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DEVELOPMENTAL ART IN THE LOW LITERACY CLASSROOM

Jean Marrapodi, PhD, CPTD

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Introduction

When an ESL teacher encounters adult students from a pre-literate culture living in the United States, there is a plethora of assumptions about adults that must be discarded. Students without print literacy have many gaps in their understanding of things taken for granted in a literate culture. This paper chronicles the discovery process of a seasoned educator coming to terms with many of the yet-to-be-learned things in a group of pre-literate students and the enormous learning curve this process entails for both student and teacher.

Background

Civil unrest in Liberia, beginning with a hostile government takeover in 1980, escalating into a civil war in 1989 then followed by another military coup 1990, caused many of the people of this West African nation to flee their homeland. Refugee camps were established in nearby Ghana, Sierre Leone, Ivory Coast, and Guinea until permanent asylum could be found for those who fled. The United States opened its doors for refugee resettlement, and many of the Liberian refugees emigrated to RI. As they became established, the new arrivals retrieved their extended families, including the group of students in this study.

The Need

Communities and agencies in Rhode Island made the necessary adjustments to assist the Liberians in the resettlement process, providing housing, food, jobs, and the biggest need: education. Many Liberians provide a unique issue for educators. They arrive from a country where English is the national language, but the adult illiteracy rate is documented as high as 88% (UNICEF, 2010). Some of the arrivals, including the group in this study, speak only one of the sixteen tribal languages of the villages. Adult educators struggle with class placement, feeling ill-equipped to deal with the lowest levels of pre-literate, illiterate, and semi-literate students.

A large percentage of these refugees settled in the Providence area, and as they adjusted to their new homeland, many began to attend church. Their culture embraced Christianity, so it was a place of familiarity, despite the language barrier. As more refugees arrived, a critical mass of adults who could neither read nor write became established in congregations, and since literacy is a crucial skill in America, these students wanted to learn to read. In an effort to provide connections for them in the inner-city ministry that serves as the setting for this study, a literacy class was created, meeting during the Sunday School hour prior to church services on Sunday. It became a place to learn and practice English, an opportunity begin to gain the necessary skills for reading and writing, and a safe place of community for them. Their teacher was an experienced educator with adult, elementary, and special education background, including advanced degrees. It is here the story begins, in the spring of 2005.

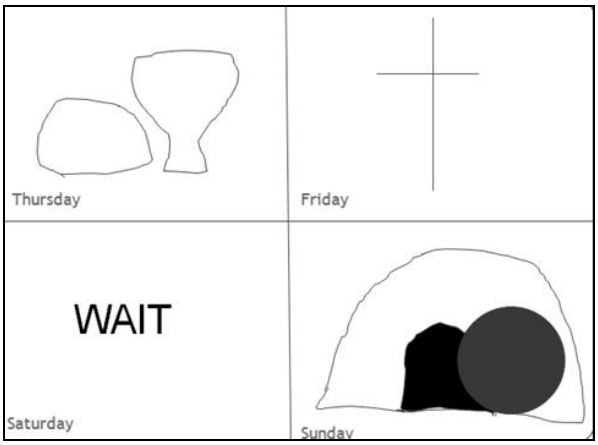
If At First You Don't Succeed, Try, Try Again

Adult learning principles advocate connecting new learning with the familiar, so Bible stories were selected for the students' foundational curriculum. The first lesson, aided by a translator, began with the retelling of the familiar story of Palm Sunday, accompanied by visuals. At the end, students were given markers and a sheet of paper with the sentence, "Jesus rode into Jerusalem on a donkey" printed on the bottom and asked to draw a picture of the story they just heard on the page. This activity was a favorite of the first graders in the teacher's experience, so it was quite a surprise when, through the translators, one of the students said, "We can't do that. We haven't practiced like you have." Assuming it was an issue of confidence, imposing the American mindset that many adults are embarrassed by their drawing skills, the assignment was set aside.

The following Sunday, Easter morning, the teacher, still working through a translator, retold the familiar Easter story, beginning with Thursday of Passion Week, and leading up to Easter. The teacher drew a diagram (Figure 1) on the board, reviewed the story pointing to each symbol, then handed the students a paper with four

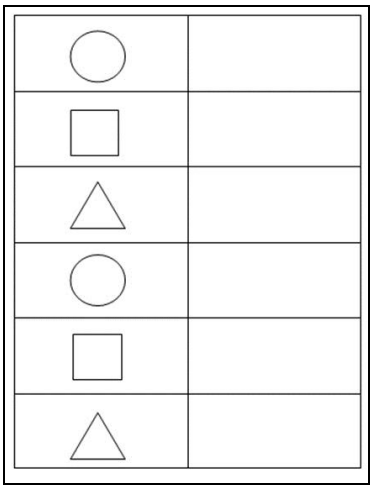
quadrants, the day marked in each, and asked them to copy the designs. The response was, "We can't do this. We don't know how."

Figure 1
Easter Drawing Model



Puzzled, the teacher took another step back, and the following week, tried a figure-copying exercise used in preschool and kindergarten classes (Figure 2). This proved to be extremely difficult for the students, but they made an attempt at this task. Their circles resembled deflated balloons and students were only able to draw the squares and triangles if the teacher provided dots for each corner of the shape in the boxes on the right. Future plans to have the students do any drawing during class were set aside.

Figure 2
Shapes Drawing Model



A New Approach

After the problems with drawing, the teacher took a new approach for Week 4: sight words. Sets of three index cards were prepared for each student containing their name, *loves* and *Jesus.* Cards were laid out in front of each student to read *[Name] loves Jesus*. As the cards were placed, the teacher repeated the sentence for the student, using their name. The teacher had a model in the front, and read the sentence to the students, touching each word, saying "Elizabeth loves Jesus." The class repeated the sentence multiple times, and the teacher went around reading each student's sentence, touching each word. Attention was directed to the front of the room again, and the teacher asked the students to watch what she was going to do. The first and third cards were switched, making the sentence say, "Jesus loves Elizabeth." When asked what the new sentence said, in chorus, the students said, "Elizabeth loves Jesus," even though they just watched the cards being switched. The teacher started again, showing the students the original sentence, switching the cards, then prompting them for the new sentence. There appeared to be no connection that the cards were connected to the words.

Why These Exercises Didn't Work

In examining the research, it makes sense why exercises that normally work so well with elementary American children were a failure with this group. The teacher made assumptions based on the abilities of beginning students raised in literate cultures.

No Experience with Drawing Materials

First, the adults had no experience with pencils, pens, crayons, or markers. A better approach would have been to begin with a separate lesson to introduce the writing tools, demonstrate their function, and allow experimentation. This would help the students recognize their control of the instrument and understand what each type did. The teacher's initial lesson made a presumption that drawing was a skillset of the class. In working with the lowest literacy students, one must determine a benchmark of the literacy skills present before attempting any activities.

