



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
2003 Volume I: Geography through Film and Literature

Geography through Film: The Scale of Things

Curriculum Unit 03.01.08
by Evelyn Lawhorn

Rationale

In this unit I plan to view geography through film and relate it to my fifth grade curriculum. Films are awe inspiring. They can keep children's attention. The color, animation, excitement, and dramatization can hold their audiences captive. Visually geography plays a big part in film, from breathtaking, unparalleled, panoramas of disasters, to roaring, thunderous, deafening waterfalls or tumultuous, sinister, overcast skies. Geography through film can really show how enormous and boundless regions, locations or places are. Geography through film can also show the severity of climates and ever changing weather patterns. Through film and its' geography I plan to use *scale* as my underlying theme . Scale in geographical terms means, "a certain area on a map represents a certain measurement on the earth' surface." ¹ Film can view the universe at macro and micro levels. Non-feature films and feature films alike play with scale.

This year I showed the feature film, *Twister*. The students had already read *Storm Chasers* and knew that their task was to locate and track twisters along Tornado Alley. Through film geography students learned more information than just reading the definition of a tornado and seeing a few black and white or colored photographs. Films can relate the scale of a tornado by showing how big and how fast a tornado is to its surroundings. The two films showed the following information and more through cinematography and sound.

A tornado can be a few meters to about a kilometer wide where it touches the ground, with an average width of a few hundred meters. It can move over land for distances ranging from short hops to many kilometers, causing great damage wherever it descends. The funnel is made visible by the dust sucked up and by condensation of water droplets in the center of the funnel. The same condensation process makes visible the generally weaker sea-going tornadoes, called waterspouts, that occur most frequently in tropic waters. Most tornadoes spin counterclockwise in the northern hemisphere and clockwise in the southern, but occasional tornadoes reverse this behavior. The exact mechanisms that cause a tornado to form are still not fully understood, but the funnels are always associated with violent motions in the atmosphere, including strong updrafts and the passage of fronts. They develop within low-pressure areas of high winds; the speed of the funnel winds themselves is often placed at more than 480 km/h (more than 300 mph), although speeds of more than 800 km/h (500 mph) have been estimated for extremely strong storms. Damage to property hit by a tornado results both from these winds and from the extremely reduced pressure in the center of the funnel,

which causes structures to explode when they are not sufficiently ventilated to adjust rapidly to the pressure difference. Tornadoes are most common and strongest in temperate latitudes, and in the U.S. they tend to form most frequently in the early spring; the "tornado season" shifts toward later months with increasing latitude. The number of funnels observed each year can vary greatly in any given region. ²

The purpose of finding these notorious phenomena was to collect data to tell temperature, speed and direction. This information would be used to forewarn residents of tornado paths. Geographers are concerned with meteorology in order to forecast weather conditions better. Without warning hundreds of people have lost lives in the past from unannounced tornadoes, while with warning the numbers were cut to a small few. ³ Prior to viewing the feature film, a documentary, was shown on storm chasers. The surreal adventures of the non-fiction documentary were not as well choreographed as the fiction feature film with its high escalating, riveting scenes as well as some computerized and actual footage from tornados. My 5th grade audience was intrigued by the destruction that the tornado left in its course in both the films, but they were more involved in the glamour of the feature fiction film than they were during actual shots of the team chasing the real storms. The feature film had more presence, for the children could see the tornados clearer and for longer intervals. The footage from the actual chasers had unfocused shots that were irregular and unsteady at times from the exact accounts of the science crew. Unanimous bellowing rang out when the students saw the scene in the feature film when the twister picked up a cow. The cow was whipped around in the sky caught up in the whirling winds of the tornado. Even though the actual documentary was thrilling, the film *Twister* undoubtedly provoked more exhilaration and concentration.

What does feature film have that real documentaries (non-feature films) don't? In writing it could be compared to expository versus narrative, reading a book yourself or having a story teller engage you the listener, studying a textbook versus envisioning Michelangelo's *Sistine Chapel*. For the visual learners this may be in fact a wondrous way to accumulate and maintain knowledge. If most children in my class need to be highly motivated it may be because I am the only one in their lives that sees education as their way to survive now as well as to foresee that a strong education builds a sturdy foundation for a prosperous future. Film and geography together can be useful to invoke imagination as well as the reality of facts. Films based on events can expose a variety of information to its audience.

Why not add cinematography to our tools? Many school workshops are telling us how to stimulate or captivate or hold a students attention. One way is by using an assortment of colored chalk on our boards for the different subjects. We are told to use different colors for different subjects and to use visuals in colorful clouds that can be color coded and read for the: *Do Now's*, the objectives, goals, and the homework (home studies). Often there is a better chance at notices being brought home by students and read by parents if they are on colored paper. Teachers are taught to display students' work on bolder, brighter back drops. And lastly we are asked to embellish our rooms with a motley array of colors, themes, and written methods. Just as colors stimulate and captivate so can film with its colors (cinematography).

