

Block Play: Part I
The American School Foundation of Guadalajara
Guadalajara, Mexico



For several days I noticed that the children were playing with blocks and building with much enthusiasm. I took photos of their play. The next day we sat down to discuss what was happening.

What is it that the children have created?



- Junkee- We are building a road.
Marcos- Yes, a road.
- Junkee- No, it's a racetrack.
Fausto- Over here we are building a tower and it fell down. It's a high tower made of blocks.
- Junkee- There were cars inside the tower. Like a house for cars.
- Juan Carlos- I crashed the tower with a car in the building and destroyed it and Marcos was angry.
- Marcos- Yes, I said, "Stop, don't do it".

After reflecting on their photos and our conversation, I found elements of joy, teamwork, and conflict resolution present. But why were they playing as constructors? The city we live in, Guadalajara, is growing very quickly and there is certainly a lot of construction to see: roads, tunnels, and high-rise towers wherever you look. Did their interest stem from their daily lives? Was this play the medium to develop friendships, as it was in the beginning of the school year? How could I probe the children's understanding of construction? How could I get the parents involved?

A Walk to Find Buildings: Part II

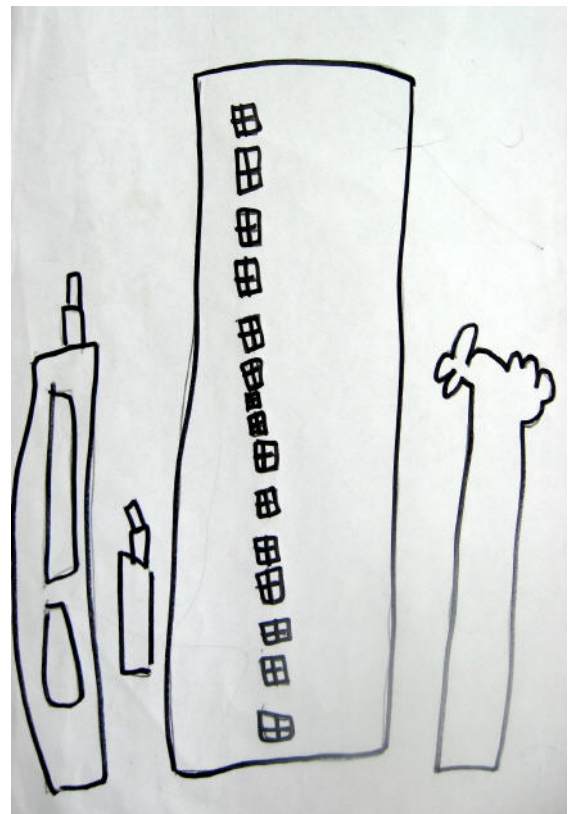
After hearing and seeing the children's interest surrounding building, I decided to move beyond the confines of our classroom and listen to how the outside world would broaden and shape the children's play as well as my understanding of their play.



- Teacher- Grab a clipboard and let's go outside to see what we can find.
- Jorge- We are going to see buildings.
- Junkee- Like houses, buildings, schools.
- Fausto- Towers and castles.
- Fernando- I see one (*pointing outside our classroom to the tall tower*).
- Junkee- I see a big building with lots of windows.
- Fernando- I saw a King Kong movie and it was the same building.
- Fausto- Let's go up on the bridge to see better (*moving towards the wooden play structure at our recess area*).
- Junkee- Yes, buildings.
- Jorge- I know where we can find more buildings. At the soccer field.

The group ran off to the soccer field to find more buildings.

