

### **An Altar for Gabriel Figueroa: Meaningful Experiences as a Spark for Deep Learning**

Project completed with second graders (7-8 years old) from the Instituto Nezaldi

Academic Year 2008-2009

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**Photo Caption Translation:** *Nezaldi Institute/Setting Learning Potential Free/An Altar for Gabriel Figueroa: Meaningful Experiences as a Spark for Deep Learning*

#### **School, Advancing Traditions**



The tradition of the Day of the Dead in Mexico, more than a Christian festivity, is a celebration that mixes equally Pre-Hispanic culture and Catholic religion, in which the Mexican people found a means to keep their ancient traditions alive.

Within these traditions, contrasting sentiments coexist, such as the pain of losing a loved one and the joy of celebration and amusement. The festivities of the Day of the Dead are divided in two parts: the first, All Saint's Day celebrated on November 1, and the second, the Day of the Dead on November 2. The origins of the Day of the Dead celebration precede the arrival of the Spanish in the

New World. There is record of such celebrations in the Mexico, Maya, Purépecha, Nahuatl and Totonaca ethnicities. These rituals celebrating the life of one's ancestors appear in these civilizations going back at least three thousand years.

The Day of the Dead altar is a fundamental element of this deeply rooted tradition and it varies according to the customs of each particular region. Nevertheless, the purpose and meaning are the same: to receive, celebrate and share with the deceased the year's harvest, thus communicating with them and consoling them for their loss.

For this reason, setting up altars is encouraged in the home and in public areas that celebrate cultural heritage. Included in these altars are offerings, comprised of the dishes, fruits, and drinks that the deceased enjoyed in life, so that they may take in the essence of this nourishment upon their return to the earth. UNESCO (the United Nations Educational, Scientific and Cultural Organization) has inscribed this festivity into the Representative List of the Intangible Cultural Heritage of Humanity.

In the Nezaldi Institute, second-grade students traditionally are charged with the assignment of sharing this celebration with our educational community, however in the 2008-2009 academic year, we received an invitation from CONARTE (The State of Nuevo León Arts Center) to collaborate with them in the planning and assembly of an altar dedicated to Mexican cinematographer Gabriel Figueroa.

## Learning, Constructing Meaning



**Photo Caption Translation:**  
*Learning, Constructing Meaning*



**Photo Caption Translation:** *What do you see in this frieze?*  
**María Luiza:** *Mexican things. They're pictures that were taken a long time ago.*  
**Manuel:** *These pictures show important people and places from a long time ago.*  
**Elías:** *They're pictures of people and places that look sad because they are in black and white.*  
**Oziel:** *They're pictures of a place that were taken with a really old camera, that's why they're in black and white.*

One of the main functions that we have as teachers is to generate and present material that intrigues, fascinates and motivates our students to immerse themselves in a subject.

In order to immerse the students in the Altar of the Dead project, we gave ourselves the task of researching the life and works of the cinematographer in order to choose a series of photographs that would generate interest and curiosity in them.

Achieving meaningful learning with each experience was fundamental. The children should not only learn the tradition of the Day of the Dead, but also connect to this tradition through an emotional tie with the person to whom they were dedicating the altar. By simply knowing and appreciating Figueroa's work, they could come to appreciate their cultural heritage and they would come to admire him. Admiring someone motivates us to want to be like that person.

The children successfully deduced the profession of Gabriel Figueroa, recognizing that he was a cinematographer who took old photographs for films.



In order to accomplish this quest for the creation of meaning, we took on the role of researchers. This allowed us to guide the children through a process of observation, of reflection, and appreciation of the images that served as a bridge to immersion in the significance of Gabriel Figueroa's life, giving it meaning from the perspective of a child's dialogue with the images and what they suggest.

**I observed the children's keen interest in observation and satisfying their curiosity.** It is clear to me that they naturally establish a relationship between the absence of color and

time, that is to say that, for them, photos in black and white represent long-ago times and the deceased. At the same time, they communicate emotions that allow us to see the impact that these pictures have, making them meaningful.

## The Role of the Teacher



**Photo Caption Translation:** *"The role of the teacher requires him or her to mediate between the objects of study and learning, to share and propitiate experiences and knowledge, and to construct with the students new meanings."* –Frida Díaz-Barriga Arceo



**Photo Caption Translation:** *"The purpose of pedagogical intervention is to help the students develop the capacity to achieve meaningful learning on their own, in a wide array of situations and circumstances (learning to learn)."* –César Coll

One of the great differences between traditional learning and constructivism is to facilitate the construction of meanings. We needed to immerse the students, not only in the concept of death, but also to guide them to understand that the tradition of the Day of the Dead is a recognition of life and of the cultural heritage of a Mexican who we admire and who motivates us to learn.



**Photo Caption Translation:** *How do you imagine Gabriel Figueroa?*



**Photo Caption Translation:** *"Gabriel Figueroa and I, because my name is also Gabriel"*

When we asked the children about the importance of knowing Gabriel Figueroa, they commented that it was important because, through his landscapes, you came to know the Mexico of his time. They also recognized that, observing his photographs, you come to learn.

When we asked them which of the five senses they thought Gabriel Figueroa used when doing his work, the children recognized that, in addition to the sense of sight, the sense of touch has a logical relationship with the work of a photographer. His aesthetic spirit led them to think that the act of observation invites you to touch the image you want to photograph.



**Photo Caption Translation: Activities Planned by the Teachers and the Arts Center**

- Increased awareness of cinema through an animation workshop.
- A visit to CINETECA to see fragments of "María Candelaria", a film directed and photographed by Gabriel Figueroa.
- Recording of a short film, "María Candelaria". Recognition of the profession of a cinematographer through the experience of social roles.
- Group visit to the Nave Lewis Exposition Center to see the "Gabriel Figueroa" exhibit.
- Learning about old-fashioned cameras. Manufacturing old-fashioned cameras with re-used materials.

