Through the Eyes of Babes

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INTRODUCTION

My youngest daughter would sometimes sit in the middle of the living room floor with boxes that held years of assorted photos. When my father passed, I inherited several boxes of old photos. I bought several large photo albums, and my daughter decided to organize the photos from my parents and all of our family photos. She was about ten years old, and we had taken several vacations and attended many family reunions. There were numerous school pictures of her, her older sister, and her younger brother.

There were many envelopes from the drugstore that had the photos and negatives still in them. As she sat with small stacks of photos spread around her, she would ask who some of the people were, especially photos that were from my parents. I could not tell her who they were because there were no names or dates. It was obvious that they were of another day and time because of the way they were dressed.

This was the beginning of informal visual literacy for my children. The excitement of my younger daughter caused the two other children to become interested in sorting and looking. It took them at least a week to get all the photos organized. I had to buy several more albums. Those albums still provide entertainment to this day because my children and now their children get them out when they come for holidays. Of course, since then, many more albums have been filled, and with the influx of modern technology computer-generated albums are now included in our collection.

I teach students in the Life Skills program in the special education department at Ortiz Middle School where students have developmental disabilities that include mental retardation. Currently there are one thousand fifty seven students enrolled. The ethnic breakdown of the student population is 68 % Hispanic, 26% African American, 1%White, and 5% Asian/Pacific Islander. Seventy percent of the students are considered "At-Risk," 22% Limited English Proficient (LEP), 8% are receiving special education services. At Ortiz Middle School, 93% of the students are identified as economically disadvantaged, and 2% are classified as Gifted and Talented.

My young students love to look at photos of animals, trees, and people. They bring in pictures from home of their pets, family, and any events they attended. They get excited looking at the ads in the Sunday paper that I bring to class each Monday morning. We have bingo games with photos of prepared food, fresh foods, household appliances, and toys. They spend hours looking in school supply catalogs finding items in them and finding the same items in the classroom. Even the non-verbal students eagerly share their pictures; their joy is obvious. These photos help them build vocabulary skills and provide visual stimulation.



My students have developmental disabilities, and unlike their peers without disabilities, who receive instructions in reading using basal readers or chapter books, are often exposed to curriculum with a functional foundation. They are encouraged to learn social, vocational, and daily living skills. My students' current curriculum includes those

components and limited academic content. The difference in content focus is owing to the capabilities exhibited by students with developmental disabilities which include mental retardation, autism, cerebral palsy, Down's syndrome, and spina bifida, among other developmental disorders. These students have cognitive impairments that can be considered mild, moderate, and severe. It is not that they cannot learn to read and write, but teaching strategies will have to be different and more creative than those for students without developmental disabilities. Several of my students fall into three of these categories: mental retardation, Down's syndrome, and autism. Although the grade levels where I teach are middle school, sixth through eighth, my student's instructional levels range from pre-K to 2nd grade.

The visual impact photography has had on society is still evolving. Even the most inexperienced and naïve individual is able to enjoy the wonder and magic created by the invention of the camera. I am certainly inexperienced when it comes to technology that allows pictures to be viewed immediately after being taken. I never thought there would be anything more marvelous than the Polaroid. Seeing that piece of black film sliding out of the camera was amazing to me. Currently my students do not know what I am talking about when I tell them about the Polaroid camera when they are seeing what the digital camera does. I want them to know about the science and art of photography from the beginning. They may not understand all of the fundamentals especially because their literacy abilities are limited or non-existent. Photography is a major gateway to meaning in their world.

Ewald suggests that, "Photography offers endless possibilities in the classroom. Teachers can use photography to explore a wide range of issues, investigate many subjects, and engage with students on questions about history and current affairs." She continues by saying, "And when teachers encourage kids to examine, in photographs and words, what their lives are really about, the teachers themselves are on the way to learning something important about a subject most vital to them-their own students" (119).

My students are from different ethnic groups, so it would be informative for each of them if they could learn about each of the different groups. Several of them are of Hispanic heritage from Mexico and San Salvador, one is of Vietnamese heritage, and three are African American. Each student could share their heritage by bring pictures of their parents' country and explaining them. Another way of learning about different cultures is to learn about the symbols their communities. For instance, the symbol for Thanksgiving in the United States is the turkey and on the 4th of July, there are parades and fire works. If their families do not have photos, the class can take a trip to the school library and find books about their respective countries. It might just be states, because several students moved to Houston from other states.

