhood drawings and the cultural and personal context of the production of the drawings. In this study, 750 pieces of drawing by a six-year child were observed and twenty eight drawing portfolios compiled over six months were analyzed. The authors used contextual inquiry and observation, and found a significant relationship between creative expression and personal and cultural factors that inspired the young child's drawings. Four stages of drawing learning were identified, namely conscious stage, alternative stage, free stage and integrated stage. Topics and images of the child's creative expression were affected by personal and cultural factors at different stages. The effect of personal and cultural factors on four stages of drawing tracks are discussed. This research suggests that the quality of the personal and cultural experiences at

54 InJAE12.1 © NTAEC 2014

differential drawing stages are likely to be of great benefit in improving the creativity of young children.

Observing of the Effect of Personal/Cultural Interaction on Creative Expression in a Young Child's Drawings

Key words: Children drawings, Creativity, Creative expression, Early childhood, Fine art education

Introduction

Children have creative potential to express their ideas and imagination on their drawings. Socio-cultural contexts are important cues to a child's imaginative world and the way it affects art works. Drawing research also shows how culture influences children's drawings around the world (Cox, 2005a).

Drawing is a very popular art activity, especially in early childhood. Young children's drawings express their senses, recognition, thinking, feeling, imagination and creativity. Cox(2005b) observed childhood drawing in naturalistic settings within a nursery classroom and stated that children's drawings are purposeful, meaningful and recognized. Cherney, Seiwert, Dickey & Flichtbeil (2006) claimed that children's drawings are a mirror that reflects their minds. Drawing is a unique mental development tool for young children (Brooks, 2005).

Brooks (2005) examined the interpersonal and intrapersonal dialogues of young children's drawings and found that young children have the ability to explore complex ideas when given the right platforms to express themselves. Young children usually enjoy drawing and talking. Tay-Lim & Lim (2013) noted that a draw-and-talk method records the journey of meaning-making drawing activity. This has great potential for providing a comprehensive account of children's perceptions. What children say when they draw and what they draw should be considered together, and, if we want obtain critical information about children's perceptions, both "languages" should be seen as an integrated unit (Tay-Lim & Lim, 2013: 70).

In this study, the researcher tried to take account of the cultural facts that affect a child's drawing process. When drawing process incorporates cultural facts, drawing becomes symbolic speech, which combines the expression of a child's experiences, creativity, and visual communication. Based on the above, the purpose of this study was to explore the relationship between the development of creative expression in early

InJAE12.1 © NTAEC 2014

childhood drawings and the cultural and personal context of the production of the drawings.

Observing of the Effect of Personal/Cultural Interaction on Creative Expression in a Young Child's Drawings

Review of Literature

1. Theoretical Framework of Children Drawing

(1) Children drawings express individual conception

Drawing provides children a safe place to exercise their creativity and imaginary. Drawings are often used to express their individual conceptions or subconscious experiences. Brown and Campione (1971) claim that we can track children's individual conceptions from the strokes, lines, structures, and colors of their works. Consequentially, ideas and concepts that children hold may therefore be observed. Drawing is a product of the culturally and socially transmitted conventions that children come to know by seeing and reproducing the graphic models available in their life contexts (Pinto & Bombi, 2008; Pinto, Gamannossi & Cameron, 2011).

(2) Drawing activity mediates children's thinking and communication

Drawing activity is broadly recognized as a visual language that helps children communicate with others (Brooks, 2009). Papandreou (2014) argued that children use drawing to communicate with people. When they draw, young children make genuine thinking efforts to use symbols, make meaning and facilitate effective communication. Through drawing, young children can recall previous experiences and knowledge, develop new ideas and concepts, produce strategies, and solve problems, as well as reflect on their mental activity (Papandreou, 2014: 97). Papandreou's research turns young children from drawing makers into meaning makers and demonstrates that drawing activity supports thinking and communication.

(3) Construct the Child social cultural interactive scaffold

Vygotsky's sociocultural theory provides a conceptual framework for understanding children's drawings. It enables us to view children's meaning

construction as embedded in their social and cultural milieu (Kendrick & Mckay, 2004: 111). According to Vygostky, children develop high level of psychological capabilities (such as the logical memory ability, the problem-solving ability, and verbal communication ability) only if adults provide them with an appropriate social and cultural context and assistance within their zone of proximal development (ZPD). In this way the best scaffold for children's learning potential can be built (Vygotsky & Cole, 1978). Children's development is intertwined with society and culture at a given time in history. It is likely to be beneficial to children and their helpers if the assistance of the social-cultural nature of the learning environment can be described. As Edwards (2010) stressed cultural historical theory shows us society's zone of proximal development makes it possible to work with children and their social worlds in ways which help adults and children.