**Activities planned by the teachers and the Arts Center**

Working in coordination with the Arts Center ensured that they understood and supported our need to create meaning for the children. For this reason, various visits were planned, so that the children could have meaningful experiences with respect to photography and Gabriel Figueroa.



**Photo Caption Translation: Increased awareness of cinema through an animation workshop.**

**María Luiza:** The drawing looks like it's moving.  
**Manuel:** When you go through them quickly that makes it move.

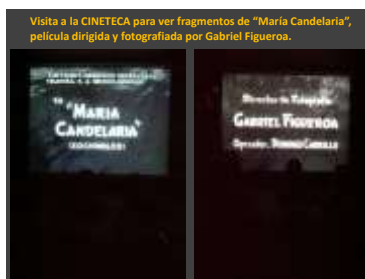


**Photo Caption Translation: "Elizardo: A film is made with lots of pictures that go fast."**



Increased awareness of cinema through an animation workshop: On the first visit the children learned about the profession of a cinematographer through an animation workshop.





**Photo Caption Translation:** A visit to CINETECA to see fragments of "María Candelaria", a film directed and photographed by Gabriel Figueroa.



**Photo Caption Translation:** Recording of a short film, "María Candelaria". Recognition of the profession of a cinematographer through the experience of social roles ... Costume crew

We visited the CINETECA, where children saw fragments of "María Candelaria", a film directed by Figueroa, to help them not only better know the profession of a cinematographer, but also to live it. So, they became producers, directors, photographers, costume designers, assistants, set designers, clapperboarders, musicians, actors... in sum, every one of the roles required to make a film. The children succeeded at creating their own short film, inspired by the work of Gabriel Figueroa.



**Photo Caption Translation:** 3, 2, 1... Action

With this experience, all of the kids came to better know, play out, and enjoy the profession of cinematographer Gabriel Figueroa. The task of making a short film became a life experience.



**Photo Caption Translation:** "If children learn by constructing their own knowledge within, then they tend to be active, independent, alert and curious ... with initiative and confidence in their ability to imagine things for themselves and to express their ideas with conviction." - Constance Kammi and Rheta DeVries

This activity, transformed into a meaningful experience, developed, not only the children's enthusiasm and curiosity, but it also contributed to their learning, as **Constance Kammi and Rheta DeVries** say: "If children learn by constructing their own knowledge within, then they tend to be active, independent, alert and curious ... with initiative and confidence in their ability to imagine things for themselves and to express their ideas with conviction."



**Photo Caption Translation:** *"The act of teaching requires the creation of advance organizers, a kind of cognitive bridge, from which the students may establish meaningful relationships with new content."* -Ausubel

Seeing the students' short film, in which they represent real social roles through play, allowed us as teachers to continue designing meaningful activities.



**Photo Caption Translation:**  
Group visit to the Nave Lewis to see the exhibit

**Oziel:** It's the photos of Gabriel Figueroa.

**María Luíza:** It's the ones we have in the classroom.

**Luis Mario and Rebeca:** Yes, it's the photos from the frieze.



**Photo Caption Translation:**  
**What do you see in Gabriel Figueroa's photograph?**

**Elías:** Mexico through our eyes.

**María Luíza:** You can see the four elements.

**Oziel:** They are landscapes of Mexico.



**Photo Caption Translation:**  
**What elements can you observe in Gabriel Figueroa's photograph?**

**Elías:** Shadows. His pictures have rays of light and others are darker.

Parallel to these activities, the "Gabriel Figueroa" exhibit opened at the Nave Lewis in Fundidora Park. Following **Ausubel, Novak, & Hanesian's (1978) proposal concerning the need to design what he calls advance organizers, a kind of cognitive bridge, from which the students may establish meaningful relationships with new content**, the teachers and guides for the exhibit got together beforehand to select the works we wanted the children to contemplate, as well as the questions that would best spark their thoughts. That is to say, we laid the framework for the bridges the children would cross as part of their learning process.

Upon entering the Nave Lewis in Fundidora Park, the children began to observe the series of photographs that were hanging as promotion for the exhibit. Immediately, they began to say:

**Oziel:** It's the photos of Gabriel Figueroa.

**María Luíza:** It's the ones we have in the classroom.

**Luis Mario and Rebeca:** Yes, it's the photos from the frieze.

**What do you see in Gabriel Figueroa's photograph?**

**Elías:** Mexico through our eyes.

**María Luíza:** You can see the four seasons.

**Oziel:** They are landscapes of Mexico.

**What elements can you observe in Gabriel Figueroa's photograph?**

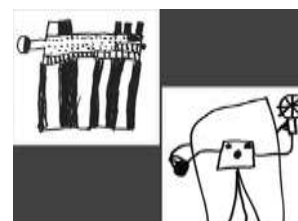
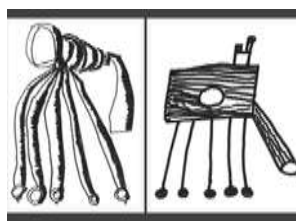
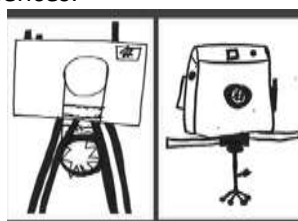
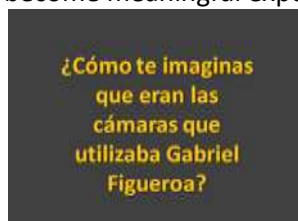
**Elías:** Shadows. His pictures have rays of light and others are darker.



**Photo Caption Translation:** *María Luíza: I feel very proud of Gabriel Figueroa.*

The children were able to see a recorded interview with Gabriel Figueroa. They were excited to see him “live”.

During the visit, the children had the opportunity to familiarize themselves with the artist and his work, thus achieving an emotional connection with him. The children, in addition to coming to know his work, interpreted and admired it. Bringing them to this level of sensitivity allowed the activities to become meaningful experiences.



