

Colors of Change Pittsburgh Past to Present

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Overview

As a transplant into Pittsburgh, I view the city much as a third grade child would look at it. The city is big and hilly, many kinds of people live here, and people tell stories about its past. Yet Pittsburgh's history can be abstract and appear to be far off and unrelated to current living. How did this city become what it is today? Why do some of the buildings look black and dirty? What's the importance of the three rivers and the point? What happened and who worked in those steel mills I used to see along the rivers? Pittsburgh leaves a legacy of environmental issues and how they were solved. These questions and other issues will be addressed in a semester study of Pittsburgh that encompasses a more concrete look at this "Gateway To The West." Third grade students will study the history of the city of Pittsburgh as a system, focusing on: the interdependence among people and the environment, and how the environment affects the way people live and work. Given an awareness of the past, students will develop projects that will allow them to become a catalyst for environmental change in the future.

Rationale

As I arrived at Duquesne University, a starry eyed freshman, my first impression of the city was how hilly it was and how dirty it was. I had driven past steel mills along the river, some still operating, some decaying, and wondered about their story. I saw Winter Garden and marveled at its radiance and was just as emotional about the depressed state of the Hill District. Old theatres and locked up storefronts that were once grand and flourishing were frowning at me. They too had a story to tell. That was in 1988. Since that time, I have observed that each neighborhood is separated by heritage and housing projects that sit atop the hills surrounding them. I've noticed that the city is cleaner and has changed dramatically. Gone is the smoke and smog; replaced with the corporate big city image and the beautiful nightscape. How did it happen? I blinked my eyes and everything is the same but different. The Point is still there and I can use it to find my way home if I'm ever lost. Yet I wonder if the students I teach know the answers to my questions or could find their way home. The city of Pittsburgh has a rich history. There are many stories to tell and a heritage to unlock.

During my second summer at Fort Pitt Elementary School, I became involved in a program that trained teachers to view social studies as part of a system and to teach and write curriculum in this manner. Therefore, one could study flowers, bread, post offices, or any other subject as part of a larger system. Flowers, bread, and mail, now became products that could be followed as goods and services. Two years later I wrote a curriculum about restaurants. This study and my involvement with the children changed my philosophy of teaching and how children learn.

Reluctant readers and non-readers became interested. Low math students began to demonstrate understanding and average and gifted students soared. Why? The subject matter was relevant, it was interesting, children were given concrete experiences, and they directed their learning. At the end of the study, Kid's Café a student, organized, produced, and operated restaurant was opened. Special needs, gifted, and average students participated and coexisted successfully in the same setting.

In Pittsburgh public schools, the third grade social studies curriculum consist of a semester study of Pittsburgh and a semester study of Pennsylvania. In prior school years, I have done this study with students and noticed that using only the text and discussion, left students with a vague understanding of the subject. Furthermore, students lacked the experiences and exposure to the city and it's history to fully make the connections between the past and the present. To avoid another year of just "teaching" Pittsburgh, I thought it would benefit my students and me to answer my own questions and find those experiences that my students should have.

Throughout history, there are some things that remain constant. People will always need air, land, water, and other people to survive. The tale of Pittsburgh illustrates how a settlement that was independent, became a city that continues to be part of a system. Pittsburgh became an integral part of a whole. The fabric of the US will change and grow because of this American City. The story illustrates and helps students understand the interdependence among people and the environment, and how the environment affects the way people live and work As a basis for the Pittsburgh study, air, water, and land will become a concrete way to help students understand a system and Pittsburgh's environmental history. Although we continue to need these three elements to survive, our use and abuse of them have changed as our wants and needs have changed. This will be illustrated in the Pioneer, Industrial, and Renaissance eras of Pittsburgh's history.

There are so many ways to bring life to a subject using a variety of media. Using air, water, and the land in a spiral approach will help secure students' learning. In each era of Pittsburgh's history, children should begin to gain an understanding of the interdependence among people and the environment. They should be able to visualize the influence of technology and how it changes the interaction of people and the environment. They should notice how the past has an influence on the present and future. Keeping this in mind, the teacher should focus students' attention on pondering certain questions as they move through the study.

This study is designed to supplement the District's Social Studies Curriculum for Third Grade. It provides a brief but comprehensive history of the city of Pittsburgh. There are many opportunities for a teacher to go more in-depth on a particular topic such as bridges, rivers, transportation, boats, landmarks, and etc., which is perfectly acceptable if doing so meets the needs and interest of the group and age level.

The concepts of any city can be understood using Pittsburgh as a model if the teacher remembers that it is part of a system. The city is part of the state; which is part of the east coast; which is part of the United States of America, which is part of North America; which is part of a continent; which is part of the world; which is one planet in a solar system. What of Pittsburgh? It's colorful history moving from natural earth tones, to gray, black, murky green, back to blue,

white, and silver paint a picture of a system that developed, had growing pains, developed some more and remained part of the bigger canvas. It continues to be a work in progress.