Most important we are no longer teaching only mental cognitive pathways, but we are to teach to the child's social, physical, psychological, ethical, and emotional pathways too. More and more educators and administrators that practice Comer Schools believe that if you involve or address all the students' pathways you can better teach or facilitate students' learning.

If lessons could ever teach every pathway at once you could possibly do it through film and geography. Film and geography display the setting (where the story takes place) and introduce you to the main character(s) (who the story is about). In the environment interaction takes place. Films show where people live (place,

location or region) and how they interact with their environment or changes made over time. Films can be engaging and a very useful tool (as scale) for learning.

Geography and Film

After reviewing many films it was very necessary to relate them geographically to my curriculum. I need to define geography, list the curriculum standards that I wish to cover and give a descriptive account of the films and books that will be used in and useful to this unit. There are several selections under each area to cover. You can use parts of films or the whole film in order to show the attribute of scale you want to support. I have chosen many films especially those that will cover the curriculum in subject areas that I had the need to support. This unit can cover more than one subject at a time.

Geography

Geography deals with topography, the layout or characteristics of the land, the natural resources, animals and/or people. Geography is about the "where of things." Geography is an important part of many other subjects. Geography's many subjects can include biology, sociology, weather, geology and history. Below is a view of how Geography may be broken down. This list can be used for the middle to higher grades.

Geographers today may study:

1. *Agricultural geography* , the study of farming in different parts of the world.
2. *Biogeography* , the study of plants and animals in different eographic locations and climates.
3. *Cartography* , the science of making maps.
4. *Climatology* , the study of world climates.
5. *Cultural Geography* , the study of people and their ways of life in different parts of the world.
6. *Geomorphology* , the study of the measurement of land forms on the earths' surface and underwater.
7. *Historical geography* , the study of how geography affected historical events.
8. *Industrial and marketing geography* , the study of locations for business and factories and how particular locations can benefit or hurt them.
9. *Meteorology* , the study of daily weather, including air temperature, precipitation (rainfall, snowfall, etc.), and winds.
10. *Political geography* , the study of nations and states, including their natural habitats, cities and farms, and populations.
11. *Resource geography* , the study of the location of the natural resources and the conservation of those resources to meet human needs.
12. *Urban geography* , the study of how cities develop and how they work. 4

Geography is physical science. In the movie *Twister* the location is the Great Plains in the midwest United States. The storm chasers canvassed Oklahoma's rural countryside looking for twisters. Climatology and meteorology are of course natural choices to study when you view this film. It is obvious that the storm chasers are in fact concerned with the climate as well as the weather: air temperature, humidity, and wind velocity.

Here is another assessment of geography that I will use when the students are asked to view a film:

Five Themes of Geography

- Location. Answers the question, "Where is it?" Identifies position on the earth's surface.
- Place. Answers the question, "What's it like?" Investigates the physical and cultural attributes that give an area its distinctive character.
- Human/Environment Interaction. Looks into how people respond to and modify their environment.
- Movement. Focuses on the flow of ideas, goods, and physical matter among people and places, and on how things change over time.
- Regions. Defines areas by selected criteria, which can be cultural, political, physical, economic, linguistic. Examples: Corn Belt, Capitol Hill, Silicon Valley, New England, Rockies. ⁵

Remember that geography is also related to other subjects combining the physical and human aspects of the world. The formation of mountains and the change in climate are very obvious examples of geography. Geographers use history, political science, sociology, anthropology, and economics to aid in their study. ⁶ Geography does not stand alone, but is grouped with many other ideas and concepts from a variety of subjects. In my class I have introduced the continents and the oceans by using the maps or a globe while not really impressing upon the children location. I also have used mazes, with some information about the area, yet I really don't see that sharing this information in this way was assimilated by every student. Film can help.

Film

Film is a molten conglomeration of ideas and images with or without dialogue and set to music. Film can be non-feature films like documentaries or biographies or it can be fiction feature films. A film can cover billions of years or a few seconds of time. It can be taken from real life (live) or staged to depict history or actual life. Film can be so very vibrantly genuine or can come from the imagination either fantasized, hallucinated or inspired by true accounts. I like a film when it makes me cry, whether it be a non-feature film or feature fiction film. Past feature films that have brought tears to my eyes are *Bambi*, *Imitation of Life* (both films), *Steel Magnolias*, *Message In A Bottle*, and *The King of Masks*. 'A picture can inspire a thousand words.' Films can sometimes be an inspiration throughout your entire life. Films can affect all your learning pathways: psychological, cognitive, social, ethical, physical, and emotional. There are a wide variety of films, and libraries categorize them under non-feature films, biographical and feature films. Feature films and

biographies are usually placed on the shelves alphabetically by the title. Feature films may also be animated.

