The Role of Philanthropists in Public Health

“Unhooking the Hookworm” Case Study: The Rockefeller Sanitary Commission for the eradication of hookworm in the American South.

Background and Rationale:
On October 26, 1909, John D. Rockefeller Sr. promised to give $1,000,000 over the course of five years to organize the Rockefeller Sanitary Commission. The goal of this commission was to help eradicate the hookworm disease that had been spreading throughout the rural American South. Rockefeller’s interest in public health did not start or end with the sanitary commission. As early as 1901, the Rockefeller Institute of Medical Research was created and then the International Health Division was set up in 1913. Organizations like these were devoted to public health and eventually would become international. Under the Sanitary Commission, each state involved would be assigned a field force of 4-6 men who worked with physicians, the press and schools to educate the people of the South about the disease, how it was contracted and how it spread. The field officers also used microscopic examinations of patient’s stool, provided by the Rockefeller Sanitary Commission, to diagnose and eventually cure the infected patients. Dispensaries were set up in the states and circulars and posters were distributed to advertise the free examinations and treatments. By September 30, 1912, 206 counties made plans for dispensaries and 301,699 persons had been treated. [1]

This lesson is intended for an 8th grade US History class. The purpose of the lesson will be to highlight the work of the Rockefeller Sanitary Commission in the rural South. The students will get a sense of the work that was done and the impact the commission had on the people of these states. The lesson will be integrated in between units on Industrialization and Progressive Reform. That way, the students have learned about big business tycoons such as Rockefeller and Carnegie but have not fully discussed their roles as philanthropists. As an introduction to the next unit on Progressive Reform, the students will get a sense of the issues plaguing the rural South at the turn of the century which they can then compare to the issues in urban cities as studied through the Progressive Reform movement. The lesson also hopes to introduce students to the breadth and depth of John D. Rockefeller Sr.’s philanthropy. Students will need to analyze documents from the Sanitary Commission archives in order to understand the work that was done and the impact this work had. Then, students will discuss the responsibility of philanthropists in the public health arena and decide what their opinion is on this in order to formulate a persuasive speech. A further study of modern day philanthropists, including the current Rockefeller foundations, will be examined as well.

**Time Frame:** Two-Three 40 minute class periods.

**Essential Questions**
   1) What was the hookworm epidemic in the early 1900s in the American South and how was it spread?
   2) How was John D. Rockefeller Sr. involved in the eradication of the hookworm epidemic in the rural South?
   3) What was the impact of the Rockefeller Sanitary Commission on the hookworm epidemic of the early 1900s?
   4) What role should philanthropists play in public health issues?
   5) **Extension:** Whole role do modern day philanthropists play in public health issues today?

**Student Objectives**
   1) Students will be able to explain what the hookworm epidemic was and how it was spread so easily throughout the rural South using the documents provided.
   2) Students will be able to identify ways in which the Rockefeller Sanitary Commission aided in the eradication of the hookworm epidemic using the documents provided.
   3) Students will be able to organize information and develop a thesis in order to write a persuasive speech about the role of philanthropists in public health.
   4) **Extension Activity:** Research modern day philanthropists and their role in public health issues.

**Resources Used:**
· The Germ of Laziness: Rockefeller Philanthropy and Public Health in the New South by John Ettling
· Selected documents from the Rockefeller Archive Center

**Activities for Students:**

**Day One:**
· **Hook Activity:** Show a 5 minute clip of the film, “Unhooking the Hookworm”:
  [http://www.rockarch.org/gallery/](http://www.rockarch.org/gallery/)
  The film is silent, and the students should be focusing on the main idea of the film. Once the film clip is over, ask the class, “Who do you think made this film? What was their goal?” This should elicit various responses such as: the government, doctors, charities, to prevent the spread of the disease, to protect American citizens, etc. After brainstorming ideas, inform the students that the film was made by the Rockefeller Sanitary Commission set up by John D. Rockefeller Sr. Distribute **Handout 1** from the Pittsburgh Gazette Times entitled, “The Rockefeller Sanitary Commission for the eradication of hookworm disease”. This handout is a brief description of the program, their goals and the impact. Have students read this document and answer the 3 questions that accompany it. Discuss the answers to the questions as a group and then inform the students that they will now learn more about the commission through a series of primary source documents.