Pittsburgh's Early History 1700- 1816

The first hundred years of Pittsburgh's history illustrate the British, French, and Native American struggle to gain control of the Point as the Gateway to the West. More and more settlers arrive at the Land in the Fork. Some become permanent residents while some move on. Trade is established and people's needs become more difficult to meet. Transportation and industry begin to grow. With this expansion, changes to the land, air, and water are inevitable and a system of distributing goods and services is born.

What was life like during this time period? How did people use the land, river, and animals? The area we know today as downtown Pittsburgh was heavily wooded and undeveloped. There was a large variety of trees such as oak, maple, and beech and wildlife including bears, cougars, deer, squirrels, beavers, elk turkeys, rabbits, and wolves. Trees were used for cooking, building shelters, and boat making among other things. Animals were used for food, clothing, and making small tools.

Both Native Americans and Pioneers were self-sufficient. They sustained their own food, shelter, and clothing. During the 1700's people lived off the land growing their own food. Life for early settlers and Native Americans could be described as hard, dangerous, and exciting. There was not much time for fun and recreation. The primary concern was providing clothing, shelter, and food for themselves. The Land in the Fork was valuable to many because of its location on the three rivers, the Monongahela, the Allegheny, and the Ohio, and its access to the west. Pittsburgh also had many available natural resources such as wood, coal, limestone, clay, and iron ore. Settlers arrived with weapons, metal, and other items valuable to Native Americans. Native Americans were familiar with the land and how to plant and harvest. Both groups were dependant on the other to some degree. Pittsburgh residents used its resources to trade for other items to meet their needs.

The Land in the Fork became a coveted area because it gave access for commerce and westward expansion as far as Mississippi. Tensions between the Native Americans and the French came to a peak. As a result, the French and Indian War was fought in 1754. Eventually, Pioneers used the Land in the Fork as a fort protecting themselves from Native Americans and later as a trading post.

As Pittsburgh grew the environment changed. Even as early as the 1700's the clear air turned smoggy and gray, more and more of the lush green forest was cut down to make way for new homes. The Land in the Fork, where the three rivers met, would soon become "The Gateway to the West." While many forged on, the area began to flourish. Its natural location in a valley protected the area from predators because it was difficult to get over the mountains. For the same reason, people became resourceful and met Pittsburgh's own needs. It was faster and cheaper than relying on goods and services from other places like Philadelphia. As a trading post, Pittsburgh had its own artisans who could make items such as boats, clothes, clocks, rope, bricks, glass and other necessary items.

What was the purpose of the river? How did the air and water become polluted? Boat making became an important industry. Now Pittsburgh became a part of the commerce system. Pittsburgh residents built boats and shipped goods on them. Flat boats were made and used to take goods down river as far as Mississippi. Once there, the boat was cut up and used to build houses and other items. These boats were friendly to the environment. However, the operators of the boats had to walk upstream. Keelboats that were able to use the current to go down the river and an oar like mechanism to go up stream were developed. This process took four months to make the return trip.

With a growing demand for goods and services, time was of the essence. Pittsburghers now manufactured goods not only for home use, but they could ship goods down the river in large quantities as well. Coal was mined and used to operate machinery. As a result, in 1881 Robert Fulton and Nicholas Roosevelt built the steamboat. Coal was used to operate steamboats, trains, and for cooking, and heat. The burning of coal began to pollute the air making it black and sooty. The soot covered the land and killed vegetation. The rivers were polluted as well. It was during this time (the late 1800's) that the area gained the reputation of being a smoky city.

By land, the railroad was an important form of transportation because it was faster than wagons and it could go places boats could not. Boats and trains worked together to connect goods being transported south and west. Iron making became a growing industry but the furnaces relied on wood to run them. The coke-burning blast furnace was developed making it easier for iron making to be closer to the river. Coal was mined and barges transported it along the river.

Factories were built along to river to take advantage of the rivers resources. Glassmakers used the sand and some engines required the use of water. There were few bridges so people walked from place to place and did not travel as far. This may be a reason why neighborhoods remained isolated from each other. The streets of downtown were full of raw sewage and other kinds of waste. There were epidemics of cholera and typhoid fever because of the filth and lack of clean drinking water. A sewage system and city water system had to be designed.

The Industrial Revolution 1860-

Pittsburgh had many natural resources that were exploited. Industry was booming. Steel was being produced. The railroads increased their ability to transport goods. Materials were produced for the war effort. There was smog and flooding. Pittsburgh was now a thriving industrial center.

What is an entrepreneur? What are laborers? What is the Industrial Revolution? What is industry? Entrepreneur's (people who organize and manage a business and take risks) helped the fast growth of Pittsburgh. Laborers were the people who worked in the factories, mills, on the railroads, and the rivers. Pittsburgh was moving from a river town to an industrial city. Andrew Carnegie, Henry John Heinz, George Westinghouse, and the Mellon Family are notable for their contributions.

In 1873, Andrew Carnegie used engineers to develop methods to use machines in the production of steel. Skilled laborers were no longer a necessity. Mills could employ unskilled laborers at low salaries. Carnegie also showed Pittsburgh how a modern corporation was run. With Partner

Henry Clay Frick, the corporation had control over producing an entire finished product. Steel mills became self-sufficient in every manner thus reducing cost.

In 1905, Henry John Heinz incorporated a plant in which food was packaged in a way to preserve food over long periods of time. The Heinz Company was successful in large-scale food packaging.