To give the class this opportunity, the teacher gave the students an art kit at Christmas that year, which included markers, crayons, colored pencils, watercolors, and paper for creative experimentation. This enabled the class to explore the different media on their own. From that point on, one of the students (Kumba) would regularly bring in art projects created with these items. They were always brightly colored and creative.

Difficulty with Visual-Motor Tasks

In reflecting on the students' unsuccessful attempt to copy shapes or to capture the story as a picture, students who have no need to draw or write will have issues with visual-motor tasks. In their non-literate culture, there was no need to write things down. According to Bigelow and Schwartz (2010), "studies involving non-print-literate subjects provide considerable evidence that non-literate subjects have significantly more difficulty than literate ones with a variety of visual-motor tasks, such as copying figures,[and] creating stick figures from a picture model" (p. 8).

No Transfer From Three Dimensional Objects

Greenfield (1997), points out that pre-literates do not transfer the concept of three dimensional objects to two dimensional drawings. There is a "hierarchy of difficulty for non-literate persons in processing two-dimensional information. Apparently, the more lifelike the images, the easier they are to understand or interpret for adults without literacy and formal schooling" (Bigelow & Schwartz, 2010, p. 8). Photographs have the best conceptual transfer. Using the line-drawn images of the flannelgraph to tell the Palm Sunday story may have confused the students rather than supported the message.

No Print Literacy

Their lack of print literacy was further illustrated in the sight word exercise. Students did not attach the concept of the word to the index card; therefore the movement of the word cards was not associated with a change of word order. A concept of print is foundational to all other decoding skills (Wren, 2001, Hoover and Gough, 2012). In a print-saturated society, print literacy is caught, rather than taught. As children are read to, they gain understanding that printed words and pictures have meaning, recognize word orientation on a page, and know we read from left to right and front to back. These are some of many unconsciously absorbed skills that the pre-literate student is unaware of. Explicit, specific, tactical instruction is needed for pre-literate students to gain understanding for many things that are assumed in literate cultures.

Try again!

The teacher persevered, attempting a variety of techniques with the class, working in a hit or miss fashion. Since the focus of this paper is the development of visual literacy, the additional reading and writing lessons will be omitted. (As an aside, and out of the scope of this paper, a sight word approach was picked up a few years later for the students with some degree of success; certainly more so than the attempted phonics methodology.)

Part of teaching English as a Second Language is the introduction of new cultural experiences, so six months after the class was initiated, the group was taken on a field trip to a museum.

The Museum Visit

In Medieval times, the church used art to help the congregants learn Bible stories and theological concepts, so an excursion was planned to Boston's Isabella Stewart Gardner Museum, where a multitude of Medieval and Renaissance religious art is housed. It is a small museum, with no identification labels to allow the art to speak for itself. The teacher expected that the students would enjoy the visit to the city as well as the experience of seeing the art in the museum. The students were awestruck by the city skyline and had great anticipation of the adventure ahead of them.

As the class walked through the museum, there appeared to be no connection whatsoever between the Bible stories the students knew so well and the pictures they were seeing. The teacher pointed out picture after picture of familiar stories with no signals of recognition by the students. Despite the many renderings of the Madonna (Mary and the baby Jesus) housed in the museum, students made no generalizations to begin to point them out. From their perspective, it was always a woman and a baby.

Two Points of Recognition

There were two exceptions to the lack of connection. When the students encountered a painting in the style of Cranach of Adam and Eve, (Figure 3) loud chatter erupted from the group.

Figure 3
Adam And Eve In The Style Of Cranach

Students were eager to inform the teacher of their discovery and retold the story as if the teacher were

totally unfamiliar with the creation account. They acted in the role of teacher, sharing their knowledge. Why is this? Perhaps in Liberia, another Sunday School teacher had shared the story with an illustration similar to this one. It was perplexing to the teacher why only this picture and no others were recognized.

As the class walked out of the museum to the car, they passed a large statue in front of the School of the Museum of Fine Arts. This generated another burst of energy as the class identified something life-sized from their homeland: a stone hippo. They wanted to touch it and feel the smoothness of the marble, explaining to the teacher the name for the beast in their tribal Kissi or Krahn language, sharing how the beast lived in the rivers.

From a teaching perspective, this is key for working with students at this level. Here we had a lifelike representation of something from the students' environment in a three dimensional form, so the transfer was obvious. The teacher discovered much later that much of the art in Liberia is three dimensional, another potential reason for the challenge of the paintings and their difficulty with the drawing activities in the beginning of class.

Why the Museum Didn't Work

In hindsight, the student's lack of connection with the paintings makes sense. Religious art is always reflective of the culture of the people who create it. The Italian representations of the Bible stories in Renaissance settings had no relevance for the Liberians; being foreign to both their homeland and new American surroundings. In Medieval and Renaissance times, these would have been familiar surroundings, and the way the oral stories would have been visualized by the illiterate congregants listening to them. In the mind's eye of the Liberians, visualizations would have been of other Liberians as Bible stories were told to them.

In the twenty-first century, literate people have had considerable exposure to visuals depicting different historical timeframes, so they have visual literacy schemas for identifying artistic settings. Literate learners can transfer themes to different time periods with little difficulty, such as a Shakespeare play set in the Vietnam War era. Seeing a familiar Bible story set in a Renaissance setting is an easy transfer for a literate person familiar with the Bible. Key markers of action or props aid in identification. For the illiterate learner, the connections are not made. The story may be in place for them, but there is a gap in contextual understanding and the disconnect of viewing two-dimensional objects as representations of something real.

Perhaps Christmas Cards

At Christmastime that year and the next, the teacher attempted to teach parts of the Christmas story using pictures from greeting cards and prints of famous paintings. Each week, one of the main characters or scenes of Christmas was introduced, beginning with the annunciation and progressing through the characters of Mary, Joseph, shepherds, wise men, then ending with the story of the birth of Christ.

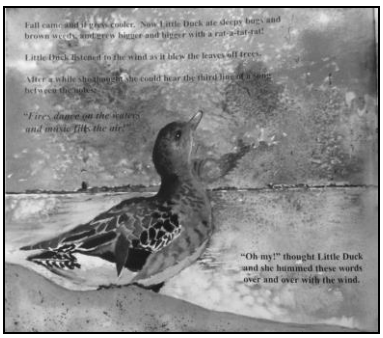
Even though the students were very familiar with the story, there was no transfer as new pictures were shown. Characters had to be pointed out in each new item. When asked, "Who's this?" the class could not answer, even though earlier in the class they had repeated the word, could accurately say the word, knew the role of the character in the story and been shown who was who in each previous picture. They enjoyed the activity and always asked if they could bring the pictures home with them.