Feature Film

Feature films are sometimes based on historical or true facts, but still considered fiction. At other times they can be taken from books or novels or written as original screenplays. These feature films have ratings. Ratings suggest which age level persons are able to view the films because of strong language, violence or sexual content. Feature films should be viewed carefully no matter what the rating, or the author's intents because some films can be offensive to their audiences. An audience is subjected to the director's purpose; a director has bias and as a teacher you need to make sure the non-feature film is a relevant account of geography. For example some films show the three pyramids in Giza near the Great Sphinx lined up diagonally when they are not in place this way. Many feature films as well as photographs of this very popular site have often been altered to possibly depict a better view, balance, or scale of the location. I have been there and because it was pointed out to me I have noticed this in films and on postcards and calendars. With technology today geography can be enhanced or even created. When choosing a feature film as an instructor you must be aware of place and location, especially if you plan to use your films for geography. Remember that films are not always shot on location, where the story takes place, for reasons of budget, safety, or convenience.

Non-Feature Film

These are the films that give more credence to geography through film. Still some are hypothetical. A film like *Blue Planet* has actual footage of the planet earth filmed in space by astronauts as their ship is orbiting 200 miles above earth. This film is the essence of geography through film. Viewers can see the Earth's surface and its large lands, continents and blue-green, oceans and seas. Biomes like the Himalayas (mountains) and the giant Namib Desert can be observed. At this vantage point you can also see climatic forces like volcanoes, hurricanes and volcanoes form, mold, and affect the planet.

Scale

Scale is created by cinematography. If you take an object filmed and shoot it at different scales it would have different significances. "Shot scale can foster intimacy with a character or conversely, it can swallow the character in its environment." ⁷ Scale for geography is the size of one thing compared to another. For example, the size of a map compared to a real area or place the map stands for. ⁸

Purpose: The Fifth Grade Curriculum

The 5th grade social studies program covers the geography and the natural resources of the New World through to the American Revolution. It specifically wants the students to be able to identify Native Americans and to examine their culture, to be able to identify the purpose and route the New World explorers took, to know where colonies and pioneers traveled, to learn how different parts of the country were settled, and to be able to describe the American Revolution and identify the three branches of the new government. Lastly students are to cover New Haven colonial historical sites.

Some of the goals of the math curriculum for 5th grade are that students should be able to apply customary units of measurements and time, have a good idea of number sense and place value, be able to read, interpret and create data tables, graphs, charts and maps. These are a few of the math standards that I will use in my unit

In science the curriculum states that the fifth grade will learn the structures of the solar system; they will learn about the relationship between technology and science; students will complete a science fair project, where they design and conduct scientific investigations and experiments. Under scientific methodology I will make use of all these topics: metric system and scientific measurement tools.

The language arts curriculum encourages students to read and write everyday and summarize and analyze texts. Students will keep a film/book journal where they can take notes, make comments, draw, or answer given questions about the film's main idea, author's purpose, biases, cause & effect, or fact & opinion.

I plan on beginning my unit with the 'Big Bang' theory and moving through to New Haven's backyard. The importance of a unit like this is to give students an awareness of the universe as well as a perspective on where they are in the universe. I plan to base a lot of the information invoking the skill of *scale*. Scale can include time, how long everything took to form. Beginning with outer space, I will give them a view of the earth from afar. It seems to me that children are very unaware of their immediate surroundings or about our world and how enormous the universe is or how far apart the planets are from the sun and each other. I have known and seen many children uninformed about the oceans and continents and the scale of things. I believe that through geography and film the students will make a useful visual identification of their surroundings and the world we live in and how very big or small things really are. I plan to always use film to point out locations and places. It is also important to let students know if the film has been shot on real locations or if computerized techniques or film sets were used.

I will introduce the films with the intention of examining these three major sections: the first selection will be the beginning (The Universe), the second part will be Planet Earth specifically taking note of our continents, oceans, seas, rivers, mountains and biomes, and the third section will be The New World including Explorers, Native Americans, Colonial America, Revolutionary War, and Colonial New Haven. Please note that this unit will be used throughout the year in conjunction with the social studies and science curriculum. It is meant to be used to give support to the 5th grade curriculum in order to achieve their goals. This unit is still on going and is not complete. Adjustments will be made for either curriculum changes or a better selection of age appropriate films. The social studies curriculum for the fifth grade is being revised this year.

The Universe

The first part of my geographical escapade will be a film that captures the students attention, *Contact* (a little girl dreams of seeing the universe, she has no mom and her dad dies at an early age, but she finds comfort in the enormousness of the stars). How many stars are in the night sky?