**Text Box Translation:** *What do you imagine the cameras that Gabriel Figueroa used were like?*

**What do you imagine the cameras that Gabriel Figueroa used were like?**

As part of our work we have recognized the importance of graphic representation of the children’s ideas. This allows the child to express beyond language what he or she understands of his surroundings and it accommodates his or her suppositions and hypotheses.



**Photo Caption Translation:** *Learning about authentic old cameras.*



**Photo Caption Translation:** *Manuel: Figueroa had to have used one of these. Gabriel: You can see the difference between the old camera and the new one. José Octavio: It’s a camera that came out a really long time ago.*



**Photo Caption Translation:** *Oziel: The old ones are really heavy. Adrián: They seem like the teachers’ cameras.*

The children commented that the altar should have cameras, given that they are the main tool with which Gabriel Figueroa worked. To that end we were able, through a teacher from the Institute, to bring from Mexico City a collection of old cameras, so that the children could learn what they were like.

Through observation and manipulation of the old cameras, the children came to know them, to compare them, and to identify their differences with modern cameras.



**Photo Caption**

**Translation:**

**Daniel:** Can we put these cameras on the altar?



**Photo Caption**

**Translation:**

**María Luíza:** Of course not, because they're very valuable and they're not ours.



**Photo Caption**

**Translation:**

**Manuel:** We can make ones just like them with reused materials, using these cameras. We can make teams so that each one makes one.



**Photo Caption**

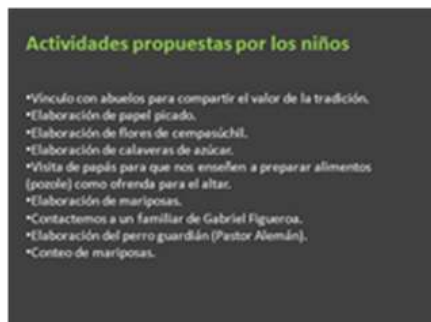
**Translation:**

**Oziel:** Yes! And we can put all of them on the altar. It'll be cool!



Recognizing that these were very valuable objects, they understood that they could not put them on the altar of the dead. Therefore, they decided that they could make some just like them with reused materials.

The children began to make comparisons between the old and the new cameras and they observed that they are very similar. For this reason they concluded that modern inventions are made based on past ones.



**Text Box Translation:** Activities proposed by the children:

- Connecting with grandparents to share the value of tradition
- Making perforated paper
- Making Mexican marigolds
- Making sugar skulls
- A visit from parents for them to teach us to make Pozole stew as an offering for the altar
- Making butterflies
- Making old-fashioned cameras out of reused materials
- Contacting a relative of Gabriel Figueroa
- Making a guard dog (German Shepherd)
- Counting butterflies

The group had already succeeded at connecting with Gabriel Figueroa, the person to whom they would dedicate the altar of the dead. Now we needed to initiate a process of investigation in which the students would begin to consult texts, images and photographs about this Mexican tradition, in order to decide which items to include in their altar.



They decided that the altar should include colored perforated paper, Mexican marigolds, the food that Figueroa liked, bread of the dead, the four elements, cardinal directions, an arch of flowers, candles, incense, crosses, sugar skulls, a guard dog, as well as a drawing and objects of the deceased.

### Connecting with grandparents



**Photo Caption Translation:** *Connecting with grandparents to share the value of tradition.*

We invited some grandparents to come and talk about how the tradition of the Day of the Dead is celebrated in the state of Mexico and in Michoacan. When talking to them about the items that an altar of the dead should have, they commented that they should include personal objects of the deceased, which prompted the very excited children to comment that they had already made cameras to put on the altar.

### Perforated paper



**Photo Caption Translation:** *In making the perforated paper we were able to review logical-mathematical concepts: geometrical figures, spatial relations and symmetry. A real context with a concrete objective allows learning these concepts, which would otherwise be foreign and disarticulated, to make sense to the child.*

In making perforated paper, the children were able to review logical-mathematical concepts: geometrical figures, spatial relations and symmetry. They decided themselves that they would make perforated paper with the colors from the Nezaldi Institute's logo, since these colors evoke happiness.

## Mexican marigolds



**Photo Caption Translation:** "She's my grandmother. I told my whole family about my project and they were very interested and they wanted to participate and so my grandmother came to teach us to make paper flowers." - Oziel

**Photo Caption Translation:** Mothers and children making Mexican marigolds for the altar of the dead. The child as transformer of his immediate surroundings, giving deep meaning to his task.

## Sugar skulls



**Photo Caption Translation:** Making sugar skulls.



**Photo Caption Translation:** Daniela: I didn't know we could make skulls out of sugar.



**Photo Caption Translation:** Itzel: And we can decorate them however we want.



Through this activity we were able to review topics such as units of measurement, weight and capacity.

## Making food



**Photo Caption Translation:** "My mom knows how to make white Pozole stew. She can come teach us and give us the recipe so we can make it for Gabriel Figueroa."



**Photo Caption Translation:** Making food.



**Photo Caption Translation:** Oziel: I had never tried Pozole stew, but now I know why Gabriel Figueroa liked it so much.

Since Gabriel Figueroa was born in Mexico City, the children decided they needed to research the typical food of this region in order to know what dishes to prepare as an offering. When they learned that white Pozole stew is typical, Adrián, very excited, said: "My mom knows how to make white Pozole stew. She can come teach us and give us the recipe so we can make it for Gabriel Figueroa."



**Photo Caption Translation:** (Top left corner) "We could make a lot of butterflies so it looks like they are flying around the altar and they can also show Gabriel Figueroa the way to his altar." (Bottom right corner) *Making butterflies.*



**Photo Caption Translation:** "My grandparents are visiting from Mexico City and I invited them to come make butterflies for the altar and they liked the idea of helping me with my project."

After making sketches of cameras and of Gabriel Figueroa, perforated paper, Mexican marigolds, food, and sugar skulls, the children decided to include butterflies since they had learned that Figueroa was born in the state of Mexico and that the Mazahua believed that the souls of the dead show themselves through colored butterflies. They thought these should therefore be a part of Figueroa's altar. They also decided to make nets of butterflies to wrap around the park's trees and in that way mark the path that led to the altar.