Disconnect with Illustrations

One of the biggest tourist attractions in Providence is Waterfire, an art installation where throughout the summer, 100 bonfires contained in floating wire baskets along the river are lit and kept burning from sunset until 1AM. A copy of *The Waterfire Duck*, an illustrated children's book issued as part of the fundraising effort to keep the fires burning, was purchased and read to the students. The storyline is about a duck, born on the Rhode Island seacoast, who hears the call of a song in the wind to find the city where "fires dance on the water and music fills the air" (Latimer, 2009, p. 10). The duck journeys through the state to land at Waterfire.

As the book was read to the students, the duckling's story progresses from spring through summer and into autumn. The page with the brightly colored illustration of fall was shown to the students (Figure 4). When asked, "What time of year is it in this picture?" the students returned a blank stare.

Figure 4
The Waterfire Duck In Fall



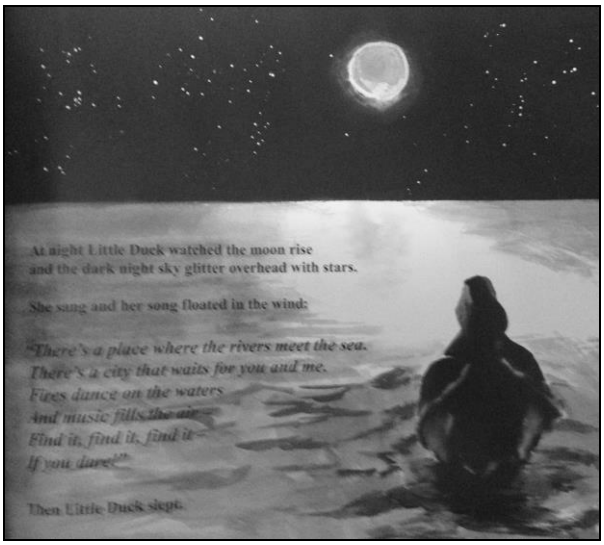
At this point, the class had been together four and a half years, with most of the students established in the USA for eight years. Every year, the class reviewed the seasons and the students could name them from memory. Seasonal discussions occurred regularly during calendar time, so the concept of autumn was not new to students. The book was being read in October, during the height of the leaves changing color in New England, yet students made no connection between what was represented on the page and what was occurring outside. Why this disconnect?

A few pages later, the storyline progressed to spring of the following year, and one of the students commented that it was a new duck, as in the story, the duck had matured to adulthood.

The teacher was not surprised by the student's misunderstanding of the duck growing from page to page, since that would be something learned in the context of the visual storytelling of book literacy. The students were able to recognize the duck on the page, so visual literacy skills had begun to develop.

As the story continues, there is a picture of the duck swimming on the water at night under a moonlit sky full of stars (Figure 5). When asked, "What time is this?" the room was filled with silence and blank stares. Once again, the students did not recognize the timeframe of the picture. Perhaps it was an issue of students thinking that the teacher was asking for a specific time, rather than nighttime, but no amount of prompting elicited an answer.

Figure 5
Waterfire Duck At Night



This response remains consistent with the findings in the literature (see Greenfield, 1997; Bigelow & Schwartz, 2010). According to Linney, (1995) "If we have not learnt the common pictorial conventions, a picture simply appears as a meaningless collection of lines, shapes, tones and colours on a piece of paper" (p. 20).

Picture recognition is important in the development of literacy and reading skills. It appears from these scenarios that like many other things, it is a skill that must be taught and developed within the pre-literate student.

Attempt to Connect Concepts through the Creation of Art

During the Christmas season of 2009, the teacher attempted art with the students again, choosing a project found on the Internet leveled for first graders. Students would create a nativity silhouette by painting a background of the moon in the night sky, using progressively darker blues around a white circle, then trace oak tag templates of silhouette figures onto black construction paper, cut them out, and glue them to the background (Figure 6).

Figure 6
Nativity Silhouette

After three years of weekly sessions, the teacher recognized the need for explicit, step-by-step instruction. She started by showing the students the finished product, then explained each step in detail of what needed to happen as the project went along, leveraging the whole-part-whole method. For the students, the transfer from seeing to doing was very complicated.

As with the *Waterfire Duck* story, students made no connection that the white circle was intended to be the moon and the background was to be the night sky. Most did not understand why they should not put paint in the white circle (Figure 7).

Tracing the silhouettes was another challenge. Students had difficulty holding the oak tag templates in place for tracing, so the teacher completed this task. The students had no trouble using the scissors, but cutting on

the line was an issue. Fine motor skills did not appear to the problem; rather, they did not understand why they needed to follow the line.

Figure 7
Class Painting

The largest issue occurred in the final step: attempting to place the cut out silhouettes on the background. (Figure 8). While very different from each other, students seemed to be unable to match their cutout with the similar shape on the model. None of the students could determine which figure represented which character, and none had the ability to copy the placement from the model. It was as if there was no connection between the story and the objects they were attempting to manipulate.

Figure 8
Cutting The Shapes

The project was only completed before Christmas with significant assistance from the teacher and two assistants brought in to help during the fourth week.

Why That Didn't Work

The teacher was surprised that after two years of working with the Christmas card pictures and the retelling of the Christmas story using illustrations from different character perspectives, that this new concept was so difficult. There are several reasons why this was so challenging. First, since this was a rendering of the characters in a new form, the students' difficulty should have been anticipated. The students knew the story, and were familiar with shadows, but not two dimensional paper silhouettes. Second, the students had never been asked to discriminate and match shapes before, and these particular shapes were irregular and complex.

Third, this was the students' first experience with watercolor. Allowing them to experiment in their own way to would have provided experience with the medium prior to completing a project in it.

Finally, the stylized background of the moon with rings of color was not understood, just as it was not recognized in *The Waterfire Duck.* At this point, the teacher had done no research about visual literacy and had not considered this element. Both teacher and students still had much to learn.

For this type of activity to be successful, the literacy teacher needs to scaffold leading activities to prepare the students for the different skills required for completion. A task analysis of this project would have identified its complexity for these learners.

