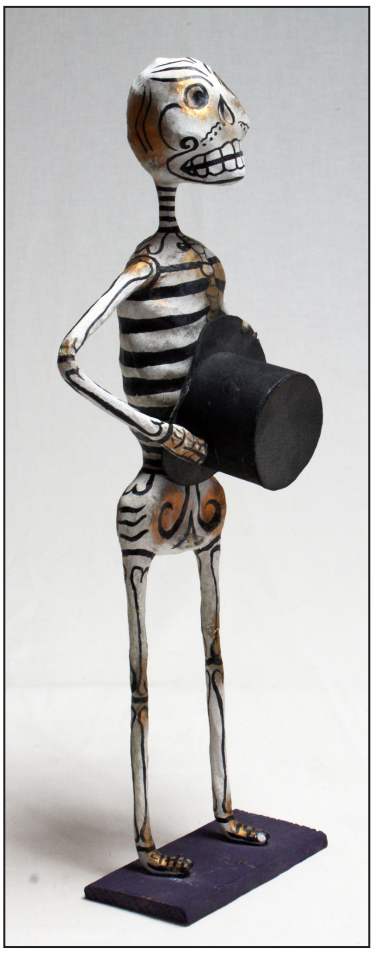
Teaching *with* Objects *and* Photographs

Supporting and Enhancing Your Curriculum



A Guide for Teachers

prepared by Ellen Sieber updated by Sarah Hatcher

Mathers Museum of World Cultures

Cover images:
Photograph, Fallua District, Nigeria, circa 1987, photographer Ellen Sieber
Esqueleto, a Day of the Dead toy, Mexico
Wood Weasel Carving, Cherokee, North Carolina
Mask, Huichol, Mexico

Mathers Museum of World Cultures
Indiana University
601 E. 8th St.
Bloomington, IN 47408
Exhibit Halls: 416 N. Indiana
(812) 855-6873

Teaching with Objects & Photographs...

... who?

This guide is for all teachers who wish to enhance their curriculum by incorporating objects and photographs into their lesson plans. Kindergarten, elementary, middle school, and high school classrooms can all benefit from expanded use of these rich materials. The range of subject areas for which these techniques can be used is also broad: studies in history, community, culture, art, language, math, and science can all include objects and photographs.

... what?

Objects. Everyday or exotic; from our culture and time period or others; large or small.
Photographs. Formal or informal; historic or modern; commercial or personal.

... when?

You don't need to set aside special time for using objects and photographs in your classroom, or insert yet another curriculum unit into your schedule for the year. Incorporating these tools into existing units and lesson plans adds a new dimension to the curriculum you already use.

... where?

Everywhere—particularly in the classroom. Working with objects and photos doesn't need to be restricted to field trips, and in fact the more focused environment of the classroom allows students to explore these materials in rigorous and rewarding ways.

... why?

Teaching with objects and photographs enhances your curriculum in a variety of ways. These materials can **engage** students who don't always respond to written materials; they can be used to **reinforce** material covered in other media; they can **connect** students with their own environment and culture, as well as with other cultures. Teaching with objects and photographs creates a direct, sensory connection between learners and their subjects that results in new levels of interest and attention. Teaching with objects also creates students with higher levels of **visual literacy**.

... how?

This guide is devoted to how you can incorporated objects and photographs into your teaching.

Contents

Pressed for time?

✓ **Teachers in a hurry to get started teaching with objects and photographs can make use of this guidebook by reading the "Steps to Take" sections then skipping right to the Teacher Resources materials.**

Contents

The redoubtable Samuel Johnson was citing a condition and not offering a choice when he wrote in the preface to his **Dictionary** *(1755), "I am not yet so lost in lexicography as to forget that words are the daughters of earth, and that things are the sons of heaven." Dr. Johnson did not elaborate about the two realms of words and things, but he may have been acknowledging that words are not capable of translating all of those attributes of an object that are available to, and integrated by, the human senses. The cliche about a picture being worth a thousand words should be enlarged to include things:* **Any thing is worth a thousand words.**

- Craig Gilborn, 1968[1]

Section 1	**Teaching with Objects: Introduction**

Why teach with objects? As an addition to other forms of classroom materials, teaching with objects offers a **direct, tactile experience** for students. Educational research over the past fifty years has clearly established that hands-on learning is a rewarding, essential experience for all learners. In addition, some children respond more readily to objects than they do to other, more abstract teaching materials. Thus, teaching with objects can help those children achieve better understanding of topics presented, perhaps offering them a leadership role among their peers.

Teaching with objects is also a powerful way to facilitate **concept learning**, the skill of classification which helps children develop high levels of reasoning and assessment abilities.

Teaching with objects is an excellent means to enhance students' **sensory literacy**, allowing them to develop the ability to compile evidence through sight, touch, hearing, smell, and even taste, and to analyze and articulate that evidence.

Teaching with objects offers latitude for shaping lessons to **students' interests and needs**, thereby enhancing the potential of these strategies to be realized in the classroom.

Lessons incorporating objects are effectively carried out in **small groups**, allowing students to work cooperatively, share their learning with companions, and pool their knowledge. Group work also allows students to test their ideas in the relative security of a small number of peers before sharing insights with the class as a whole.

Perhaps most importantly, teaching with objects arouses **curiosity**, and thus is an ideal forum for encouraging students to **develop their own questions** about the items they are exploring, and to learn to develop strategies for answering those questions. A study of children's experiences in museums and zoos offers this exchange between a researcher and a sixth grade student:

> *What does curiosity do for you—anything?*
> If you're really determined to find something out, then you'll find it out.
>
> *Why is it satisfying to find out things?*
> (*Laughter*) Because you've worked—you've probably tried to find out what you want to find and you've looked around and when you find it, you've found it and that's what you wanted to do.[2]

Finally, learning with objects can be fun, and we all know the value of an educational experience that encourages the best aspects of play: **exploration and discovery**.

Our aim is to explore the use of objects as evidence of cultural behavior. Within this framework there are many approaches that can be used in the study of what we call "material culture," human-made artifacts and natural objects used by people.

Techniques for teaching with objects draw on a wealth of scholarly works accomplished over the past five decades, in the varied fields of folklore, anthropology, museum studies, history, collecting, archaeology, and art history. These efforts, whose results are published in a variety of books and journals (see sections on sources and notes), show that objects can be studied in many different ways.

Section 2	**Teaching with Objects: Standards**

Teaching with objects and photographs is a natural way to work towards meeting a variety of curriculum standards at the state and national level. The Common Core standards for English-Language Arts (ELA) call for increased visual literacy and what better way to do that than with photographs and objects. The National Council for Social Studies has identified ten themes for social studies and it is easy to work within them with photographs and other media.

Visual Literacy and the Common Core Standards

Visual literacy is the ability to interpret and make meaning from information presented in the form of an image (photograph, web page, movie, object, etc.). Humans have been producing images for thousands of years, long before the written word was introduced. What we think of as prehistoric or primitive art was a form of communication through images.

In today's media rich environment, becoming adept at decoding images is becoming ever more important. The importance of this skill is evidenced by its inclusion in the Common Core Standards for grades K-12. While exact wording of the standards varies by state, the general thrust of the standard for grades 6-12 is "Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue."[3] Younger students are charged with finding meaning in illustrations (drawings, maps, charts, etc.) or describing the relationship between the text and illustrations.

Key benefits of emphasizing visual literacy include engaging students with predominately right brained learning styles, enhanced visualization skills, and improved visual communication skills. Research also indicates that children acquire visual literacy long before verbal literacy and enhancing that skillset may improve verbal literacy acquisition.[4]

Visual Literacy and Culture

Our visual literacy is informed by the dominant culture in which we were raised, and in today's multi-cultural classrooms, it is incumbent upon teachers to recognize that different interpretations of an image may arise. Some background knowledge of the culture from which an image comes helps us interpret or "read" an image. Conversely, some knowledge of the person who read an image or object may help us understand her interpretation of it. For example, a group of students from a Jewish school may see a powder horn and exclaim, "A shofar!" while a group of students from a predominately Christian public school may see the same object as a powder horn, a drinking cup, or a musical instrument.

Images and objects can be a starting point around which to have conversations about the cultural context. Pointing out different types of styles, images, colors, etc. can also create an opportunity for students to make personal connections to the materials being used.

Section 3 | Teaching with Objects: Approaches

One theme in the literature concerns **study method**: how does one study objects fruitfully? An important contribution to this scholarly discussion is E. McClung Fleming's "Artifact Study: A Proposed Model."[5] In this essay, Fleming sets forth a scheme that includes several classification operations, plus the addition of supplemental information to analyze and interpret an object. Fleming's approach combined aspects of anthropology (putting objects in a cultural context), art history (detailed analysis of the object on many levels), and folklore (looking for themes and patterns in material culture), to create what Thomas Schlereth calls "a holistic framework that identifies many possible approaches to the subject."[6] Fleming's model takes the study of an object through the steps of identification (through factual information), evaluation (a judgment process comparing an object with others), cultural analysis (the relationship of the object to its culture), and interpretation (examining the significance of the object). These steps are accomplished through direct observation and through use of supplemental information, including comparison with other objects, knowledge of the cultural setting, and the values of the present culture.[7]

Other artifact study models presented in the past several decades include most of these same elements, though with different emphases. In Section 3, "Teaching with Objects: Steps to Take" we present a distillation of these many scholarly works, in a format designed to lead young learners through the process of learning from objects.

The literature of the past decades also includes a wide variety of approaches to **organizing the findings** that are developed through direct study of objects. Some emphasize the study of a particular type of object; some focus on materials; some on use categories; some on design elements; and some on the material culture of an ethnic group or region. Here we sample a few of those approaches:

- *Focus:* **One type of object.**

Blankets. Gaynor Kavanagh shows the very wide range of uses—practical and symbolic—one simple type of object can carry.

> "Consider the use of four very ordinary blankets. Open to inspection, the quality of the material, weave and colour, and signs of wear may give certain though limited information. Markings may help disclose more. From this the quality and types of uses might be suggested, perhaps little else, unless forensic science was applied. The same four blankets may have very different tales to tell."[8]

The four stories she tells are from Wales, Lincolnshire, Glasgow, and Belfast. The Welsh blanket is used to carry a child, which use she describes as a "practical expression of the social and physical environment," leaving a woman's hands free for other tasks while negotiating the hilly terrain, unsuitable for baby carriages even were they affordable. The Lincolnshire blanket is a museum piece with a known history; it is from a farm whose wool was sold to a wool merchant who in turn sold it to a Yorkshire mill. The blanket had been brought to the farmer by the

merchant, and the farmer kept it as a "tangible expression of the farm's work" in relation to the world at large. The Glasgow blanket is from the poorer East End of that city, and the experience of poverty is central to the blanket's meaning. In the later 1800s blankets such as this would be pawned in the early morning by their owners, with the money thus obtained used to buy a basket of food. The food was then sold at a profit during the day, with the proceeds used to buy food to eat and to redeem the blanket from the pawn shop. As Kavanagh expresses it, "The blanket's potential function of giving warmth was matched by one that might produce enough income to feed a family for the day." Finally, the Belfast blanket is an overt symbol of political resistance, used initially by Irish Republican Army prison inmates protesting their failure to be considered political prisoners. In the 1970s a large number of IRA inmates refused to wear prison clothes or maintain personal hygiene, sometimes wrapping themselves in blankets as minimal protection. In this way the blanket became a symbol of the protest.[9]

Houses. The Kwandu people of East Africa use a relatively simple house form, yet there is still a great deal of cultural meaning in the buildings, their materials, and their use. Small, circular structures made from poles interwoven with slender sticks and coated with mud are covered by conical roofs constructed of poles and thatched with grass. These materials reflect the direct relationship between the people and their environment; creating a house does not require purchase of foreign materials. The construction of houses reflects gender roles in the culture, with men building the structures and women applying mud to the walls and floors; children help in these activities, learning skills they will use as adults. Neighbors work cooperatively in the heavier aspects of the work. Men and women occupy separate, individual houses, and possession of a house gives status to both men and women. Houses also symbolize personal boundaries, and thus others do not enter a house uninvited. In addition to describing these basic aspects to Kwandu houses, author Barrie Reynolds has also traced the political significance of house forms and their distribution.[10]

Wallpaper. Catherine Lynn surveyed changing designs and production technology in the United States wallpaper industry over 200 years. Her work demonstrates the way in which one limited type of object can reflect changes in culture itself, including concepts of the home, the roles of the sexes, the growth of a consumer economy, and even changing moral values.[11]

These three examples—blankets, houses, and wallpaper—illustrate the wide range of information a single type of object can provide when exploring the meanings of material culture.