- *Contact*. The movie was made in 1997. It is a Warner Brothers Inc. Production and the director is Robert Zemeckis. It is in color and stereo. The film is 153 minutes long. The film is rated PG.

I chose this film for several reasons: the little girl has several things in common with my students who are about her age. Her mom died during childbirth leaving her in a one parent household. My class this year are all raised by single parents or guardians. The majority of my students enjoy science. I'm not quite sure why. I would guess that it has something to do with the hands-on approach and that they work in small groups for labs. Science is a new subject that is graded for almost all of them. I would like to believe that they like it because it is tangible and they are interested in the subject because it is a part of them. Students can see their relationship to science and the relationship science has with nature.

In the movie Dr. Ellie Arroway as a young girl remembers a conversation with her dad, in which she asks him, "Do you think that there is life on other planets?" He replies, "If there isn't, it would really be a terrible waste of space." ⁹

This section on the universe would have to be supported by other theoretical films about the beginning of the universe. In the American Museum of Natural History's Hayden Planetarium, New York, there are several programs that talk about the universe. "The Big Bang" and "Celestial Highlights" are only two of their short films that captivate audiences about theories of the beginnings and why the night sky changes. Again students will become aware of: the trillions of stars, rotation of our Earth (a 24 hour day), and a theory about the tremendous time it took the Universe to evolve. If the trip to the Hayden Planetarium is impossible we could walk to Southern Connecticut University's planetarium. In conjunction with the trip to the planetarium I would show parts of these feature films: *2001 Space Odyssey*, *2010 the Year We Make Contact*, the animated feature film *Jimmy Neutron: Boy Genius* , and end with the non-featured films *A Brief History of Time* and *The New Solar System An Epic Adventure* .

- *2001 Space Odyssey* This movie was made in 1968. It is a Warner Brothers Inc. Director is Stanley Kubrick. It is in *Metrocolor* . The film is 139 minutes long. The film is rated PG.

- *2010 the Year We Make Contact* This movie was made in 1984. It is a Warner Brothers Inc. Director is Peter Hyams. It is in *Metrocolor* . The film is 116 minutes long. The film is rated PG.

These films pose questions about how the universe was created, how long it took to be created, and who created the universe. The film *2001 Space Odyssey* opens with very melodramatic music and a scene of the sun, moon, and earth in alignment and nearly taking up the whole screen. The next scene begins on earth in an arid climate with a community of early man (ape-like). The time period is early man, when he did not possess the intelligence and sophistication of modern man. Something not of this earth comes and soon the early man ape evolves. His intellect expands. This is a film that questions the theory of evolution and, as theories go, is open-ended. This issue of how mankind today evolved or was created must be handled with care and caution, so that no offense is made to anyone's beliefs. This film shows another great shot of the Earth when the Discovery crew leave to go on the Jupiter mission. This film and it's sequel are still rated very highly as the best made science fiction films. If time permits you could show this film in its entirety.

In the film *2010 the Year We Make Contact* scientists make contact with the higher intelligence that has been involved with the destiny of early man and the beginning of Earth itself. A new event is going to take place in our solar system that will change our world, another sun. This film ends with our solar system becoming a

binary (sun) system. In science one of the reasons life exists on Earth is that it begins from the sun. I would ask the students question what they would think a new binary system would bring to our existing solar system. Since Jupiter becomes that new sun I would ask them to look at the size of our sun now and compare it to Jupiter's size. Will this new sun have an affect on Earth? Will the new sun affect outer planets in our solar system?

- *Jimmy Neutron: Boy Genius*. This animated film was made in 2001. The film is 82 minutes long and is rated G. A young genius is forced to build interstellar ships with the help of his friends in order to rescue all the parents from alien kidnappers.

This film is fun, it really has a far fetched theme and students should be amused at the unlikelihood of events now that they realize how big the Universe is. The film could be used just to entertain, given the fact that space travel would be unlikely to truly occur in the time frame proposed.

- *A Brief History of Time*. This movie was made in 1992. It is a Warner Brothers Inc. film and it was directed by Errol Morris and produced by David Hickman. It is in color. The film is 84 minutes long. The film is rated G.

In the non-feature film *A Brief History of Time* Stephen Hawking, a theoretical physicist asks these questions about the universe: How did the world begin? and Why do we remember the past not the future? Despite near paralysis Stephen Hawking's great mind is giving new and insightful information about our cosmos. I would use this whole film because it covers one man's limited life and abilities and his investigations (scientific theory) of the Universe that is infinite. It shows an average human lifespan compared to the age of the Universe.

- *The New Solar System An Epic Adventure*. Written and produced by Steve Skoosky and part of a space science series. This film is 60 minutes long. It was filmed in 1994. It has enhanced visuals combined with animation from the U.S. Space Program depicting the inner and outer planets of our solar system.

