



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
2015 Volume II: American Culture in the Long 20th Century

A Turn of the Century Reading of *Yellow Death: A Story of Medical Sleuthing*

Curriculum Unit 15.02.07
by Medea E. Lamberti-Sanchez

Introduction to *The Secret of the Yellow Death*

Summer, 1899: “The young man didn’t feel well. There was a chill, an icy, bone-freezing chill in the middle of a warm summer evening. Then there was a terrible, crushing headache. His back hurt, and spewed streams of black vomit with digested clots of blood across the pillow...”¹ “Ewe, Mrs. Sanchez! That’s disgusting; I don’t want to read anymore.” “Why do we have to read this book?” “I don’t like this book at all” and I like it!” These were just some of the reactions that the students had to the introductory pages of the core novel, *The Secret of the Yellow Death: A True Story of Medical Sleuthing*. At first, the students were interested in the start of the novel because of its use of descriptive language and interesting details about the young patients of Yellow Fever, but then the reactions started to change, and I was not sure why.

The Secret of the Yellow Death is a historical, scientific, and informational text that offers plenty of opportunities for the students to think analytically about Yellow Fever. The book hones in on the cause, the transmission, and the treatment of the disease. *The Secret of Yellow Death* follows the story of five scientists who go to Cuba and begin their crusade to find the cause and cure for Yellow Fever. The story follows the lives of Dr. Walter Reed, Dr. James Carroll, Dr. Jesse Lazear, Dr. Aristides Agramonte, and Dr. Carlos Finlay. These characters carry the narrative of the book, and move the plot toward its climactic ending. The book offers great illustrations to describe what the characters, medical equipment, and bacterium looked like in the 1900’s as well as they lent themselves to great discussions about the equipment used during that particular time period. Overall, the structure of the book was laid out well; the book had a strong introduction, and the vocabulary signaled higher-order thinking about the context of the words in relationship to the content of the novel. The book’s dramatic chapter titles enticed the students and enabled them to think more broadly about the chapter’s content.

The book is part of the Plugged-In to nonfiction series, by Janet Allen². It is one of two nonfiction core titles that is introduced during the year. The curriculum guide for this book includes several vocabulary word study

handouts, poetry, and resources that the teachers may use to accompany this book. All the non-fiction materials presented are great to use to strengthen the student's background on the topic of yellow fever. The book also has an audio component, in which, the students are able to listen and follow along with the narrator of the story. The audio component provides the students with a chance to build both their fluency and their vocabulary skills. The difficult vocabulary words are pronounced for the students and explained further in the text; which helps the struggling readers decode the words easily. There are fiction and nonfiction Science connections as well as supports to match the text to the individual reader through photographs, primary and secondary sources, historical narrative, and "edgy content about death and disease." The strengths of the book rely on its historical content, but this was not enough to sell the book to the students. They were interested in learning more about the time period other than the historical background of the yellow fever disease.

Even though the book offers multiple attempts to discuss, analyze, and examine the patients, the bacterium, and the scientists, the students could not relate to the characters, their lives, or the time period. Several weaknesses included the historical background of the Spanish American War, although the book touches upon it, it really doesn't offer the students much information as to why Americans were involved in the conflict and its relationship to yellow fever. Another weakness had to do with the roles of men and women in this particular time period. Again, the book mentions the wives of the scientists, but it does not offer any opportunity to explore the feelings, or interactions of the female role. Lastly, the book does not touch upon Germ theory, or the importance of the discovery of germ theory, and its necessary role that it played in diagnosing diseases. The students wished that the book would have offered these notions in order to add more excitement for the topic at hand. Based on these discussions with the students, the weaknesses of the book drive the reason for the unit. The unit will offer knowledge on these ideas through classroom activities that can be showcased through technology, social media, visual arts, or informational brochures.

Rationale

Since the book is a required text from the New Haven Public Schools curriculum, there was no choice for them not to read it, but the students did get a choice in what they were interested in learning more about. For the majority of the students, connect ability to the characters and time period were major priorities, with little emphasis placed on the background of the disease.

In this unit, the students' questions will be answered and they will be able to draw conclusions about life in the turn of the century. The idea behind this unit originated from class critiques and book reviews that offered mixed reactions to the book. The feedback that I received from the students made me realize that if I wanted this book's likeability to soar, then I had to teach other subject matter in addition to the book. It was also a goal to change the perspectives of the students about the book from utter dislike to pure love for the heroic scientists who risked their lives for medical research and science. Despite the grotesqueness of the introductory chapter, the book promised rich conversation and student discourse from start to finish about life in the early 1900's.

As stated before, forming relationships with the characters and their stories is extremely important in being able to become a part of the experience of the book. My students were presented with great characters, portraits, and letters, but there was no meaning derived from them without the knowledge of the past. Once

the students are given the framework, their understanding of the past becomes more applicable. Student-centered discussions can build upon prior knowledge, so that the students can filter out the information that is the most useful for them to use and teach others about.

The unit will include reading, writing, and researching topics surrounding yellow fever. The new background that the students will learn will enhance their close reading of the book. The new information is designed to get the students actively involved. Hopefully, it will invite connections to the real world and interpretations of life at this time period. The unit will appeal to students who are auditory learners, visual, kinesthetic, and linguistic learners because of the multiple resources that are being highlighted and used throughout the unit. The experience of the book will be richer once the students gain more insights about what they are interested in.