◆ *Focus:* A material.

Silver. Six aspects of silver as a material are explored by Barbara M. Ward and Gerald Ward in an exhibition catalog from the 1970s. Silver is explored as a metal, and as currency; both the traditional silversmithing process and later industrialization of silver production are investigated; changes in the styles of silver household objects are cataloged; and the social meanings of silver are studied. This is accomplished through examination of a wide range of objects, including coins, silversmithing tools, ore, and jewelry. Again, we see that an in-depth study can reveal a wide array of cultural connections.[12]

◆ *Focus:* **A functional class.**

Containers. Examination of one type of object, containers, suggests multiple approaches in itself. Containers are part of every culture. Nomadic peoples who move frequently must find ways to carry their few possessions securely, and have developed baskets, sacks, panniers, and other container forms to do so. In materially-abundant cultures such as our own, households seek effective strategies to cope with all of their "stuff" and often resort to containers—from plastic boxes to storage warehouses— simply to store items not in current use. The role of containers in the emergence of human culture has undergone study in recent years, with some scholars suggesting that the ability to carry food from one place to another, perhaps in leather or basketry containers, helped create the first societies by allowing sharing of food or other resources.

◆ *Focus:* **Design motifs.**

Decorative patterns on baskets. In one Brazilian culture, intricate geometric motifs are found to have cultural meaning tied to some of the basic characteristics of the society, including their cosmology and their relations with their neighbors.[13] In our own culture, such icongraphy is often quite overt, from bumper stickers proclaiming views on morally-charged issues, to baseball caps showing allegiance to a favorite sports team.

◆ *Focus:* **The material culture of an area.**

The Hausa of northern Nigeria. The preceding summaries of several different approaches to studying objects suggests that looking at the entire material culture of an area or culture can be very informative, though clearly very complex as well. Exploration of the everyday objects in use among the rural Hausa of northern Nigeria reveals a variety of cultural influences and strategies. A typical family household uses items that are locally made from natural materials. These include shirts produced from locally-grown cotton and indigo dye, woven on hand looms, and pieced together by tailors; and pots created by nearby potters using locally-dug clay and open-air firings. Other items reveal connections with a wider economy and culture: enamelware dishes made in factories in neighboring Niger; plastic ware and machine-woven fabrics made in local factories. Each type of item in a family's assemblage of material goods has its own history, some old and traditional, others quite recent. Taken together, they reveal that this culture incorporates new materials and forms without discarding older ones. This practice is perhaps due to a variety of factors, economic necessity, cultural conservatism, and practical advantage among them.[14] Lesson 3 in the Teachers Resources section offers the opportunity to explore this same kind of behavior in our own culture.

Section 4	**Teaching with Objects: Steps to Take**

The process of **teaching with objects** is quite simple, based on the basic steps which museum curators, folklorists, archaeologists, art historians, and other scholars use for **learning from objects**. Authorities on the topic use various terminology in their own fields, but all center on three basic elements: description, classification, and interpretation. (See the chart "Learning from Objects" in the Teacher Resources section for a summary of these elements.)

Description: What is this object?

Learners examine the object directly when compiling a description. A good first step is developing a complete description of the object's physical appearance. The major skill exercised and developed when describing the object is **observation** based on the evidence of the **senses**.

You may want to incorporate the use of other specific skills students are developing by having them record their descriptions. Depending on your wider curriculum objectives, and the learning stages of your students, recording the description can include writing, drawing, photographing, measuring, and weighing the object, and presenting their findings orally to an audience.

What are the basic elements required in a description? Determining the **material** used to create the object is a vital component of description, and can lead to many kinds of inquiry. For instance, asking a basic question, "Are the materials natural or human made?" opens up the wide subject of how people and cultures relate to their natural environment.

Other topics which can be explored in this stage are the object's **use**, **method of manufacture**, **date**, **place of origin**, and **maker**. Some of these characteristics may be suggested from examination of the object itself, while others will take research into other sources (books, catalogs, web sites, people more familiar with the item).

It is important to note that in addition to the evidence of the senses, students will be bringing their **prior knowledge** of materials and types of objects to their explorations. It is good to recognize this explicitly in the exercise. For instance, if students are compiling a written description of a wooden bowl, you might ask them to cite their evidence for each observation. If they state that the object is made of wood, ask, How do you know? They might answer, It feels like wood, or looks like wood, or sounds like wood when you tap it, or smells like wood. These replies can be followed up with questions about the general characteristics of wood to support their finding. Likewise if they call the item a bowl, ask them to support that finding. What is a bowl? Does this item have all the characteristics necessary in a bowl? Are there other items that have those same characteristics?

Lesson 1 takes students step by step through the description process.

Classification: How does this object relate to others?

Once the object is described, learners put their new knowledge to work by discovering how their object relates to other items. This is an extremely fertile area for learning! Classifications can be used to explore a multitude of questions: What value is placed on this object? Is its value due to materials, function, date, rarity, ownership history, place of origin, or religious associations? Does the object mean different things to different people?

The ability to **compare** and **contrast** is the central skill used in classification. Comparative analysis can be accomplished on a very simple level with younger students, and refined to much more detailed levels for older ones.

Compared to What?

The first question to answer in classification is, "Which objects are we using as our comparative set?" The answer will depend on your curriculum goals. If you are using objects to **explore change over time** in a history class, you will want to use a comparative base that includes items from different historical periods. If you are using objects in a lesson on **cultural diversity**, you will want to use objects from different cultures. In both of these cases, learning is helped by considering only a small range of objects. For instance, to explore changes in American life over the past 200 years, you might want to focus on two or three sorts of artifacts, such as items used in transportation, food preparation, and play. (We'll explore how this can be done in the lesson plans.)

Classification Schemes

Another curriculum option is to **examine classification itself**. This exercise helps to develop critical thinking skills, because students have the opportunity to assess many different options and decide from among them. For instance, if the class is looking at a wide range of objects, such as things found at a garage sale, students can explore different ways of sorting the objects, such as by size, color, function, price, age, or state of repair. In the process of doing this, they will question the value of each form of classification. What questions can we answer after sorting the items by color? What *different* sorts of questions can we answer by sorting the objects according to their state of repair? Lesson 2 explores many issues associated with classification.

Selecting Criteria

Another process that uses critical thinking skills occurs in all forms of classification, no matter the curriculum goals or learning levels involved: determining the **relevant criteria** for classifying objects. This process requires that students weigh various factors and determine which are useful in answering the questions at hand. If students are examining change over time in automobile manufacture as part of a curriculum unit on changes in the American family during the 20th century, which attributes are important—size? shape? color? material? engine type?

The use of classification in lessons, whether as the primary focus or as a means to an end, is a great opportunity to reinforce the notion that all research findings are shaped by the questions we ask.

Interpretation: What stories does this object tell?

Any one object can tell a great many stories—once again, this will depend on the questions you and your students ask. The most important concept in interpretation is **context**, the cultural setting of the object. Description and classification can be carried out with no actual knowledge of the cultural, environmental, social, or other contexts of an object, but for interpretation this information is essential. Seeking this knowledge is itself a rewarding activity for students whose curiosity has been awakened by an object, and it is a splendid opportunity for teaching higher levels of investigative skills.

The classic journalist's questions—what, who, where, when, and how?—are ideal first steps in this kind of research. Lesson 3 uses ordinary spoons in an example of this kind of inquiry, and also introduces the ultimate goal of interpretation: **answering the question, "Why?"** (Why is the spoon shaped this way? Why is it made from wood? Why is it used in this way? Why is it used here?). As the word "interpretation" implies, explanations of "why" are never absolute. Different students or groups of students will arrive at different interpretations of an object's meaning. Of course, this can give rise to discussion of the various interpretations, with attendant opportunities for learning about listening skills and respect for diverse views.

Section 5	**Teaching with Objects: Finding "Stuff"**

Borrowing objects

Museum hands-on collections

Museums often have teachers' kits of objects and information that can be checked out for classroom use. Some museums have loan collections of objects set aside for hands-on classroom use. The Mathers Museum has both; call (812) 855-6873 for information.

Other institutions that have such materials include area studies programs at universities and history agencies such as the Indiana Historical Society. Some kits and collections are available for purchase through private companies.

Professors at local universities or colleges

Contact the anthropology, folklore, or history departments at your local institutions. If there are no formal lending programs, individual professors may have materials they could loan, or bring to your classroom on a visit.

Collectors

Many people collect objects from American history and from other cultures. While most items in such collections will be considered too precious or valuable to loan or bring in for hands-on work, many individual collectors are very knowledgable about their subject and may be able to provide some less valuable objects for classroom use. Check with a local antique mall or shop for leads if you don't already know any collectors personally.

Purchasing objects

Museum stores

Many museums offer items for sale in their shops which relate to their collections. Inquire carefully, though, because not all objects for sale represent genuine cultural traditions, but instead may be created for the tourist trade or for export. While these objects have their own intrinsic value in teaching about the world economy and relationships among countries and cultures, they should not be mistaken for traditional materials. For instance, the mask forms exported from Africa are often of modern, tourist-oriented design, perhaps because the deep cultural meaning of traditional forms are sacred enough to be avoided. Museum stores also often carry reproductions of traditional cultural objects, particularly archaeological items. These can be used in your classroom, but again should not be represented as genuine—usually the materials and manufacture are not traditional, and could be misleading.

Other possible sources for this sort of item are mail order catalogs and Internet sites, though of course the same cautions apply to this material.

Garage sales, flea markets and thrift stores

For objects from our own culture, there is no better place to look than our own special form of material culture redistribution, the flea market! The Teacher Resources section of this guide includes a list of items to use in Lessons 1 through 3, many of which can be found at garage sales and flea markets.

Section 6	**Teaching with Photographs: Approaches**

Teaching with photographs shares many of the rewards of teaching with objects. The chance to learn from primary sources catches students' interest, they experience the excitement of participating in detective work, and they discover that they already have the skills and knowledge to learn from these items.

Unlike objects, though, most of the information in photographs is gained from studying the **image** rather than the physical aspects of the photograph.[15] Photographic study thus offers an excellent opportunity for learning the challenge of accurate description. How can you put into words what you see with your eyes?

Working with photographs also adds another layer of complexity to the lessons, because every photograph was created at one point in **time**, in a particular **place**, of a chosen **subject**, by a particular **photographer**, for a specific **purpose**, and using a particular **technology**. Let's examine each of these elements and see why they can be so important to understanding a photograph.

Time. The time the photo was taken includes the year, season, time of day, and whether there is special significance to any of these. Is it the date of a historical event, such as the end of World War II? Is it a special occasion for people in the photograph, such as a wedding, birthday, funeral, or anniversary? Does the photo record a ceremony such as a Fourth of July parade or Cinco de Mayo festivities?