Learning about each others backgrounds can create bonding and appreciation for how they are different but also alike. Some of the students are from one-parent homes or have several

siblings, whereas others are the only child. They can expand on learning about each other with drawings and dictation to the teacher that can be transcribed. They can also use computer clip art and the family photos to creative posters of their families. The posters can be displayed and changed according to the seasons.

HISTORIAL BACKGROUND

The attempts to invent a method of capturing images date back to 500 B.C. with Aristotle. Steffens (10-11) shows the timeline for photography as follows:

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500 B.C.	Aristotle describes pinhole images.
A.D. 1035	Ibn al-Haitham experiments with pinholes images
1558	Giovanni Battista della Porta popularizes the camera obscura in <i>Magiae Naturalis</i>
1614	Angela Sala notes blackening silver nitrate.
1727	Johann Hienrich Schulze stencils images into silver nitrate
1777	Carl Wilhelm Scheele discovers why silver nitrate turns dark when exposed to light.
1802	Thomas Wedgewood makes images on paper with light.
1822	Joseph Nicéphore Niépce makes first photo engravings.
1824	Niépce takes photograph from nature.
1834	William Henry Fox Talbot makes first photogenic drawings.
1837	Jacques Mandé Daguerre makes first photograph using silver iodide.
1839	Alphonse Giroux produces daguerreotype camera.
1840	Josef Max Petzval computes design of new lens that permits sixteen times more light to enter camera.
1847	Claude Félix Abel Niepce de St. Victor invents glass plate photography.
1851	Frederick Scott Archer invents wet-plate process.
1861	Abraham Lincoln permits photographer Mathew B. Brady to visit battlefields of Civil War.
1873	The Daily Graphic publishes first newspaper photograph.
1884	Eastman introduces first roll film.
1888	Eastman begins to sell Kodak camera.
1925	Ernst Leitz Company introduces the compact Leica camera
1930	Clyde Tombough uses camera to discover Pluto.
1936	First issue of <i>Life</i> magazine by Henry Luce.
1938	The Eastman Kodak Company begins to sell the first low-cost color film.
1948	Edwin H. Land introduces first instant picture camera.
1959	Soviet space Luna 1 takes first close-up pictures of the moon.
1988	Canon Corporation introduces Xapshot, first digital imaging still camera for home use.

Before the invention of the camera, the only images seen were paintings or drawings, and only the rich could afford such luxury items. Artists traced images of people to make drawing and they could only be viewed in the day light. As early photos emerged, images appeared with stiff unsmiling faces. That was because the subjects had to sit rigid for long periods of time. They were positioned using props that held their head in one position. It was very uncomfortable.

The first camera was a room with a small hole in one of its walls where full-color images came through from outside and rested on the opposite wall creating an image. The first camera was called the camera obscura. It means dark room in Latin. Over time the room was reduced to a box and artists were able to take it from place to place along with heavy equipment that was needed to develop the images. They used wagons that were equipped with the chemical needed to develop the images after they were taken. The images were not permanent, but over time scientists began to experiment with different chemicals and eventually conceived a finished product.

It was years before Kodak offered a camera loaded with film, and after the pictures were taken, the camera and film were returned to Kodak where the film was developed and the camera reloaded and returned to the customer.

For years photography was a complicated procedure that could only be executed by professional. But in 1888, American industrialist George Eastman offered his easy-to-use Kodak camera to the public. The days of amateur photography had begun. (Markam 13)

Cameras came in all sizes. There were small cameras called "detective cameras" because they were used to take pictures of people without them knowing it. The camera was sometimes disguised as hats, as the head of a cane, and as other familiar objects; they were hidden in shoe heels and in watches. Then in 1900 the Mammoth camera was assembled in Chicago. It was not used that much because smaller cameras were much easier to use.