Topics of Interest

Cuba and the Spanish American War

Cuba is the largest island of the West Indies Group; its size is equal to that of Pennsylvania. It is located south of Key West, Florida, at the entrance of the Gulf of Mexico. It is mainly a mountainous region that includes several smaller islands.

During the late 1890s, The United States wanted to increase its role in global affairs. Theodore Roosevelt advocated for a strong presence in the world's foreign policies and believed that America needed to be involved in policies that extended past its own boundary lines. His aggressive attitudes toward foreign policy led to new policies of intervention in the Pacific and South America. Roosevelt backed these policies with direct action that included the construction of the Panama Canal as well as fleets of warships that sailed throughout the waters. The Spanish American War placed America on the map of world powers. This event changed how America was viewed. At that time, Spain ruled over many countries including Cuba, and the war for freedom and independence swept through Latin America. By the year 1890, Cuba and Puerto Rico were the only islands left to be ruled by Spain, and the United States's close proximity to both of these islands made them important for economic and military reasons. Americans invested in many Cuban products like sugar and tobacco, so therefore, American businesses had a strong presence.

Tensions mounted between Cubans and Spaniards as Cubans fought for independence, and by the 1890s, this conflict escalated. Cubans were treated badly, and many died from diseases, and hunger. When the United States received word of this, they were outraged and even more so, the newspapers inflamed these attitudes and members of Congress called for the intervention of the Americans. This was an effort for Cuba to win their independence. The United States was also concerned about the Americans living in Cuba in 1897, because their property was rioted. President McKinley, in 1898, sent the Battleship Maine into Cuba as a protective measure, but instead, the ship blew up in the Havana Harbor. The United States newspapers blamed the Cubans for the battleships demise, and Pulitzer and Hearst inflamed the event further with articles detailing the tragedy. In April of 1898, war begun. The Spanish forces were no match for the Americans. The Spanish lost their entire fleet, and more ships were sent to Manila Post where thousands of American troops were stationed there. Soon after, American warships blockaded Cuban waters and American military men landed on the shores. The Rough Riders were led by Roosevelt. Americans suffered from tropical diseases such as Yellow

Fever, and more died from this disease than bullets. The war was highlighted by several battles, and in July, the Spanish government sued for peace. After the war, the decision to grant Cuban independence from Spain was granted, and at which time, Spain also “sold” the entire Philippines to the United States for 20 million dollars. Lastly, Spain issued the United States power over Puerto Rico and Guam in the South Pacific.

The Rise of the Independent Woman

The roles of men and women in the 1900's changed drastically. Unfortunately, during the time period that the book discusses, 1900-1910, the roles of women and men were not discussed in detail. It was implied that the men dominated the economic and educational sphere and the women were expected to tend to the household, take care of the children and were often suppressed. The book offered a chance to meet the wives of the scientists, but did not invite the reader into their personal lives, or to learn very much about them. Students wanted to know why the women were not allowed to go to their husband's funeral, or be a part of their social lives. It was assumed that the role of the woman was to be dependent upon her husband for money and social status. Although the book made it seem like the women were confined and restrained to a way of life that consisted mainly of housework, family obligations, and entertaining within the private sphere, the truth was that during this time period, the roles of women changed drastically. The spirit of the “new woman” evolved and contested the role of a male-dominated society. The term “new woman”³ referred to independent women who have exerted control over every aspect of their lives including personal, economic, and social. The “new woman” was no longer dependent on her husband for her economic survival because she was presented with career opportunities and education that would foster her knowledge and push her to become more competitive in a male-dominated world. My students need to know that the roles of women were not confined to household duties. In conversations about the women in *The Secret of the Yellow Death*, they often ask about the women in the book, and want to know what their lives were like during this time period. They needed to be aware that the women saw themselves in a new way, one that exerted power and demanded respect in a world that was considered to be a “man's world.” It was because of the spirit of the “new woman” that the social roles started changing and women were not left in the role that they were known for. Progress was being made.

The new woman that evolved between the 1890s and 1910s was a symbol of freedom and independence from the typical female role. Women, soon, expanded their roles as artists, writers, lawyers, doctors, teachers, journalists, and professors, and men had to adapt to the changes brought about by the new roles of the women. Students should recognize that the females were just as important in the story as the men were because they sought out independence from the male-dominated society and pushed the limits to which they were confined.

The Microscope and Germ Theory

The major scientific instrument that the scientists used throughout *The Secret of Yellow Death* was the microscope. In the 19th century, the improvements that were made to enhance medicine were immense. The microscope, the main instrument of choice, made such advancement that it allowed scientists to study cells and tissues more extensively. The evolution of the microscope was credited to three Dutch eyeglass makers, who invented the first practical microscope, but it wasn't until later that an English philosopher, Robert Hooke, made the most significant improvement in its design and also introduced external light sources; however, the images he saw were blurry. Later, Leeuwenhoek introduced finer lenses which helped to magnify the images 275 times. He was the first person to see sperm, single-celled animals, and red-blood cells. He was nicknamed the “Father of Microbiology.” Since then, the microscope was defined further, so that the images can be

magnified up to 2000 times, and use electrons and X-rays, instead of light. Matter was now viewed at an atomic level.