(4) All artistic experiences are dynamic

All artistic experiences are dynamic; each experience leads to more experiences; discovery generates further exploration (Eglinton, 2003). Current research in the learning sciences supports a view of learning that emphasizes the role of context in learning experiences (Bransford *et al.,* 2000), situated cognition (Greeno, 1989), distributed cognition (Cole & Engestrom, 1993, Hewitt & Scardamalia, 1998), and sociocultural views of learning (Wertsch, 1985, 1991) all emphasize the important role of the learning environment (Eckhoff, 2008).

2. Recent Research on Children's Drawings

Ivashkevich (2009) noted that there were two distinguishable strands of research in children drawings. According to Ivashkevich (2009:51), the first sought to understand children's graphic development in the hope of providing an important tool for educational intervention. Research of this kind includes that of Burt (1921), Goodenough (1926), Luquet (1927/2001), Lowenfeld (1947), Plaget & Inhelder (1948), Gardner (1973,1980), Cox (1992), Feldman (1980), Freeman (1980), Wolf & Perry (1988), Kindler & Darras (1997), Parsons (2003). The second strand presented children's

drawings as a form of art. It attempted to to appraise the aesthetic and formal qualities of a child's drawings as a pictorial medium. Research of this second kind includes that of Read (1945), Arnheim (1954, 1969), Kellogg (1955, 1969), Gardner (1973), Korzenlk (1981), Wilson & Wilson (1982), Alland (1983).

Observing of the Effect of Personal/Cultural Interaction on Creative Expression in a Young Child's Drawings

It should be noted, however, that both research strands have undergone considerable revisions over time. That is, the developmental approach has shifted from a view of drawing development as a natural, universal step-by-step evolution of graphic forms toward visual realism to nonlinear developmental models. The new approach of developmental models accounts for both sociocultural Influences and individual differences in drawing acquisition. Likewise, the second body of research, which initially focused on identifying the universal pictorial symbols and graphic principles in images produced by children, has now recognized the influence of cultural pictorial conventions on children's image making (Ivashkevich, 2009: 51).

Despite these significant revisions, both approaches remain largely object-oriented and place major emphasis on the analysis of graphic form (Ivashkevich, 2009). Pearson (2001) argued that such a product-oriented paradigm of inquiry places major value on the "artifactual residue" of image production while generally overlooking the contextual complexities of drawing practice as a lived social and cultural experience. Hence, following Pearson's call for an alternative, context-specific, and process-centered inquiry, Ivashkevich (2009) reconceptualized children's self-initiated drawing as a sociocultural practice interwoven with discourses of childhood and embedded in children's peer interactions, daily activities, and participation in popular culture.

Because Ivashkevich (2009) and Pearson (2001) claimed that children's drawings clearly demonstrated dynamic development interwoven in their social, cultural and life experiences, these ideas served as the theoretical basis for this study. We made the assumption that cultural facts could affect the performance of drawings and that it might be possible to discern the relationship between socio-cultural context and children's drawings.

Tay-Lim and Lim (2013) have noted that recent literature, such as that of such as Cox (2005b), Coates & Coates (2006), and Mukherji & Albon (2010), which explores children's drawings, has led to the adoption of a new paradigm that looks into the integration of perceptions and meanings in children's drawing processes. This theoretical stance reflects current visual theory, which emphasizes the inter-link between the interpretative conceptual and the perceptual dimensions of children's drawings (Tay-Lim & Lim, 2013).

Papandreou (2014) drew on Vygotsky's sociocultural framework (Vygotsky, 1962, 1978) and the semiotic perspective of Kress (1997, 2003) to study early childhood drawings. She argued that drawing as a meaning-making activity takes place in certain sociocultural contexts. Her research has challenged traditional views about young children's drawing that focus on the result of the drawing activity. She recommended that an appropriate learning environment and pedagogical strategies could strengthen children's drawing activity. Ring (2006) reminds us that when a child's drawings are considered important and valuable, and the child gets favorable responses from others, then the child is likely to enjoy drawing.