**Photo Caption Translation:** "The butterflies are going to lead visitors to the altar."



**Photo Caption Translation:** The child learns through meaning and sense, motivating and mobilizing his community.

The children wanted to hang butterflies on the trees in Fundidora Park, to guide visitors to the altar. This idea implied a lot of effort. The commitment and enthusiasm of the group was contagious, resulting in the families, students, teachers, and personnel of the Nezaldi Institute all collaborating to make butterflies for the altar.



**Photo Caption Translation:** Counting butterflies.

**Matilde:** We have a lot of butterflies.

**Adrián:** We're going to count them.

**Mariluz:** I bet we already have hundreds.

**Adrián:** Maybe we'll reach 1,000.

**José Octavio:** I doubt 1,000, but I bet we have several hundred.

As a promoter of learning, I had in mind the curricular content that I should link to each activity of the project. For that reason making butterflies was one of various opportunities to establish logical-mathematical relationships.



**Photo Caption Translation:**

**Oziel:** We can take them all out and start counting.

**Manuel:** We could start making a line of butterflies to count them.

**José Octavio:** The line would be very long, it'd be better to put them in groups.

**Eduardo:** We can make groups of ten.

As the group made butterflies, they placed them in a cardboard box, however when the children saw that the box was filling up, they began to question the number of butterflies they had made. We decided to form five teams and give them a bunch of butterflies to count. Some suggested that, since there were various sizes, they could be classified into groups of small, medium and large. The children took the butterflies out and, in the center of the classroom, began to divide them into three groups.

**Teacher:** Which group do you think has the greatest number of butterflies?

**Oziel and Valeria:** The group of big butterflies.

**Matilde:** I think either the medium or big group.

**Adrián:** We won't know until we count them, but there might be the same amount in each group.

**Octavio:** You can see more in the big group because of their size.

They decided that each friend could take a turn forming a group of ten butterflies. The children made groups and then organized them in rows. At the end they realized they had three butterflies left over and they set them aside. When some children began to count the groups of ten and say their results out loud, others made corrections, at which point I invited them to come over to the rows in order to count them.



**Photo Caption Translation:** **Adrián:** There are 403. I counted 40 tens and 3 ones; Practical experiences give motivation and reason to other meaningful learning experiences.



Through this activity the children had the opportunity to classify, group and to count numerically. They were also able to identify place value in a concrete manner, using the butterflies, which were meaningful for them.

As a result of these experiences lived throughout the project, we achieved a primary objective: that the students would acquire comprehension of the tradition of the Day of the Dead through a recognition of life. As part of this search for meaning that the children were engaged in, they recognized the importance of contacting one of Figueroa's family members, who might help them dig deeper into the most important aspects of his life.



**Photo Caption Translation:** *Let's contact a family member of Gabriel Figueroa's.*

I contacted the organizers of the Gabriel Figueroa exhibit in order to locate a family member. It was through the Televisa Foundation that I was able to contact the photographer Gabriel Figueroa Flores, son of the cinematographer. By mail I shared the children's interest in knowing what his father liked, so that they could leave appropriate offerings for him. The children suggested I include a photo of our group with the idea that Figueroa's son would get to know them and therefore be interested in sharing information about his father with us.

#### **Message from Gabriel Figueroa Flores**

We were able to contact Gabriel Figueroa Flores, the cinematographer's son, who shared personal information about his father with us, which we included as offering in his altar.

*"Gracias por ponerse en contacto conmigo. A mi parecer a mi papá le gustaba mucho la música, los perros (en particular los Pastor Alemán), los libros, y le gustaba también mucho el chocolate. Les agradezco muchísimo su interés y quedo a sus órdenes.*

*Un saludo, Gabriel Figueroa F."*

**Text Box Translation:** *"Thank you for contacting me. It seems to me my dad really liked music, dogs (especially German Shepherds), books, and he also really liked chocolate. Thank you so much for your interest and let me know if I can help you further. Best wishes, Gabriel Figueroa F."*

## Making the guard dog

With the information they had received from Gabriel Figueroa's son, they decided the guard dog that would watch over the altar had to be a German Shepherd, given that this was the breed that Figueroa liked best.



**Photo Caption Translation:** *Making the guard dog for the altar.*



**Photo Caption Translation:** *It needs to be a German Shepherd because that's the kind Gabriel Figueroa liked.*

## Learning is a reward



**Text Box Translation:** *Learning is a reward; "The search for the meaning of life and of oneself in life is born in the child and is desired by the child. It is for this reason that we talk about the competent and strong child, a child with the right to have hopes and the right to be valued, not about a predefined fragile child, needy and incapable (2006)." Carla Rinaldi*

Having had from the beginning the conviction that our project should be meaningful for the children confirmed our belief that we were dealing with a need of the children themselves, as **Carlina Rinaldi (2005)** describes: "The search for the meaning of life and of oneself in life is born in the child and is desired by the child. It is for this reason that we talk about the competent and strong child, a child with the right to have hopes and the right to be valued, not about a predefined fragile child, needy and incapable."



**Photo Caption Translation:** *What do you feel when you look at the altar?*

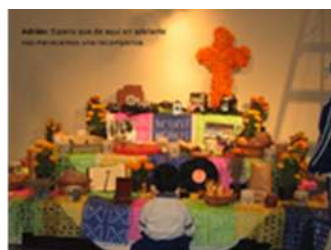


**Photo Caption Translation:** *I feel that Gabriel Figueroa's son would be very happy with us.*  
**Adrián:** *The real Gabriel Figueroa would be very proud if he could be here.*

**Photo Caption Translation:** **Oziel:** *More or less we were able to use everyone's examples, like Matilde couldn't use her idea, but we managed to reach our goal. All the work we did was worth it, for me and for everyone.*

**Photo Caption Translation:** **Elías:** *It makes me really excited because I'm on the first team to come here and I'm excited because it's really cool and, with the stairs I didn't think it was going to be so cool.*

Creating the altar came to be the culmination of a process that had meaning for each of the students. When it was finally completed we invited the children to observe it in detail, trying to identify where their ideas, work and effort would emerge. The children were very excited, able to recognize that, through this project they were able to discover and develop their talents.