In addition to the microscope, the field of medicine advanced. when Louis Pasteur, a French chemist and microbiologist, developed germ theory. Germ theory is defined “as the theory that infectious diseases are due to the agency of germs or microorganisms.” Germ theory proved to be a revolution in medicine because it expanded the lives of people, improved sanitary conditions, and improved and created new medicines. As a result, people knew what caused certain diseases and how they could be prevented. Most people learned how to cure infectious diseases simply by washing their hands and their surgical instruments more frequently before, during, and after a medical procedure.

Prior to germ theory, “the transmission of diseases was thought about from a different viewpoint. It was believed that one disease could change into another, or manifest itself differently in different people.”⁴ Scientists studied and explained diseases without any awareness of disease causing bacteria, or microorganisms. They thought that “diseases did not result from action on the human body by a disease causing agent, but instead, by the individual’s interactions with the environment.”⁵ It was also noted that “an infected person could spread the disease without showing any signs of the disease”⁶, like those patients in the *Secret of the Yellow Fever* book, while others were more likely to catch the germ rather quickly once exposed. The scientists in the book, tried to understand and find the cause of yellow fever through exposing their volunteers to unsanitary conditions before it was known that the female mosquito caused the disease. If it was not for the Germ Theory, the disease would not have been contained or controlled. Later, scientists developed vaccines for those living in areas where the disease was the most prominent, and have also improved medicines for those who have contracted the disease. Bug repellents have also been created for those people who live in areas that are inhabited by mosquito-borne illnesses.

Entertainment

During the discussion of the book, the students asked about what people did during their leisurely time, and I thought it might be interesting to mention the arts since the focus of my school is centered around the visual arts. My students were interested in what types of dance and music were popular, as well as what recreational activities were popular throughout the early 1900s. I thought it might be interesting to listen to “Alexander’s Ragtime Music” and analyze the song, and watch the dancers express themselves through ragtime music. I am also interested in showing the students a clip of *The Great Train Robbery*, released in 1903 to show the students what the moving picture looked like prior to our new technological advancements of the movie theatre, as we know it today. YouTube is a great resource for videos of this time period, and are great starting points for students to learn information from. Students can search for information regarding various forms of entertainment using search engines like Yahoo or Google. Lastly, I will focus on Amusement parks, because my students love going to them simply because of the rides like the ferris wheel and the rollercoaster. My students would love to see what the rides looked like and how they changed and developed over time, as well as the popular amusement park foods like the ice cream cone, or the hotdog. Amusement parks like Coney Island, St. Louis Fairgrounds, and Atlantic City are among all of the theme parks that should be covered. We will discuss the evolution of food like the popularity of the ice cream cone, or the hamburger, in addition, to the gigantic ferris wheel that thrilled thousands of people. I will use visual aids like pictures to illustrate how people looked, lived, and enjoyed the thrill of the amusement park.

Before the 1900’s, people watched live entertainment or made their own by sitting around the piano singing, but before long, recorded music took a life of its own. The phonograph played cylinder shaped discs, and

music was becoming more refined. Jazz music and ragtime music flourished, and by 1911, Irving Berlin wrote a hit song, "Alexander's Ragtime Band," and became one of the most popular styles of dance during this decade. Vaudeville featured nonstop shows of singers, dancers, musicians, and actors. In addition to the changing sounds of music and theatre, the entertainment of this time period consisted of traveling shows and trolley parks. People rode ferris wheels, attended baseball games, band concerts, and the movies. People loved football, baseball, and boxing as we did, and the idea of going to sports outings was found to be exciting and very popular. In addition, people loved going to the movies just as we do today. The students would be fascinated to learn about the moving picture and the fact that theatres sprouted up across the country all through the 1900s. The lives of Americans changed drastically in the area of entertainment and technology. New inventions like the telephone, and the phonograph made life easier for all the people throughout the 1900s.

Objectives

The reading and writing objectives for this unit will align with the Common Core State Standards and will consist of students being able to draw information from multiple and digital resources to develop and organize their writing in a concise manner. According to the Common Core State Standards for English Language Arts students are expected to "draw evidence from literary or informational text to support analysis, reflection, and research as well as use their knowledge to engage in a range of collaborative discussions about the topic." Students will be offered a variety of ways to engage in meaningful discussions, work both cooperatively and independently, while still being able to express shared ideas. The students will also learn how to effectively take notes and write descriptively about their experiences using graphic organizers like the Venn diagram that serves to compare and contrast information, the classic KWL chart (know, what to know, and learn chart), and Cornell notes that force the students to make meaning out of the questions that they are asking, so that the students can think more critically about the topic at hand. The unit will also address CCSS Reading for Information Essential Questions that focus on key ideas, craft and structure, and integration of knowledge and ideas surrounding the books. Students will have multiple opportunities to think creatively and share ideas both cooperatively and independently either through writings, readings, or art-integrated pieces. Throughout the unit, the objectives for reading and writing will remain the same. Students will determine the central idea of the text through its particular details and identify key ideas through specific strategies, note taking, and questioning that will anticipate questions when writing.