Children often play in very creative ways and they are often curious about interesting objects. Gardner (1982) noted that young children approach novel tasks in terms of play and exploration and their output is often highly original. Zabelina & Robinson (2010) showed that the manipulation was particularly effective among more introverted individuals, who are typically less spontaneous and more inhibited in their daily lives. The research results thus inspired the idea, the researcher intended to select an introverted child as the study case.

Description of the Study Design

The study is a case study of a six-year girl (Sandy). Both her parents have a doctoral degree and work as teachers. The parents enjoy fine arts but are not good at drawing. Table 1 presents basic information about the girl.

Table1 Case personal information

	01 1 1 1				
Category	Characteristic				
Case name	Sandy				
Age/Gender	6/ female				
Personality	Introverted, Curious, sensitive and patient				
Hobbies	Drawing, games, stories, listening to music and playing house				
Education	home-schooling				
Drawing experience	self-taught drawing for 3 years				

Participant observation was the main method for data collection. The purpose of the observation was to explore the interaction between the child's drawing process and the sociocultural context within which the drawings were produced. To observe the subject's creative performance, the researcher took the role of complete participant observer, while the subject had no knowledge of the research. During the observation, the researcher also provided stimuli that affected the child's drawings. These stimuli included art, literature, education, customs of life, etc. The researcher was a listener, and employed a draw-and-talk method in helping with the drawing process. The researcher asked questions about the child's drawing plots, listened to the child's drawing ideas, and shared the child's drawing experiences.

This study observed 750 pieces of drawing being done by the six-year-old child over a period of six months, and analyzed 28 drawing portfolios. A qualitative method of description, analysis and comparison was employed for interpreting research data. In order to analyze the intertwined influential relationship between creative expression and cultural facts among the drawing tracks, the researcher classified Sandy's drawings into differential types. The classification was based on the topics and images of the child's creative expression and the effect of specific cultural experiences. Finally, after several comparative analyses, they were grouped into four stages.

62

Results and Discussion

This study found that there is a significant intertwined influential relationship between creative expression and cultural milieu that inspires a young child's drawings. Based on the observation of Sandy's drawing and talk with her, four categories of drawing production were observed: a conscious stage, an alternative stage, a free stage and an integrated stage.

1. Conscious Stage

The first learning stage of creative expression and personal/cultural interaction is called "conscious stage". Sandy was curious and paid much attention to the items provided by the researcher. She consciously played with the items (e.g. toys), observed pretty pictures (e.g. female figure images), and enjoyed putting them into her drawings. Observing Sandy's drawing process and talking to her, the researcher found that she copied the topics, figures, shapes and colors that she liked in her drawings.

Figures 1 to 4 present some of Sandy's drawings. Sandy showed interest in gift packages, covers, and toys. She first paid attention to the words and images on gift packages (Figure 1 & 2), and then the different facial expressions of characters (Figure 3), and finally the different dress of characters (Figure 4).

Figures 1 to 4 show that Sandy knew about the Mid-Autumn Festival, Moon Cakes, and a Chinese Fable. She recognized the key figure in the fable of the Mid-Autumn Festival and showed evidence of the replica-fairy Chang Er (Figure 1), replicating Chinese characters (deserts) (Figure 2), reproducing the beautiful fairy (Figure 3) and the fairy flying to the moon (Figure 4). The interpretation of Mid-Autumn Festival and a Chinese fairy tale constituted the major theme of her creative drawing.

InJAE12.1 © NTAEC 2014









Observing of the Effect of Personal/Cultural Interaction on Creative Expression in a Young Child's Drawings

Figure 1 Chang Er

Figure 2 Mashu

Figure 3 Shy

Figure 4 I want to fly

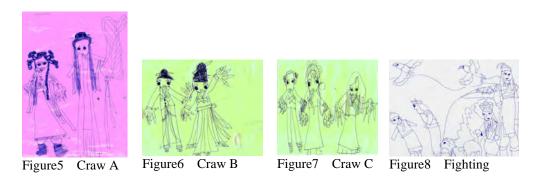
Note. Figure 1-4 ideas arose from Chinese Mid-Autumn Festival and Chang Er

2. Alternative Stage

The second learning stage of creative expression and personal/cultural interaction is called the "alternative stage". Sandy was curious and paid attention to the objects provided by the researcher. Her observation seemed to show more progress than at the previous stage. She enjoyed re-drawing what she liked, and deliberately strengthened or partially exaggerated graphic performance on her drawings. The contribution of the researcher inspired her motivation and imagination. Figures 5 to 8, show that Sandy was inspired by a stylish character in Jin Yong's novel of the Kung Fu TV series "The heaven sword and the dragon saber".