Place. The place a photograph is set is also a broad category. The continent, country, town, particular building, the room in the building can all have interpretive significance. Dramatic examples are the famous photos of President John F. Kennedy and his young children in the Oval Office; the location adds an essential layer of meaning to the pictures.

Subject. Some photographs are true "snapshots" of a moment in time, but even these pictures are not random. First, the photographer deliberately chose to take the photo; he or she also chose the angle, the moment, and what to include and what to leave out of the image. Some photos are very much "composed" by the photographer, who might arrange props or instruct human subjects on their positions, what to wear, how to sit or stand, what kind of expression to assume, how to act in relation to others in the picture, and so on.

Photographer. Most early photographs were taken by professionals, but for the past 100 years photography has been accessible to millions of others, particularly in North America, Europe, and parts of Asia. The training of the photographer can have a decided influence on the picture, with amateur photographers producing less studied and sometimes more spontaneous images that reflect their everyday lives. The relationship of the photographer to the subject is very important. If the photographer is from outside the culture of the subjects, the images can reflect his or her ideas about that culture which may differ from indigenous attitudes.

Purpose. All photographs exist for a reason. Some are meant to record important events, others to expose dire conditions to the public, still others are intended as artistic statements. Knowing the purpose of a photograph, and the corollary of knowing its intended audience, can help in

interpreting a photograph. This concept is explored in Lesson 7, which makes use of a set of photographs of Native Americans taken by European American photographers in the early 1900s.

Technology. The process of photography has changed a great deal in its 160 years of development, and these changes affect how photographs are interpreted. In early photography, the images took much longer to be recorded than is now the case, and this affected the kinds of subjects that could be photographed, and the poses of people in the pictures. Another technological factor to consider is that photographers have the ability to manipulate images when developing and printing photos. Not only can they change light effects that alter the mood of a photo, they can actually remove elements found on the negative by blocking them during printing, or add elements by combining two or more negatives into one print (see Lesson 7 for an example). (This form of manipulation is becoming much easier through the use of computer programs in which photos can be altered.) Finally, accidental effects of technology can alter photographic images. For instance, broken or scratched negatives produce unintended and sometime dramatic effects, such as in the photograph featured in Lesson 8. In Lesson 6, overexposed edges on the negative produce a misty effect in the photograph probably not intended by the photographer.

To help in understanding the range of technical considerations, let's take a brief look at photographic technology, followed by a summary of the history of photography. There are several basic technical elements in photography:

Camera: A device that physically holds light-sensitive material and contains lenses that concentrate light onto the light-sensitive film or plate. The major elements of a camera are: the **box**, which holds the necessary features and is sealed to prevent light entry; the **light control**, that lets in light only when desired; and the **lens**, which focuses the light reflected from the subject, reduces it to a very small area, and projects it onto the film or plate. Cameras also include a holder for the light-sensitive film or plate, and a viewer so the operator can see what is being photographed.

Negative: A flat sheet of light-sensitive material, on which an optical image is imposed during the action of taking a photograph. Light and dark areas appear the opposite way round on negatives to the way in which they appear in reality and in the printed photograph.

Film: Modern photography uses flexible, transparent film to create negatives. The surface of film is covered with a layer of gelatin that contains tiny silver halide crystals or grains. When film is exposed to light during the process of taking a photo, these tiny particles produce a "latent" image which is invisible until the film is developed.

Developing: The process by which the latent image on the exposed film is turned into a permanent, visible negative image, by reducing the silver halide crystals to metallic silver. This is accomplished by washing the film in various liquids which produce the image and then make it permanent.

Printing: The chemical process by which the negative image is reversed and imprinted on material such as paper. Light is directed through the transparent negative onto light-sensitive paper. This produces a positive image because the dark areas on the negative prevent light from hitting

the paper, and so those areas of the paper remain white. The printing process usually enlarges the image as well as turning it from negative to positive.

Print: The finished product, a positive, photographic image on paper or other material.

History of Photography. The daguerreotype was the first commercial photograph, invented in France in the 1830s by Louis-Jacques-Mandé Daguerre and Joseph-Nicéphore Niepce. The process involved coating a copper plate with silver iodide, then exposing this plate to light in a camera. The plate was then exposed to mercury vapor to make the image appear, then made permanent ("fixed") with a salt solution.

Meanwhile, in England William Henry Fox Talbot was creating another photographic technique called the calotype (sometimes also called the talbotype). In this process, a sheet of paper was coated with silver chloride then exposed to light in a camera obscura, resulting in a negative image. Talbot used gallic acid to speed up the time it took for the silver chloride to react to the light, so that photos could be taken in a much shorter time.

In 1851, the wet collodion process was created by Englishman Frederick Scott Archer. In this process, a glass plate was coated with "collodion" (cellulose nitrate) and iodine, and was then placed in a silver nitrate solution to create silver iodide. The plate had to be placed in the camera and the photograph taken while the plate was still wet. This was then immediately developed and fixed with various chemicals. Two variations on this process, the ambrotype and the tintype, became very popular, and a great deal of portrait photography was created using these techniques.

The next important advance was in 1871 with the invention of dry plates by R.L. Maddox. These were glass plates coated with gelatin containing a suspension of silver bromide, and could be stored both before and after exposure, which allowed for much more mobility and flexibility than was practical using the wet plate process. These plates could also be mass-produced, which made the process more readily available and less expensive.

The first commercially-available, transparent, flexible film for creating negatives was introduced to the market in 1889 by George Eastman, a Rochester, New York inventor and businessman who had earlier created a dry plate production process.

Eastman also led the way toward popular photography, so that ordinary people who were not trained in the techniques and chemistry of the photographic process could produce their own photographs. "Kodak" cameras were Eastman's invention (he made up the term "Kodak" as well). The first of these was a sealed camera, complete with film enough for 100 images, first put on the market in 1888. The whole camera was sent back to the factory for film developing and printing—much like the disposable cameras of the 1990s and early 2000s..

In 1900, the Eastman Kodak Company introduced the "Brownie" camera. Though intended for use by children, and costing just one dollar, the camera was very popular with adults as well and led to a huge increase in the numbers of photographs produced. The Brownie was probably the most dramatic innovation in the history of the camera itself, which over the 160 years of commercial photography has changed from a large, heavy, and bulky device to small, portable and easy to use gadgets that can be very inexpensive.

Color photography came into widespread use in the mid-1900s. Early experiments in the 1800s had allowed color photographs, but only with very expensive and complicated procedures. Color technology has improved over time for printing photographs, as well. Color photographs from the 1950s and into the 1970s look different from current photos, with the colors having faded or darkened over time.[16]

Section 7	**Teaching with Photographs: Steps to Take**

Teaching with photographs follows the same three basic steps used in teaching with objects: **description**, **classification**, and **interpretation**. There are some important differences in how these steps are carried out, though, based on the special value that photographic images can convey, and the immediate sense of identity that comes of looking at photographs of other people.

Description

As with objects, **observation** based on the evidence of the **senses** is the basis for photographic description. With photographs, however, we have two sources for evidence: the physical **photo** (photographic print) and the **image**. Elements of description include:

Material:

Photo. This category is especially relevant for original photos (rather than photos found in books or other reproduced forms), as it can be a clue to the age of the photograph. Most photographs now are printed on standard photo paper, but past forms include cards and postcards, and 19th century photographs were sometimes made on metal sheets and other materials.

Image. Material is not usually very relevant to the image, except when it affects the printing (such as highly textured paper).

Subject:

Image. The subject is of course the most compelling aspect of a photograph. What is shown in the image? People, objects, buildings, landscapes, all can be described in words, though the effort required to do so can be surprising. Describing photo images can be an excellent exercise in developing both observation and word skills, and for demonstrating understanding of spatial relations.

Age:

Photo. Evidence for the age of a photo can be found in its technology:

- Is the image printed on something other than paper?
- Does the photo exhibit the sepia tones characteristic of many 19th century photo prints?
- Is it in color or black and white?
- Does it appear to have been faded with time?

Photographs sometimes have a studio or photographer's named stamped on the photo or its holder, which can be clues to date. Other evidence can include handwritten identifications on the back, which may include a date. Further clues can also exist, such as indications that a photo was once pasted into an album; thick black paper was a standard for photo albums throughout the early and middle 1900s, and this leaves traces on photos which have been removed from such albums.

Image. There is a wealth of dating information found within photographic images. Clothing styles, hair styles, buildings, objects, writing, or advertising included in the image are all good dating sources.

Place of origin:

Photo. Once again photographers' stamps can help establish a place of origin for the photo, as can handwritten information on the back or in the margins.

Image. The same sorts of clues used for dating photo images can also be used for establishing a place of origin: clothing, hair, buildings, and other landmarks can identify a particular place or culture.

Classification

Photographic classifications use the categories established during description: technology, subject, date, and place of origin. The criteria for classification will depend on what your curriculum demands:

- If you are studying historic change in one area by using a set of photographs, it is good to first use photo technology and date to **establish a chronology**, then analyze subject matter to look for trends over time.

- If you are studying a particular topic spanning several cultures and time periods, **sort photographs by place and by time** before comparing and contrasting their content.

Interpretation

There are many possibilities for interpreting photographs, including the two strategies suggested above. Whatever the immediate topic, however, it is always important to ask:

- **Why was this photo taken?**
- **What did the photographer mean to convey?**

It is only after answering these questions that we can fruitfully ask:

- **What can we learn from the subject of this photo?**

An example from midwestern family history will help illustrate this point.

In the photograph, we see what is apparently a family group, posed in an interior (probably the photographer's studio). The clothing on most the figures suggests the picture was taken around 1900. Exploring the relationships between the people, it is fairly easy to suggest that the man seated in the center of the picture is the father of the children grouped around him. Both the poses and the facial resemblances make this likely.

But what about the two young women featured in the upper left corner of the image? They look as though they could be sisters. Are they daughters of the man? Their ages suggest they could be. There seems to be something anomalous about the woman on the far left, however. She is the only person in the picture not looking into the camera. She is also dressed differently; her clothes are lighter in color, and an expert in the history of fashion would note that her blouse is of an older style than that worn by the young woman pictured next to her.

This picture would be very difficult to interpret correctly without additional information. Here is the story behind this photo. The photo does show a family grouping, father and children, posed in a photographer's studio around 1900. The woman on the left in the back row, Emma, is the seated man's wife, and others in the photo are her children. The reason she is dressed in clothes from an earlier period and appears to be about the same age as her oldest child is that this image of her is actually from an engagement picture made around 1880, before she was married or had any children. This woman died in 1900 when her oldest child was nineteen years old and her youngest was two. The family wanted a photograph of the whole family together, so the photographer grouped the living members of the family as you see in the photo, leaving room for Emma. He then inserted the older image of Emma during the printing process. This story took place in a tiny town in Wisconsin, and the photographer was Emma's brother.

Section 8	**Teaching with Photographs: Finding Photos**

Museums

Museums sometimes maintain collections of photographs they will lend to teachers for classroom use. The Mathers Museum has a range of photo images it loans, most notably local historical images and a major collection of Native American images. These prints are loaned in a dry-mount format, so they can be handled easily. Photo sets can also be purchased from the museum. Please call (812) 855-6873 for information.

Books and magazines

One big advantage in teaching with photographs is that images can be reproduced inexpensively, without much loss of the information that is provided by the image itself. Historical photograph sources are plentiful. There are innumerable books of photographs of historical events from every time period since the invention of photography. Old issues of magazines such as ***Look*** and ***Life*** offer many excellent photos. Photographs that influenced history are a fertile subject for study, and there are several examples from America's past that are easy to locate. These photographs are often graphic and disturbing, which is exactly why they helped influence public opinion. Examples are Mathew Brady's Civil War photographs (1860s); the work of Jacob Riis documenting conditions among poor immigrants (early 1900s); and the depression-era Farm Security Administration's government-sponsored photography including work by Dorothea Lange and Walker Evans (1930s).