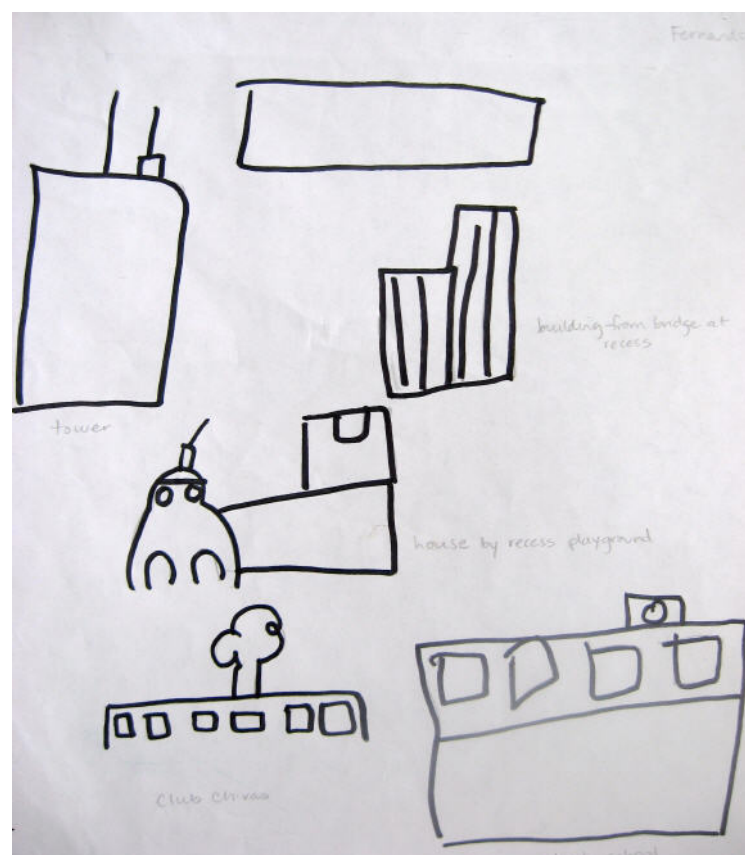
- Junkee- There is a big orange one (*pointing*) off to Philadelphia street behind the school parking lot).
- Ian (a first grader)- What are you doing?
- Jorge- Drawing buildings.
- Ian- There is another one, the pink palace.
- Jorge- Let's look for more.



A child's replication of the building outside our classroom.

How did this experience allow me to understand what the children know about buildings? From looking at their drawings I saw that they are aware of many features that surround and are included in drawing a building. I imagined the task of drawing a building to be difficult, as they had to create a 3 dimensional shape on a 2 dimensional plane. Did this frustrate them? I was also given a window into the child's idea of "building". Was it just the tall high-rises? Or does it include gardens, benches, fountains, play equipment, and more? By listening and looking over their drawings, I was able to see further into their thinking. I also loved reading about how the 1st grader became involved (our school is from age 3 to 19), which led me to wonder how could I involve other areas of the school in this study?

To involve parents, I asked them to take photos of man-made structures. When asked to reflect on this experience with their child, one parent said, "Our involvement was to discuss with Renata the different options of buildings she wanted to have pictures taken of. This was a lot of fun, because it coincided with a family trip to New York City. She was very appreciative of different approaches and different styles of architecture. We encouraged her to photograph from different angles to see the buildings in different perspectives."



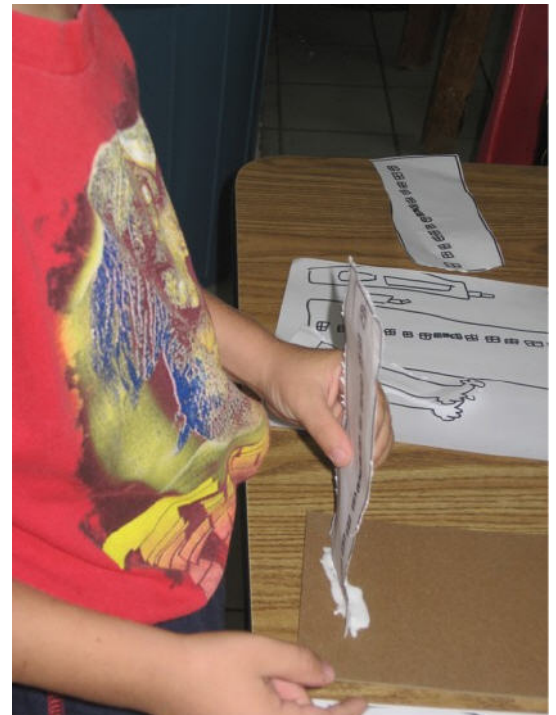
Building in 3 Dimensions

I put out photocopies of the children's drawings that they had created from a walk they took to find "buildings". On the table I put out scissors, tape, clay, sticks, white glue, and glue sticks. The children used individual boards to create the floor of their work.