· **Stations Activity:** Several documents will be placed throughout the classroom. Document examples include a letter from John D. Rockefeller Sr. about the Sanitary Commission, personal accounts from field officers who worked on the commission, pictures of patients with hookworm disease and outhouses were the disease was most likely spread, and statistics about the commission’s work and long term impact. Students will walk around the room and for each document will have to answer the corresponding questions on **Handout 2**. These scaffolding questions ask students to identify the author,
title, date and type of document so that they are responsible for understanding the entire document
and its purpose. After they answer the question for each document, they should move to the next table
and a different document. Once all documents have been viewed and all questions have been answered,
the students may return to their seats. The documents will be displayed on the Smart Board and the
class will go through each document together and answer the corresponding questions.

· Homework Assignment, Day One: The homework assignment will be for the students to outline the
Purpose, Goals, and Impact of the Sanitary Commission using detailed information from their notes (see
Handout 3).

Day Two:
· Do Now: Students should be discussing their homework worksheets as a table group. They should
specifically focus on the last question from the worksheet: “In your opinion, how effective was the
Rockefeller Sanitary Commission on aiding the people of the South? Explain your answer.”

· Classroom barometer activity: After 10 minutes for the Do Now and a brief discussion about what each
table group discussed, explain to the students we will conduct a classroom barometer activity. The
question being posed is: “Do philanthropists have an obligation to become involved in public service?
Why or why not?” Pose this question to the class and do a class barometer- those who agree should
stand on the right side of the room, those who disagree should stand on the left side and those who are
unsure should stand in the middle of the room. Have students discuss their opinions and make
connections to the Rockefeller Sanitary Commission using the documents from day one. This activity
should take 10-15 minutes.

· Persuasive Writing: After the class discussion, pass out Handout 4: directions for persuasive speech.
The students should begin by outlining their ideas in preparation for their final 2-3 paragraph persuasive
speech about the role of philanthropists in public health. They must make reference to at least 3 of the
documents they saw in class about the Rockefeller Sanitary Commission and they must refer to the time
period we are studying. These speeches should be persuasive and include opinion but must also be
anchored with the documents and examples from history. Refer to handout 4.

· Extension Activity: As an extension activity, students will need to research modern day philanthropists
such as Bill and Melinda Gates, Bono and Oprah Winfrey, to evaluate their involvement in public health
issues. Students should then include a paragraph in their persuasive speeches that describes this
modern day philanthropist’s role in public health issues and the student’s opinion on their involvement.

· Homework: Finish persuasive speeches, typed, double-spaced. Speeches must be between 2-3
paragraphs in length and must make reference to at least 3 of the documents they saw in class and refer
to at least one modern day philanthropist and their work in the public health field.
Day Three:

Article Jigsaw: As an extension and to get the student’s more information about modern day philanthropists and the connection to the Rockefeller Sanitary Commission, have them read the two articles, “Reinventing the toilet” and “Lancet article misses the point with Gates criticism”. Split the class into two groups- A and B- and assign each group one of the articles to become “experts” on. After they have read the articles and taken notes, they should meet with someone from the other group and explain what they have read and the connections they have made.  See Handout 5.

Articles:  http://thedailyparadox.wordpress.com/tag/rockefeller-sanitary-commission/

Extra Credit Option: As a bonus assignment, students may want to research the current Rockefeller Foundations and their role in public health and other issues. Here is a link to a website with information:

Handout 1:
Information on the Sanitary Commission

The Rockefeller Sanitary Commission
For the eradication of hookworm disease

Mr John D Rockefeller gave $1,000,000 for the eradication of hookworm disease, the principal, or so much of it as found necessary, to be used within five years. The Rockefeller Sanitary Commission was organized October 26, 1909. An Administrative secretary was appointed in December 1909. Offices were opened in Washington and work begun on January 6, 1910. The Commission works in cooperation with state boards of Health in each state. There is a state director who is appointed by the joint action of the state board of health and the Rockefeller Sanitary Commission. He is thus a member of the state department of health and represents this department in all the work for his state. Under the direct supervision of each state director there is organized a field force of from 4 to 6 men. These field men constitute an ambulance service and devote their whole time to work in the field. As the diagnosis of hookworm disease requires a microscopic examination of the patient’s stool, each state has at the laboratory and in the field a force or microscopists to take care of this phase of the work. This definite organization devoted exclusively to this service is relied upon to enlist in the accomplishment of its purpose upon the enlisting of

1. a. How much money did Rockefeller give to the Sanitary Commission?