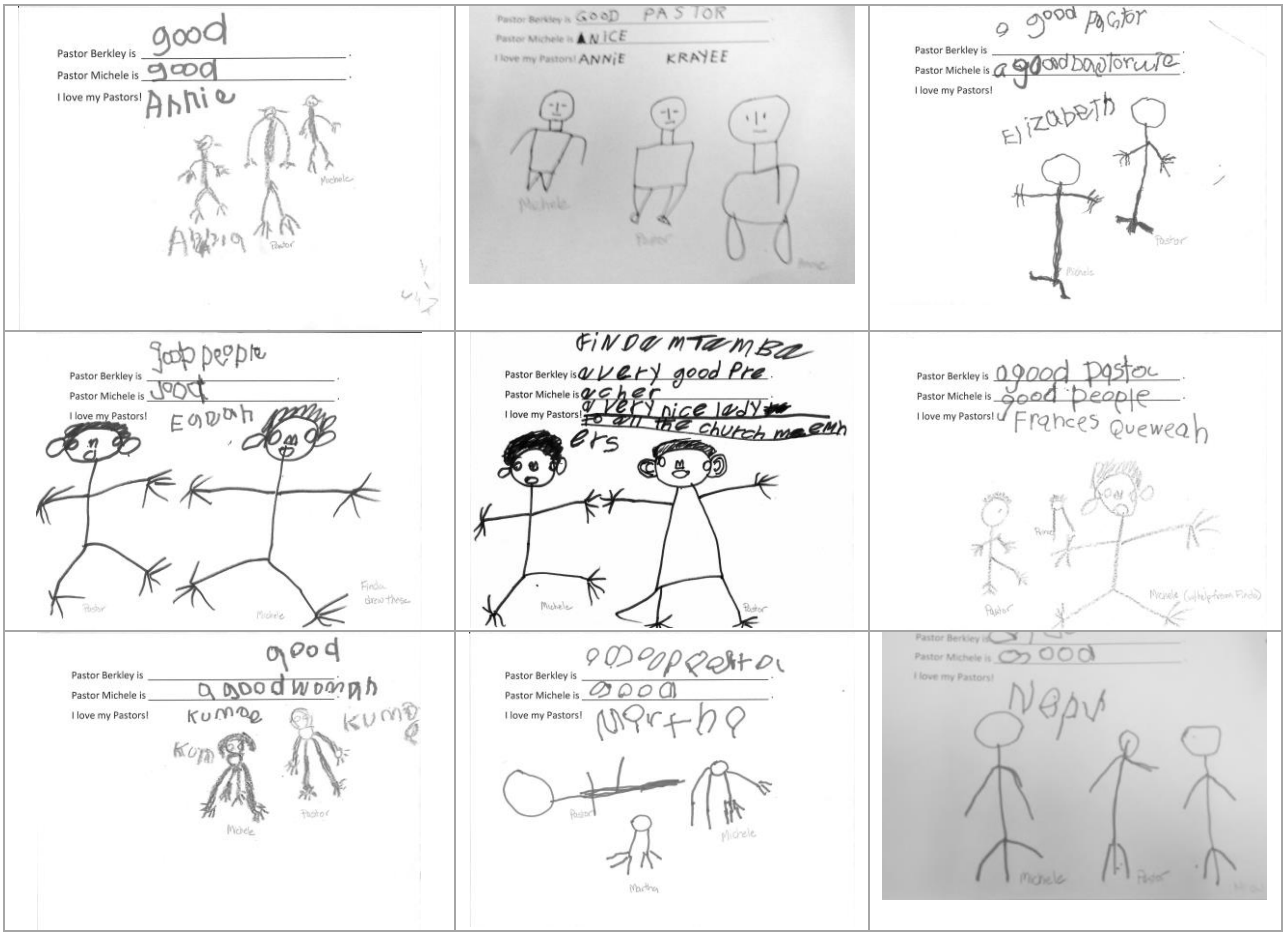
Drawing, Take Two

Another year went by, and the class continued to learn a variety of things. By this point, all had mastered writing their first name without copying from a card, and could write each letter of the alphabet with an auditory prompt. Students were beginning to understand the concept of words, and recognizing figures in pictures. Students had written language experience stories as a class, and were beginning to understand that words had meaning.

In October of 2010, the church planned to honor the pastor and his wife, and asked each Sunday School class to write a note of thanks to them for their service to the congregation. A template was made for the students that gave them two fill in the blank sentences saying, "Pastor Berkley is _____" and "Pastor Michele is_____." Students were told what the sentences said, and asked for a word, which was written out or spelled for them to fill in each blank, then instructed to draw a picture of themselves with the pastor.

The results of this exercise were astonishing. Students did not have difficulty selecting a word, copying it from a card, or writing it as the teacher dictated the spelling, but the teacher was perplexed by the student drawings, as illustrated in Figure 9. The human figure drawings resembled what would normally be produced by a

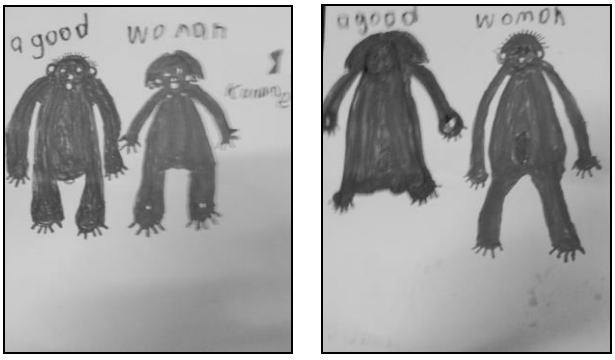
Figure 9
Student Drawings Of Themselves With The Pastor



preschool child, and included tadpole people. This was the moment of the teacher's awakening to the larger foundational visual literacy gaps present in the students. The drawings were completed, shared with the class, and presented to the pastor.

Kumba, one of the students who especially enjoys art projects, brought several drawings from home to class the following week (Figure 10), repeating the drawing of the two pastors. Unlike the ones from class, these figures were colored in, and had genitalia to identify the difference between the man and the woman. She had also chosen colors for these pictures. The woman was red and the man was orange. Each woman had a womb, recognition of the key role of childbearing and nurturance within the Liberian culture, and wore earrings. Above the picture, she had written, "a good woman," the words she had used to describe Pastor Michele. It is unknown whether she recalled this

Figure 10
Kumba's Drawings From Home Oct. 2010



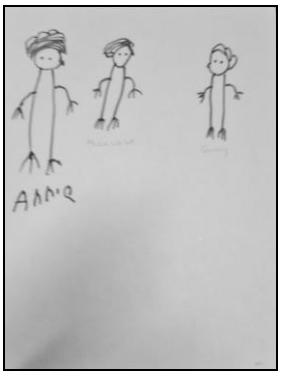
and wrote it from memory, or more likely, asked one of her children or grandchildren to help her spell it. It finally appeared that the concept of print literacy was

beginning to be cultivated. The next week, she returned with two additional pictures she drew at home. The woman was drawn in pink marker, with blue hair, earrings, a womb, and digits on the fingers and toes. She had begun to work more on facial features, drawing those in with brown marker, leaving white space for the pupils and nostrils. (Figure 11, left). She drew the man in red crayon, also with blue hair, earrings, digits, and facial features (Figure 11, right). Both had a belly button and genetalia.

Figure 11
Kumba's Second Drawings From Home

In class the following week, the teacher asked the students to draw a picture of themselves with their grandchildren in an attempt to explore this phenomenon further. The students embraced this task with vigor. The teacher was amazed by their zeal for this task, and their delight at the discoveries they were making as they represented the people they knew in their lives. Annie G. drew a hat on her grandson, and laughed as she shared this addition with the teacher (Figure 12).