This is what I observed...



Constructing with the glue stick



Constructing with white glue



Constructing with tape
Constructing with the glue stick



Constructing with clay
Constructing with the glue stick

Here are some ideas I gathered from watching, listening, and taking photos.

- Every child started with a glue stick or white glue but realized after trying that the paper would not stand up so they had to revise their thinking.
- They helped each other solve the problem of getting drawings to stand up by directly asking a friend, watching others, or offering support.
- The children realized that white glue does not help because it offers slippery support.
- Glue sticks only help the papers to stick together but not to stand up.
- Clay offers a solid foundation to place sticks or papers.
- More support is provided if clay is put on both sides of the paper or the paper is put in the middle of the clay.
- Tape needs re-enforcement, as it is too flimsy.
- Other paper can be used to re-enforce the base of the standing object.
- A stick in the center or behind the building creates structure for the building to rest upon.



The use of paper to support the building



The use of a stick to support the building

To open a dialogue with the parents regarding the children's explorations and discoveries, I sent home 3 documentation pieces that highlighted the investigations that had been taking place in school. Some parents were amazed at the children's perseverance and commented that "this activity helps reinforce a value we hold dear, to persevere until one's goal is reached". Another commented on how "we found the building exercise really interesting and helpful to foster creativity and the use of our kid's imagination". And another commented that "the project requires the children to use knowledge to solve a practical problem and that is putting knowledge to work."

I was pleased to create a conversation with the parents and found them receptive and eager. They wanted to be involved and they found that they also learned about their children in a much different way. One parent noticed his daughter was putting together different materials like sticks, toilet rolls, cardboard, and plastic products to construct something. He told her "not to do that" but then noticed she was really building something, her way and with her ideas. He also commented that he was "amazed at how she started to combine material like glue, tape, clay, and string."

I believe parents, children, my teacher assistant, and I learned to appreciate how constructing is multi-dimensional and that we can learn about building

- by listening to each others' ideas
- by experimenting to find the best materials to use
- by observing examples of building in the environment

Meta-cognition of a Child's 3 Dimensional Building

Each child created a 3 dimensional depiction of his/her building by first cutting out a photocopy of the original 2 dimensional drawing and then choosing the material(s) s/he needed to make the building stand. I took photos of each child's process (20 children in the class) and asked that they reflect with me on their experience by visiting the photo story. I wanted a window into each child's thought process as well as an opportunity for the child to reflect upon the work created. Below is an example of one child's journey. The text below each photograph is her description of the building process.



First I tried to have my building stand with clay but it just lay down



So I put clay on the inside



And it stood for a minute



But then it fell down



So I decided to make 2 buildings lean on each other to get it to stand up



I added clay at the top so it would make a point



And it kept falling down so I tried and tired and tried



Until I got it to stand up

I found this activity to be rewarding on many levels. It created the opportunity to observe and listen to each child, record their thinking, and reflect and share the children's thought processes. We circulated a book home, which included all 20 children's photo stories with accompanying reflective thoughts by each child. I asked the parents to make comments and this is what they said...

- I think is a very interesting project. It's amazing to see how the children don't give up. They try again and again to reach the objective. They look for different alternatives if the one that they used didn't work for them before.
- I liked to see how they helped each other; they give their opinions to each other in order to help their buildings stand up. I believe that they're learning the importance of teamwork.
- Maybe it will sound simple and that all they are doing is playing or doing a manual activity but I think what they're developing is knowledge.
- We Mexicans have a saying that I value, "the one that perseveres, reaches the end". I find this activity illustrates the experimentation and endurance that our children demonstrate in their daily lives, which will hopefully continue as their lives unfold.
- I learned how cooperative they are as they put ideas together to reach whatever they want.

My work with the children was enriched by the parents' comments. Ideas of perseverance and cooperation were not forefront in my planning but held great importance to parents as shown in their responses to the work sent home. Sharing my curiosity in uncovering children's thoughts about their work with parents helped us become co-researchers with the children.