For photographs of other cultures, ***National Geographic Magazine*** is a good source, and there are also many beautifully-produced books. Quite unlike the disturbing images mentioned above, these photos are often somewhat "sanitized," picturing contented-looking people in interesting settings. Details of architecture, clothing, and other types of material culture can be viewed in context, though, regardless of the photographers' and publishers' aims.

Some specific books containing useful photos are listed under "Photography: History and Culture Sources" in the Sources section.

Garage sales, flea markets, and thrift stores

These places often produce old photographs, photo albums, and postcards featuring photographs. Even 19th century forms (daguerreotypes, tintypes) can be found relatively inexpensively. Most often there is no time and place context provided with this items, so they provide a great source for "detective" work. Sometime you can find these older photo images in their original display frames, which help to place them in time and offer some additional insights into the period.

Garage sales and their ilk are also good sources for old magazines. These are a wonderful resource for looking at the uses of photography in advertising. A lesson which compares the use of photo images in fashion ads from the mid-1950s and the mid-1990s would reveal a wealth of information about our culture, how it has changed, and how it hasn't.

Websites

Many historical and cultural websites have magnificant photos that are easy to teach with. The Library of Congress has thousands of photos, many of which are available for free classroom use. Many state historical societies also have photos available as does the National Archives. Most university archives have begun digitizing their photographic collection.

A word of caution: if your school doesn't have good firewalls or "parental controls" you may wish to check your student's search terms if they will be looking for their own photos.

Section 9	**Archaeological and Cultural Context**

Archaeological Context

If you include archaeological objects such as arrowheads in your object sets, you will likely find that your students don't have enough information to answer many of the questions they develop about these items. The reason for this is that these artifacts are without **context**—with such objects, we generally have no knowledge of where they were found, what sorts of other artifacts were found with them, and so on.

This circumstance offers a great opportunity to talk about **stewardship**. Archaeological sites are nonrenewable resources that can provide information about the past only if they are kept intact. The general public, including kids, can help preserve these resources by not disturbing sites they encounter. (In fact, in Indiana there is a law that requires an individual to obtain a permit before excavating any prehistoric site.)

Cultural Context

Similarly, objects from other cultures often find their way into our lives without much information about who made them, their original use, their age, and how the came to be here in the U.S. Many such items are in fact created for the tourist market. Generally items found in gift shops are made for this sort of export, and are not items traditionally used within the cultures that produced them.

This is particularly true of items marketed as "art." Masks, figurines, wall plaques, and other sculptural forms may be loosely based on traditional forms and styles, but unless they are purchased from a reputable art gallery or dealer, and for fairly steep prices, they are probably "tourist art." Many such items are designed to appeal to stereotypical, Western expectations of what "primitive" or "tribal" arts should look like, paradoxically combined with features that conform to Western ideas of art—smooth, polished surfaces, wall-mounted formats, etc.

While the study of such items can lead to all kinds of interesting discussions of international relations, the legacy of the colonial era, adaptation to changing economic situations, and so on, younger students may not have the skills necessary to sort through the complexities of these issues.

Section 10 Glossary

anthropology the study of human beings and their cultures; a person who does anthropology is called an anthropologist

archaeology the scientific study of material remains (such as artifacts, buildings, trash) of past human life and activities; a person who does archaeology is called an archaeologist

art history the historical study of visual arts such as painting, sculpture, architecture, photography, etc., including their physical aspects, development, and social and cultural context; a person who does art history is called an art historian

artifact an object created or used by humans

attribute a characteristic of an object

brainstorming a group problem-solving technique that involves the spontaneous contribution of ideas from all members of the group

category a distinct group of entities or concepts

chronology a list or description of events in the order in which they happened

classification systematic arrangement in groups or categories according to established criteria

collection an accumulation of objects gathered for study, comparison, or exhibition or as a hobby

context the interrelated conditions in which something exists or occurs

criteria (plural) facts or standards on which decisions may be based; characterizing traits

culture the pattern of human knowledge, belief, and behavior, which is learned and passed on from one generation to the next; a particular culture is distinguished by its customary language, beliefs, customs, rituals, institutions, arts, social forms, and material objects such as tools, buildings, and art works

curator a person who cares for and supervises a collection, such as in a museum or zoo

describe to represent or give an account of in words

description a statement or account intended to give a mental image of something

detective a person who gathers information in order to solve a problem

economy how a society uses resources, such as money, labor, raw materials, and factories, and organizes the production, distribution, and consumption of goods and services

folklore the study of the traditional customs, tales, sayings, dances, art forms, and material culture of a people; a person who does folklore is called a folklorist

function the action or purpose for which a thing is used

image a picture

interpret to explain or tell the meaning of in understandable terms

manufacture the method or process by which an object is made

material culture tools, buildings, and other artifacts

museum an institution devoted to the collection, care, study, and display of objects of lasting interest or value

negative (in photography) an image on transparent material from which a photograph can be made, and in which light and dark areas appear the opposite way round to the way in which they appear in the photograph

object a material thing that can be perceived by the senses

observation the act of recognizing and noting a fact

photography the process of producing images on a sensitized surface (such as film) by the action of radiant energy, especially light

society an enduring and cooperating social group whose members have developed organized patterns of relationships through interaction with one another, and having common traditions and institutions; all the people in an area can be referred to as a society

technology the practical application of knowledge; a manner of accomplishing a task especially using technical processes, methods, or knowledge

tool a piece of equipment used to help do a job

tradition an established or customary pattern of thought, action, or behavior which people in a particular society or group have continued to follow for a long time (such as a religious practice or a social custom)

traditional following customary patterns of behavior, thought, or action

Definition sources include ***Cambridge International Dictionary; Merriam-Webster's Collegiate Dictionary; Newbury House Online Dictionary.***

Section 11	**Sources**

Books

There is an enormous literature for collectors of works which detail the origins and manufacture of items ranging from porcelain to toy trains to Barbie dolls. These books are very helpful in dating items and in providing a material culture context for objects. The following lists of books on household items and toys are just a sampling. Several publishers produce on-going series on "collectibles" of all sorts (Collector Books of Paducah, Kentucky and Wallace-Homestead of Radnor, Pennsylvania are two examples).

Household Items

Cunningham, Jo
1999 ***Collectible Dinnerware.***
Altgen, PA: Schiffer

Davern, Melva R.
1995 ***The Collector's Encyclopedia of Salt and Pepper Shakers. Second Series: Figural and Novelty.***
Paducah, Ky.: Collector Books

Epstein, Diana and Millicent Safro
1991 ***Buttons.***
New York: H.N. Abrams

Florence, Gene
2000 ***Collectible Glassware from the 40's, 50's, 60's— 2000 Edition: an Illustrated Value Guide.***
Paducah, Ky.: Collector Books

Franklin, Linda Campbell.
1992 ***300 Years of Housekeeping Collectibles: Tools and Fittings of the Laundry Room, Broom Closet, Dustbin, Clothes Closet and Bathroom.***
Florence, Ala.: Books Americana

Franklin, Linda Campbell.
1997 ***300 Years of Kitchen Collectibles.***
Florence, Ala.: Books Americana

Goldberg, Michael J.
1995 ***Collectible Plastic Kitchenware and Dinnerware, 1935-1965.***
Atglen, PA: Schiffer Pub. Ltd.

Herring, Russell
1971 ***800 Insulators Priced and Illustrated.***
Paducah, Ky.: Schroeders

Husfloen, Kyle (ed.)
1994 ***Antique Trader Books pottery and porcelain: ceramics price guide: an illustrated comprehensive price guide to all types of pottery and porcelain, American and foreign.***
Dubuque, IA: Antique Trader Books

Kamm, Dorothy,
1997 ***American Painted Porcelain: Collector's Identification and Value Guide.***
Paducah, Ky.: Collector Books

Kilgo, Garry and Dale Kilgo
1991 ***A Collector's Guide to Anchor Hocking''s "Fire-King" Glassware.***
Addison, Ala.: K and W Collectibles

Newbound, Betty and Bill Newbound
1995 ***Collector's Encyclopedia of Milk Glass: Identification and Value Guide.***
Paducah, KY: Collector Books

Polak, Michael
1994 ***Bottles: Identification and Price Guide.***
New York: Avon Books

Schroeder, Bill
1970 ***1,000 Fruit Jars Priced and Illustrated.***
Paducah, Ky.: Schroeders

Raycraft, Don and Carol Raycraft
1995 ***American Stoneware.***
Radnor, PA: Wallace-Homestead Book Co.

Weatherman, Hazel Marie
1974 ***Colored Glassware of the Depression Era 2.***
Springfield, Mo.: Weatherman Glassbooks

Whitmyer, Margaret and Kenn Whitmyer
1994 ***The Collector's Encyclopedia of Hall China.***
Paducah, KY: Collector Books

Toys

Bagdade, Susan D. and Al Bagdade
1990 ***Collector's Guide to American Toy Trains.***
Radnor, Pa.: Wallace-Homestead Book Co.

Baumann, Paul
1990 ***Collecting Antique Marbles.***
Radnor, Pa.: Wallace-Homestead Book Co.

Davis, Greg and Bill Morgan
1999 ***Collector's Guide to TV Toys and Memorabilia: 1960s and 1970s.***
Paducah, Ky.: Collector Books

Kurtz, Henry I. and Burtt R. Ehrlich
1987 ***The Art of the Toy Soldier.***
New York: Abbeville Press

Olds, Patrick C.
1999 ***The Barbie Doll Years: A Comprehensive Listing and Value Guide of Dolls and Accessories.***
Paducah, Ky.: Collector Books

Polizzi, Rick.
1995 ***Baby Boomer Games: Identification and Value Guide.***
Paducah, KY: Collector Books

Young, Mary
1984 ***A Collector's Guide to Paper Dolls: Second Series.***
Paducah, Ky.: Collector Books

Photography: History and Culture

Hartley, W. Douglas
1994 ***Otto Ping: Photographer of Brown County, Indiana, 1900-1940.***
Indianapolis: Indiana Historical Society

Horan, James David
1955 ***Mathew Brady, Historian with a Camera.***
New York: Crown Publishers

Jackson, Nancy
1997 ***Photographers: History and Culture through the Camera.***
New York: Facts on File
(Juvenile Nonfiction)

Kavanagh, Thomas W.
1995 "More Than Meets the Eye: Photographs as Research Documents."
Bloomington, In.: William Hammond Mathers Museum, Occasional Paper Series: ***Reading Photographs.***

Kavanagh, Thomas W.
1996 ***American Indian Portrait Photographs: Photographs from the Wanamaker Expeditions.***
New York: Konecky and Konecky

Neidich, Warren
1989 ***American History Reinvented: Photographs.***
New York: Aperture

Sandler, Martin W.
1989 ***American Image: Photographing One Hundred Fifty Years in the Life of a Nation.***
Chicago: Contemporary Books

Sullivan, George
1994 ***Mathew Brady: His Life and Photographs.***
New York: Cobblehill Books
(Juvenile Nonfiction)

Wakin, Edward
1993 ***Photos That Made U.S. History.***
New York: Walker
(Juvenile Nonfiction)

Wilson, Jackie Napolean
1999 ***Hidden Witness: African-American Images from the Dawn of Photography to the Civil War.***
New York: St. Martin's Press

Photography: History and Technology

Gilbert, George
1976 ***Collecting Photographica: The Images and Equipment of the First Hundred Years of Photography.***
New York: Hawthorn Books

Lemagny, Jean-Claude and Andre Rouille, editors
1987 ***A History of Photography: Social and Cultural Perspectives.***
Cambridge: Cambridge University Press
Translated by Janet Lloyd

Mace, O. Henry.
1989 ***Collector's Guide to Early Photographs.***
Radnor, Pa.: Wallace-Homestead Book Co.