In the alternative stage, Sandy consciously selected topic and images for her drawings. Sometimes, she would think about revisions for the figures in her drawing-story. She selected long fingernails apparently because of a television character she remembered.

Observing of the
Effect of
Personal/Cultural
Interaction on
Creative
Expression in a
Young Child's
Drawings

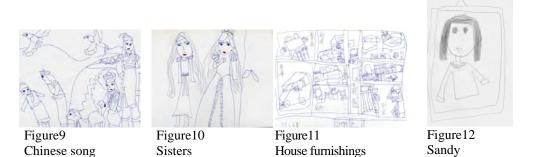


Note. Figure 5-8 ideas arose from Jin Yong's novel of "The heaven sword and the dragon saber"

3. Free Stage

Sandy played well on her own. For example, she might play Barbie dolls, listen to a CD, interact with her nanny, or play with toys and house furnishings. Her creativity at this stage was relatively flexible. She liked to say what she thought in her drawings. Figures 10-12 reveal that she wanted to sing and perform (Figure 9), to dress as prettily as her sister (Figure 10), to plan house furnishings (Figure 11), and to make a cute self-portrait (Figure 12).

In the free stage, context was not only provided by the researcher but also by Sandy herself. Her drawings related mainly to her personal experiences, such as life and play.



Note. Figure 9-12 ideas arose from life and play

4. Integrated Stage

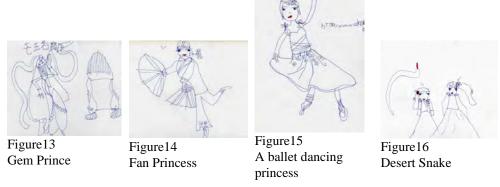
4.1 The Pre-integrated Stage

Sandy did not need to copy other things to create her own drawings at the pre-integrated stage. Figures 13 to 16 reveal her integration of observation and imagination. Her creative drawing emphasizes the integration of art, literature, music, science, education, life experiences and imagination.

In Figure 13,"Gems Prince", for example, Sandy related a story of the Persian Empire. She imagined that there were many hidden gems and mystery veils of the Persian nobility. At this stage, she did not need to see samples of story books to illustrate "Gems Prince". On the contrary, she made a variety of designs for the Prince by herself. In Figure 14, "Fan Princess", she was hoping to show the princess on graceful tiptoe holding a fan. In Figure 15 the ballet princess wears a beautiful costume designed by Sandy. The beautiful dancing girl shows Sandy's design capabilities, creativity, and aesthetic experience. In Figure 16, "Desert Snake", Sandy drew the story of "Desert Snake" which her mother told her every night. She employed her imagination to draw a desert snake meeting two girls. She tried to develop the story as a sequel to "Desert Snake".

Because, Sandy enjoyed reading various storybooks, she knew the characters. She drew some decorations and a dancing pose, and designed a costume. These pictures came mainly from her daily life and were integrated with her imagination. Analysis of her creative expression in drawings revealed creative qualities, such as fluency, flexibility, originality, elaboration and sensitivity.

Observing of the
Effect of
Personal/Cultural
Interaction on
Creative
Expression in a
Young Child's
Drawings



Note. Figure 13-16 ideas arose from art, literature, music, education, and imagination