**Photo Caption Translation:** **Adrián:** *I hope now we have earned a reward.*



**Photo Caption Translation:** *What could be the best reward for having made this altar?*

Nevertheless, one classmate asked us what reward they had earned for having made the altar. And we responded with this question: **What could be the best reward for having made this altar?**



**Text Box Translation:** *Gabriel: Having it.*

*José Luis: Good work in groups.*

*Guillermo: This is learning, not a reward.  
 Can learning be a reward?*

*Luis Mario: Yes, the learning was that you could make the altar.*

*Elizardo: You learned something new and that feels good.*

*Mariluz: We discovered our talent.*

*Elías: (Crying) I felt very emotional because I thought it wasn't going to turn out so cool.*

*Adrián: We reached our goal!*

*Teacher: Together we reached our goal! I'm very proud of you.*

And their conclusions surprised us and amazed them even more. They came to recognize that learning is a reward in itself.

### Becoming real photographers.



**Photo Caption Translation:** *Becoming real photographers*

The process of planning and making the altar of the dead manifested clearly the role we as teachers play in the search to achieve meaningful learning. **Díaz-Barriga Arceo and Rojas (1998) describe this role, recognizing that the educator should pay adequate pedagogical attention to the diversity of needs, interests and situations their students are involved in. This will encourage students to value their goals, to develop their potential, and to serve their academic needs, which will in turn support their processes of building autonomy, particularly promoting those in which the student self-directs and assumes responsibility for and control over their own learning.**

Our aim to make the experiences lived by the students meaningful allowed another interest to be born in them: "becoming real photographers," like Gabriel Figueroa. That was how we began a new research process, so that the children could discover the art of photography and how a photographic camera works.



## Activities completed to become photographers



### Text Box Translation: *Activities completed to become photographers*

- *Researching how a photographic camera works and Leonardo Da Vinci.*
- *Taking pictures of themselves.*
- *A visit to the developing and printing lab at Regiomontana University. The children developed and printed their own photographs.*
- *A conversation with a professional photographer at the Center for the Arts.*
- *Taking pictures of landscapes at Fundidora Park.*
- *Building a pinhole camera and a dark room.*
- *Taking pictures with the pinhole camera.*
- *Developing and printing pictures taken with the pinhole camera.*
- *Letters to Gabriel Figueroa*

## Researching how a photographic camera works and Leonardo Da Vinci



### Photo Caption Translation (drawing): *How do you think a photographic camera works?*

The children researched the origins of the photographic camera, finding that the concept of a “box” or “camera obscura” comes from Leonardo Da Vinci. This information allowed us to work with the group on appreciation of the works of this artist and scientist, thus developing in the children their sense of sight and aesthetic appreciation.



### Photo Caption Translation: *Talk with a professional photographer.*

We planned a visit to the CINETECA so that the children could have the opportunity to talk with professional photographer Eduardo González, who spoke with them about the evolution of the camera and photography, as well as some suggestions for how to take good pictures.

### Las imágenes transmiten emociones

**Elías:** La foto de mis primos me dio tristeza porque hace mucho que no los veo.

**Juliana:** El recorte de la naturaleza me hizo sentir tranquila y feliz.

**Rebeca:** Recorté un perro y me puse triste porque recordé a un perro que se murió.

**María Luíza:** Yo no sentí emoción porque unos zapatos y un tostador no emocionan, pero hay fotos que sí.

### ¿Las fotos de Gabriel Figueroa nos hacen sentir algo?

**Daniel:** Sí, porque al ver lo bonito de México te sientes feliz.

**María Luíza:** ¡Las fotos nos transmiten emociones!

**Text Box Translation:** Images convey emotions

**Elías:** The picture of my cousins makes me sad because it's been a long time since I saw them.

**Juliana:** The sketch of nature made me feel peaceful and happy.

**Rebeca:** I drew a dog and it made me sad because I remembered a dog that died.

**María Luíza:** I didn't feel any emotions because shoes and a toaster don't cause you to feel emotions, but there are pictures that do.

**Do Gabriel Figueroa's pictures make us feel something?**

**Daniel:** Yes, because when you see the pretty things of Mexico you feel happy.

**María Luíza:** Pictures convey emotions!

The children recognized that a photographer must develop his or her sense of sight. They had the opportunity to observe many images in which, in addition to recognizing many elements of photography (light, shadow, quadrants, setting, etc.) they were also able to deduce that pictures convey emotions.

### ¿Qué podemos fotografiar?

**María Luíza:** Los paisajes son muy bonitos, pero las personas más. Yo creo que cada uno va a decir que él es la persona más importante, pero ni modo de tomarnos fotos nosotros solos.

**Elías:** Sí, nuestra primera foto debe ser de nosotros mismos y luego ya empezamos a tomar paisajes.

**Oziel:** Alguien me toma la foto a mí y luego yo le tomo a él o a otro amigo.

**Mariluz:** Sí, hay que tomarnos fotos de nosotros, porque somos los más importantes.

**María Luíza:** ¿Pero cómo vamos a salir en las fotos?

**Eduardo:** Pues así, como somos...normales.

**Elías:** Podemos salir con algo que nos guste.

**Guillermo:** Sí, a mí me gusta el fútbol y podría salir con mi playera del Barcelona.

**Valeria:** Yo puedo salir con pinturas porque me gusta pintar.

**Text Box Translation:** What can we photograph?

**María Luíza:** Landscapes are very pretty, but people are even prettier. I bet everyone will say they are the most important, but there's no way to take pictures of ourselves by ourselves.