Matanle, Ivor
1986 ***Collecting and Using Classic Cameras.***
London: Thames and Hudson

Mathews, Oliver
1973 ***Early Photographs and Early Photographers: A Survey in Dictionary Form.***
New York: Pitman

Web Sites

Web site addresses are not as stable as book citations. These sites are associated with enduring institutions.

Objects:

The Smithsonian's education web site offers lesson plans using objects and stories and archaeological analysis:
educate.si.edu/resources/lessons/

Louisiana Voices is an educational site that provides lesson plans on folklore including on material culture:
www.crt.state.la.us/folklife/edu_home.html

Photographs:

Frank Hohenberger photographs of rural Brown County in can be seen on IU's Lilly Library web site:
www.dlib.indiana.edu/collections/

This Library of Congress site has Civil War photographs:
rs6.loc.gov/ammem/cwphome.html

National Archives and Records Administration's site:
www.nara.gov/education/classrm.html

Commercial site has information on old photographs types:
www.classyimage.com/picdate.htm

Minneapolis Institute of Art offers images and commentary from 20th century photographers:
www.artsmia.org/get-the-picture/

George Eastman House timeline of photography:
www.eastman.org/5_timeline/5_index.html

Section 12 Notes

1. Gilborn, Craig. "Pop Pedagogy: Looking at the Coke Bottle," ***Museum News*** XX (1968): 12-18, p. 13.

2. Common Core State Standards. 2011. http://www.corestandards.org/the-standards/english-language-arts-standards/reading-informational-text-6-12/grade-6/ (accessed 03 22, 2012).

3 Randhawa, B. S. & Coffman, W. E. Visual Learning, Thinking, and Communication. New York: Academic Press, 1978 in Flattley, Rita. Visual Literacy. 1996. http://ecc.pima.edu/~rflattley/Student%20Pages.htm (accessed 3 23, 2012).

4. Birney, Barbara. "Criteria for Successful Museum and Zoo Visits: Children Offer Guidance," ***Curator*** XX 1988): 292-316, p. 298.

5 Fleming, E. McClung. "Artifact Study: A Proposed Model," ***Winterthur Portfolio*** 9 (1974): 153-173.

6. Schlereth, Thomas J. (editor). "Introduction" to E. McClung Fleming, "Artifact Study: A Proposed Model," in ***Material Culture Studies in America.*** (Nashville, Tenn.: American Association for State and Local History, 1982), p. 162.

7. Though Fleming's essay is presented in a condensed format in Schlereth's 1982 edited volume, the original contains a detailed analysis of one object (an early American court cupboard) that illustrates just how much information can be extracted from an artifact.

8. Kavanagh, Gaynor. "Objects as Evidence, or Not?" in ***Museum Studies in Material Culture***, Susan M. Pearce, ed. (London: Leicester University Press, 1989), 125-137, p. 128.

9. Kavanagh, Gaynor. "Objects as Evidence, or Not?" in ***Museum Studies in Material Culture***, Susan M. Pearce, ed. (London: Leicester University Press, 1989), 125-137, pp. 128-130.

10. Reynolds, Barrie. "Material Systems: An approach to the study of Kwandu material culture," in ***Material Anthropology: Contemporary Approaches to Material Culture,*** Barrie Reynolds and Margaret A. Stott, eds. (Lanham, MD: University Press of America, 1987), 155-187.

11. Lynn, Catherine. ***Wallpaper in America: From the Seventeenth Century to World War I***. (New York: W.W. Norton, 1980).

12. Ward, Barbara McLean, and Gerald W.R. Ward, eds. ***Silver in American Life: Selections from the Mabel Brady Garven and Other Collections at Yale University*** (New York: American Federation of Arts, 1979).

13. Riebero, Berta G. "Visual Categories and Ethnic Identity: The symbolism of Kayabi Indian basketry (Mato Grosso, Brazil)," in ***Material Anthropology: Contemporary Approaches to Material Culture,*** Barrie Reynolds and Margaret A. Stott, eds. (Lanham, MD: University Press of America, 1987), 189-232.

14. The Mathers Museum's outreach presentation, "Hausa Material Culture and Environment," explores these issues with hands-on objects and slides of rural life in northern Nigeria.

15. This means that vision-impaired students cannot participate in the same direct way as they can in the study of objects, but this can be balanced by the opportunity for other students to sharpen their description skills while sharing information with their vision-impaired classmates.

16. There are many excellent references on the history and technology of photography. Basic information can be obtained from any good encyclopedia, or you can consult more specialized works such as ***The Focal Encyclpedia of Photography*** (New York: Macmillan, 1983) and ***The History of Photography from the Camea Obscura to the Beginning of the Modern Era*** by Helmut Gernsheim (New York: McGraw-Hill, 1969).

Teaching with Objects and Photographs:

Teacher Resources

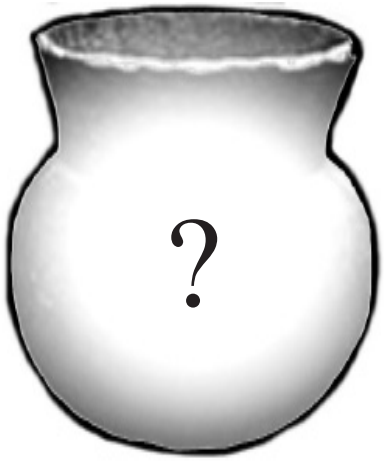
Learning from Objects

Description:

What is this object?

Use the evidence of your **senses** and the **knowledge** you already have of similar items to describe the object.

- material? size? shape?
- color? weight? decoration?
- how was it made? how was it used?
- where is it from? who could have made it?
- who could have used it?

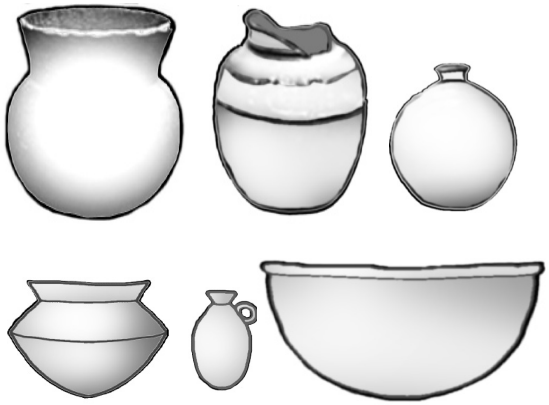


Classification:

How does this object relate to others?

Use your senses and your knowledge to **compare** and **contrast** the object with others.

- how is the object similar to others?
- how is it different?
- are some similarities and differences more important than others?
- which traits are most important when relating the object to others?

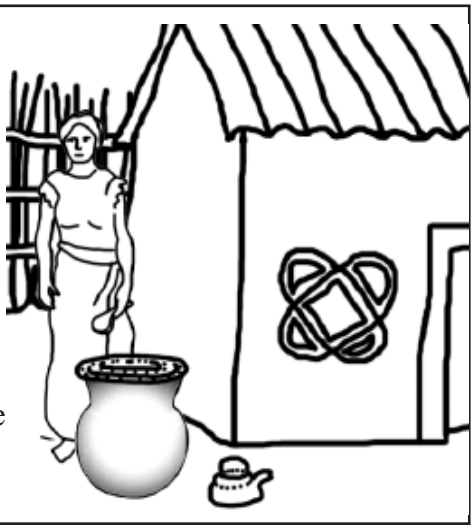


Interpretation:

What stories does this object tell?

Objects tell many different stories. What are some of the stories this one can tell?

- what does the object tell us about how its makers relate to the natural environment?
- what does it tell us about how the people who use it organize their lives?
- does the object have a story to tell about the beliefs of the people who make or use it?



Lesson Plans

All of the lesson plans presented here are based on the conviction that teaching is successful when students are given both the necessary tools and the opportunity to begin generating their own questions.

The lessons each leave room to encourage students to play a leading role in developing research questions and pursuing investigations.

Object Lesson Plans (1-4)

Lessons 1, 2, and 3 build from one to the next, while Lesson 4 uses the skills developed in the first three.

Objects to use in these plans can be collected by the teacher. We provide a list of suggested items on the next page, to get you started. A small number of sets of objects are also available for short-term loan from the Mathers Museum's hands-on educational collection. Call 812-855-6873 for information or email museumed@indiana.edu.

Photograph Lesson Plans (5-8)

Photo lessons are an excellent means to teach history, particularly for grades four and up as students take on more formal historical studies.

Lesson 5 is a good introduction to learning from photographs, and can be followed by lessons specific to different historical time periods or places.

Lessons 6, 7, and 8 make use of photographic images found in the collections of the Mathers Museum of World Cultures. The small reproductions produced here are for reference purposes only, as they do not carry enough detail for meaningful study. Packets of these images are available from the museum, for short-term loan or purchase. Call the museum at 812-855-6873 for information.

Lesson 8 explores a volatile subject, and you will want to be sure you allow enough time to sort through the issues it raises.

Object Collection

These items can be used in Lessons 1, 2, and 3:

- For Lesson 1, you may want to use only part of this list.
- For Lesson 2, the **range** of items is of critical importance.
- For Lesson 3, you'll only need the objects chosen for interpretation, but the whole collection should be available for reference, at least as a written list.
- When working with younger students, you may want to use a smaller version of the collection.

Suggested items:

1. plastic food storage container (Tupperware, Rubbermaid, etc.)
2. wooden mixing spoon
3. plastic mixing spoon (of same basic shape as wooden one)
4. metal serving spoon
5. small number of playing cards representing different suits, values, and decks
6. broken toy
7. metal box, such as for holding tea , mints, or bandages
8. internal part for a small engine or appliance
9. plastic jump rope
10. wooden-handled jump rope
11. length of string, yarn, or rope
12. plastic cup from a fast food restaurant
13. ceramic pet's food dish with a name on it
14. stone arrowhead
15. handkerchief
16. baseball cap with a sports logo on it
17. dollar bill
18. some coins, preferably from both the U.S. and another country
19. postage stamp (any country)
20. child's decorative sticker
21. rubber float from toilet mechanism
22. paint color cards showing variations of one color (from paint store)
23. wooden paint stirring stick (also from paint store)
24. paint brush (house painting size) or roller cover
25. used paint rag

You can see that many of these items are related by **function** or by general **shape**. There should also be a mixture of **colors** represented, for instance so that green is represented by a Tupperware container, dollar bill, paint color card, and baseball cap. You'll develop your own favorites over time!

Note: These are all items that might be found in an American family home; the only "exotic" item—the arrowhead—is one that many midwestern U.S. families might have in their possession. The reason for including an arrowhead is for contrast, and to make that point that **all of these items are artifacts** though at first kids might assume that only the arrowhead is a "real" artifact. This helps underscore the (unromantic!) fact that anthropologists can learn a great deal from the ordinary debris of everyday life. If you don't have an arrowhead, you could make this same point by substituting an item from another culture or time period. If you do include an arrowhead or other archaeological artifact, please consult the statement on "Archaeological and Cultural Context" found in section 9.

Lesson Plan 1	**Description**

Grade: Appropriate for all grade levels.

Time: One to five class sessions, depending on number of items collected for observation:
First session: Activities 1 and 2
Second session: Activity 3; start Activity 4
Third session: Complete Activity 4
Fourth session: Activity 5
Fifth session: Activity 6

Objectives:

1. Develop observational and reasoning skills:
- **a)** Increase students' sensory literacy.
- **b)** Develop the ability to verbally describe the evidence of the senses.
- **c)** Develop understanding of levels of prior knowledge.
- **d)** Learn to differentiate forms of evidence.