The writing objectives focus on the concept of being able to understand what was read and discussed in class in order to build writing fluidity, structure, and cohesiveness. Graphic organizers will serve as visual aids for the students to build strong research skills about the topics. The writing is focused, structured writing on a particular topic that the students will be able to type, or hand-write later on as the unit progresses. There will be lessons on grammar and punctuation that will assist the students with the revision process through the writing workshop component.

Goals of the Unit

It is the goal of the unit for the students to write a research-based, specific, informational paper, or better known as the I-search paper, on medical technology from the turn of the century to the present, or the lives of women from the past to the present, with a specific purpose that includes a claim, an introduction, and supporting reasons using adequate elaboration of the material that is learned throughout the duration of the unit. The struggling writers will use the RAFT. (Role, Audience, Format, Topic) model for writing in which students choose a perspective to write from like a soldier, a scientist, a woman, and will choose the format that they would like to write it in like a letter, a journal entry, or an article on a specific topic.

The writing will have a clear audience and will be shared with their peers, and their teacher in order to edit and revise the piece of written work. Even though it is a research based assignment, the paper can be written in the RAFT format, or the standard research format. The book is also taught during the third marking period, so the writings and the information from the book will be closely tied together. The teacher's goal is to guide the students through the writing with the use of graphic organizers, mini grammar lessons, and use of other writing techniques that the students can use to monitor their writing. All of the lessons presented on writing will be organized in their writing folders and notebook.

The second goal of the unit is for the students to work cooperatively in smaller groups to write, illustrate using photographs, collages, or hand-drawn pictures, and explain the chronological events of the Spanish American War. The goal will be to look at the pieces of literature that are given to them by the teacher, and their own research on the war, and highlight the most important pieces of this information to use. The goal of the students will be to plan the important events together, and be able to verbally and pictorially explain them. The students will timelines so that they can follow it in case they become overwhelmed with the abundance of information they get from their resources. There will be a rubric and a guide to specifically serve as an assessment tool for both the students and the teacher to ensure that directions are being followed accurately and carefully. It will be a difficult task and may be modified or adapted to the teacher's and students' needs. The goals of both these tasks comply with the Reading and writing standards of the Common Core framework and will fulfill the required tasks, both writing and performance, for the third marking term as outlined in the New Haven Public Schools district curriculum.

Strategies for the Unit

What are the strategies that this unit will focus on?

The unit's strategies will focus on teaching the students how to read and summarize informational articles, and view multiple visual aids to determine meaning. The reading lessons will focus on conducting and building research skills in order for the students to draw conclusions about the text and build knowledge of the events. In addition, the students will learn various strategies for note-taking so that the information that is read or written about can be accurately recorded and paraphrased for the culminating project. Other key strategies include teaching the students how to accurately cite information and use it to effectively elaborate in their I-search papers, or RAFT papers, in addition, to teaching them how to write a bibliography.

Another strategy that is important is teaching students how to use technology effectively. The teacher should show the students which websites are trustworthy for information, and which are not as trustworthy, or valid to draw sources from. The students should also be taught how to generate good questions in order to search the topics easily. If the students generate good questions, then they should be able to search the topic they are interested in more specifically on internet websites like Google or Yahoo.

The third strategy that is helpful in teaching the students how to write an informational paper based on RAFT is to give them a choice about what role they would like to take on, and the topic that they would like to talk about. Student choice is an integral part of the writing because it allows them to pick and choose what it is that they want to write about. Teachers may choose to model one first with the students, read it out loud, and revise it together. Student perspectives will change and force the students to view the characters differently in the story based on the new knowledge that they have gained.

Cooperative learning is another important part of this process. It is supposed to be an enjoyable task, not a chore, so it is suggested that an exercise in team building should be a part of the unit before the students actually get into groups to work on the events of the Spanish-American War. Teamwork is such an important theme in *The Secret of the Yellow Death*, and it should be an important part of the task, as it is a theme that is implied throughout the book as seen with the scientists.

Perhaps the last strategy that will be taught has to do with helping the students generate good questions. The questions are the key for learning essential knowledge about the topic of interest. The questions also help to organize their thoughts into categories that they can use later on in their I search papers. Questions can be organized into ideas like: Why is this topic so interesting and what do I need to know about this topic? Questioning the information that is read can also be helpful in making predictions and wondering about what materials are provided for you to make meaning from. The questions will guide the research in many ways. First, the students have a narrow focus, second, they understand the topic they are researching, and thirdly, they can decipher what are the most vital pieces of information that can be taken from the readings and used.

Resources

The students will have several opportunities to use nonfiction, fiction, and internet resources to conduct their research on the three main topics surrounding the book. The books that I chose for the students to look at include *Chronology of the 20th-Century America*, *Decades of the 1900s*, *Our Century: 1900-1910*, and *America in the 1900s and 1910s*. All these books look at a timeline of events that highlighted the time era. They are in chronological order, and present facts and photographs about what people did in their daily lives, the roles of men and women, various wars other than the Spanish American war, and of course, entertainment like sports, music, and art of the decade. In addition, key individuals are highlighted like Albert Einstein and Sigmund Freud. I will use excerpts from these books to pinpoint, or highlight the daily lives of people. There are also statistics that the students would be impressed by or prompted to ask questions about like the cost of theatre tickets in the 1900s, or the number of people who went to elementary, middle, or high school. The journey that these books will offer to the students through photographs proves to be a snapshot of a time when life was both extraordinary and ordinary.