**Elías:** Yeah, our first picture should be of ourselves and then we can start taking pictures of landscapes.

**Oziel:** Someone can take my picture, and then I'll take his, or another friend's.

**Mariluz:** Yeah, we need to take our own pictures, because we are the most important.

**María Luíza:** But how will we look in the picture?

**Eduardo:** Well, we'll look how we look... normal.

**Elías:** We can pose with something we like.

**Guillermo:** Yeah, I like soccer so I could wear my Barcelona shirt.

**Valeria:** I could pose with paints because I like to paint.

The children were very anxious to become photographers and to start taking their own photos. We reflected as a group about what we might photograph and the kids concluded that, in addition to people, we could take pictures of everything in our surroundings, whether objects, trees, animals, buildings, or landscapes. Nevertheless, we needed to define our focus in our first experience as photographers.

The children said that their first picture needed to be of something important and valuable, and therefore concluded it should be of people. We then considered how, in addition to our physical characteristics, our likes and preferences identify us, and so they therefore had to think about themselves in order to discover what best represents them.



**Photo Caption Translation:**  
*Taking pictures of themselves.*



**Photo Caption Translation: Mariluz:** *I felt very happy taking my first picture and if I put it in an album I'm going to remember everything I did in an instant.*



The children noted that a photographer knows how to use various types of cameras, and so they thought they could use a digital camera to take practice pictures and then take pictures with a traditional camera. They also said that they wanted to use black and white film, like Gabriel Figueroa.

Outside our classroom we set up a screen to serve as a background for the photo shoot. We got a digital camera, a camera with color film, and another with black and white. The kids began to take practice pictures with the digital camera, keeping in mind that they needed to center the image, focus, and keep the camera still.

### ¿Cómo se sintieron tomando fotografías?

**Elías:** Al principio es difícil porque no sabía todo lo que se hace. Tienes que confiar en quien te toma la foto.

**Adrián:** Yo me sentí como un fotógrafo. Muy orgulloso de tomar tantas fotos.

**Oziel:** Me gustó porque tomar una foto se necesita ser paciente, ver bien, enfocar y que haya silencio.

**José Octavio:** Tomar fotos en la escuela con todos tus amigos se siente muy emocionante. Me sentí orgulloso de saber fotografía.

**Elizardo:** Me gustó mucho tomar yo las fotos, porque tienes que tener mucha paciencia y mucha experiencia para que te quede bien.

**Text Box Translation:** *How did you feel taking pictures?*

**Elías:** *At first it was hard because I didn't know all you need to do. You need to trust the person taking a picture of you.*

**Adrián:** *I felt like a photographer. Very proud to take so many pictures.*

**Oziel:** *I like it because to take a picture you need to be patient, see well, focus, and for there to be silence.*

**José Octavio:** *Taking pictures at school with all your friends is very exciting. I felt proud of knowing how to take pictures.*

**Elizardo:** *I like taking pictures a lot, because you have to be very patient and have a lot of experience for it to turn out well.*

The prior experience of knowing the life and works of the cinematographer Gabriel Figueroa motivated them to become photographers, thus achieving meaningful learning, as described by **Ausubel et al. (1978)**: “**meaningful learning occurs when new information is connected to a relevant preexisting concept in the cognitive structure, this implies that new ideas, concepts and relevant propositions are adequately clear and available in the cognitive structure of the individual and that they work as an ‘anchor point’.**”

### Visit to Regiomontana University



**Photo Caption Translation:** *Visit to the developing and printing lab of Regiomontana University.*



**Photo Caption Translation:** *The children develop and print their own photographs.*

We contacted the Regiomontana University of Monterrey to schedule a visit to their developing and printing lab, so that the children could learn these processes and be able to use them to develop and print the pictures they had taken.



**Photo Caption Translation:** “*Meaningful learning occurs when new information is connected to a relevant preexisting concept in the cognitive structure...*” Ausubel et al. (1978)

The children’s interest caused us to look for those kinds of interesting experiences that would generate their interest and encourage in them the development of their own thoughts. For this reason our work was guided by the thoughts of **Jerome Bruner (1996)**: “**as interest in instruction advances, the instructor should try to motivate the students to discover principles by themselves... The curriculum should be organized in a spiral manner in such a way that the student continually builds on what they have already learned.**”

The children were very excited to get to know and use the facilities of a university, being only 7 years old. The Communications Coordinator greeted us and explained to the students the process involved in developing and printing photographs. He also commended their interest and enthusiasm.



**Photo Caption Translation:** *"As interest in instruction advances, the instructor should try to motivate the students to discover principles by themselves..." Jerome Bruner*



The children enjoyed this experience very much, given that each carried their own photograph in their hand, which they had developed and printed on their own. When we said goodbye the excited children told the coordinator that when they grew up they were going to study at this university.



**Photo Caption Translation:** *Photo shoot of landscapes in Fundidora Park*



The children had already taken pictures of people, so now they wanted to photograph landscapes. They decided that a good place to do this would be in Fundidora Park, where the Center of the Arts was located, where they had built the altar of the dead.

Later the children took a train ride throughout the park, taking pictures of the landscapes they most liked. Through this experience the children had the opportunity to transform themselves into photographers. Their sense of sight led them to recognize and admire images that are part of their surroundings but that they rarely take the time to appreciate. It is wonderful that Gabriel Figueroa has become a source of inspiration for a group of small children!



**Photo Caption Translation: Building the pinhole camera**

*"It's a box camera that you poke a tiny hole in to let in just a little bit of light. You can only take a picture with it if you put in photographic paper and then lift the cover to let in some light."*

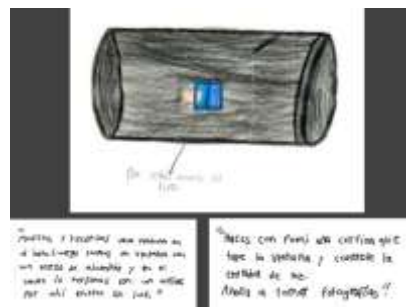
When the children studied the principle of Leonardo Da Vinci's "box" or "pinhole camera", in all honesty, some doubted that a dark box would work to make a real camera. They therefore suggested they test this principle and build their own pinhole cameras.