2. Communicate observations using descritive writing and proper writing conventions.

3. Expose students to some general concepts important in the study of cultures.

4. Provide experience necessary to study objects from other cultures and historical periods, for application in the classroom or on visits to museums.

Materials:

A collection of objects, most of them common and recognizable. Using a variety of objects of different materials, uses, shapes, colors, sizes, ages, and places of origin is important for this lesson. The list provided ("Object Collection") could be used for both Lesson 1 and Lesson 2, or you could use only a portion of it in Lesson 1. An alternative is to ask students to bring common, inexpensive objects from home.

Zip lock bags. Putting each item in your collection into a zip lock bags helps formalize the process: the objects are likely to be treated with more respect if they've been isolated in this way, and it also avoids confusion (if any of your objects are items that might normally be found in the

classroom). Numbering each bag with indelible marker helps keep track of them, and keys each description to a particular item.

Paper and pencils (depending on age level). Pencils are recommended over pens, as they are less likely to leave marks on the objects—this is real museum practice, as well as helpful for preserving your own teaching collection.

Copies of object description forms (optional: see Activity 3)

Magnifying glasses, rulers, protractors, calipers, scales (optional). These or other examining and measuring devices can be used.

Preparation:

There should be clear table or desk space available for examining the objects. You might want to have the students work in pairs or in teams.

Activities:

Activity 1) You can start the lesson with very little preliminary explanation. If you want to give a "real world" context for the lesson, you can announce that the class will be acting in the role of museum curators. (Curators evaluate and care for museum collections.) Your museum has been given a collection of items, and it is the job of the curators to examine and describe them.

Activity 2) Place the objects at work stations around the room. Let the students examine the objects for a short time, reminding them to keep each object with its bag, though allowing them to remove and handle them. (If the students have provided the objects, require them to describe objects other than the ones they brought.) Have a timer set so students progress through work stations, for instance allowing students three minutes at each work station. After each student has seen all artifacts, briefly discuss each artifact in general terms.

Activity 3) Using one object as an example, work through with the entire class the procedure of making observations. Start by asking the class to talk about what they've observed about this object. With younger kids you'll hear lots of specific information and possibly speculation about the objects, but the purpose of this stage of the exercise is to articulate the various **categories of observation**. You might want to write these on the board as the group discusses them. The class will probably name all relevant categories; you may need to supply some for younger kids. Ask them for the **sources of knowledge for each category**. After you've developed these together, you can let them know that a curator's first job is to record those observations he or she can learn directly from the object, based on the senses, prior knowledge of materials, and so on, and this phase is what you will be focusing on with this exercise. The list you develop will probably look something like the "Categories of Observation" chart shown on the next page.

You might want to draw up (or have a student draw up) a blank information form at this juncture that can be photocopied for use with each object. Once again, this parallels museum practice, in which standard information is recorded for every object. Creating the form in collaboration with the students helps them know that they *do* have the skills and knowledge necessary for the exercise, and this can help establish a sense of purpose. You could also use the "Object

Information Form" (for older students) or "What Is This Object?" form (for younger ones), found in the back of this booklet.

Example of items to include: **Item Number**; **Material**; **Appearance; Manufacture Method**; **Date of Manufacture**; **Place of Origin**; **Description**. You may also want to leave space for **Notes**, to record observations or special information, such as any inscriptions or markings on the object. A **Drawing** can be attached or made on the back. It's effective to have the most obvious observation, **What Is It?**, listed last, because it depends on the other information.

Activity 4) Give each student or group time to fill out an information sheet for one item as fully as they can. In this part of the exercise, figuring out what they **don't know** about the objects is as important as writing down what they do know. When a student or group is baffled by a category, such as method of manufacture, you could call on the expertise of the entire group to discuss it. If no one can answer the question, explore ideas on how you could find out the answer. Possible resources are encyclopedias, books, the Internet, or calling on outside experts. This can lead to further research, especially with older students, but at the very least it reinforces ideas on how to conduct research.

Activity 5) Game: What Am I? Students can exchange their written descriptions of objects, to see if another team can accurately match their description with the specific object. This exercise helps emphasize the challenges of "translating" an object into words, and will help the students develop more precise description skills.

Activity 6) Hold a general discussion of what you've learned about the **process** of examining objects, and what you've learned from the **objects themselves**. For this last part, you may want to focus on large concepts: Which of these items are made of natural materials? How many of them could a person make by hand? What are their known countries of origin? These are the kinds of questions anthropologists and others studying culture ask, and addressing them even briefly here will begin the process of thinking about how cultures relate to their environment, how their economies are run, how they relate to other cultures, and what kinds of values they hold. You might close by asking what **other methods** the students could imagine using to learn more from the objects themselves, setting the stage for further lessons.

Activity 7) If I Could Talk: If objects could talk they would have a lot of stories to tell. Students could write a short story or create art from the perspective of the object they studied. (Ex. Just last week I was up to my handle in hot water. You see, I'm a spoon and I spend a lot of time in soup. Thank goodness I'm wooden or I would have melted last week when the cook left me really close to the burner...)

Categories of Observation	
Observation	**Sources of Knowledge**
material: what is it made from?	•senses •prior knowledge
size: how big is it?	•senses and measuring tools (rulers, scales, etc.)
form: what is its shape?	•senses
appearance: color, texture, etc.	•senses
manufacture: how was it made?	•senses •prior knowledge •research (patent numbers, catalogues, etc.)
age: how old is it?	•prior knowledge •research
origins: where is it from?	•senses •prior knowledge •research
use: what's it for?	•prior knowledge •research

Lesson Plan 2	**Classification**

Grade: Appropriate for all grade levels.

Time: One to two sessions.
First session: Activities 1 through 4.
Second session: Activities 5 through 7.

Objective:

Encourage concept learning by developing classification systems, evaluating relative importance of different characteristics.

Materials:

Collection of everyday objects. This assemblage should be designed so that the items can be classified in many different ways (see suggested object list). Objects should plausibly be found within an American family home.

List of artifacts in the collection (enough copies for whole class). This can be supplemented with description sheets, if the same artifacts were used in Lesson 1.

Paper and pencils

Preparation:

It helps to have a central table or other display area, readily accessed from several different work areas (groupings of desks or tables and chairs). This lesson works well with students working in groups of three or four.

Activities:

Activity 1) Explain that **classification** is simply a way of organizing things into separate groups, based on something every item in the group **has in common**. You can give some examples using familiar ideas, such as animal classifications (birds, mammals; horses, dogs, and cats) or weather categories (cold, hot; rain, snow, fog, sleet). Similarly, the collection of objects before them can be classified or organized into different groups or **categories** of objects.

With this very limited introduction, ask each group of students to classify the materials. They can work from the list, but should be free to examine the objects. You may want to have each group inspect the objects in turn, to avoid congestion at the display area. Ask the groups ***not*** to

consult with one another while creating their classifications. They **must include every object** in their classification schemes.

Activity 2) After each group has developed a classification for the objects, have the groups present their ideas to the class, explaining what characteristics they used to separate objects into categories.

Activity 3) Ask the students to go back to their groups, and have each group develop a new classification, that is not like any other yet developed by any of the groups. Each group then presents its additional classification scheme. Some may become pretty fanciful, but this exercise serves to get the students thinking creatively about classification.

Activity 4) Discuss the results of the class's efforts. You might want to compile a list during the presentations, recording the chief criteria used by each group for its classification. Some of the criteria they may have chosen are: use, material, method of manufacture, shape, color, age, place of origin, or size. The students can brainstorm from the list, asking whether there are yet other criteria that could be used to classify the objects. This should be wide-open and imaginative, even if it results in some goofy kinds of ideas (smell; or whether the object can be juggled; the letter its name starts with; even the second letter of the complementary color of the object).

Activity 5) Game: **Name that Category!** Put the objects together in categories and ask if the students can guess what criteria you are using for your groupings. You could also have the students do this in teams, and guess each others' criteria.

Activity 6) Ask the students: what is the usefulness of each of these types of classification? Why would you want to classify these objects by their function? Why would you want to classify them by where they are from? etc. The purpose here is to explore the idea that **how you classify things depends on what you want to learn from them.** Sorting objects by function is useful if you wish to know how a culture accomplishes its daily tasks. Sorting objects by material can give information about how a culture relates to its natural environment. Sorting objects by color might tell you something about the aesthetics of a culture. Sorting objects by the initial letter in their names could be useful if you were planning to write an alphabet book!

Activity 7) Wrap up by letting the students reflect on what they've discovered about the possibilities and learning potential of classification.

Lesson Plan 3	**Interpretation**

Grade: Upper elementary through high school; can be adapted to lower elementary by using whole class inquiry and discussion.

Time: One to two sessions.
First session: Activities 1 through 3.
Second session: Activities 4 through 6.

Objectives:

1) Learn to reason from various forms of evidence.
2) Promote scientific inquiry by framing research questions and exploring results.
3) Learn and practicing skills needed to study other cultures and historical periods.
4) Learn about the importance of context in research.

Materials:

Three spoons: a wooden mixing spoon, a plastic mixing spoon, and a metal serving spoon.

Preparation:

Organize the students into small groups.

Activities:

Activity 1) Provide the students with a **context** for the object. Example: These objects were found in a house in Illinois, in a kitchen drawer. Tell the students that they will be exploring the question, **"What can we learn about the culture of the people who lived in this house, just by studying these objects?"**

Reviewing the types of descriptive observations made in Lesson 1 and the different criteria used in the classification exercise in Lesson 2 will help give them clues to answering this question. Different ways of looking at the objects will reveal different aspects of the culture that produced and/or used them. See chart on next page for listings of the types of information you can glean from different observations.

Activity 2) Ask each group of students to begin developing an answer to the question by considering each type of observation and the information it provides, making a list as they work. They should be as thorough and exploratory as possible. Thus, if they don't know exactly where the wooden spoon was made, they can consider the possibilities. (Such spoons for sale in Bloomington in 2001 are from China, Thailand, Taiwan, Finland, and Indiana). If they don't know exactly how it was made, they can consider different possibilities (hand carved, factory-made, made from a mold).

Categories of Observation	
Observation	**Information provided**
material: what is it made from?	•the culture's relationship with the environment
form: what is its shape?	•cultural or individual taste
appearance: color, texture, etc.	•cultural or indiviudal aesthetics •relationship to the environment (are the coloring agents natural or human-made?)
manufacture: how was it made?	•the culture's economy
age: how old is it?	•economic status of individuals •cultural or individual values (are things treasured or trashed?)
origins: where is it from?	•the culture's relationship with other cultures •the economic status of the object's owners •the culture's place iwthin the world economy
use: what's it for?	•cultural activities

Activity 3) Each group can now compose an **interpretation** of the three objects, based on the list of observations and information they've created. An interpretation is a story that helps explain the collection in understandable terms. You can guide them in this by posing these questions:

•Why were these spoons found in a kitchen drawer?
•What are they shaped the way they are?
•What does it mean that each is made of a different materials?
•What can you learn from the origins of these items?
•What can you learn about the way the people who used these items related to the natural environment?
•What can you know about the people who live in the house?

Activity 4) The groups each present their interpretations, and the class compares and contrasts them. Some of the stories may be farfetched; ask the class to evaluate each others' interpretations based on how well they reflect the evidence (rather than their creators' imaginations).