The next set of books that I plan on using will be books about Cuba and the Panama Canal. I am only naming

two books to begin, but as the unit progresses, more books will be added to the study of these areas. The books that will be used are *Cuba in Pictures* and *Cuba: Enchantment of the World*. Both books discuss the Second War of Independence, the geography of Cuba, its landforms, and the historical significance of Cuba. When reading *The Secret of the Yellow Death*, the students asked how far away Cuba was from the United States, so this book provides maps to show location, distance, and elevation so that the students can have a better idea of where it is on the map. The books also provide cultural life, economic and a timeline of events. The Panama Canal book provides students with information about how the construction of the canal was halted due to the outbreak of Yellow Fever; a cause and effect relationship which the students need to know about in order to understand the origins of the disease.

Other books include *Epidemics and Plagues* and *Deadly Diseases and Epidemics: Yellow Fever*. These books highlight bacteria, germs, viruses, and current strands of new viruses that are appearing all over the United States and different parts of the world. It is helpful to understand the circumstances that brought about these diseases. Perhaps, students can make comparisons of past viruses to present viruses and their search on diseases.

The Plugged In materials lend themselves to other resources like articles on medicine and technology from the past to the present, and the comparisons of labs from the early 1900s to today's modern labs filled with state-of-the-art equipment that allows scientists to work more effectively. I think it would be interesting for the students to look at other diseases like Malaria and Dengue Fever, and compare them to Yellow Fever. The Plugged In materials offer students a Venn Diagram to compare and contrast diseases, and also provide them with the Center for Disease Control website for research on these diseases. The Plugged In materials also provide poetry that highlights the effects of this disease on the people, like the poem called *Casualties* and *Pestilence* that highlight the lives taken and the curse people thought it had on them in the 1800-1900's.

The materials that are provided do not touch upon the lives of women and family, so I intend on using articles about women in the 1900's to showcase their daily lives, dress, and obligation to their families.

It is hoped that through all of these resources for the unit, that the students can generate higher order questions to begin exploration of the topics at hand. Higher order thinking is an important skill that the students should possess as it is a skill that is emphasized in the Common Core State Assessments. The endless resources that can be used for this unit, then present the trouble of choosing which articles, photographs, videos, and books to direct the main focus on. I want students to be able to use most of these resources, but I do not want them to be overwhelmed. The students can pick and choose which materials they would like to use.

Videos and photographs are also great resources to use in addition to the literature. The video, *The Deadly Fever: Documentary of America's Yellow Fever Disaster* touches upon historical facts and pictures about the disease, and shows the students what medical technology and research was like and what patients of the disease had to go through. Other resources include, but are not limited to, newspaper clippings that chronicle the people's views and letters of the victims.

Even though the resources are plentiful, the unit will take the entire third marking period to complete because of the writing tasks that will be worked on and the performance task.

Classroom Activities

The classroom activities that will be a part of this unit will include viewing multiple resources, both print and digital in order to get a good understanding of the historical time period. The classroom activities should promote student-centered discussions and a stimulation of mental pictures or images that the students can become excited to learn about. The information that is chosen to be used for the classroom activities should be essential in the planning and preparation of the information that is learned. There will be three classroom activities that the teachers can modify and adjust according to the needs of the students. These activities may take up to three classroom sessions before they are complete, and cannot be expected to be finished within one fifty minute class period. The first classroom activity will invite students to learn about Cuba and become familiar with its location and surrounds.

Activity One: A Tour of Cuba

Objective: Students will learn about the culture of Cuba and will invite others to learn about the Spanish-American War as well as the island through an informational, travel brochure, or poster.

The brochure can be done electronically through Microsoft Publisher, or it may be completed on construction paper. Students will be asked to focus their brochures or posters on three focal points: the culture of the island, tourist attractions, and interesting facts about the Spanish American War. The students will work in small, cooperative groups of three or four, depending on how many students you have in the classroom. Each group of students will have the following materials:

Materials: chart paper, colored pencils, crayons, markers, computers, construction paper, scissors, glue, and pictures of the topics printed from the computer.

Length of Time: 52 minute class period x 4 days, if possible. If not, then the teacher may choose to split the activity time, or do it in sections.

Preparation: Students will be instructed to form groups of three or four and each student must choose which point of interest; culture, tourist attractions, and interesting facts, and begin to research them using the following websites.

<http://www.culturalislandtravel.com>

<http://www.visitcuba.com>

<http://www.cubaabsolutely.com>

or students can use the internet search engines to visit websites about Cuba and record their findings. Students will record their observations and get started. The group must decide if they are going to use the computer to design their informational brochure, or use chart paper to design their posters.