I will continue with a closer view of earth, noting its position in our solar system, its size, shape, and other attributes. The documentary non-feature film I have chosen to show is *The New Solar System An Epic Adventure* . I would have to find some non-feature, theoretical or factual films depicting our solar system. I will again always make students aware of scale. The size of the planets and the distance from the sun, while using the proper units of measurements. In order to grasp the size of the planets the students will work on the formula for diameter of a sphere in order to the find the circumference of planets. Students will become aware of what a light-year is in relationship to miles and kilometers. One light-year is equal to 5.88 million million miles or 9.46 million million kilometers. ¹⁰ In lesson 1 students will be able to take the information given from the table and answer the questions involving how far apart are the planets from one another in all units (light

years, miles or kilometers).

Planet Earth

When taking an even closer look at planet earth I could begin with a film that speculates on possible theories about the formation of the earth and its moon and a historical time line of the earth. Films that I would like to show are those that depict what it was like on earth millions or even billions of years ago. The plate tectonics theory shows movement, how the lands once were connected. This can be introduced through film, as well as concepts showing, how big are the land masses and the oceans. Continental drift is another theory that many films has been brought out in many children's animated films such as *Ice Age*, a great animated feature film that shows time periods (eras). Time periods will be compared to each other like the Jurassic or Crustaceous period. The documentary films I will use for this are *The Blue Planet* and *Baraka*. These two non-feature films depict the themes of geography. The feature film *Close Encounter of the Third Kind* can also be used for its place and location.

- *Ice Age*. The film was made in 2002, it was directed by Carlos Saldanha (I) and Chris Wedge. The animated, color film is 81 minutes long.

Natural resources like oil had come from the dinosaurs. In the film *Ice Age* a scene shows a dinosaur that gets caught in a mud hole, pretends that he /she is stuck, but is not. Ironically on many occasions mud holes or tar pits were places where many prehistoric mammals and dinosaurs got stuck in and died. Paleontologists have made many discoveries at these locations. Over eons dinosaur remains have produced oil, a natural resource found throughout North America. The misconception that mammals were not alive when the dinosaurs were can be discussed when viewing this film. The mammals in this animated feature lived at the same time as early man. The saber tooth tiger and the woolly mammoth may have been driven to extinction because of human hunting. ¹¹

- *The Blue Planet*. This film was made in 1990. The director is Ben Burtt and it was produced by IMAX. The narrators are James Buchli and Toni Myers. It is 40 minutes long.

The Blue Planet shows the seven continents and the oceans from a 200 mile high vantage point. I would have students make comparisons of: areas of continents and oceans, lengths of rivers, longitude and latitude of places. The resources needed for this are geography books or maps or world fact tables. The information you want to share with students would be longest (length, height, or depth), biggest (area), and most famous place. The most amazing part of this film is the night time view of the earth taken from space. These images show us how populated some parts of the world are when compared to others. The lights reveal how very populated and industrialized some of the places (continents and countries) on earth are compared to others.

- *Close Encounters of a Third Kind* was made in 1977. The film is 132 minutes long and is rated PG. The director is Steven Spielberg. This is a great film that covers parts of the United States.

The places that the film takes you to are Muncie, Indiana to see UFO's, the Sonora Desert in Mexico where a fleet of planes missing from 1945 have been placed, the Gobi Desert in Mongolia where a ship the Cotopaxi once lost at sea has been placed , and in Dharmasala, Northern India when thousands of people are chanting a five note tune that they heard from the sky. Finally, coordinates from sky give the longitude and latitude for a plateau in Wyoming (Devils Tower Monument). Many human beings feel drawn to this location. The film covers many arid lands (biomes would be considered deserts). The longitude and latitude given for the tower like mountain in Wyoming are not it's coordinates; it is 250 miles away from that shot. I would find the right location and show the actual site for these coordinates.

- *Baraka* . *Baraka* was made in 1992, it is a non-feature color film, It is 96 minutes long. The director is Ron Fricke. The film has no plot and is composed of environmental footage from around the world.

Baraka is a film that could be used as both an introduction and a conclusion for this part of the unit. There is not a theme of geography it does not incorporate. If I had to choose only one non-fiction film it would be this. *Baraka* shows many regions, locations, places, how people affect the environment and movement. The regions shown include biomes, like the rain forests and deserts. Some of the locations shown are the Middle East, Africa, and Asia. Scenes from busy industrialized cities like Tokyo, Japan or places like Baghdad are shown. Communities near rivers makes use of this natural resource; for travel, irrigation, bathing, ceremonies and much more. The film demonstrates social changes as religions spread across the world and a variety of farming techniques used across lands and throughout the world.