**Photo Caption Translation: How do you make a pinhole camera?**  
*"To make a pinhole camera you need a cardboard container, like for oatmeal."*



**Photo Caption Translation: "You need to paint the inside and the outside black. You should also paint the cover."**



**Photo Caption Translation: "You mark and cut a window in the container. Then you cover the window with aluminum and in the center you puncture it with a needle. That's where the light comes in." "You make a little curtain out of foam that covers the window and controls light coming in. Now you can take photographs."**

Developing scientific thought requires making concepts part of reality and verifying that they are true, thus acquiring their own meaning.



**Photo Caption Translation: Taking pictures with a pinhole camera**

**Photo Caption Translation:****Top Left** – *Elías taking his picture;***Top Right** – *The landscape he wants to photograph;***Bottom Left** – *Developed picture (negative);***Bottom Right** – *Printed picture (positive)*

This experience for the children served as evidence of **Jerome Bruner's (1996) idea concerning meaningful learning: "one develops when one acquires through exploration activated by curiosity and a desire to know... This process helps the student develop strategies to learn how to learn."**



**Photo Caption Translation: María Luíza:** *If the camera works and it takes pictures, where are we going to develop the photographs?*

**Manuel:** *We would need a dark room.*



**Photo Caption Translation: Oziel:** *We're not going to be going to the university every time.*

**Daniel:** *I think we'd have to do it here at Nezaldi.*

The children knew that taking pictures with the pinhole camera required, in addition to photosensitive paper, a nearby lab to develop and print their photographs. For this reason they asked me to speak to the director of the Institute to see if they could support us in building a dark room, the children being willing to help in any way possible.



**Photo Caption Translation: Matilde:** *We can help.*



**Photo Caption Translation: Adrián:** *We'll have to talk with Adriana (director) to see if we can build one.*

The Institute supported us and a dark room was built. All the children collaborated in painting the walls. They also concluded that the dark room should be named Gabriel Figueroa, in honor of the man who inspired them to become photographers.



**Photo Caption Translation:** *"We'll need trays to put the chemicals, developer, and water in."  
"Now we can develop our own photographs that we take with the pinhole cameras."*

The children were anxious to be able to test their pinhole cameras and verify in the laboratory if they really "worked" and took pictures. They decided to photograph landscapes around the school with their box cameras. The children first entered the darkroom to put the photosensitive paper in the camera and then they went to the mountain to take a picture of a landscape.



Then they brought their cameras to the dark room, where they took out the paper to start the developing process. The first teams felt sad to see their papers were completely black, so they began to share some ideas about how to avoid this in the future. (Previous learning, verification of a hypothesis, and discovering strategies.)

When the children began to make out landscapes in their photographs, they got very excited and they recognized that they had succeeded in becoming real photographers.

**María Luíza:** Now we are real photographers. Gabriel Figueroa would be proud of us.

**Photo Caption Translation:**

**José Octavio:** *Wow! My picture came out!*

**Elías:** *Yes! It worked!*

**Julianita:** *You can see the picture!*

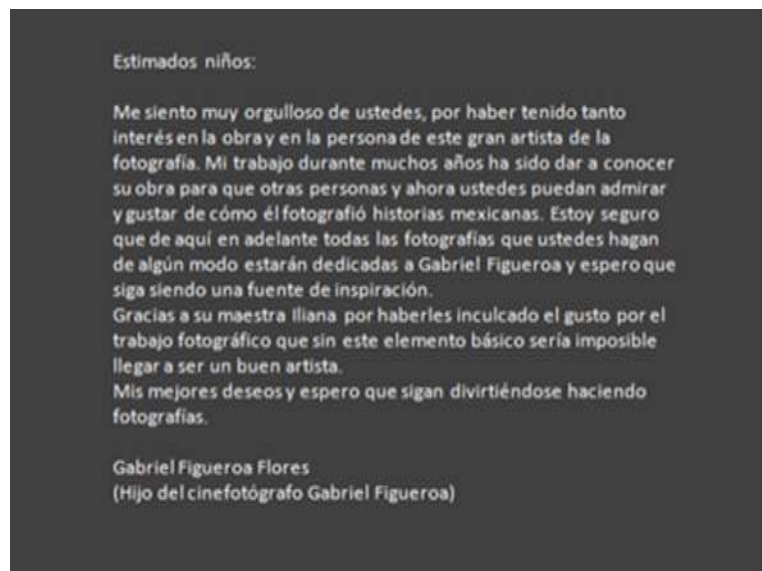
**María Luíza:** *Now we are real photographers.*

*Gabriel Figueroa would be proud of us.*





And indeed Gabriel Figueroa Flores, son of the cinematographer, sent them a message in which he let them know how proud he was of them. (I read Gabriel Figueroa Flores' letter.)



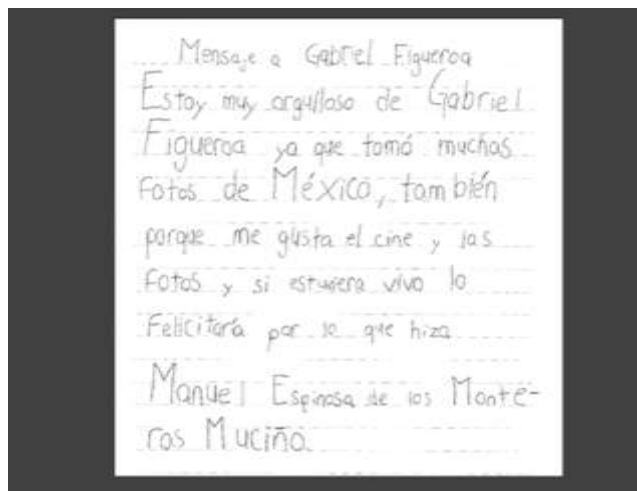
**Text Box Translation:** *Dear children, I feel very proud of you all for having had so much interest in the works and the person of this great artist of photography. My job for many years has been to make his works known so that other people and now you all may admire and enjoy the way in which he photographed stories of Mexico. I am certain that from now on every photograph you take will in some way be dedicated to Gabriel Figueroa and I hope he continues to be a source of inspiration. Thanks to Ms. Iliana for having instilled the love of photography in you; without this basic element it would be impossible to become a good artist. My best wishes and I hope you keep having fun taking pictures. Gabriel Figueroa Flores (Son of the cinematographer Gabriel Figueroa)*