Activity:

Students will use one or two class periods to construct their travel posters or brochures, and they may spend part of one class, researching and the other part, illustrating the brochure. Students must be well versed on

the contents of their project and must make sure that they have pictures to demonstrate their focus points. Students must collaborate and decide how the brochure or poster should be decorated and how the information should be designed.

Discussion:

Before, during, and after the project is completed the students will be talking about what facts should be included in the posters and decide how the project will be presented. If there are questions, the teacher will be able to instruct the students about the task, observe, and circulate around the classroom. The teacher will also make sure that the students are not having difficulties with others in their groups, or any other issues that may arise while working together. A rubric can be made to instruct students what needs to be included in the project so that they do not get off track during the activity. There will be constant monitoring done by the students to ensure that students are working to the best of their ability.

Closure:

At the completion of the activity, the students will pretend to take you on a tour around the beautiful island. They will be your tour guides. They will present the information to the class and answer any questions about Cuba that are asked. The teacher can then ask the groups any questions if necessary.

Activity Two: Women in the Turn of the Century Internet Activity

Objective: Students will navigate through a virtual website, <http://www.cct2.edc.org>

that allows them to learn information about the roles of women at the turn of the century.

They will examine eight historical documents of the time period and write about what they see the women doing and why they are doing these roles. The students can decide if the pictures that they are viewing are newer roles for the women, or roles that existed for the time period. The website is an interactive website for middle and high schoolers where they can explore illustrations, build virtual exhibits, and investigate inventions of the time period. The students can work alone, or in groups depending on the number of laptops, classroom computers, or technology center computers there are. It may even be that the teacher has to use his or her Eno Board to do the lesson with the whole group if there are no computers available to use. The teacher knows his or her own school setting.

Materials: Computer, pencils, paper

Length of Time: 52 Minutes, or one class period.

Preparation:

Students will work in pairs, or independently, and visit the appropriate website and navigate to *Women at the Turn of the Century* activity page. Students will type their responses in the boxes on the website. They do not need to write anything on paper. They may use paper and pencil if they wish to record notes. The activity is fairly simple; there are 8 pictures of women participating in an activity, or role and the students must write in the box next to the picture what they see in the picture, and what new role women should have.

Discussion:

Students can discuss with their partners the various roles women played and talk about what is going on in the picture. For example, in one picture, the women are on the farms with their animals, the students have to discuss what the women are doing. The students can also navigate through the website to look at ways women industrialized and became urbanized. There are connection questions that the students can also discuss as they go through the website.

Closure:

At the completion of the activity, the students can complete a peer-share activity and discuss the images of the women in their advancement of roles. Students can also choose to compare and contrast today's woman to the women at the turn of the century. The students will also have a chance to become an image detective and pose a question about the image and look for clues within the picture to answer the question. The students can learn background information from the picture and lastly, draw a conclusion about what they have learned from the pictures. It is a user friendly website that encourages students to create meaning and purpose.

Activity Three: The Modern-Day Laboratory

Objective: Students will compare and contrast the modern-day laboratory to the laboratory used by the four scientists in the story, *The Secret of the Yellow Death: A True Story of Medical Sleuthing*. This activity is taken from the Plugged-In materials, but it can be modified to fit the needs of the students.

The students will view images and compare and contrast the instruments used in both of the laboratories using a Venn Diagram, or a "Y" chart. The students can record their details on a graphic organizer that encompasses all of the elements that a Venn Diagram covers. Students will note similarities and differences. The activity can be shown on the Eno-Board, or photocopied so that everyone has a copy of it.

Materials: Picture of the lab and its instruments, a Venn Diagram, pencil, and Eno-Board so the teacher can show the students the picture blown up.

Length of Time: 52 Minutes, or one class period

Preparation:

Students will work as a whole group, individually, or in pairs to complete this activity. They will cite the similarities and differences on the chart and give responses about the images that are seen.

Discussions:

The students will talk about the lab and the use of technology as it applied to the past and present.

Closure:

At the conclusion of the activity, the students can talk about why the laboratory should be a sanitary place for scientists to work on the discovery and cure of diseases. The students should be able to tell why the spread of diseases is more easily detectable today than in the early 1900's, based on the equipment that they were shown throughout the illustrations and documentations.

Notes

1. Jurmain, Suzanne, *The Secret of the Yellow Death* , Introduction, 2009
2. Allen, Janet, Plugged In to Nonfiction, Yellow Death Resource
3. Wikipedia, *The New Woman* , July 2, 2015
4. Harvard University, *Contagion: Historical Views of Diseases and Epidemics, Germ Theory* . 2015
5. Harvard University, *Contagion: Historical Views of Diseases and Epidemics, Germ Theory* . 2015
6. Harvard University, *Contagion: Historical Views of Diseases and Epidemics, Germ Theory* . 2015

Teacher and Student Bibliography

Bobek, Milan. *1900s* . Prescott, AZ: El Dorado Inc, 2005. Print. This book is about the time period of the 1900's. It offers a timeline of events in chronological order.

Callan, Jim. *America In the 1900s and 1910s* . New York: Facts On File, 2006. Print. This resource relies on pictures and events to tell the story of the events of the 1900s.

Campbell, Kumari. *Cuba in Pictures*. Minneapolis: Lerner Publications Co., 2005. Print. A resource centered on the historical and cultural background of Cuba.