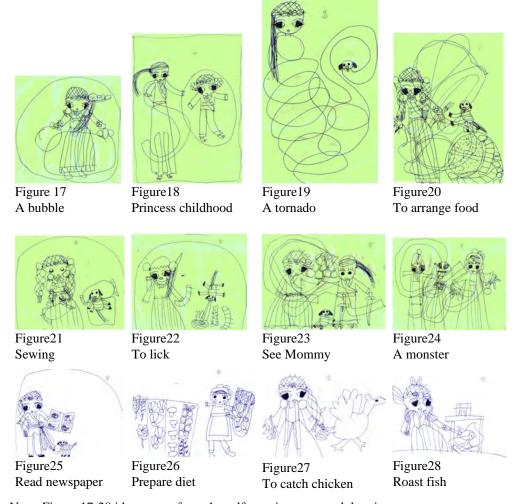
4.2 The Post-integrated Stage

Figures 17 to 28 are 12 of the 33 fairy-tale drawings made by Sandy. They tell a story of a princess who wanted to take an adventure to an uninhabited island. Sandy made herself a magic "bubble trough" and traveled on the sea (Figure 17). She found herself in a bubble, just like a little baby in her mother's stomach (Figure 18). She met a puppy on the uninhabited island and invited the dog to accompany her on her travels. They traveled together and had a variety of experiences, including one when she used magic to create a tornado (Figure 19), one when she learned how to get food to eat (Figure 20), one when she fell asleep with the puppy (Figure 21), one when she fed the puppy soup (Figure 22), one later when her mother came to her, and she took her mother to pick coconuts on the island (Figure 23), one when she met and defeated a monster (Figure 24), one when this event was reported in newspaper and the princess was reading the newspaper (Figure 25), and one when, the next day, the princess still had to eat three meals a day, and so they put a dish in the garden and prepared for a meal (Figure 26), and caught a chicken (Figure 27) and roasted fish (Figure 28). The Princess and the puppy lived a happy day together.

InJAE12.1 © NTAEC 2014

Observation of Sandy's drawing process and talking with her, showed how her cultural experiences were incorporated into her drifting, seeing a tornado, sewing, hunting, cooking, reading a newspaper, and encountering monsters. From analyzing these figures, the researcher learned that Sandy used her experience and imagination. Briefly, Sandy is not just an imitator, but a creator of distinctive and sophisticated drawing that draw on her unique cultural experiences.

Observing of the Effect of Personal/Cultural Interaction on Creative Expression in a Young Child's Drawings



Note. Figure 17-28 ideas arose from the self-creative story and drawings

In the integrated stage, Sandy gave more personal opinions and showed more imagination. She liked to create a new story by herself. The researcher's role was to facilitate her creative expression. Creation depended on the child's assimilation and transformation of the social interaction.

The 28 drawings of the study case show that the art, literacy, music, science, education, and life experience are related to a child's creative expression. As Pinto, Gamannossi, Cameron (2011) argued the behavioral and cognitive mechanisms involved in the cultural transmission of symbolic communications are situated in an environment embedded in cultural historical features that should be taken into account, as they give rise to variations in social-cultural practices.

In Table 2, Analysis of Drawing Stages and Personal/Cultural Stimuli, the four stages of, Conscious, Alternative, Free, and Integration are displayed along with the personal and cultural stimuli that affected the production of the drawings.

Table 2 Analysis of Drawing Stages and Personal/Cultural Stimuli

Stages Figures	Themes	Cultural Stimuli						
		Art	Literacy	Music	Science	Education	Life	
Conscious 1-4	1.Mid-Autum Festival 2.Chinese fairy tale 3.Gift package	design	story		object observation	festival	custom	
Alternative 5-8	1.Kongfu novel 2.Kongfu TV	drama	fiction		Object observation	athletics	play	
Free 9-12	1.Nursery rhymes 2.Barbie doll 3.Housing 4.Portrait	Architecture	Barbie	rhymes	Structural observation	self	life	
Pre- integrated 13-16	1. Ruby prince 2.Fans princess 3.Ballet princess 4.desert snake	dance	fable	dancing music		creativity	imaginary	
Post- integrated 17-28	1.Drifting story	Performance	self- editing story	sounds of nature	Natural observation	reading	experience magic	

From the above findings, our study derived the two important concepts that are discussed below.

1. Creative drawing expression with learning differences in differential stages

Sandy's drawings at the conscious stage, alternative stage, free stage and integrated stage revealed differences in various degrees.

At the first learning stage, Sandy was imitating rather than creating. The first phase was named the conscious stage because Sandy was aware of the things that influenced her drawing. The interaction with the researcher affected her drawings. She learned consciously and copied objects in her pictures, including the theme, figure shape and colors. For example, Sandy chose the topics such as the mid-autumn festival, customs, stories, etc., and copied from the moon cake boxes, Chinese festivals and cultural figures. She copied the female figures on the moon cake box, and did not change the composition, shapes or colors. At this stage, her drawings involved imitation rather than creation.