The Mammoth camera was commissioned by the Chicago & Alton Railroad to make a "perfect portrait" of its new luxury train. The owners of the railroad wanted a single negative to capture the entire train. They didn't want two or three negatives put together, which would be the only other way to show the entire train in complete detail. So they hired George R. Lawrence to make a camera that could take a photo no less than eight feet long. The Mammoth weighted seven tons and needed fifteen men to work it. (Holland 28)

Over the years the camera has evolved from the camera obscura to the digital camera. The timeline of the development of the camera is as follows:

1839	The Giroux Daguerreotype Camera
1841	The Voigtlander Daguerreotype Camera
1851	The Lewis Daguerreotype Camera
1874	The Scenographe Dry-Plate Camera
1883	The Stebbing Roll Film Camera
1888	The Kodak Camera
1900	The Brownie Camera
1925	The Leica Camera
1939	The Super Kodak 620
1948	The Polaroid 95 Camera was the world's first instant camera
1949	The Contax S Camera was the first modern single-lens reflex Camera
1986	The first Single-Use Camera
1990	The Digital Camera

The purpose of the camera since its invention has been the same, to capture images, but the lens, speed of the shutter, the film, and the design of the camera has changed. The kinds of

cameras are two numerous to list. I plan to provide pictures from web sites and newspapers, magazines, catalogs, and actually cameras for the students to see.

PHOTOGRAPHERS

There are photographers, past and present, who have taken photos of children which have shown them in playful ways as well as showing how the children have endured hard times. Coles (preface) has listed several such photographers. Two of them are Lewis Hine and Dorothea Lange. Lewis Hine's photographs were influential in changing laws regulating child labor. Dorothea Lange's famous photograph of the Migrant Mother was a symbol of endurance in 1936. The photograph shows a migrant mother with three of her children in a stance of protective motherhood. Her photographs chronicled the adverse conditions of migrant workers in the 1930s era. I plan to show the students more photos taken by these two photographers and others who did work with children.

VISUAL LITERACY AND PEDOLOGY

Photography provides a vehicle for mental retarded students to attain literacy. I want them to understand the importance of the art and science of photography.

A young child's cognitive structures are different from those of an adult. The only way to get information from the outside world into a child's developing brain, where it can be understood and then remembered, is through the five senses and movement. Young children learn by doing. (Entz Xi)

Entz also says the following:

Digital and instant photography helps young children to revisit their first hand experiences shortly after they occur and to fix them in time. Pictures stimulate the recall of direct experiences and the use of words as memory triggers to recall these concrete events

It is the feelings of the author that photographs taken during school events have the added benefit of extending school learning into the home (xi).

Photography helps students promote community and a feeling of being a part of a community. The Life Skills setting is inclusive, so we are together most of the day; therefore, there is a family atmosphere. We identify with each other and develop a feeling of comfort. Photos taken on field trips or during classroom activities and displayed on the bulletin board say, "I belong." The students develop feelings of security. When they see their picture on their lockers, there is a sense of personal space. Most of the students can't read, so the pictures serve as symbols of ownership. This way they can find their own locker.

This unit will provide the student with needed language skills and enhanced literacy proficiency. Other content areas such as social studies, vocational education, and math are affected as well. In social studies, students will be taught how to read photographs. They will look at the children in books and be required to describe what is happening, what the children are doing, what they are wearing, what they are playing, and what they are looking at? They will look at photos of families in different poses and explain what they are doing. I will use books from the University of Houston library, such as *When They Were Young, A Photographic Retrospective of Childhood* by Robert Coles; Children *At Work* by Lewis W. Hines; *Children between the Wars: American Childhood, 1920-1940*, by Joseph M. Hawes; and *American Children* by Susan Kismaric. I think that these books will provide an excellent introduction to photography because they feature children that they can relate to. They will also learn about the lives, attire, and living arrangements of children and families in earlier times.

Photography can be used in math to teach sequencing. Several photos taken by the teacher or the students, after they are taught to take photos, can be of classroom activities or activities on a trip. They will be printed and the students will put them in the order that they were taken on the bulletin board. For vocational education, the students can take photos of people in various job situations on the campus and identify what their jobs are. Entz indicates that:

Effective communication is a cornerstone of any successful venture. Photographs stimulate conversations between all key players in a school. Pictures provide feedback to children, to their parents, for reporting progress, and for staff development (xiii).