George Westinghouse founded the Westinghouse Air-Brake Company in 1869. He invented the air brake, which allowed trains to work faster, carry heavier loads and run more safely. Through research and engineering, Westinghouse was also responsible for developing ways to distribute alternating electrical currents. In 1886, the Westinghouse Electric Company was formed. While these entrepreneurs took the risk and created various industries, they would have been unsuccessful without the use of laborers.

What were living conditions like for laborers? What did laborers do to attain better working conditions? Most did not have a specific skill and were paid low wages. Living conditions were horrible. Laborers lived near their workplace in narrow, crowded accommodations. Neighborhoods were self-sufficient. This may be another reason why neighborhoods in present-day Pittsburgh appear to be separated by cultures and traditions. Some houses had no toilets, hot water, or heat. Working conditions were not any better. Laborers worked long hours doing hard physical work. Children had to work in the mills too. The work was dangerous and many were injured or killed while working. By the age of 30 people retired from the mills. In order to affect a change, laborers went on strike. They formed unions to help attain better work and living conditions. Many lost their jobs or lost pay while on strike. It was their fortitude that made conditions better for future generations.

What were the effects of the Industrial Revolution on the environment? The air continued to remain black and smoggy. The rivers were contaminated with chemicals from the factories and human waste was also dumped there. The fish and river life died and people were drinking water from the same polluted river. There was an obvious disparity between becoming wealthy and concern for the health and well being of laborers.

Efforts toward change were attempted. The first water treatment plant was opened in 1908. The water filtration and sewage systems were completed. Hospitals were established. Andrew Carnegie gave free public libraries to communities. The Art Commission was created and areas were set aside to build parks. Because of the Great Depression (1929) and World War II, many of these plans for improving, health, environmental and social well-being were put on hold.

The Renaissance

Pittsburgh would move through another environmental and social change. People became prosperous and needed to work less. The wars had ended and health and happiness became a priority. There was a big push by all parties in government to improve the environment and develop recreation. The rivers and the air must be cleaned. Laws were made to protect the air and the water and the steel mills began to close or be moved.

How did Pittsburgh change from a smoky city to a clean city? Who were some of the influential people in the environmental movement? As the base of the middle class became larger and laborers fought for better work and living conditions, priorities changed. It was no longer acceptable to drive through the city with headlights on at noon. White shirts and gloves were meant to be white. Leisure activities and social well-being were important. People of all political parties unified to clean up the city's air and water.

Mayor David Lawrence and Richard King Mellon pushed hard for anti-smoke laws. A smoke ordinance was enacted in 1941. The smog cleared and the sky was once again blue. John Connelly who also founded the Gateway Clipper Fleet created the Allegheny County Sanitary Authority. Collection sewers and a disposal plant were built. Industries had to treat the water they discarded. Now people could cruise along the river for pleasure.

Roads, tunnels, and bridges were built connecting parts of the city across rivers. The Point was revitalized. There was even talk of Urban Redevelopment to create the Civic Arena and a cultural district.

Neighborhoods

How do neighborhoods fit into the environmental history of Pittsburgh? What impact did the environment have on neighborhoods? How did the environment change as neighborhoods began to develop?

Pittsburgh's neighborhoods have been intricately carved from necessity. The general terrain of the land was a factor in itself. The three rivers separated parts of the land and other areas were inaccessible because of the steep mountains. In the early years, people lived close together because the land had not been developed. Fort communities were built and used for protection. People also lived near the river for easy access to transportation and use of the river's resources. Roads and railways were pushed through the mountainside. Inclines took passengers from the valley below to the top of mountains.

Technology and ever-changing needs began to impact where people lived and caused changes to the environment. The population in the city was increasing dramatically. Industry grew and developed rapidly. Gone was the natural beauty of the landscape. In its place were narrow congested streets overcrowding, smog, raw sewage and filth. There were few places for outdoor recreation and relaxation. Who would want to swim at a place called Smokey Beach?

In the late 1880's and early 1900's, the river continued to be an important resource for industry and movement of goods and services. Therefore, mills and factories were built on its banks. Housing was conveniently located near mills and factories and controlled by one's job. Neighborhoods were isolated yet found ways to become self-sufficient.

Living close to factories and mines caused many health problems. People had to breathe polluted air and drink chemical infested water. Environmental sacrifices were made in the name of progress. Cheap housing was the order of the day; lacking basic needs, such as indoor toilets, hot

water, and heat. Even so, neighborhoods like the Hill District were prosperous places with a thriving community.

During the renaissance, there was a push to clean the air and the water and to improve social well-being. Green spaces like Schenley Park and a park at the Point were planned. The Lower Hill District would become a place for cultural buildings and the Civic Arena. In the name of improving the environment, the Hill was dismantled and lost its vitality. Residents moved to other neighborhoods and were not able to reconnect. The same happened in other city neighborhoods like East Liberty. The affects are still felt today.

Pittsburgh (Present & Future)

When thinking about present day Pittsburgh, and looking into the future, the same questions from the Early Years, the Industrial era, and the Renaissance era remain. How have we had an impact on the environment over time? What have we learned from the past? Is there a way to be prosperous and grow and respect the environment? How has Pittsburgh become part of a system?