Craats, Rennay. *History of the 1900s* . Mankato, MN: Weigl Publishers, 2002. A brief history of life in the 1900s.

Corey, Melinda. *Chronology of 20th-Century America* . New York: Facts on File, 2006. Print. A timeline of events in chronological order.

Crichton, Judy. *America 1900: The Turning Point* . New York: Henry Holt and Co., 1998. A book that chronicles the United States during the 1900s.

Gareth Stevens Pub, *Our Century* . Milwaukee, 1993. Print. This resource is one that outlines the events of the century using timelines and pictures.

Gould, Lewis L. *Theodore Roosevelt* . New York: Oxford University Press, 2012. The historical background of Theodore Roosevelt

Jurmain, Suzanne. *The Secret of the Yellow Death: a True Story of Medical Sleuthing* . Boston: Houghton Mifflin, 2009. Print. The core novel revolving around four scientists searching for the cure of Yellow Fever.

Mann, Elizabeth, and Fernando Rangel. *The Panama Canal* . New York: Mikaya Press, 1998. Print. This resource tells the story of the Panama Canal and highlights Yellow Fever.

McNeese, Tim. *Remember The Maine!: the Spanish-American War Begins* .Greensboro, NC: Morgan Reynolds, 2002. The historical background of the Spanish American War

Morrison, Marion. *Cuba*. New York: Children's Press, 1999. Print. This resource is a historical and cultural resource regarding Cuba.

Shmaefsky, Brian. *Yellow Fever* . New York, NY: Chelsea House, 2010. Print. The book discusses Yellow Fever and its causes, cures,

and spread of diseases in other areas.

Woog, Adam, Michael V. Uschan, Erica Hanson, Petra Press, Stuart A. Kallen, Gini Holland, and Gail B. Stewart. *A Cultural History of the United States: through the Decades* . San Diego, CA: Lucent Books, 1999. A book that outlines the history of the United States in the 1900s.

Yapp, Nicholas. *Getty Images, 1900s: Decades of the 20th Century* . 2001. A book that highlights the timelines of the 1900's in pictures.

Walker, Richard. *Epidemics and Plagues* . Boston, MA: Kingfisher, 2006. Print. This resource explains the epidemics and plagues of Yellow Fever, Malaria, Dengue Fever, and others.

Teachers and Students Internet Resources

<http://www.Nationalgeographic.com/> This site provides insight about life in Cuba.

"YouTube." *A Documentary on Yellow Fever* . YouTube, n.d. Web. Jun. 2015. [/www.youtube.com/](http://www.youtube.com/)>

Centers For Disease Control and Prevention." *Yellow Fever, Malaria, and Dengue Fever*. Centers for Disease Control and Prevention, n.d. Web. Jun. 2015. http://www.cdc.gov/ncidod/diseases/list_mosquitoborne.htm

"Condé Nast Traveler - Travel Reviews, News, Guides & Tips." Web. Jun. 2015. A site that discusses tourism in Cuba. <<http://cntraveler.com/>>

"Cuba Absolutely | On-Line Cultural Magazine & Travel Guide for People with a Passion for Cuba." *Cuba Absolutely | On-line cultural magazine & travel guide for people with a passion for Cuba* . Web. 29 Jun. 2015. <<http://cubaabsolutely.com/>>

"Cuba Travel Guide - What To Do & Where To Travel in Cuba | Visit Cuba." *Cuba Travel Guide - What To Do & Where To Travel in Cuba | Visit Cuba* . Web. 29 Jun. 2015. <<http://www.visitcuba.com/>>

"Explore PBS." *The Great Fever*. PBS, n.d. Web. 29 Jun. 2015. A website that provides online comments by real scientists as well as information regarding Yellow Fever. <<http://www.pbs.org/>>

"Ivanhoe Medical Broadcast News." *Medicine's Not so silent killer: Human Guinea Pigs* Web. Jun. 2015. <<http://ivanhoe.com/>> An article discussing scientists that use themselves for experiments.

"Fever" *Poetry Foundation* . Poetry Foundation, n.d. Web. Jun. 2015. A poem on Yellow Fever. <<http://www.poetryfoundation.org/>>

"National Geographic: Images Of Animals, Nature, and Cultures." *Expeditions in Cuba*. Web. Jun. 2015. <<http://www.natgeo.com/>>

"Travel To Cuba Legally from the U.S. - Cultural Island Travel." Web. Jun. 2015. A online virtual tour website of Cuba. <<http://www.culturalislandtravel.com/>>

"WIRED." *The Decades that Invented the Future, Part I, 1900-1910* . Conde Nast Digital, n.d. Web. Jun. 2015. A website that focuses on inventions of the 1900's those which include medical and scientific technology. <http://www.wired.com/>>

"A WORLD HISTORY ENCYCLOPEDIA." *Life for Women in the 19th Century*. Web. Jun. 2015. A website that focuses on the lives of women. <<http://localhistories.org/>>

"WatchKnowLearn - Free K-12 Educational Videos." *Art History: Famous Women photographers in Cuba. Short clip of famous women that were female artists in Cuba*. Web. Jun. 2015. <<http://www.watchknowlearn.org/>>