Figure 12
Annie And The Hats

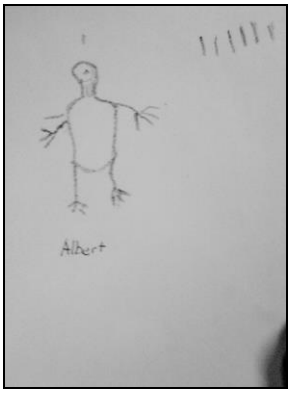


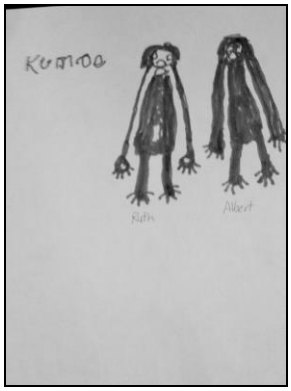
Elizabeth rounded her stick figure, colored it in, and said with glee, "Look! I make myself fat!" (Figure 13). The figures were similar to those drawn in the previous week, but there was an element of joy in the creation process as the students discovered new techniques.

Figure 13
Elizabeth's Fat Self

Essah made tick marks to identify his grandchildren, and drew a grandchild who also attended the church. Kumba, his wife, drew that same grandson, along with a granddaughter who at 16, was drawn with a womb, just like the women in her other pictures (Figure 14).

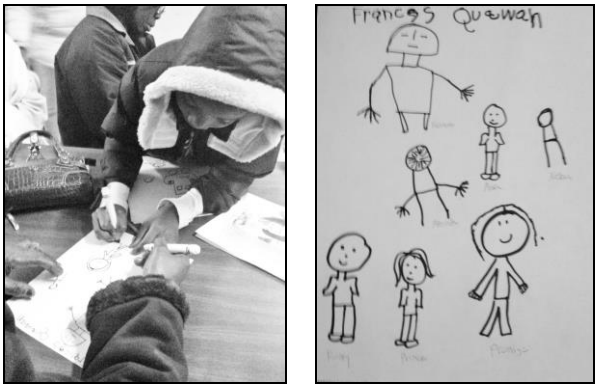
Figure 14
Kumba And Essah And The Grandchildren





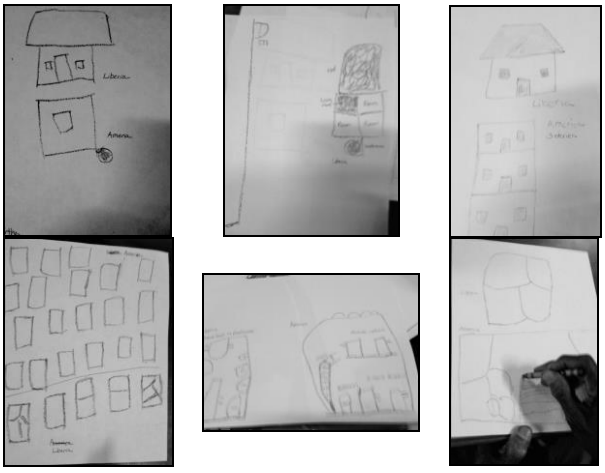
At a point near the end of the class, Frances' granddaughter came over and "corrected" her grandmother's work, showing her "the right way" to draw a person. It is interesting that this 12 year old, also from Liberia, recognized the difference between what her grandmother could do and what she was able to produce as one farther along on the developmental drawing scale (Figure 15).

Figure 15
Frances' Grandchildren "Help"



The next week, the teacher continued the exploration, asking the students to draw their houses in America and their houses in Liberia (Figure 16). The complexity of these drawings was surprising, as some created blueprint type drawings of their homes, and found creative ways to represent their homes in high-rise apartment buildings. It appeared that the cognitive sophistication of visual representation was farther along in this area, and that the students had begun to recognize some of the ways drawing could be used.

Figure 16
My House In Liberia And My House in America



What Does the Research Say?

Puzzled by these results, the teacher began to look into the research literature to see if there was anything that addressed this topic. While there is much writing on developmental drawing in children, there is a paucity of research on the connections between low literacy and drawing in adults. The Goodenough-Harris Draw a Man Test (1963), may be used to roughly identify stages of development in children. The students' people drawings were explored in this framework, and their work equaled that of children between 3-6 years old. Young children between the ages of 3 and 6 are learning to read and write, just like these pre-literate Liberian students, which leads one to ponder the connection between drawing and literacy.

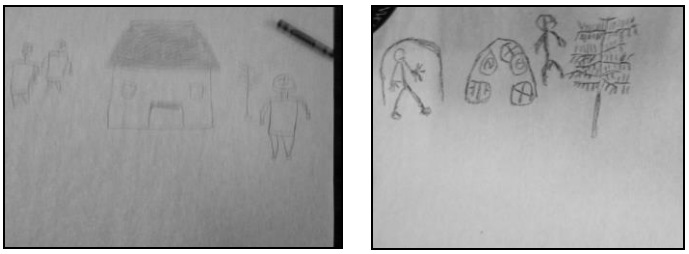
The House-Tree-Person test, used with adults in mental institutions, is a drawing assessment similar to the Goodenough-Harris Draw-a-Man (Hagood, 2000). Lister and Rosales (2009) expanded this test, adding that the person in the drawing must be doing something, and renamed it the Kinetic-House-Tree-Person Drawing Test. This test can be used to identify aberrant behaviors in adult drawings. While the teacher was not expecting to see any aberrant behavior demonstrated in the students, it was an interesting concept to explore with the students to see the types of drawings they would create with this prompt.

Kinetic House-Tree-Person Activity

The teacher added this activity to the curriculum in July 2011. Students were directed to draw a house, a tree, and a person doing something, then explain their picture in a taped session.

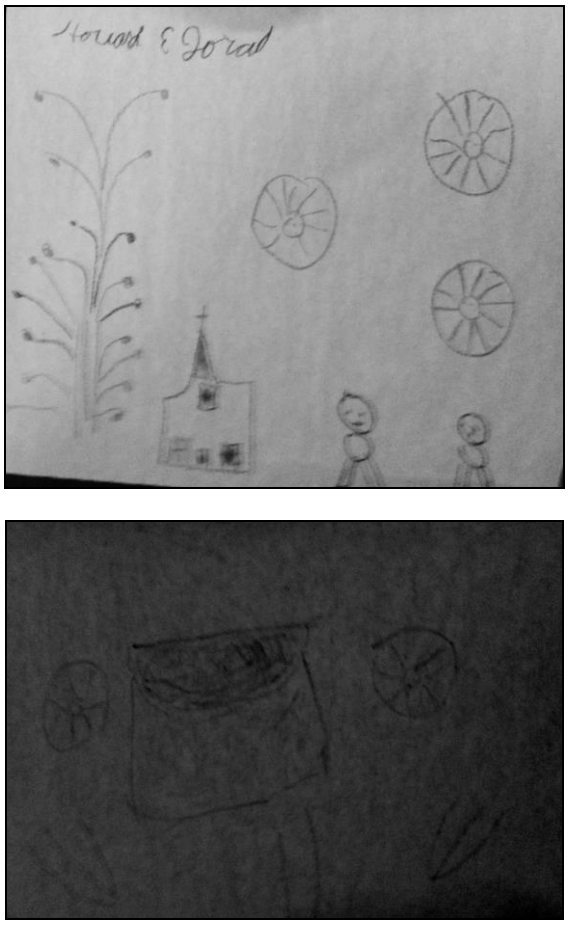
As the students shared their pictures, their level of literacy development was mirrored by the sophistication of their drawings. Those who had advanced further in class had drawings with more details and drew people that would place the artist at a higher chronological age using the Goodenough Draw-a-Man test. Annie, who had advanced farther has more realism in here drawing (Figure 17, left) than Kumba, even though Kumba seems to enjoy art more and spends time practicing.