Pittsburgh today has changed from an industrial, polluted, and smoky city to a place where fish and wildlife once again inhabit the river. Drinking water is clean and there are green spaces throughout the city. Corporate America and new technology have replaced steel mills, but they are not forgotten.

As part of the second renaissance, even more improvements are being made. Political and social leaders have learned valuable lessons and found ways to honor the past and embrace the future while respecting the environment. New methods for improving quality of life and maintaining the integrity of a neighborhood have been put into place using strategies like recycling buildings, and incorporating the existing culture into new structures.

As I reflect on the history of Pittsburgh and add conclusions I have drawn from day-to-day observations. I realize how flat my impressions were. I visited the Heinz History Center twice with groups of students. Each time my students and I walked through looking at the wagons and the pictures on the walls and entered the exhibit that takes you through different neighborhoods of old. Somehow it didn't seem real. When I heard excerpts from the story Out of This Furnace and saw the video in which I actually looked at the faces of the people, I gained an entirely different understanding of my trip the History Center. Now a walk through the narrow streets with cramped quarters was startlingly real. If it's possible, it was more real when I walked through the streets of Braddock and viewed the mill in all its grandeur. These and other experiences, like walking down the water shed and listening to stories of how the water became polluted, and the impact of dumping slag being felt years later, had an impact on me. I began to answer my own questions.

I want my students to develop a picture in their heads and question why. I want them to come to a realization like I did and one-day, make a change. Now is the time to take the knowledge of Pittsburgh's legacy and formulate ways to continue making Pittsburgh one of America's most livable cities.

Curriculum Objectives

This curriculum will fit in with the existing curriculum prescribed by the Pittsburgh Board of Education for third grade. The study will provide a brief but comprehensive history of the city from pioneer times to present. It is in alignment with the Pittsburgh Board of Education Outcome Standards for social studies, communications, science and technology, and the arts. Furthermore, many sections of the curriculum will provide opportunities to reach the New Standards performance standards in reading and writing at the third grade level. Books read independently will be counted toward the "25 book" requirement.

By the end of the study, students will be able to demonstrate a concept of time and how the past influences our lives. As evidence, students will produce books, reports, models, and presentations that display their knowledge of Pittsburgh's history and its role in industry and its effect on the environment throughout the years. Students will practice basic mapping skills by reading and creating maps that represent places in Pittsburgh. By creating models, role-plays, and narrative responses, students will further illustrate the interdependence among people and the environment as a system and how the environment affects the way people live and work.

During the course of the study, students will show initiative and self-direction, follow classroom rules, use materials purposefully, show eagerness and curiosity as a learner, approach tasks with flexibility and inventiveness, and sustain attention to work over time. Students will be able to interact with peers when working as partners or in small groups. They will interact easily with adults, use discussion and compromise to resolve conflict and participate in the group life of the class.

Students will use effective communication skills by listening and participating in discussions and conveying ideas in conversation. They will read and write for a variety of purposes using text to cite and retrieve information. Students will examine arguments and prove or disprove them. Students will describe in their own words new information they gained from a nonfiction text and how it relates to their prior knowledge.

Students will be able to use tools to measure, create items to scale, explore and solve problems related to everyday experiences, collect and record data, create and read charts and graphs based on predictions and conclusions.

Students will be able to observe and record data, seek information by active investigation, ask questions about the natural and physical world, form explanations based on observation and experimentation, and communicate scientific information in various ways.

This curriculum is divided by time periods in Pittsburgh history with a focus on three environmental issues (air, water, and land.) It should be taught using an interdisciplinary approach integrating all subject areas.

Pittsburgh's Early History/ Industrial Revolution

Students will be able to identify the basic needs of all people, (food, clothing, and shelter) and discuss how this has changed over time. Students will be able to discuss how people lived long ago, with a focus on how early American families and Native Americans lived. They will study the impact of immigration on Pittsburgh. Students will demonstrate an understanding of why laws exist as well as who makes them. Students will show an understanding of characteristics of entrepreneurs, laborers, and their contributions to Pittsburgh. Finally, students will explore changes in the environment and the reasons for them

Neighborhoods

Students will be able to identify the elements of a community, neighborhood, and city. Students will be able to discuss how cities may be divided into neighborhoods and why. They will gain knowledge of several neighborhoods with diverse and rich histories and how culture has been infused within them. Students will learn about local government and its influence on our daily lives.

Pittsburgh Present and Future

Students will be able to discuss the differences between city life now and long ago. Students will create a project that incorporates knowledge and understanding of Pittsburgh's past environmental history and ways to change the present and future.

Strategies

When a visitor or parent walks into the classroom, it should be apparent that an interactive study of Pittsburgh is taking place. The teacher should create an environment that encourages interest in the study of Pittsburgh and stimulates different modes of learning. The environment should also promote higher-level thinking, independent work, and discovery.

Students should be immersed in literature that supports all aspects of the study, including fiction and non-fiction titles, as well as varied levels of text. Books and other materials should be located where they are easily accessible by students for exploration, re-reading, and referencing during writing, and making projects.