My students are familiar with their pictures being taken using a digital camera. The curriculum that is developed for Life Skills students encourages this during field trips which are referred to as Community Based Instructions because they are planned to reflect objectives stated in their Individual Education Plans. In fact the Special Education District office provided the camera. I want to go back in time though and introduce them to early photographs of children their age so they can appreciate the visual arts. I also want them to become familiar with several genres of photographs, such as nature, science, still life, landscape. I want them to see pictures of the older versions of cameras and some other equipment that was used then. I have an old Polaroid camera and a tripod. I am also collecting catalogs of cameras for them to do some comparisons.

TEACHING STRATEGIES

The unit will be taught using two approaches: One approach will feature photos taken by me, and the second will use photos taken by the students and used in various projects.

I plan to take photos of the students engaged in classroom actions and when on field trips or as the opportunities occur. Since I teach all the core subjects as well as content areas, there will be many occasions to take and use my photos. Lesson plans will reflect the use of these photos.

I will use photographs to communicate with the non-verbal students by taking photos of them during the day as they engage in various projects and post them on the bulletin board so they can see the progress made each day as they complete each project. The photos can serve as directions for repeating the same projects. The photos can be put into small booklets and they can self chose activities during the school year. A requirement of the program for developmental disabled students is to monitor mastery of skills and using photography will satisfy that requirement.

For instance, one functional activity the students are taught is to make a peanut butter and jelly sandwich. Photographs can be taken as they go through the steps of getting all the ingredients needed to make the sandwich. If they see photos of themselves instead of photos from a catalog, there will be motivation to repeat the activity which will lead to mastery. Other students can take photos of the class eating their sandwiches and add to them to their albums.

The pictures can be shared with the families so they are aware of the skills the students are learning and enjoying. The families can reinforce these skills by letting the students make their own sandwiches or whatever skill they have learned at home.

The students will have to be taught how to carefully handle a camera so they do not drop it. Holding a camera does not come easy to some adults, so expecting students with limited cognitive skills will prove to be a challenge. They will need to know how to turn the camera on and off. I will purchase straps that are long enough to go around their necks so if they do drop the camera, it will not hit the floor. They will need to learn which side faces the subject and which side faces them. One of the most difficult tasks will be to teach them how to decide which eye to use when focusing on the subject of the photo.

Of course they will also have to be taught how to use the disposable camera. I will take as long as necessary for them to learn these skills. The use of photography in the Life Skills Program is involved throughout the school year. The goal is for the students to attain as much mastery as they are capable of. Time is not a factor.

Students will be taught some of the terminology associated with photography. Since their reading skills are limited, the teaching is going to be visual. Examples of some selected terms are as follows:

Aperture: The size of the hole in the lens which controls how much light gets into

the camera.

Composition: Arrangement of everything in the photo.

Cropping: Cutting off the edges, either by moving in closer to your subjects when

you are taking the picture or by trimming off the edges of your finished

photograph.

Digital Camera: A camera that captures images in an electronic format.

Disposable: A throwaway or single use camera. Once you have taken all the pictures,

you turn the whole camera in to the film processing lab.

Exposure: The amount of light that is allowed to hit the film.

Flash: A function or accessory that allows you to provide additional, artificial

light to a scene.

Focus: The process where you make the image sharp.

Frame: The view you see through your camera's viewfinder.

Negative: Film, both before and after developing.

Shutter: A mechanism that controls how much light is allowed to get into the

camera.

Subject: What you are taking a picture of.

Tripod: Photographers often attach their camera to this three-legged stand to keep

the camera steady while taking a picture.

Zoom: A zoom lens provides more flexibility by allowing you to easily change

the amount of magnification just before you shoot. (Miotke 203-214)

One project will be for the students to take disposable camera home and get pictures of their families, and they can use the photos to develop albums. To reduce the expense of getting a camera for each student, they will take at least three exposures each. We will spend time doing scrap booking. Young children can develop a sense of community while completing these projects. We go on outings that are considered Community Based Instructions, and they can be taught to use the digital camera during those outing. We go to Wal-Mart several times a year because the store has a number of departments that can be used to teach functional skills. Using photography, those skills can be greatly enhanced. The students can use the digital camera and take photos of each other during scavenger hunts for fresh food items or finding the clothing department during the social studies component for learning about sorting and grouping.