New World

Explorers and Conquerors

There are historical fiction films and documentaries on famous explorers like Marco Polo, Eric the Red, Ponce de Leon, De Soto and many others. Originally Spain, France, Portugal sailed for a shorter route to the East for trade with China. However, as soon as the great thrones realized that Christopher Columbus' discovery was a new world then the motives changes to Gold, Glory and God. The new natural resources were being claimed in the name of kings and queens of Europe. Now conquest was the ultimate motive for many. Films that depict the renowned founders of our country are *1492 Conquest of Paradise* , and *The Road to El Dorado* .

- *1492 Conquest of Paradise* . The movie was made in 1992. It was made by Paramount Pictures. It is in color and stereo. The film is 154 minutes long. The film is rated PG 13. The director is Ridley Scott.

This feature film, was historically based, and was set in Spain as well as the New World Hispaniola. Hispaniola is today the shared island of Haiti and the Dominican Republic. Queen Isabella of Spain sponsored the Italian map-maker and navigator, Christopher Columbus's trip. Columbus set sail on August 3, 1492 on his first trip and found land October 12,1492; he had indeed thought he found a short cut to the Indies and called the natives of San Salvador in the Bahamas "Indians". In the following weeks he sailed the Caribbean searching for

China or Japan. He built a colony called La Navidad and traded with the natives for the little gold they had. After the Santa Maria was wrecked they decided to leave 39 men behind and return home to Spain. Upon his return he was proclaimed a hero and he presented King Ferdinand and Queen Isabella with gold, birds, plants and a number of Indians that he had brought back. On the second voyage, Columbus' return to the island, he brought 17 ships and more than 1,200 men. He found the settlement at La Navidad was empty and all the men killed by Indians. Columbus founded a new colony but, unfortunately had trouble governing it. ¹²

This is a good movie to introduce nautical mile, fathom, and league. A nautical mile is just 800 more feet than a mile. Since Christopher Columbus was a navigator he kept track of the miles he spent on his voyages. Historians believe he was off with his own calculations.

- *The Road to El Dorado* . The movie made in 2000 is an animated film in color and stereo. The film is 89 minutes. The film is rated PG. This animated film shows two young swindlers that get their hands on a map of a hidden treasure in the New World. The famous explorer Cortes leads an expedition to the New World to find gold.

This is a fun filled yet serious historical feature that shows some Europeans with a sense of compassion. Geographically the location is central America, and the purpose for the adventure to this new world is gold. Since many native American tribes were affected by Europeans this is a good time to talk about some of the changes Europeans made affecting the indigenous people.

Native Americans

The feature films I have in mind are *Black Robe* and *The Mission* . Both films include Jesuit priests that have come to bring Christianity to the Native Americans, one of the many reasons why Europeans came to the New World.

- *Black Robe*. The movie was made in 1991 it is in color and stereo. The film is on video and is 101 minutes long. The film is rated R. A Jesuit priest and companion travel with Huron Indians as guides to a distant mission in the winter. They use three canoes to make the trip up the Saint Lawrence River. The area is northern New England and Quebec, Canada. This film must be edited for all students. However, it shows a real look at cultures with no judgments. The viewer can see human weaknesses and strengths in both the Native Americans and the new settlers.

- *The Mission*. The movie was made in 1986. It is a Warner Brothers. The director is Roland Joffe. It is in color and stereo. The film is 125 minutes in long. The film is rated PG. Filmed in Argentina although set in Brazil.

Actors Robert De Niro and Jeremy Irons play the parts of a villain that becomes saved and a Jesuit priest trying to save a mission and the Native Americans that belong to that area. The sword and the cloth come together to try to prevent the South American Indians from becoming slaves for colonization that is moving in and up the great waterfall and into the rain forests where they live.

Colonial New Haven

- *The Amistad* . This film was made in 1997. The director is Steven Spielberg. The film is in *Technicolor* and lasts 152 minutes. The movie is based on an 1839 revolt, Africans taken from their homes through a slave port and on to Cuba, during a time when Spain , England and the United States made it illegal to have slaves brought into the New World.

In the end I plan to show our students backyard with the film *Amistad*, which depicts a Colonial American event that is a part of New Haven History. The trial of the *Amistad* lasted from 1839 to 1891 in which Yale and New Haven community people work to secure the freedom of the *Amistad* captives. ¹³ I would like to compare colonial New Haven to New Haven today. I would take students to the Colonial New Haven Historical Society and a tour of New Haven colonial historical sites. Scale would still be an underlying goal. The students would be able to recreate on scale a replica of Edgerton Park mansion or Eli Whitney's factory or old mill or maybe even one of the old churches that are still on the green today.