Collections of pictures and maps of Pittsburgh should be displayed on walls or in books. Both should include past and present views of the city. During independent work time, students will have opportunities to interact with the maps and pictures.

Charts displaying vocabulary words and their meanings, names of places in the city, and discussions about city topics should be displayed and discussed regularly. Students should also be encouraged to utilize these artifacts for spelling, word choice in writing and speaking, and support of opinions in discussions.

The study will include independent, small group, partner, and whole group reading and research. Students will use Pittsburgh Our City and The Story of Pittsburgh as the basic text upon which deeper research is developed. The text will be supplemented through the use of field trips,

pictures, videos, guest speakers, interviews, books, picture books, read-alouds, reference materials, computers, and experiments.

Students will keep a Pittsburgh Journal and collect data in a folder. Generally, lessons will begin with a journal entry, and a meeting where the group's input is recorded on charts to be displayed in the room for future reference. From there, students will "discover" information through individual or group work using any of the strategies listed above. As a result of their learning, short and ongoing projects such as model making, book making, reports, experiments, etc., will be conducted. At least twice per week, sessions will end with self-reflection about what students learned, group dynamics, and the process they used to gain information.

Prior to a field trip background information will be presented to students. Students will create a list of questions they may have about the field trip and the time period they are studying. The teacher will make a pre-trip visit and a trip sheet will be used to focus the visit. Upon return, there will be discussion about what students saw and learned on the trip. Students will work in groups or individually to develop a plan of how they will demonstrate their learning. Over a short period of time, about 1 week, the students will carry out their plan.

When the time comes for students to write reports or narratives, students will be taught skills such as the writing process, elements of a narrative or report writing, and how to respond to informational text as part of the "Writer's Workshop." Students may use books that are a part of the Colors of Change Study to practice comprehension and vocabulary skills taught in the "Reader's Workshop." Students should also be learning 5 new words a day and reading "a lot" daily. Students can use these books as part of their book and new word logs.

During computer lab periods, students will be able to use the Internet, Microsoft Reference materials, and Microsoft Word to type reports, or narratives, and make charts or graphs.

Activities

Students need to have a basic understanding of environment, community, and what a city is. Record their thinking in their City Journal and be prepared to share at meeting time. Students are responsible to record their thinking in their City Journal and be prepared to share at meeting time. For the purpose of this study, the environment will consist of air, land, and water. Spend time reflecting on the following questions and related activities. Why do we need air? List reasons we need air and set the chart aside until you reach the industrial period of the study. Why do we need water? / How do we use water? List responses and discuss them. Set the chart aside until reading and discussion about the rivers becoming polluted or other water issues arise. How do people use the land? Record the answers on a chart and refer back to it when appropriate. Each question above and throughout the activities constitutes a lesson. As an anticipatory set, the question for the meeting is posted and students are responsible to write their thinking in their Pittsburgh Journal and to share their thoughts during the meeting. During meeting time responses are recorded and discussed. Follow up activities may apply.

Students should be able to distinguish between wants and needs and what are the basic needs of people. Meeting topics may include: What is environment? What do people need to survive? What is the difference between wants and needs? What do families need to survive? Remember

to reference air, land, and water. On chart paper make a list. From this list note three categories of basic needs: food, clothing, and shelter. Over three days view the following filmstrips: Families Need Food, Families Need Clothing, and Families Need Shelter. Keep this chart posted and add changes as you progress through the rest of the study.

Early Years

When the pioneers arrived, the environment was in its most natural state. As stated previously, there were oak, beech, chestnut and maple trees, among other vegetation. Many kinds of animals like deer, bears, and cougars lived in the forest. The rivers contained trout, bass, catfish and other species of fish. The primary concern of Native Americans and Pioneers was providing clothing, shelter, and food. The Land in the Fork was valuable to many because of its location on the three rivers and access to the West. Settlers arrived with weapons, metal, and other items that were valuable to Native Americans. Native Americans knew the land and how to plant and harvest. While each group was dependant on the other, they had different lifestyles and cultures. Trade was established and people's needs become more involved. Transportation and industry began to grow. With this expansion, changes to the land, air, and water were inevitable.

Environment

Read pages 1-3 from The Story of Pittsburgh. Prior to reading, have students answer the following question in their Pittsburgh Journals: Imagine what it was like 300 years ago. If you had been standing where Pittsburgh is now, what do you think you would have seen? After reading, discuss these questions. What are natural resources? Identify some in Pittsburgh. Why was the land at the fork so desirable? What was the purpose of the river during this time?

Visit Mount Washington and observe the Point in its present state. Locate the three rivers and show how the Point is also the Land in the Fork. Take a clipboard and paper and have students draw what they see. After the trip, compare current drawings with maps and pictures of the Point long ago.

In small groups, begin a mural of Pittsburgh during pioneer times being sure to leave space in the forefront to add people and shelter. Other groups may create a book describing the environment.

Read pages 14-18 from The Story of Pittsburgh. Small groups who are interested may build small keel, or flatboats or use the book, Canals and Waterways, to make locks and dams or aqueducts.