The experience each child had of becoming a real photographer turned out to be an experience full of meaning, a life experience. The children discovered, as **Bruner (1996) assures us, principles by themselves, constructing the knowledge to solve real problems, collaborating in a social process of constructing knowledge (socioconstructivism).**

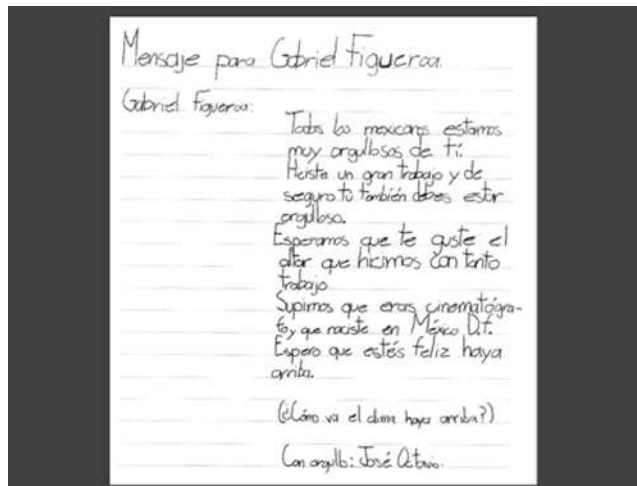
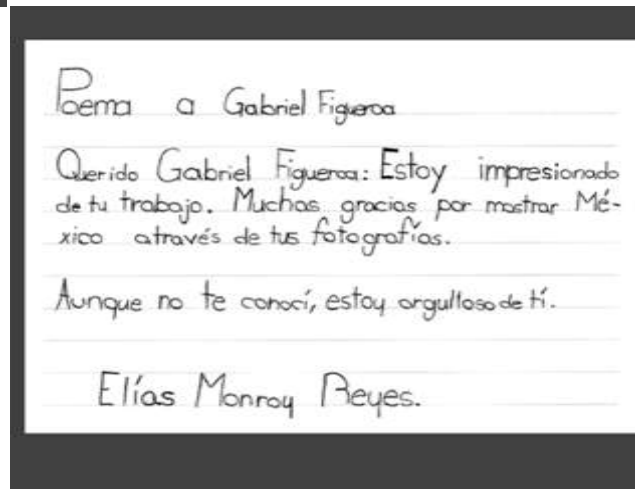
In order to share their success, the children decided to conclude the school year with a photography exhibit where their work could be appreciated. Just like professionals, the children were able to share with pride their experiences as photographers, in addition to using this opportunity to officially inaugurate the "Gabriel Figueroa" dark room.

Joining this group of children in the process of constructing their learning meant taking on the constant work of planning and research to prepare myself for the questions the children might ask. It was my responsibility to learn the material and to become an "expert" in order to establish connections within the content of their learning and to ensure that the students maintained their enthusiasm and therefore their meaningful learning.

**Letters to Figueroa** - (I read the students' letters to Figueroa.)

**Letter Translation:** Message to Gabriel Figueroa  
 I am very proud of Gabriel Figueroa since he took a  
 lot of pictures of Mexico, and also because I like  
 movies and pictures and if he were alive I would  
 congratulate him for all that he did.  
 Manuel Espinosa de los Monteros Muciño

**Letter Translation:** Poem to Gabriel Figueroa  
 Dear Gabriel Figueroa: I am impressed with your  
 work. Thank you so much for showing Mexico  
 through your photographs.  
 Even though I never met you I am proud of you.  
 Elías Monroy Reyes



**Letter Translation:** Message to Gabriel Figueroa.  
 Gabriel Figueroa  
 All Mexicans are very proud of you. You did a great  
 job and you certainly should feel proud too.  
 We hope you like the altar we made with so much  
 hard work.  
 We learned you were a cinematographer that was  
 born in Mexico City. I hope you are happy up there.  
 (What's the weather like up there?)  
 With pride: José Octavio



**Photo Caption Translation:** *"The child, from the socioconstructivist perspective, is a producer of stories and relationships, a child who, from birth, is an active reader and builder and competent in reality, actor and protagonist in his own story, capable of interacting with adults and parents, in addition to influencing them greatly" Loris Malaguzzi*

Children succeeded in expressing and sharing with their community their 100 languages, thus ensuring that they would be recognized as child creators of their own culture. Through this project we could see represented the thinking of **Loris Malaguzzi: "The child, from the socioconstructivist perspective, is a producer of stories and relationships, a child who, since birth, is an active reader and builder and competent in reality, actor and protagonist in his own story, capable of interacting with adults and parents, in addition to influencing them greatly."** (Edwards, Gandini, & Forman, 1998).

**Work and Experience: (Lic.) Iliana Maricela Ayala Salazar**

- Completed a degree in Education Science at the University of Monterrey
- Master's Student in Family Science
- Instructor of the art workshop "Express Yourself" at the Nezaldi Institute
- Teacher of 1<sup>st</sup>, 2<sup>nd</sup>, and 4<sup>th</sup> grades at the Nezaldi Institute
- Participant in the study group at Reggio Emilia, Italy in 2007
- Academic coordinator at the Childhood Development Centers of Integral Family Development (DIF) in Santa Catarina
- Planning for the Family Education Center of Integral Family Development (DIF) in Santa Catarina

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