- *The Autobiography of Jane Pitman* . The film was made in 1974 for television. The director is John Korty and runs for 120 minutes. In 1962 a black woman is celebrating her 110th birthday. She recalls being a slave and many of the major events that occurred during her lifetime. This is an excellent film to show because it reveals the immorality of slavery and also the necessity for it. I would use this film to show how Jane Pitman was born a slave in the south, traveled north to Ohio to live after the slave were freed and then only to become an indentured slave in Kentucky. She meets her husband and they walk to Texas and live there until he dies. Jane Pitman's last home is in Louisiana where she becomes a part of the civil rights movement. This is a very good film to show the locations of states in the United States.

Lesson Plans

Lesson Plan I: Our Solar System

- Anticipatory Set: read ch13 The Solar System pp 430-461 in Science Horizons

practice converting scales from customary units to the metric system. Charting and graphing diameter. length of day in Earth time, length of year in Earth time, number of moons and the main gasses of the atmosphere

- Objective:

Class to identify all the planets in our Solar System and make a full room scale of the distance of each planet from the sun using appropriate units.

- Steps: Class (seated at groups of 3 to 5 students per table)

(40 minutes) using both books come up with a scale to plot the solar system in our classroom. For example 12 inches (ruler is one light year). Suggest that the students begin with an outer planet.

- Materials:

construction paper or planet sick ups, scissors, tape, and adding machine paper, rulers, meter stick, tape measure, pencils, colored pencils, calculator, conversion table

The Magic School Bus Lost in the Solar System by Joanna Cole p. 36

Science Horizons text Silver Burdett Ginn pp. 448-449

- Goal(s):

Students should realize that maps are necessary to show big areas and that the key or legend gives important information about the distance and students will affectively make use of information from charts.

- Assessments:

Students will be able to estimate the distance between neighboring planets, using the operation - subtraction. Estimate 5 distances using tables. (100 points)

Lesson Plan II: World Continents

- Anticipatory Set:

After seeing the film *The Blue Planet* and reviewing the world maps from *Our United States vol. 1* . Exclude Antarctica and model part of a continent like Central America.

- Objective:

Students will learn all six continents and there location on the world map.

- Steps: Individuals, tables for each continent sharing resources and information.

(one week, (3 to 5) 55 minute classes)

Must find out what hemisphere continent is in, make a map of continent include information about; oceans its borders, important river, lake, a mountain and a mountain range, a desert, two countries and two cities, what type of lands and/or biomes they have, and must have a legend (scale).

- Materials:

reference - Geography books

Library books about continents

Our United States vol. 1 (world maps)

Biome books

pencils, colored pencils, tag board, clay or plaster

<http://www.worldbookonline.com/wbol/wbAuth/jsp/wbDisplay.jsp%20%20?/na/mp/co/mp000258.htm>

<http://geography.about.com/cs/geoeducation/>

<http://www.enchantedlearning.com/school/index.shtml>

<http://aol.countrywatch.com/>

<http://geography.about.com/library/weekly/topicsub7.htm>

- Goal:

to have all students share information and know the location of the continents.

- Assessments:

Students will make oral presentation 20%. Written 40% and map 40%. Given a world map they will locate all continents and ocean bordering their continent.

Lesson Plan III: New World Explorer or Conquerors

- Anticipatory Set:

Students have seen the film *1492 Conquest of a Paradise*

read the book *Where Do You Think You're Going Christopher Columbus?* by Jean Fritz

notes have been taken in film/book journal

- Objective:

Students will be able to identify and understand motivation for European exploration.

- Steps: Individuals (two weeks, 55 minutes a day)

a. Select and research a New World Conqueror or Explorer

b. Trace his route use a world map.

(Give information on the nautical miles and weeks or months taken).

c. In a your ship's journal answer these questions:

1. Whom did your explorer sail for? 2. What purpose did your explorer sail for: political domination, economic gain, religious conversion, scientific curiosity? 3. What were his/her discoveries? 4. Would he/she be considered and Explorer or a Conqueror by the indigenous people he/she met? 5. Add six entries of your personal thoughts about the voyage, the explorer, the indigenous people you have met or any new discovery or question.

- Materials:

List of Explorers (Appendix 3)

Explorer book(s) world map note book ship journal

Web sites

<http://www.enchantedlearning.com/explorers/indexe.shtml>

<http://www.win.tue.nl/~engels/discovery/northam.html>

http://www.mce.k12tn.net/explorers/explorers_start.htm

- Goal:

Give a three to five minute presentation. All students should be able to tell which country their explorer came from and what lands he/she discovered in an oral presentation to the class. Questions will be asked from other students. Every student must decide for themselves the explorer motives.

- Assessment:

Ship Journal 40% (All questions answered) Oral Presentation 20%

KWHL 20% (notes use format: already Know, What I want to learn, How (resources), and Learned information

MAP 20% (must have route, day sailed to end of sail and nautical miles)

Use a list of *Explorers of the New World*

Lesson Plan IV: Native Americans Regions

- Anticipatory Set:

After reading Unit I Land and People chapters 1 and 2. *Our United States Vol. I*

- Objective:

Compare Native American life styles.