List and talk about the different kinds of industry present in the first 100 years. Discuss the pro's and cons of technology of the time (The steam boat and the steam engine for the railroad) How did this impact the environment?

Describe differences in the land, air, and water now and long ago. How did the air and water become polluted? What happened to the land during this time?

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The focus of these activities is to find out who lived in Pittsburgh during this period, and how they survived. Students may make predictions in their Pittsburgh Journal prior to reading sections of The Story of Pittsburgh, pages 5-13.

Tell about life as a Native American. Prior to reading pages 5-6 of The Story of Pittsburgh and Pittsburgh Our City, predict what life was like as a Native American. After reading, check predictions and discuss. Students can draw pictures of Native American clothing, and foods they ate. They may also use popsicle sticks and cloth to build long houses and their contents. The model is then labeled and displayed. Select students to use the Internet to find information about the Delaware, Seneca, and Shawnee tribes

Read aloud the introduction to Children of the Earth and Sky and discuss the Shanopin and Delaware tribes. Read Brother Eagle, Sister Sky, by Susan Jeffers to illustrate Native Americans' love of the earth. Answer the question, How did the Native Americans show respect for nature?

Pioneers/Settlers

Read pages 6-13 of The Story Of Pittsburgh. Tell about life as an early settler. Why did the British and Native Americans rely on each other? What is a frontier? Listen to books with tapes about the life of a Pilgrim Girl or Pilgrim Boy. Compare and contrast roles and responsibilities. Build a pioneer house and its contents to display. Compare and contrast family life of pioneers and Native Americans. Visit the Point and read placards depicting the fort.

maple, and re oak, in ittricityed a predictions ative Americanhare at meeting time. s posted and students are responsible to rRead pages 19-21 of The Story of Pittsburgh. Meeting questions may include: How did the environment affect people's living conditions and their health? Refer to charts previously made and discuss the issue associated with polluted water and lack of sewage disposal. Why was a water system a necessity? What kind of laws would you make if you lived during this time?

Add people to the mural of the first hundred years. Be sure to illustrate environmental issues in the mural as well. View the filmstrip Families Need People.

The Industrial Revolution

As previously stated, Pittsburgh had many natural resources that were exploited. Steel was being produced. The railroads were increasing ability to transport goods. Pittsburgh produced materials needed for WWI and WWII. There was smog and flooding. Pittsburgh had become a thriving industrial center.

Read pages 22-26 from The Story of Pittsburgh. In their Pittsburgh Journals, students should answer the following: What is an entrepreneur? Tell the accomplishments of the major entrepreneurs and write a brief report on Andrew Carnegie as a class. The book Andrew

Carnegie may be used as a read aloud to pull out important information. Assign other famous people of the 1800's to groups of two and have them write reports. Try to include ways the person had an impact on the environment.

Read pages 27-29 from The Story of Pittsburgh. In their Pittsburgh Journals, students will answer these meeting questions: What are laborers? What were living conditions like for laborers? What were working conditions like for laborers? What did laborers do to get better working conditions? Read Growing Up In Coal Country to illustrate living conditions, work life, entertainment and standing up for one's rights. Select and read excerpts from Kids on Strike and Nineteenth Century America, the Unions to illustrate the importance of unions and going on strike. Also emphasize the concept that kids can make a difference in societal issues.

Read portions of the book The Industrial Revolution and discuss the components of the industrial revolution that relates to Pittsburgh (iron and steel, mining, and transportation.) Use the book I Wonder How Steel Is Made as reference. Analyze the impact of the industrial revolution on the environment. A fast and easy teacher reference such as Industrial Pollution: Poisoning Our Planet, may be used to facilitate conversation. Identify technology of the time and identify pros and cons. View the filmstrip Families Need Machines.

View portions of the video, Out of this Furnace. While watching the video, observe the environment; air, water, land and living conditions. Have students write reflections about the video and how they would change things. View pictures from book Eliza Remembering a Pittsburgh Steel Mill. Visit Braddock and walk through the neighborhood and look at steel mill. Point out streets and sites from the video. Students should write their thoughts about the visit to Braddock and viewing an actual Mill. They should also draw pictures of what the neighborhood looks like now and tell why they think it's that way. View the filmstrip, Families Need Money.

Design role-plays of conflict between laborers and entrepreneurs. Assign a student to be a mill owner, others to be laborers, someone to represent the union, and a person to represent the receiver of goods. Emphasize long work hours, poor work and living conditions. Present a problem and have the group develop a solution. In their Pittsburgh Journal books, students should record their feelings after their experiences.

Visit the Heinz History Center and view the exhibit of neighborhoods as they looked during the industrial revolution. Discuss the differences in the neighborhoods and have students give theories about why each neighborhood is separate and different. Select books or get information from encyclopedia or Internet about famous entrepreneurs and write reports on their contributions.

Collect water samples from Nine Mile Run Creek and observe polluted water for color and smell. Discuss reasons why it is polluted. Visit the Water Works, Sewer and Water Treatment Plant.