Figure 17
Literacy Parallels In Drawing



There was some inter-student learning as the students worked on their houses. Howard, a developmentally delayed, Caucasian adult who participates in the literacy class, created a barn with an Amish hex sign, which Martha copied twice and later labeled as the people in her picture (Figure 18). This starburst symbol is a regularly occurring item in children's work (Kellogg, 2009).

Figure 18
Copying Of Starburst

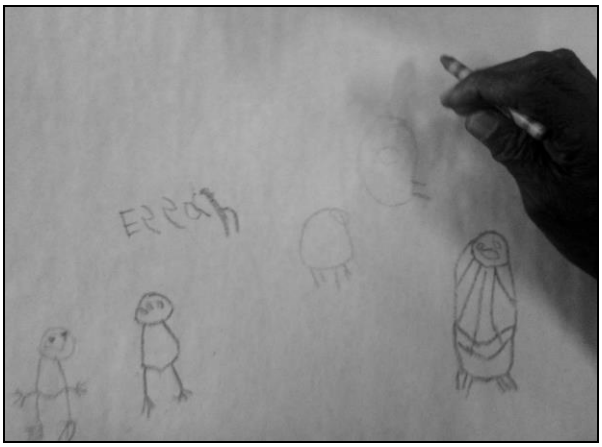


Essah, rather than drawing the requested house, tree, and person, drew people and bullfrogs. When asked why, he referred to the previous week's Bible lesson of the plagues during the time of Moses. Essah also commented that his bullfrogs were not very good. This was the first and only incidence of self-criticism in the class and indication that the drawings did not resemble the items they were attempting to portray (Figure 19).

Students had no difficulty completing the assignment, and enjoyed explaining their pictures on camera. The recording of the students and their explanation with subtitles is available at http://youtu.be/2bIdrTJhXPc .

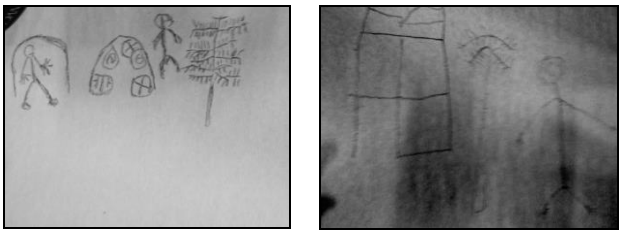
When the teacher went back to transcribe the tapes, she realized that she made continuing assumptions and needed to listen better to what the students actually said. The transcription reflects the activity accurately.

Figure 19
Essah's Bullfrog



As the students explained their drawings, two of the women described a single figure as a group of people, potentially an indication of Hofstede's (1980) concept of a collectivist culture (Figure 20). The Liberian people have a much stronger sense of community than the individualistic culture of the United States. In many of their drawing sessions, students observed and copied from one another, sharing ideas.

Figure 20
Representing Collectivist Thinking



Lister and Rosales (2009) make a significant observation about uses for this test.

> This adapted Kinetic-House-Tree-Person *for adults with developmental disabilities* holds promise for providing an arts-based assessment that *assesses for growth and positive changes in the individual in addition to negative or downward changes*. Verbal assessments are not always appropriate due to verbal limitations within the individual who has

developmental disabilities, therefore, arts therapists have at their disposal alternatives for assessing for change in functioning. Because this assessment mirrored the notes of the on-site therapists, this assessment suggests it can measure change. *It also suggests that arts based interventions do, in fact, facilitate well-being and positive changes in interaction and communication*. (p. 45, emphasis added)

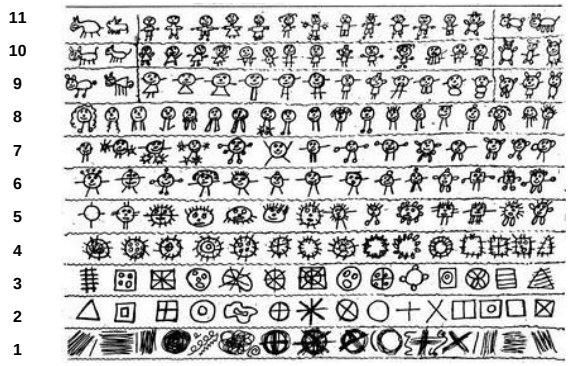
While this test was created for adults with developmental disabilities, there appears to be parallel use for it with pre-literate adults in the assessment process. Further research is needed to validate the reliability of this type of assessment.

Developmental Drawing in Children

Developmental drawing in children has been extensively documented in the literature. Callighan (2008) labels the phases of developmental art as (1) the precursor phase, where the child is scribbling, followed by (2) the onset of representation, then (3) refinement. The Liberians were clearly in the second stage, moving into stages of refinement during these sessions.

Rhoda Kellogg (1969) has developed a catalog of the stages of the developmental representations of human and animal figures in children's drawings (Figure 21).

Figure 21
Kellogg Taxonomy: Images In Children's Drawing



She labels the stages as:

1. Basic Scribbles
2. Diagrams and Combines
3. Aggregates
4. Suns
5. Sun faces and figures
6. Humans with head-top markings and with arms attached to the head
7. Humans without head-top markings
8. Armless humans
9. Humans with varied torsos
10. Humans with arms attached to the torso
11. Relatively complete human images

Kellogg notes that children may move back and forth between stages within the course of a week, so her taxonomy does not represent an exact science. She has noted the presence of many of these symbols appearing worldwide in children's drawings. In comparing the work of the Liberians to these stages, the same patterns are identifiable, and some of the symbols of the earlier stages, such as the starburst, appear in their work. Most of the Liberian's students' figure drawings are represented in Kellogg's stages 6-11 (See Figure 21).