- Steps: Assign one region to a pair students. 4 to 6 students ea. region (two weeks)

Students will map out a Native American region on a North American map.

Compare two tribes from that one region. Write about their shelter (home), religion or spiritual ceremonies, clothing (what they dressed like or wore), division of labor between men, women and children, leadership (government), and how they acquired food (hunters, gatherers, farmers, fishers).

- Materials:

An Educational Read and Color books of: NW Indians, California Indians, NE Indians, SW Indians, Plains, and SE Indians. Library book on tribes or regions.

<http://www.cnie.org/nae/>

<http://www.u.arizona.edu/ic/kmartin/School/Amer4.wav>

- Goal:

Students will realize that Native American tribes were as different as people are today, when they are influenced by the geography in their regions, laws, customs, religion, rituals, leaders, government, and natural resources.

- Assessments:

Students will be assessed on the comparisons of each of the questions in steps. Make a model or draw a picture of the two different tribes comparing one of the points.

Bibliography

The Universe

2001 Space Odyssey, Keir Dullea, Gary Lockwood, William Sylvester, Daniel Richter (I), Dir. Stanley Kubrick, MGM, 1968. Man has found a mysterious artifact on the moon and finds another outside of the orbit of Jupiter. The Discovery ship is sent to investigate.

2010 *The Year We Make Contact*, Roy Scheider, Jon Lithgow, Helen Mirren, Bob Balaban, Keir Dullea, Douglas Rain (voice), Dir. Peter Hyams, MGM 1984. Nine year later a joint expedition is sent to see what happened to the Discovery expedition.

A Brief History of Time, Stephen Hawking, Dir. Errol Morris, Producer David Hickman, Paramount, 1992. Physicist Stephen Hawking lives in a wheelchair but thinks infinite. He conducts fascinating research about time and the universe.

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Jimmy Neutron: Boy Genius, voices: Megan Cavanagh, Mark DeCarlo, Debi Derryberry, Jeffrey Garcia (I), Dir. John A. Davis (I), Nickelodeon, 1997. Aliens abduct all the parents from Earth and Jimmy, boy genius and friends build spacecrafts to go and rescue them.

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The Planet Earth

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Blue Planet, IMAX, produced by Graeme Ferguson, written edited and narrated by Toni Myers, Smithsonian Institute, 1990. A look a planet Earth from space seeing the natural forces that affect it.

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Ice Age , voices: Ray Romano, John Leguizamo, Denis Leary, Goran Visnjic, Jack Black (I), Cedric the Entertainer, Directors Carlos Saldanha (I) and Chris Wedge, Fox, 2002. Three animals, a sloth, a mammoth, and a saber tooth tiger during the ice age find a human child and try to return it to its' tribe.

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New World

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Amistad , Director Stephen Spielberg, Producers Steven Spielberg, Debbie Allen and Colin Wilson, DreamWorks, 1998. Slaves brought illegally to United States go on trial for there freedom.

The Autobiography of Jane Pitman , Cicely Tyson, Odetta, Josephine Premice, Teddy Airhart, Ted Arroyo, Eric Brown (I), Woody Chambliss, Barbara Chaney, Dir. John Korty, Tomorrow Entertainment Inc., 1974. A black women born a slave in the 1850's lives to become a part of the civil rights movement in the 1960's.

Black Robe, Lothaire Bluteau, Aden Young, Sardrine Holt, August Schellenberg, Tantoo Cardinal, Dir. Bruce Beresford, Samuel Goldwyn Company, 1991. Jesuit priest tries to go up river with the help of Huron Indians to distant mission in the dead of winter.

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Geography through film: The scale of things. Oct 2003. E Lawhorn. Lawhorn, E. 2003. Geography through film: The scale of things, vol. I. New Haven Teachers Institute. Accessed October 6, 2017. <http://www.yale.edu/ynhti/curriculum/units/2003/1/03.01.08.x.html#b>. A geographic view of film that recognizes the importance of more than one theoretical framework, positions the cognitive and social in a continuum reaching from the individual to the societal, and makes traditional notions of scale antiquated is recommended. Research by geographers contesting the assumed objectivity in documentaries is reviewed as are geographers' contributions to understanding the construction of meaning of urban and natural settings in films. Humans define scales through a variety of means, including the media we watch, the things we consume, the places we travel, and with whom we interact. One can argue that the development of many transportation and communication technologies have had but one goal—to extend individual reach across space, expanding what is thought of as local and making the regional and global more accessible than ever before. Thus, geographical questions are highly influenced by the available data, the scale of that data and the theoretical stance taken by the researcher. Most phenomena can be examined at multiple scales. Why geographers choose certain scales is often a matter of convention. A specific theory may identify particular scales as important.