Activity 5) Present an anthropologist's interpretation of the spoons:

a) The owners of these spoons took part in a global economy, based on the origins of the spoons and their raw materials. This participation is taken so much for granted, that we, as members of this culture, rarely ask where something was made, or by whom, or how.

b) The culture that uses these spoons has the ability to value both tradition and innovation, based on the presence of the various materials. Wooden spoons have been around in our culture for centuries; stainless steel, for perhaps 100 years; plastic only for about 50. This is an example of how cultures *accumulate* technology, rather than simply replacing an earlier method with the latest one.

c) The owners' culture relies on mass production of goods for everyday use. Not just the spoons, but none of the items in the collection suggested for use in Lessons 1 and 2 are hand made (with the exception of the arrowhead, which is from another time period and culture).

d) The culture has a distant relationship with the natural environment. The only naturally-occurring material used in the spoons is wood, and it is very likely that the wooden spoon's owner does not know what kind of wood it is, where it was grown, or how the spoon was made.

e) Examining the forms of the spoons suggests that this culture does not value ornamentation, but rather favors a "streamlined" look in their utensils.

Activity 6) Ask the groups to come up with a different scenario for the objects that would change how they are interpreted. For example, a jar of peanut butter in a kitchen cupboard is one thing, a peanut butter jar filled with nails in the garage is something different!

Activity 7) Conduct a wrap-up discussion by asking what they've discovered about the value of studying everyday objects. You might want to create a list for future reference, perhaps to look at before visiting a museum or studying a historical period.

Lesson Plan 4	**Exploration**

Grade: Appropriate for all grade levels.

Time: Two to three sessions:
First session: Activities 1 and 2.
Second session: Activity 3; begin Activity 4.
Third session: Complete Activity 4.

Objectives:

1) Build on expertise created in previous lessons by applying the same techniques to objects from another culture or another time period, depending on the aims of your general curriculum.

2) Allow students to devise their own research questions about cultures, and investigate them using the skills they have acquired through working with objects.

Materials:

Objects from another culture or time period. It is best to have several items from the same culture or time period, so that a more complete picture of the material culture can be developed. See Section 4 for ideas on where to find items to use.

Object description forms. As we learned in Lesson 1, it is easier to compare and contrast objects and to think of new questions to ask about them when we organize our information in clear categories. The "Object Information Form" (for older students) and "What Is This Object?" form (for younger ones) are found in the back of this booklet.

Preparation:

Lessons 1, 2, and 3 will prepare students to analyze objects from other cultures and eras. This lesson works best as an element in a larger curriculum designed to explore a particular culture or culture area or period in history.

Activities:

Activity 1) Description Follow the same steps suggested in Lesson 1, working through the various categories of observation such as material, size, form, method of manufacture, age, place of origin, and function. The answers to some questions can be obtained through sensory exploration, although it is likely that you will need to supplement direct observation with additional information.

Activity 2) Classification After creating a basic description of the objects, ask the students to figure out the various ways in which the set of objects can be categorized, using the different observations they have made as alternate criteria for classification.

Activity 3) Interpretation Ask the students what story they can tell about this culture, based on these objects. Does the collection feature handmade items, or those that are mass-produced? Are the materials used natural or human-made? Do the objects feature a great deal of decoration, or are they relatively plain? Is the use of color bold or subtle? Are the objects used in everyday activities, or are they for special occasions or ceremonies? By answering these questions and others of this sort, students will be able to see more in the objects than simply a collection of unusual and exotic items.

One of the most effective strategies to use in interpreting objects from another culture or from our past is to **compare and contrast** that culture with our own. Invariably there will be points of common ground, and these are very useful in establishing a picture of the other culture. This exercise will also help students understand that people in all time periods and geographic regions have been faced with the same basic human needs, including the need for food and shelter, the need to create and maintain a social order, the need to seek and find meaning in daily life. How they have met these needs varies from culture to culture, but we all share the needs themselves.

Activity 4) Game: Creating a Culture (Optional for upper elementary or older.) Teams of students develop their own "culture" and assemble a set of objects that they think reflect its environment, economy, aesthetics, technology, religion, social organization, or other characteristics. This activity might best be started during one session, and completed the next day, allowing students to bring objects from home if necessary. Have each team write down a list of cultural characteristics revealed by the objects. Student teams then trade objects, so that a new team can analyze each set of objects and attempt to describe the culture. Their interpretations can then be compared with description written by the creating group, and alternative interpretations discussed.

Lesson Plan 5	**Family Photos**

Grade: Appropriate for all age levels.

Time: Two to three class sessions:
First session: Activities 1 and 2
Second session: Activities 3 and 4
Third session: Activity 5

Objectives:

1) Develop observation and reasoning skills:
  a) Develop good verbal description skills.
  b) Practice classification.
  c) Learn to build chronologies (time-lines) based on visual clues.
2) Learn to "read" photographs.

Materials:

Photographs collected from students

Paper and pencils

Tape or pins

Copies of photograph description forms (optional: see Activity 1)

Preparation:

Ask each student to bring a photograph from their home, one that does NOT feature themselves. Encourage them to bring older photos from their family, if they are available (and have permission to do this). Ask them please to not show their photos to each other, or to indicate which is theirs during the activities.

Activities:

Activity 1) Description

a) Distribute the photos among the students, making sure than no one gets their own photo.

b) Have students write down basic information about the photos. They should include descriptions of the elements in the photo (people, furniture, animals, objects, etc.). You may wish to provide students with the one of the forms included at the end of this booklet ("Photograph Information Form" for older students, "What Is This Photograph?" for younger ones.) It can be valuable to let them figure out their own observation categories before handing out the form.

c) Ask each student to write a full description of the subject of the photo (or be ready to share one aloud, for younger students), based on the information they've noted.

Activity 2) Name That Photo! Collect the photos and the descriptions, and pin or tape up all the photos so that everyone can see them. One at a time, read the descriptions (or ask younger students to describe aloud) and see if the other students can guess which picture is being described. This is a fun way to discover that descriptions have to be to very specific and detailed in order to accurately portray an image in words.

Activity 3) Classification Working as a group, try sorting the photos into different categories. Some may be school pictures, others are from sports events, birthday celebrations, travel experiences, etc. Talk about how the qualities of the pictures differ among the categories: school portraits are usually more formal; travel pictures may not feature people as much as landmarks; birthday photos often focus on the honoree. In fact, these are the elements that allow us to categorize pictures we've never seen before.

Activity 4) Time-Line See if the group can place the photos into a chronological order. You can do this as a time-line, physically placing the photos in the order in which the class thinks they were taken. (Many may date from approximately the same era, so you can instead group them by decade if this looks more feasible.) Factors to look at in this exercise are the film technology (color or black and white, for instance), clothing styles, and sometimes dates written on the picture.

Activity 5) Interpretation Ask each student to identify the photo they brought, and to tell whether the class correctly identified its general subject (travel photo, wedding picture, etc.) and its date. You can wrap up with discussions about how much you can learn from these photos, and what kinds of supplemental information you may need to understand a photo properly.

Lesson Plan 6	**Jackson Market**

Grade: Appropriate for upper elementary through high school; early elementary students could do Activities 1 and 2, and could be led through Activity 3 with information and cues supplied by the teacher.

Time: One to two class sessions:
First session: Activities 1 and 2
Second session: Activity 3

Objectives:

1) Learn to "read" photographs.
2) Explore change and continuity in American culture.

Materials:

A print of the **Jackson Market** photograph showing the exterior of a small food market, dating from the mid-20th century. The photo is from the Mathers Museum's Shaw-Starks Collection of historic Bloomington photographs.

Copies of photograph description forms.

Mathers Museum Shaw-Starks Collection (73-11-0291)

Note: This small reproduction does not carry enough detail for study. Call the Mathers Museum at 812-855-6873 for information on borrowing or purchasing a print of the photo.

Preparation:

Lesson 5 or other experience in describing and interpreting photographs. You may wish to have students work in small groups of three to five for this lesson.

Activities:

Activity 1) Have students fill out a description form as completely as they can, and then have each group of students write a description of the photograph, using the information from the form.

Activity 2) As a class, compile a description of the photo from the results of each group's work.

Some features to note:

Material.
-This is a black and white photo with some damage to negative in upper left corner.
-The photo is overexposed around the top, left side, and bottom (what effect does this produce?).

Subject: People.
-Boy in overalls is wearing no shoes.
-Truck driver appears to be wearing a hat.

Subject: Objects.
-The truck shows the phone numbers "301" and "207." (When were phone numbers of just three digits used in Bloomington?)
-The produce in front of the store looks as though it is could be locally grown (no tropical produce).
-Various goods can be seen through the store window, including cans and bottles.
-Some of these goods appear to be on high shelves.

Subject: Setting.
-"Jackson's Grocery and Meat Market," located in a brick building with plate glass front windows.

Subject: Activities.
-The man sitting in the truck and the boy standing alongside it may be delivery staff, preparing to take grocery orders to customers at their homes.

Date.
-When might the delivery truck date from? (1930s)
-The produce (melons and beans) combined with the leaves on the trees suggest which season? (Middle to late summer)

Activity 4) Tell the students what is known about the photograph: It was taken in Bloomington, probably in the 1930s. Jackson Market was probably located on Atwater and Woodlawn, where there is currently a "Subway" store. It represents a typical grocery store from the first half of the 1900s: small, with limited goods and personal service (delivery truck & high shelves are clues to that in this photo).

Activity 5) Ask students to consider how the American grocery shopping experience has changed over the past 50 years, and what has remained the same.

Some major points of difference:

a) Size: The store in the photo is much smaller than typical grocery stores today.

b) Level of service: Delivery, plus individual help inside store (such as getting items from tall shelves).

c) Product choice: Availability of locally grown produce in 1930s; was any imported produce available?

d) Size of businesses: The Jackson Market was a independent store, very different from the large chains such as Kroger and Marsh that operate today, with hundreds of stores in many states. (Chains were present in the 1930s, but they weren't as widespread and the stores were small, there was a Kroger store on the west side of Bloomington's downtown square.)

e) Packaging: None of the produce in the photo is wrapped or packaged.

Some major points of similarity:

a) Packaging: The cans and bottles shapes and sizes are similar to those available today.

b) Retail store setting: Indoor facility, with fixed prices (vs. open air market, prices negotiable).

c) Marketing: Truck legend suggests advertising was used similarly to the way it is today; can and jar labels visible through the window suggest that brand recognition was used as a marketing tool as it is today.

Lesson Plan 7	**Native American Photos**

Grade: Upper elementary through high school. Lower elementary students can make observations, but discussions will need to be well guided by the teacher.

Time: One to three class sessions:
First session: Activity 1
Second session: Activities 2 and 3
Third session: Activities 4 through 6

Objectives:

1) Learn to "read" photographs.

2) Explore Native American and European American cultural relations.

Materials:

Prints of the ten photographs shown on the next page, from the Mathers Museum's **Wanamaker Collection** of Native American photographs

Copies of photograph description forms

Preparation:

Lesson 5 or other experience in describing and interpreting photographs. Students work in seven groups for this lesson. Use the first seven photographs shown on the next page for Activities 1 through 4, *without* providing any information about the photos.

Activities:

Activity 1) Have student groups fill out Photograph Information Forms for Photos 1 through 7 as completely as they can, and then have each group write a description of the photograph, using the information from the form.

Activity 2) Ask each group to show the photo they have studied, and relate their description. Students from other groups may notice different aspects of the images based on what they have seen in the photos they worked with, so this can be a general discussion.

Features to note:

Subject: People.
The features of some of the people in the photos look to be Native American; this impression is strengthened by the articles of Native American style clothing worn as well as some of the settings.

Photos for description and discussion in Activities 1-4:

Photo 1.
Jim Battiste (W 3431)

Photo 2.
Mant Mundi (W 3429)

Photo 3.
Man on horse (W 1485a)

Photo 4.
Dixon and Blackfeet (W 2126)

Photo 5.
Crow Reservation house (W 229)

Photo 6.
Ursula Rock (W 298)

Photo 7.
Reservation dwelling (W 5777)

Photos to display during Activity 5:

Photo 8.
Men riding over a hilltop
(W 2671a)

Photo 9.
Men riding over a hilltop
(altered) (W 2671b)

Photo 10.
Dixon preparing to photograph
Blackfoot couple (W 4219)

Photographs from the Mathers Museum Wanamaker Collection.
Note: These very small reproductions do not carry enough detail for study. Call the Mathers Museum at 812-855-6873 for information on borrowing or purchasing prints of the photos.