Cultural Influences on Art

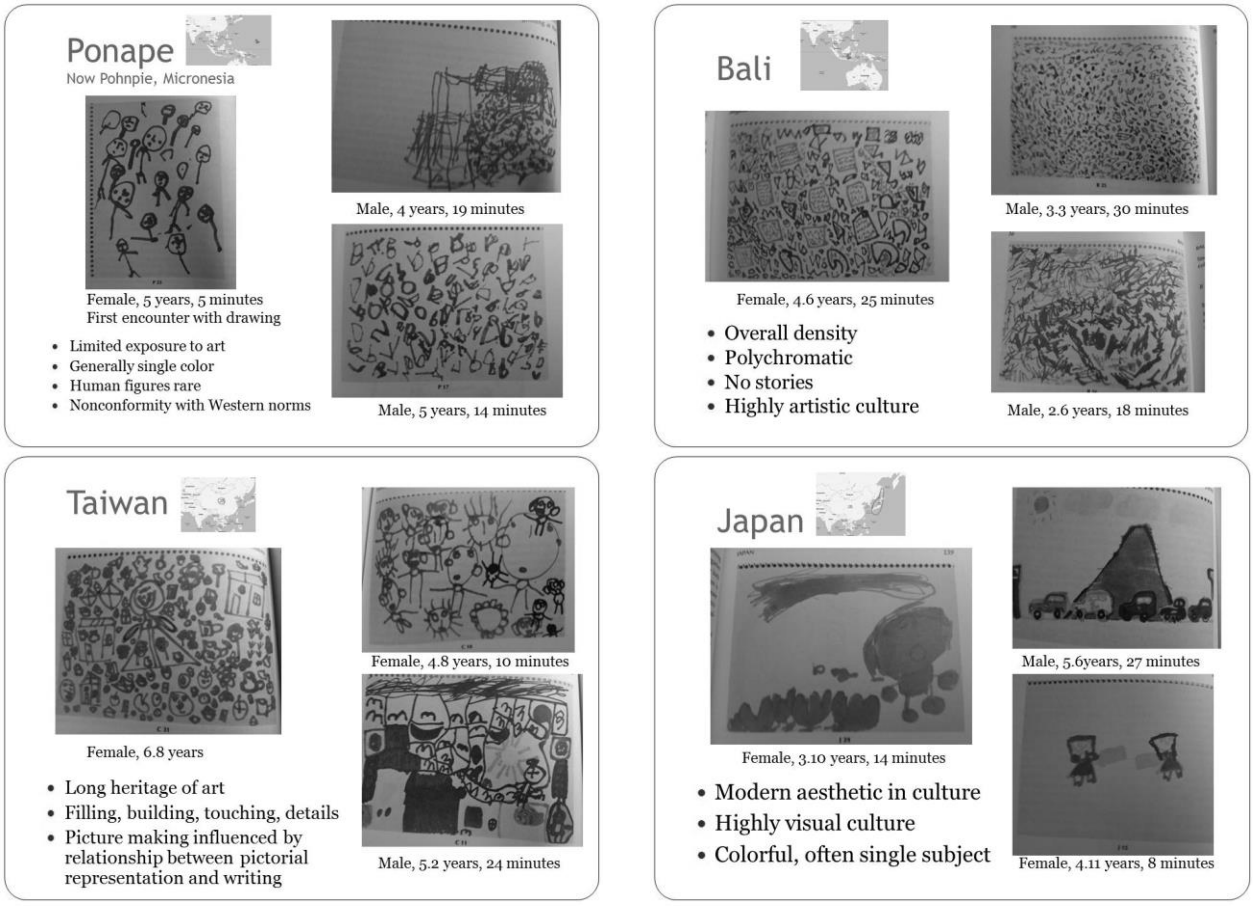
Cultural influences art worldwide, so one must be careful not to impose Western standards on the drawings of these adults. Alland (1983) has done extensive research on developmental drawing in children from around the world and shows that there are clear cultural influences in their drawings; even those from preliterate cultures as the illustrations of Figure 22 demonstrate. Could the Liberian students' challenge with drawings be a cultural phenomenon and not related to their pre-literate state?

A search for Liberian art uncovered very little from the areas of the students' villages, other than a few carved masks. This may be indicative of the lack of rebuilding the country's infrastructure since the war, minimal access to technology, and the very low literacy rate.

E-mail correspondence with Leslie Lumeh, Chairman of the Liberia Artist Association, and executive director of Liberia Visual Arts Academy, revealed that

> …in Liberia, the art of drawings is never taken serious [*sic*] from parents to educators. Parents will discourage their kids to draw, and in schools, the subject is never really ever taught. All Liberian artists - including myself - are self-taught. Thanks to God for giving this talent freely.
>
> In one of my popular quotes, I said: "Art has it root deep in nature..." And you and I know very well that art grows as does the artists. That is why if you listen to musicians during their earlier days of singing, the songs are sometimes hasty or fast, but as time wears on, that changed depending how well/much this musician might have improve [*sic*] in the area. I am not a musician and knows[*sic*] nothing about music, I am only making reference to how art - in any form, be it music, dance, literature painting etc can develops [*sic*] ...

Figure 22
Alland Cultural Representations in Drawing



Having said that Liberian artists are self-taught, we have gone the x-tra [*sic*] miles to learn from those that have made research into the field of drawing and painting...

Now, back to your folks/students. The art of drawing has always been there in them, but was never nurture [*sic*] for or even allowed to grow (perhaps, it was even suppressed). But now that you have given them this opportunity to draw, the memory starts from where it has always been - at childhood!

And to answer your question more directly, 'Was there no exposure at all to drawing?' Jean, in my opinion, the question should be 'Is there no exposure at all to drawing [in Liberia]'? And the answer is Yes. That is why I opened the first art academy last September in Monrovia, the Liberia Visual Art Academy or LiVArts. (Personal communication, August 20, 2011)

According to Lemeh, then, art has not been encouraged in Liberia, which may be an additional factor in the limitations of this group of students.

Relating Art to Writing

As children experiment with drawing, they often create shapes resembling letters. According to Kellogg (2009),

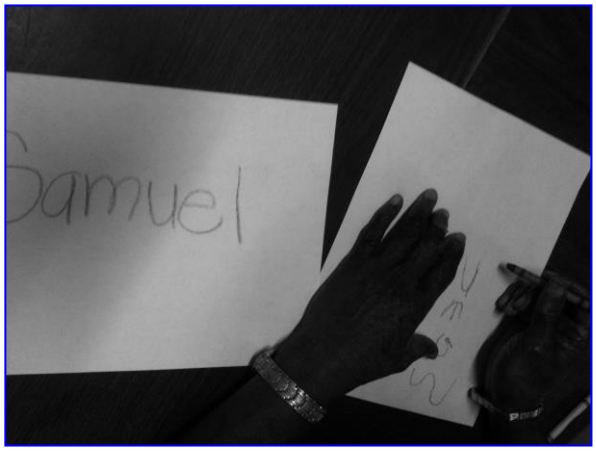
> Most of the letters of the English alphabet, both capitals and lower-case forms, are made by young children as art Gestalts. In art, the letters are placed or arranged to complete a Pattern or an implied shape. In language, the letters are arranged in a certain order within words and are put into a certain

left-right and top-bottom placement. As the child learns to read, he must perceive the differences between the esthetic and the linguistic positioning of letters, and as he learns to write, he must put this perception to use.