At the alternative stage, Sandy's drawing was based on observation of and reflection on stimuli in her culture, and involved her imagination. Sandy was fascinated by the Dragon martial arts television series. When she drew a "bad guy", she made the nails sharp or drew hidden weapons that could hurt people. The character who had great martial arts had flexible body movements, and was no longer just a stick like the copied figures.

At the free stage, Sandy observed, selected and employed resources from her daily life at home. In her drawings she wanted to say what she thought. She interpreted the meaning of the things in her drawings. For example, she wanted to sing, dress attractively, decorate her home, and to make a cute self-portrait. She did not depend on the researcher to provide ideas. She drew on her personal experiences of life and play which were meaningful for her.

At the integrated stage, the "drift" story Sandy created was full of imagination. Through her drawings, she imagined herself flying and

70

exploring the uninhabited island. Her drawing represented her wish to enjoy a holiday. In her drawing, she could travel around the world and appreciate natural beauty. If she encountered difficult situations she could resolve them easily. She also wanted to have the companionship of a dog. She hoped the dream would "come true" through drawings. She integrated her feelings, conceptions and imagination in her drawings.

2.The acceptance of personal/cultural interaction with scaffolding related to drawing content

While she was drawing from the age of three to the age of six, Sandy did not attend any kindergarten or art school. She stayed at home with plenty of time to do the things she liked, such as playing with toys, reading books, and drawing. She enjoyed traveling with her family and exploring the natural landscape. Sometimes, she had the opportunity to attend cultural events, such as folk festivals, art performance, exhibitions. Her life revolved around family, home furnishings, toys, story books, and sometimes landscapes and cultural events. These experiences had a major influence on her drawings, as she went through stages of imitating, making meaning, interpreting action, and imagining her future life.

The analysis of Sandy's 750 drawings and twenty eight drawing portfolios, particularly the 16 drawings and one story book shown in this article (Figure 1-28), revealed that the content of Sandy's drawings came from her reflection on her experience. Her figures, scenes, story making, and life-imagine drawings, were driven by what she had observed in her daily life. These drawings revealed what she saw, knew, felt and thought, as if they were a mirror reflecting her mind.

This study found that a child's experiences could motivate a young child's interest and willingness to draw. Through drawing, a young child can express her ideas and communicate with others. The drawings can help to integrate previous experiences and knowledge, develop new ideas and concepts, and produce creative strategies to solve problems, as shown in

Sandy's drawings. This research showed that an individual's experience is very important for a young child's progress in creative drawing.

Conclusion

This study found that experience of personal/cultural interaction can strongly affect the performance of a young child's drawings. Observation of Sandy's drawings revealed four stages of drawing development, namely the conscious stage, alternative stage, free stage and integrated stage. Comparative analysis of drawings at each stage showed significant learning differences existed.

In the conscious stage, Sandy had consciously learned from her cultural environment and she replicated its topics and images in her drawings. Interaction with the researcher also influenced the child's drawings. Her drawings depended on imitation rather than creation. At the alternative stage, Sandy's drawing skills showed her observation of the things about her. She drew what she liked, and refined her drawings constantly based on her observation, thinking and feelings. At the free stage, Sandy's creativity was relatively flexible. She enjoyed drawing on various cultural resources, but she also drew on her personal experiences. At the integrated stage, Sandy's drawings revealed more personal opinions and imagination.

In observing Sandy's drawing progress, the researcher found that drawings allow children to draw on their own cultural resources and their own experience. Sandy came to know by seeing and reproducing the graphic forms available in her life. Cultural resources and personal experiences provide a creative platform for a young child to explore, and even encourage creativity as in this study case. This study suggests that that the opportunity to use their cultural resources and personal experience can lead to great benefits for young children's creativity.