Another activity would be to take pictures of the school from different angles and put them together as a sequencing project as a math project. I plan to teach them about different ways to pose and how to capture the light. This can be done during outside trips around the school and while touring the hallways inside the school. I feel that these activities will help build self-esteem in the students and help them grow as adolescents. During these tours, they can take photos of school staff performing their duties and learn about different job tasks. This is a science requirement for them.

The use of cameras and photos in the classroom and the community use increase the feeling of belonging for the students and they can share this with their families.

> Photographs hold an honored place in most homes. In family albums, on mantels, tables, and walls, they serve as fond reminders of distant



relatives and friends and times gone by. Snapshots comprise our private and semipublic history. Fascinating as they may be, however, they are seldom illuminating to anyone other than family and close friends. (Ewald 17)

A list of books that will be used in the teaching process can be found in the annotated bibliography.

The skill of acquiring literacy through photography for developmental disabled students will enhance their educational experiences and lead to development of vocabulary, word meanings, math concepts, social studies content in socialization, family, and recreation. Learning new skills lead to higher levels of self-esteem and positive self-concept.

LESSON PLANS

Introduction

The students have prior knowledge of using photos during instructions. They have photo libraries that they use for building vocabulary skills. The libraries include over 250 photo cards in ten different categories, such as furniture, animals, home items, school items, and food. They also play photo bingo using photos of kitchen items, prepared foods, fresh vegetables, and bathroom items.

I will develop lesson plans relating to the learning styles of the students. They are visual, auditory and tactile learners; therefore, seeing, hearing and hands-on activities will hold their interest and encourage them to participate.

Lesson One

Objective

Students will recognize pictures of early cameras.

Activities

Students will be shown vintage cameras and equipment such as tripods on selected web sites and understand their functions. A computer will be used to access the web sites which will be shown via the television and some history will be given of each item. The students will also examine three old cameras, a roll of film, and a tripod that belong to the instructor. Prior to the lesson, a note will be sent home asking parents if they have old cameras that they can send to school for this activity. One web site we will use is:

http://inventors.about.com/library/inventors/blphotography.htm

Assignments

Each student will describe a camera from the presentation on the website. They will use printed clip art of cameras and color them. They will look at the models available in the classroom and are expected to ask questions about how they operate and what kind of film each camera used. The concept of film will have been included in the web site presentations.

Assessment

After spending several class periods looking at and examining camera, each student will be able to name a camera from a book on early inventions. Students will discuss and describe one early camera using observation from the presentations.

Materials

Computer, television, models of old cameras and equipment, hand outs of clip art, colored markers and pencils, and crayons

Lesson Two

Objective

Students will "read" selected photographs.

Activities

Students will examine and discuss the composition by describing the setting, people and action in selected photos. Books mentioned earlier in the unit will be obtained from the University of Houston Library and the students will be guided by the instructor through them as she discusses the context in which some of the photos were taken. The students will be shown how different angles of photos affect their meanings and how important the correct lighting is to exposure.

Assignments

Students will bring pictures from home and share them with the class. They will focus on angles, lighting, and settings and explain each in their own words.

Assessment

Students will remember discussion from other student's photos and retell the features by "reading" them.

Materials

Family photos, selected books on photographs of children

Lesson Three

Objective

Students will learn how to operate a digital camera with assistance.

Activities

Students will use a digital camera to take pictures of the front and back of the school. Each student will take photos from different locations so they can share and discuss them.

They will print the pictures, sequence them and use them to begin a photo album of the entire school. These albums will be shared with the students' families as well.

Assignments

Students will use the computer to transfer the photos from the camera and then print the photos and develop photo albums that will be shared with families. The students will use also use the bulletin board in the hallway to display duplicate photos.

Assessment

The assessment will be completed albums and a well-designed hallway bulletin board.

Materials

Computer, printer, camera, photo albums, photo paper, hall way bulletin board.

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