Subject: Objects.
-Material culture items pictured (clothing, housing, transportation) show a mixture of traditional Native American and European American items.
-The shirt and possibly one of the necklaces shown in Photos 1 and 2 appear identical, but the photographs are of different men, and their other gear (headdresses, objects they are holding) are different.

Date.
-Few clues exist in the photos that could establish their dates. The European American style dress in Photo 4 suggests the early 1900s; the buggies or wagons seen in Photo 5 could be 19th century or early 20th century.

Place.
-Some of the traditional clothing in Photos 1, 2, 3, and 6 indicate a western U.S. origin for the photos.
-The tipis shown in Photo 7 also suggest a western U.S. setting.

Activity 3) Ask students to summarize what they can learn from the photographs as a collection.

Major points:

a) The Native Americans depicted seem to live with a combination of their traditional culture and European American material culture traits. In some pictures they are dressed in traditional clothing (Photos 1-3); in one, there are Native American men wearing European American style suits (Photo 4); in another, a woman is wearing clothing and accessories that appear to be a combination of traditional (footwear, necklace, belt) and European American (blanket, dress) (Photo 6).

b) There is some evidence that the Native Americans are not well off (shabby dwelling in Photo 7; unpainted house in Photo 5).

c) One of the pictures (Photo 3) is very dramatic and moody.

Activity 4) Ask the students who they think may have taken the photographs. A Native American photographer? What was the purpose of the photos?

Activity 5) Explain the context of this set of photos, and display the remaining three images. The photos were taken from 1908 to 1913 during the Wanamaker Expeditions, sponsored by the Wanamaker family, wealthy Pennsylvanian department store owners. During these expeditions, photographers traveled widely in the western United States, visiting Indian reservations and taking photographs. The work was organized by Joseph K. Dixon, who also served as lead photographer (he is pictured in Photo 4 and in Photo 10, in each case with his back to the camera). Dixon was convinced that Native Americans were a "vanishing race" and wanted to record details of their traditional life before they disappeared. This attitude is reflected most dramatically in Photo 3, which Dixon composed out of a photo taken during a staged event (the men riding over the hillside in Photos 8 and 9) and a separate photograph of a sunset. He called the combined image, Photo 3, "Sunset of a Dying Race." Contrasting Photos 8 and 9 shows the first step in Dixon's alteration of the original image. He's removed the figures nearest to the left foreground figure, beginning to create the mood of isolation essential to the composite Photo 3.

Other less obvious clues to Dixon's point of view are found in the photos. Photos 1 and 2 are typical of the images Dixon and his assistant photographers made of Native Americans, in that we see the subjects in what we assume to be their traditional clothing. We have to question this, though, when we note that the same items appear worn by different people. Did the shirt and necklace belong to either of the individuals pictured, or did the photographer provide them? It's also interesting to note that in the unstaged setting of Photo 4, the Native American men are wearing European American style suits and hats, presumably by choice.

In Photo 10, we see Dixon composing a photo of a Blackfoot couple, wearing traditional dress and standing in front of a tipi. Notice that out of Dixon's photo range, on the right side of the image, stands a Native American man wearing European American style trousers, shirt, suspenders, and hat. Photo 10 is a great illustration of Dixon's method and attitude, staging a scene that emphasizes the past, the traditional trappings of these "vanishing" people, while leaving a 20th century Native American literally out of the picture.

Activity 6) Wrap up the lesson with a summary of what the students have seen and learned. What does this information, combined with the photos themselves, tell us about relations between Native Americans and European Americans? There is evidence from the story of Dixon's working methods that European Americans may have a desire to romanticize Native Americans, and hold them frozen in time in their "traditional" modes; this is a form of stereotyping. There is also much evidence in the photos themselves that the Native Americans pictured participated in a complex culture, combining elements from their own traditions and European American practices. Important lessons here are that all cultures change over time; that sometimes these changes are in response to outside influences; and that changes can be voluntary or imposed.

Activity 7) Ask students to write an essay or create a drawing about the object. Essays can be very informative and interesting when written from the perspective of the object (ex. I'm a wooden spoon, just last week I was in hot water--I was up to my handle in soup! It is a good think I'm wooden and not plastic otherwise I would have melted when the cook set me on the stove while she did dishes.)

Lesson Plan 8	**Ku Klux Klan in Bloomington**

Grade: Grade 5 and up. Younger grades can study this photo if it is appropriate within their curriculum.

Time: One class session; be sure to allow enough time to adequately address the issues that this photo raises.

Objectives:

1) Learn to "read" photographs.

2) Explore the role of the Ku Klux Klan in Indiana history.

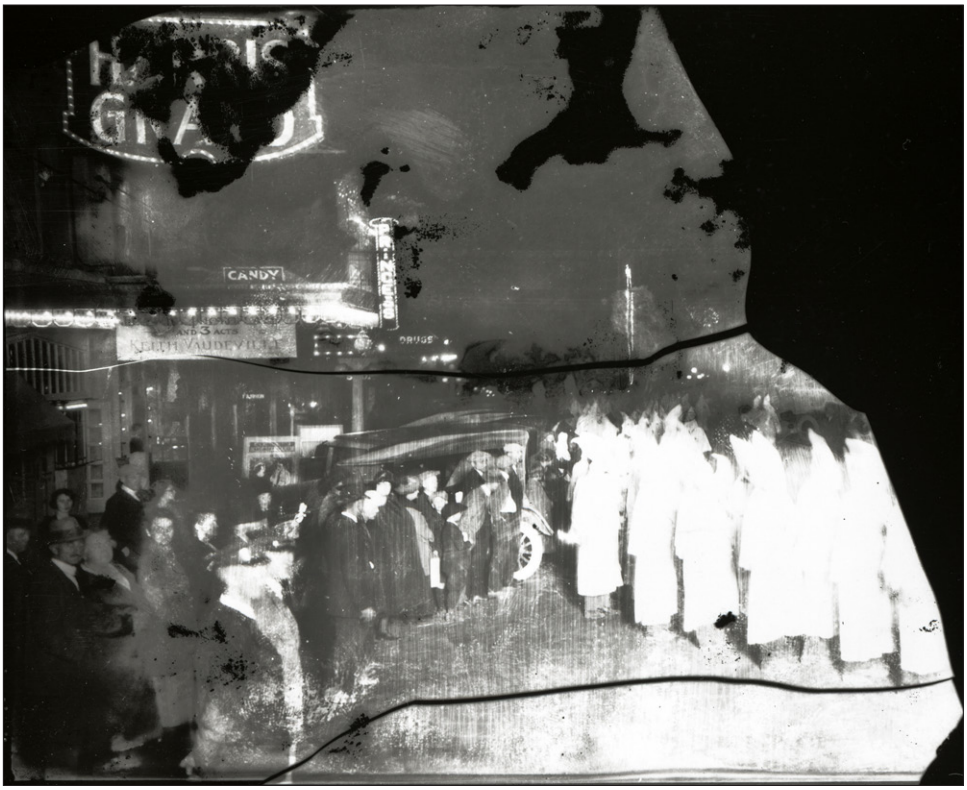
Materials:

A print of the photograph depicting a **Ku Klux Klan rally** in downtown Bloomington, ca. 1924. The photo is from the Mathers Museum's Shaw-Starks Collection of historic Bloomington photographs.

Copies of photograph description forms.

Preparation:

Lesson 5 or other experience in describing and interpreting photographs. You may wish to have students work in small groups of three to five for this lesson.



Mathers Museum Shaw-Starks Collection (73-11-0002)

Note: This small reproduction does not carry enough detail for study. Call the Mathers Museum for information on borrowing or purchasing a print of the photo.

Activities:

Activity 1) Have students fill out a Photograph Information Form for the picture, and then ask each group of students to write a description of the photograph based on the information they've observed.

Activity 2) As a class, compile a description of the photo from the results of each group's work. Features to note are:

a) The effect that the damaged negative has on the image; the tears and scratches on the film lend a murky quality to what is already a disturbing image.

b) The orientation of the two groups of people in the photo, with the Klan members in robes on the right, and the citizens in ordinary dress on the left.

c) The location of the photo, on a downtown street in front of a movie theater.

d) The time period is indicated by the dress of the crowd on the left; other clues rely on more specific knowledge (the existence of the Harris Grand Theatre, whose sign is partially visible, in the first half of the 1900s; the fact that the KKK was very active in Indiana in the 1920s).

e) The time of year and day are difficult to determine; the clothing would seem to indicate cool weather, but dress was more formal generally in the earlier years of the 20th century; the condition of the negative makes it appear that the photo was taken at night, but this may not be the case.

Activity 3) Ask each group of students to create an interpretation of the photograph. Contemplation of this photo is a powerful way to introduce the topic of the KKK's role in Indiana culture and politics. During discussion, there are several issues that will probably emerge, leading into more extensive explorations. These issues cannot be resolved by examining the photo; in fact, students often find that this picture gives rise to a number of questions they are then curious to pursue. A central element is often the relationship between the two groups in the photo, the Klansmen and the crowd. One interpretation is that the crowd are "counter-demonstrators" who are purposely on the scene to voice their opposition to the Klan's ideas. Another is that these people are present to show support for the Klan. A third is that the people are present by chance, perhaps because a movie just ended, and their presence indicates neither support nor opposition.

These questions offer a suitably ambiguous introduction to study of a troubling aspect of our history, the effects of which are of very active concern today. A fuller understanding of the role of the KKK in Indiana history should include analysis of the political influence of the group in the state, and consideration of the general prevalence of many voluntary associations, social clubs for men such as the Odd Fellows, Knights of Pythias, and the Masons, some of which featured elements of secrecy and ritual in their activities. Sources for placing the KKK of the 1920s into historical and cultural perspective include Kathleen M. Blee, ***Women of the Klan: Racism and Gender in the 1920s*** (Berkeley, California, 1991); M. William Lutholtz, ***Grand Dragon: D.C. Stephenson and the Ku Klux Klan in Indiana*** (West Lafayette, Indiana, 1991); and Leonard J. Moore, ***Citizen Klansmen: The Ku Klux Klan in Indiana, 1921-1928*** (Chapel Hill, North Carolina, 1991).

Object Information Form

Item Number

Material

Appearance

Manufacture Method

Date of Manufacture

Place of Origin

Description

Notes

Drawing (on back or on separate sheet)

What is it?

What Is This Object?

Item Number

What is it made of?

How was it made?

When was it made?

Where is it from?

What does it look like?

What else do you notice about it?

Drawing (on back or on separate sheet)

What is it? Who is it important to?

Using your senses!

What object is this?

What does it look like? What do you see?

What does it sound like? Does it make any noises?

What does it smell like? Does it have a smell?

What does it feel like? What textures can you feel?

How old do you think this object is? Why?

Where is the object from?

What is it? Why is it important? Who is it important to?

Photograph Information Form

Material ***Photo*** *(the thing)*

Subject ***Image*** *(the picture)*

People

Objects (clothes, cars, furniture, etc.)

Setting (indoors, outdoors, type of building, etc.)

Activities

Date	***Photo*** *(the thing)*	***Image*** *(the picture)*
Place	***Photo*** *(the thing)*	***Image*** *(the picture)*

Notes

What Is This Photograph?

What's in this photo?

Are there people? Who are they?

Are there buildings or cars or things ?

What is happening in the photo? Is it a special occasion?

What else do you see in this picture?

When was the photo taken?

Where was the photo taken?

What else do you notice about it?