Each child who has scribbled a great deal will know many of the letter Gestalts when he enters school, but he needs to learn the differences between their uses for art and for language. Otherwise, he will have serious difficulties with language. (p. 262)

For the Liberian students, who have had no exposure to print prior to this class, the letters that create words are just shapes. In writing tasks, students use the writing model at any orientation, copying the letters one shape at a time regardless of "right-side-up" (Figure 23). Students copy letters by imitation of the movement of the lines. This is more of an artistic process than a literary one.

Figure 23
Copying Letters as Shapes
(Note Orientation Of Paper)



Having fluency with drawing helps students with the skills of recognizing and differentiating shapes and gaining proficiency with using the tools for writing.

Continuing Growth

In the fall of 2011, the students asked to learn more Bible stories. The teacher found *The Big Picture Bible Timeline* (Eide, 1991), a resource containing simple line drawings of Bible stories that covered the entire Bible sequentially. Each week the teacher told one or two of the stories on the page, discussing them with the students. Students kept their pictures in a three ring notebook, which was used for review. One week, Kumba brought her notebook to class with many of her pictures colored in orange marker. She was very pleased with her work.

As the students began to realize that the line drawings had specific meaning, they wanted to know who was who in the pictures. They began to recognize repeating characters like Moses, David, and Jesus. Students were excited to be able to "read" the pictures, able to retell each story from its picture. Finally, they had begun to attribute distinct meaning to drawings. They knew there was more to reading, and often asked what the Bible reference was for the story so they could tell their friends the book of the Bible the story was located in. There seemed to be a sense of power for them in knowing this information.

What about Three Dimensions? Working with Clay

In May of 2012, the week after Easter, each student was given modeling clay in a variety of colors and asked to use it to tell the Easter story.

The students enjoyed working with this medium and produced figures clearly related to the story (Figure 24). They used their clay figures to retell the story of the resurrection with great zeal. A video clip of their stories is available at http://youtu.be/DozJuI7LfiM.

Figure 24
Working in Clay

After class, the students were given the clay to bring home, and on the following Sunday, several brought projects they made at home during the week to show the class (Figure 25). Annie depicted people and a dog eating dinner in Liberia. Kumba created cookware, and Elizabeth made mortar and pestle sets, "so you can see something we have in Liberia that you don't have in America." This medium brought connections for them and provided opportunities for new expressions not seen with drawing. Perhaps this was a more concrete association to reality for them. Perhaps it was a demonstration of what they had gained in the year of classroom growth. It was clear they were deliberate with each figure and each represented something created to have specific meaning.

Figure 25
Figures Made At Home

Craft Project

At Christmastime 2012, the class attempted another Christmas craft project. The teacher purchased the supplies to make a clay pot nativity set (Figure 20) and had the classroom set up when the students arrived with a model on display.

The students were puzzled by the model, and did not identify it as a nativity set. When it was explained to them, they were agreeable to create the project.

The students enjoyed painting the pots, but some had difficulty understanding that the wooden ball would represent the head, and why we were adding the cloth that would represent the head scarf. When the heads were glued on, Kumba put what would have been the face stare straight up into the sky, not understanding that the head belonged on the neck facing forward. Some had a hard time identifying that the little figure would represent baby Jesus.

In the end, they were very pleased with their project even if they didn't really understand it (Figure 26).

Figure 26
Clay Pot Nativity

Story in Stickers

Another project attempted during Christmas 2012 clearly demonstrated that students still had not fully grasped basic visual literacy concepts. Students were given a set of nativity stickers (Figure 27) with a blank sheet of paper and asked to recreate the Christmas story.

The students had never worked with stickers, so it took them a while to understand how to peel them off the backing. Once they figured out how this worked, they began with their designs independently.

Surprisingly, rather than placing the figures to tell the story, most copied the order of the stickers on the sheet they came from. Most were unable to identify which sticker represented which character, and did not orient animals with their feet on the ground, even with coaching. Students consistently held the sticker sheet with the right side up, so some visual literacy clues have been established to recognize the correct orientation for representations of people.

Figure 27
Working With Stickers

Retelling with Figures

On the Sunday before Christmas 2012, the teacher brought a crèche set to class to allow the students to retell

the story using three-dimensional figures. Each student was handed one of the pieces from Figure 28 to examine.

Figure 28
Stylized Nativity

When asked to guess who the different figures might represent, students did not know. One guessed the shepherd was Moses. Another guessed Mary was the angel. It was encouraging that the guesses were biblical, so there was some frame being established. The Christmas story was told using the figures to demonstrate each character's role, and the nativity was assembled.

Pieces were handed out again, and students were asked to name the characters. Despite seeing them named and

used in the story moments ago, there was no recall or transfer to the object they were holding.

This is puzzling, considering the limited set of characters in a nativity set and the amount of interaction students had with this concept in seven successive Christmas seasons. The students had clear familiarity with the story, but could not match characters to pieces. This is a stylized piece, but after all the work done over seven years, their foundations in visual literacy still has significant gaps. They demonstrated symbolic representation in their creation of figures for the Easter story, and in their drawings, but "reading" something created by someone else remained an elusive skill.

Clearly, there is more groundwork to be laid with these students, even after seven years of weekly one hour sessions. Progress has been made, but major gaps still exist. Their discoveries provide a fascinating window into understanding how visual literacy builds in the human mind, and the void of pieces yet to be placed in those growing up in the absence of print.

Conclusion

Becoming literate is a complex task. Learning to read entails the coordination of many discrete skills involved in the decoding process. Learning to recognize and create art also involves decoding and encoding. According to Howard Gardner (1990),

> ...human artistry is viewed first and foremost as an activity of the mind, an activity that involves the use of a transformation of various kinds of symbols and systems of symbols. Individuals who wish to participate meaningfully in artistic perception must learn to decode, to "read" the various symbolic vehicles in their culture; individuals who wish to participate in artistic creation must learn how to manipulate, how to "write with" the various symbolic forms present in their culture, and, finally, individuals who wish to engage fully in the artistic realm must also gain mastery of certain central artistic concepts. Just as one cannot assume that individuals will – in the absence of support - learn to read and write in their natural languages, so, too, it seems reasonable to assume that individuals can benefit from assistance in learning to "read" and "write" in the various languages of the arts. (p. 9)

For the pre-literate adult, there are many skills to be mastered to survive in a literate culture. Encouraging students to experiment with art provides them with a fun activity, and gives them the necessary practice using the tools of writing. It gives the teacher a benchmark of the students' early literacy skills, and lays the foundation for the learners that symbols, whether three dimensional or in print, carry meaning, then ultimately, they can begin to understand meaning-making through the written word.

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