Read pages 29-32 of The Story of Pittsburgh. Discuss the problems with the environment and living conditions that arose as a result of the Industrial revolution. Tell solutions and why they did or did not work. How did the war change things in Pittsburgh? Look at Pictures from various

books of Pittsburgh history, for example A Pittsburgh Album or The Story of Pittsburgh. Have students give opinions on the condition of the city in terms of pollution and what should be done to clean up the city. Students can make a mural of the environment and add people and buildings. They should compare and contrast Pittsburgh present and past.

The Renaissance

How did Pittsburgh change from a smoky city to a clean city? We have learned that during the renaissance, people became prosperous and needed to work less. The wars had ended and health and happiness became a priority. There was a big push to improve the environment and develop recreation. The rivers and the air needed to be cleaned. Steel Mills began to close or be moved and laws were made to protect the air and the water.

Have students write a response to the question: What if there were no parks or places to play and relax? How would you feel and what would you do for fun and rest? What is the renaissance? What caused people to want to clean up the environment? How did the environment change during the renaissance?

Who were influential people in the environmental movement? Select books and use other resources to research information about Jacob Lawrence and Richard King Mellon. Students should focus on their contributions to the renaissance.

How do we keep people safe? Why do we need laws? Who takes care of the city? Who makes laws? How do we get city services? What is Government? How did city government help change the environment? Discuss city government and its branches. Talk about how laws, acts, and ordinances are passed. Discuss laws that were passed during the renaissance and why they were necessary. Brainstorm about laws that could be passed to improve health and well being today. Visit a City Council meeting in session. Invite the representative for the school to talk with the class about the renaissance and other environmental issues. Read Keeping the Air Clean and Cleaning Up Our Water.

Visit existing parks like Schenly Park and Highland Park. Locate them on maps of Pittsburgh and notice the amount of space they take up. Find the area and perimeter of the parks. Create relief maps of different parks. Note the parks' elements and rationale for them and add to the display. Make the map to scale and include a key.

Visit the Homestead waterfront. Identify ways the old and the new were incorporated into the project. Select a way to show the Homestead project in the classroom by model, map, drawing, or any other medium. Choose an area in the school's neighborhood and brainstorm ideas for uses of the structure and space while incorporating its history. An old grocery store could become a recreation center or skating rink. An empty lot could become a community garden.

Neighborhoods

Pittsburgh's neighborhoods are diverse and have a rich history of the culture that has been infused into the United States and Pittsburgh specifically. Discussion and lessons will focus on

neighborhoods and local government and its influence on our daily lives. Meetings include: What do you know about your neighborhood? What kind of people live in any given neighborhood?

Take a walk through the school's neighborhood. Note what is observed both positive and negative. Take note of the physical environment, kinds of people, and types of buildings. Mark places that are fine the way they are and those that should be torn down or can be fixed or changed. Mark the number of green spaces found as well. This task can be broken into committees that are looking for specific criteria. Each committee would present to the group and contribute to a master data sheet for the neighborhood. If this is not the student's neighborhood, have them do the same thing in their neighborhood and bring in a report. You can compare and contrast neighborhoods. Invite the History and Landmarks Society to do a walking tour of the school's neighborhood.

Invite people in or ask students to interview older people from the neighborhood to hear stories about what it was like long ago. Emphasis should be placed on questions about types of houses, recreation, and kinds of people who lived there. If possible, collect old photos taken in the neighborhood.

Write letters to City Council representatives asking for information about neighborhood improvement projects that are being implemented. Check with local community groups and invite a speaker to talk about projects happening within the neighborhood to revitalize it. Find out if there are things that kids can do to become involved. Have students design green spaces for their neighborhood. Select a project to revitalize or improve the school inside or outside. Begin planning to implement the project.

Activities include reading of Pittsburgh Our City and The Story of Pittsburgh and other picture books about neighborhoods. Trips may be taken to look at different neighborhoods. Students can compare and contrast neighborhoods. Using the Internet, students will research the history of a selected neighborhood. The teacher will invite speakers to share traditions of different cultures. Students will read about and discuss local government. The class will visit City Hall and other buildings of the city government. They will also sit in on a City Counsel session and establish a government within the classroom.

Pittsburgh Present and Future

After learning about the past, it is now up to the students to predict and create future Pittsburgh. How will it look? Who will and how will Pittsburgh be maintained? What changes need to be made and why? How do we hold on to the past, as we embrace the future?

There will be mixed feelings about ways to culminate this study. The classroom community should have taken ownership of the work and become invested in perusing a certain course of action. Therefore, a project should be developed that impacts the community and demonstrates the learning that has taken place. The teacher may want to create a museum or an art gallery of all completed work projects and have students act as tour guides. Anything the class community

determines as the next course of action should be appropriate. However, it is important for students to culminate the study in a way that integrates all of their knowledge.

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Appendix A

Pittsburgh History Series Teachers' Guide

WQED'S Pittsburgh History Series will help us tell the story of six eras of western Pennsylvania history, which we title after Pittsburgh's past names or nicknames:

- □ Forks of the Ohio: Native American Crossroads Before 1755
- □ Fort Pitt: Military Outpost 1755-1795
- □ Gateway to the West: Commercial Trade Center 1795-1852
- □ Smoky City: Early Industrial Town 1852-1876
- □ Steel City: Manufacturing Metropolis 1876-1945
- □ Renaissance City: Corporate Center 1945-present

Video about Western Pennsylvania History

Mix and match segments to meet your goals

Discussion and Activities

Use before, during, or after viewing videos in class

Resources

Find bibliography, web links, and community resources

Appendix B

Student Learning Standards

Communications

1. All students use effective research and information management skills, including locating primary and secondary sources of information with traditional and emerging library technologies.