References

- Bransford, J. D., Brown, A. L., & Cocking, R. (2000). *How people learn: Brain, mind, experience, and school.* Washington, DC: National Academy Press.
- Brooks, M. (2005). Drawing as a unique mental development tool for young children: Interpersonal and intrapersonal dialogues. *Contemporary Issues in Early Childhood*, *6*(1), 80-91.
- Brooks, M. (2009). Drawing to learn. In M. Narey (Ed.), *Making meaning:* Constructing multimodal perspectives of language, literacy, and learning through arts-based early childhood education (Vol. 2, pp. 9-30). New York: Springer.
- Brown, A. L., & Campione, J. C. (1971). Color dominance in preschool children as function of specific cue preferences. *Child Development,* 42(5), 1495-1500.
- Cherney, I. D., Seiwert, C. S., Dickey, T. M. & Flichtbeil, J. D. (2006). Children's drawings: A mirror to their minds. *Educational Psychology*, 26 (1), 127-142.
- Coates, E., & Coates, A. (2006). Young children talking and drawing. International Journal of Early Years Education, 14(3), 221-241.
- Cole, M., & Engestrom, Y. (1993). A cultural-historical approach to distributed cognition. In G. Salomon (Ed.), *Distributed cognitions:* Psychological and educational considerations (pp.1-46). UK: Cambridge University Press.
- Cox, M. (2005a). The pictorial world of the child. Cambridge: Cambridge University Press.
- Cox, S. (2005b). Intention and meaning in young children's drawing. International *Journal of Art & Design Education*, *24*(2), 115-125.
- Eckhoff, A. (2008). The importance of art viewing experiences in early childhood visual arts: the exploration of a master art teacher's strategies for meaningful early arts experiences. *Early Childhood Education Journal*, 35, 463-472.

- Edwards, S. (2010). Numberjacks are on their way! A cultural historical reflection on contemporary society and the early childhood curriculum. *Pedagogy, Culture & Society, 18*(3), 261-272.
- Eglinton, K. A. (2003). Art in the early years. New York: Routledge Falmer.
- Gardner, H. (1982). Giftedness: Speculations from a biological perspective. *New Directions for Child Development, 17,* 47-60.
- Greeno, J. G. (1989). A perspective on thinking. *American Psychologist,* 44(3), 134-141.
- Hewitt, J., & Scardamalia, M. (1998). Design principles for distributed knowledge building processes. *Educational Psychology Review, 10*(1), 75-96.
- Ivashkevich, O. (2009). Children's drawing as a sociocultural practice: Remaking gender and popular culture. *Studies in Art Education, 51*(1), 50-63.
- Kendrick, M & Mckay, R. (2004). Drawings as an alternative way of understanding young children's constructions of literacy. *Journal of Early Childhood Literacy*, *4*(1), 109-128.
- Kress, G. (1997). *Before writing: Rethinking the paths to literacy.* London: Routledge.
- Kress, G. (2003). Literacy in the new media age. London: Routledge.
- Mukherji, P., & Albon, D. (2010). Research methods in early childhood: An introductory guide. Los Angeles, CA: Sage.
- Papandreou, M. (2014). Communicating and thinking through drawing activity in early childhood. *Journal of Research in Childhood Education*, 28, 85-100.
- Pearson, P. (2001). Towards a theory of children's drawings as social practice. *Studies in Art Education*, *42*(4), 348-365.
- Pinto, G., & Bombi, A.S. (2008). Children's drawing of friendship and family relationships in different cultures. In C. Milbrath & H.M. Trautner (Eds.), *Children's understanding and production of pictures, drawings and art* (pp. 121–154). Göttingen: Hogrefe & Huber.
- Pinto, G., Gamannossi, B. A., Cameron , C. A. (2011). From scribbles to meanings: social interaction in different cultures and the emergence of

- young children's early drawing. *Early Child Development and Care, 181* (4), 425-444
- Ring, K. (2006). Supporting young children drawing: Developing a role. *International Journal of Education through Art*, 2(3), 195-209.
- Tay-Lim, J. & Lim, S. (2013). Privileging younger children's voices in research: Use of drawings and a co-construction process. *International Journal of Qualitative Methods*, *12*, 65-83.
- Vygotsky, L. S. (1962). Thought and language. Cambridge, MA: MIT Press.
- Vygotsky, L.S., & Cole, M. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wertsch, J. V. (1985). *Vygotsky and the social formation of mind*. Cambridge, MA: Harvard University Press.
- Wertsch, J. V. (1991). Voices of the mind: A Sociocultural approach to mediated action. Cambridge, MA: Harvard University Press.
- Zabelina, D. L. & Robinson, M. D. (2010). Child's play: Facilitating the originality of creative output by a priming manipulation. *Psychology of Aesthetics, Creativity, and the Arts, 4*(1), 57-65.