"EHow | How to Videos, Articles & More - *The Jobs of Women in the 1900's eHow* . Demand Media, n.d. Web. 29 Jun. 2015. The site focuses on the 1900s and jobs that women held. <<http://ehow.com/>>

"Edu.Org." *Women at the Turn of the Century*. An interactive website that allows you navigate through the jobs and roles of women. Web. Jun. 2015. <<http://www.cct2.edu.org/>>

"io9 - *Historic pictures of Early Science Lab s*" io9 . Web. Jun. 2015. This website reveals pictures of laboratory instruments <<http://www.io9.com/>>

"Plantseed.Com." *Medicine in the 19th Century* . Web. 29 Jun. 2015. This website discusses what scientists and medicine was like in the turn of the century. <<http://www.plantseed.com/>>

"Science Museum." *Exploring the history of medicine*. Another website that details how medicine developed and evolved throughout the 19th century. Web. 29 Jun. 2015. <<http://www.sciencemuseum.org/>>

"Virtualmentor.Com." *Politics of Participation: Walter Reed's Yellow-Fever Experiments*. These are series of articles about Walter Reed and his scientists about how their research originated and who was involved. Web. 29 Jun. 2015. <<http://virtualmentor.com/>>

Appendix A

Background Information on Betsy Ross Arts Magnet School

I am a Regular Education sixth grade Language Arts and Social Studies teacher. I teach in an inclusive classroom setting with both regular and Special Education students. There is a Special Education teacher with whom I collaborate and consult for the modification and adaptation of curriculum. I teach two sets of children. There are twenty students in each of my classrooms, forty students total; sixteen children, both full time and part time special education children that have individualized Education Plans, which call for many adaptations and modifications to the regular curriculum taught in the classroom. Our students' abilities vary in functional levels. Their abilities extend from basic learners to advanced level learners. All of the students have differing disabilities that range from intellectually disabled, to emotionally disturbed, to autistic.

Presently two sixth grade classes will be participating in this unit. Even so, my classes are rich in diversity and ethnicity. It is a hope that next year, all of the sixth grade classes can participate in the unit and contribute to the student experiences that are shared throughout the unit.

My students fall into three categories: Caucasian, African American, and Hispanic. Each category of students has offered personal experiences that stimulate wonderful conversations about their cultural backgrounds and ethnicities. It is for this reason, that the subject of community within the classroom will lend itself well to the curriculum. Students can share common perspectives and experiences. These student led conversations help

stimulate richer relationships. The students will feel more comfortable with one another and will learn to develop better relationships which will certainly help with cooperative learning exercises within the classroom and outside the classroom to enrich the climate of the classroom.

Betsy Ross Arts Magnet School is a middle school that serves students in grades five through eight. Betsy Ross serves urban and suburban students from surrounding areas of New Haven and it is for this reason that this is an inter-district school because all students from these areas are encouraged to attend the New Haven Public School System. Betsy Ross is founded on the principle that through the arts, students will think, learn, and see their academics in an innovative, challenging way. Each student attends five academic subjects (Math, Language Arts, Science, Social Studies, and an Enrichment class(French, Chinese, Spanish, Reading or Math Enrichment) and one specific performing arts class (Theatre, Dance, Visual Arts, Photography, Video, Music) every day.

Betsy Ross is made up of artistic, creative young people with a strong interest in the arts that is shown through their poetry writings, group presentations, and performances in the theatre, dance showcases, and the annual arts shows. Betsy Ross provides a performance platform for the students to showcase their ideas artistically through portraits, sculptures, videos, etc. It is because of these reasons that the unit will include visual aids like videos, photographs, images, and entertainment focal points, i.e. music or dance.

Appendix B: Implementing District and State Standards

After completing this unit, the students will have worked on the following Connecticut Common Core Standards for Reading and Writing:

Common Core Standards-Speaking and Listening Skills

CCSS.SL.6.1: Engage effectively in a range of collaborative one on one, in groups, and teacher led with diverse partner on grade 6 topics, texts, and issues building on each other's ideas and expressing their own clearly.

CCSS.SL.6.1.B: Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed

CCSS.SL.6.1D: Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection.

CCSS.SL 6.5: Include multimedia components (graphics, images, music, sound, and visual displays in presentations to clarify information.

Common Core Standards: Reading and Writing Standards

CCSS.W.6.3A: Write narratives to develop real or imagined experiences or events using effective techniques and descriptive details as well as well-structured event sequences.

CCSS.W.6.3.B: Use narrative techniques, such as a dialogue pacing and description to develop experience, events, and characters

CCSS.W.6.3.D: Use phrase words, and relevant descriptive details and sensory languages to convey experiences and events

CCSS RH.6.B.2: Determine the central ideas or information of primary or secondary sources to provide an accurate summary of the source distinct from the prior knowledge or opinions

CCSS. RH. 6.B.3: Key Ideas and Details, Craft and Structure: determine the central idea of the text

CCSS. RH. B.4: Summarize the text helps the reader to determine the central idea

<https://teachersinstitute.yale.edu>

©2019 by the Yale-New Haven Teachers Institute, Yale University

For terms of use visit <https://teachersinstitute.yale.edu/terms>