2. All students read and use a variety of methods to make sense of various kinds of complex texts.
3. All students respond orally and in writing to information and ideas gained by reading narrative and informational texts and use the information and ideas to make decisions and solve problems.
4. All students write for a variety of purposes, including to narrate, inform and persuade, in all subject areas.
5. All students analyze and make critical judgments about all forms of communication, separating fact from opinion, recognizing propaganda, stereotypes and statements of bias, recognizing inconsistencies and judging the validity of evidence.
6. All students exchange information orally, including understanding and giving spoken instructions, asking and answering questions appropriately, and promoting effective group communications.
7. All students listen to and understand complex oral messages and identify their purpose, structure and use.
8. All students compose and make oral presentations for each academic area of study that are designed to persuade, inform or describe.
9. All students communicate appropriately in business, work and other applied situations.

Mathematics

1. All students use numbers, number systems, and equivalent forms (including numbers, word objects and graphics) to represent theoretical and practical situations.
2. All students compute, measure and estimate to solve theoretical and practical problems, using appropriate tools, including modern technology such as calculators and computers.
3. All students apply the concepts of patterns, functions and relations to solve theoretical and practical problems.
4. All students formulate and solve problems and communicate the mathematical processes used and the reasons for using them.
5. All students understand and apply basic concepts of algebra, geometry, probability and statistics to solve theoretical and practical problems.
6. All students evaluate, infer and draw appropriate conclusions from charts, tables and graphs, showing the relationships between data and real-world situations.

7. All students make decisions and predictions based upon the collection, organization, analysis and interpretation of statistical data and the application of probability.

Citizenship

1. All students demonstrate an understanding of major events, cultures, groups and individuals in the historical development of Pennsylvania, the United States and other nations, and describe the patterns of historical development.

2. All students demonstrate understanding of themes and patterns of geography, know the location of major bodies of water, land masses and nations, and describe the relationships between geography and historical, economic and cultural development.

3. All students describe the development and operations of economic, political, legal and governmental systems in the United States, assess their own relationships to those systems, and compare them to those in other nations.

4. All students examine and evaluate problems facing citizens in their communities, state, nation and world by incorporating concepts and methods of inquiry of the various social sciences.

5. All students develop and defend a position on current issues, confronting the United States and other nations, conducting research, analyzing alternatives, organizing evidence and arguments, and making oral presentations.

6. All students explain basic economic concepts and the development and operation of economic systems in the United States and other nations, and make informed decisions about economic issues.

7. All students demonstrate their skills of communicating, negotiating and cooperating with others.

8. All students demonstrate that they can work effectively with others.

9. All students demonstrate an understanding of the history and nature of prejudice and relate their knowledge to current issues facing communities, the United States and other nations.

10. All students demonstrate an understanding of the various roles they can play as citizens through participation in a community service project.

11. All students demonstrate the ability to resolve conflicts in peaceful ways, including but not limited to peer mediation, anger management, interpersonal skills, and problem solving.

Science and Technology

1. All students explain how scientific principles of chemical, physical and biological phenomena have developed and relate them to real-world situations.

2. All students demonstrate knowledge of basic concepts and principles of physical, chemical, biological and earth sciences.
3. All students use and master materials, tools and processes of major technologies which are applied in economic and civic life.
4. All students explain the relationships among science, technology and society.
5. All students construct and evaluate scientific and technological systems using models to explain or predict results.
6. All students develop and apply skills of observation, data collection, analysis, pattern recognition, prediction and scientific reasoning in designing and conducting experiments and solving technological problems.
7. All students evaluate advantages, disadvantages and ethical implications associated with the impact of science and technology on current and future life.
8. All students evaluate the impact on current and future life of the development and use of varied energy forms, natural and synthetic materials, and production and processing of food and other agricultural products.
9. All students demonstrate basic computer literacy, including word processing, software applications, and the ability to access the global information infrastructure, using current technology.

Environment and Ecology

1. All students understand and describe the components of ecological systems and their functions.
2. All students analyze the effects of social systems, behaviors and technologies on ecological systems and environmental quality.
3. All students think critically and generate potential solutions to environmental issues.
4. All students evaluate the implications of finite natural resources and the need for conservation, sustainable agricultural development and stewardship of the environment.
5. All students demonstrate an understanding of the local, national and international implications of environmental and ecological issues.

Career Education and Work

1. All students explore the multiple purposes of work and the range of career options, including entrepreneurship, and relate them to their individual interests, aptitudes, skills and values.

2. All students assess how changes in society, technology, government and the economy affect individuals and their careers and require them to continue learning.

3. All students understand and demonstrate the importance of relating their academic and vocational skills - for example, interviewing, creative thinking, decision making, problem solving, understanding and giving written and oral instructions - to their ability to seek, obtain, maintain and change jobs.