   __________

   b. For how many years?

   __________

2. When was the Commission organized?

   __________

3. How does the Commission work? (use information from the document):

   [Handout 1 continued]
Scaffolding Questions
Documents Activity: “Unhooking the Hookworm”

**Handout 2**

**Directions:** You must view each of the documents at every table. For each document, complete the information in the box first and then answer the questions that follow. These documents will be used to help you form a thesis for a persuasive speech. Be specific with your answers.

**Document 1. Foundation Field Officer Photograph, Privy.**

<table>
<thead>
<tr>
<th>Title of Document:</th>
<th>Author/ Source:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Document (picture, letter, diary entry):</td>
<td>Date:</td>
</tr>
</tbody>
</table>

1) What evidence is provided in the document that explains one way in which hookworm was spread in Proctor, NC?

**Documents 2a. and 2b. Foundation Field Office Photograph, Boy.**

<table>
<thead>
<tr>
<th>Title of Document:</th>
<th>Author:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Document (picture, letter, diary entry):</td>
<td>Date:</td>
</tr>
</tbody>
</table>

1) List the evidence the document provides to explain the effect of hookworm on individuals.
**Document 3. Letter from John D. Rockefeller Sr.**

<table>
<thead>
<tr>
<th>Title of Document:</th>
<th>Author/ Source:</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>Type of Document (picture, letter, diary entry):</th>
<th>Date:</th>
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</thead>
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</tbody>
</table>

1) What evidence does the document provide for Rockefeller’s purpose for creating the Sanitary Commission? (use specific quotes from the document)

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**Documents 4 and 5. Sanitary Commission Personnel Records.**  
*You must choose two of the personnel records to focus on. There is a number for each record, be sure to write the number down next to each question.*

<table>
<thead>
<tr>
<th>Document 4:</th>
<th>Author/ Source:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title of Document:</td>
<td></td>
</tr>
<tr>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Document (picture, letter, diary entry):</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1) What evidence is provided in the document in support of the Rockefeller Sanitary Commission?

2) List details from the document about the sanitary Commission.
1) What evidence is provided in the document in support of the Rockefeller Sanitary Commission?

2) List details from the document about the sanitary Commission.

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1) What evidence is provided in the document about the positive impact of the Sanitary Commission’s efforts? (List at least 3 specific details).
Directions: After viewing all of the documents from the Rockefeller Archive Center in class today, complete the following graphic organizer in preparation for your persuasive speech. Be sure to refer to class notes.

Rockefeller Sanitary Commission, established 1909.

1) Purpose of the Commission (refer to documents #1 and 2):
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

2) Goals of the Commission (refer to documents #3-5):
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

3) Impact of the Commission (refer to document 6):
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

4) In your opinion, how effective was the Rockefeller Sanitary Commission on aiding the people of the South? Explain your answer.
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

“Unhooking the Hookworm”
Persuasive Speech Directions

Directions: Now that you have learned about the role of the Rockefeller family in public health issues, particularly the hookworm epidemic in the South, you are now responsible for writing a persuasive speech using this information as a starting point. The question you will need to answer is: Do philanthropists have an obligation to become involved in public service? Why or why not? Your answer to this question must make reference to at least 3 of the documents you saw in class about the Rockefeller Sanitary Commission. You also must include in your speech a reference to the time period we have been studying - the Industrial Age. Your speeches must be at least two paragraphs long, be persuasive and include opinion but must also be anchored with the documents and examples from history. Final drafts must be typed, double-spaced.

Use the space below to outline your ideas:
Extension Activity: Once your first two paragraphs have been written, you must then research a modern day philanthropists such as Bill and Melinda Gates, Bono or Oprah Winfrey, to evaluate their involvement in public health issues. You will then need to include an additional paragraph in your persuasive speech that describes this modern day philanthropist’s role in public health issues and your opinion on this.

Name of modern day philanthropist to research: __________________________________________

Source of information (web address): _______________________________________________

List of at least 10-15 bulleted facts about this philanthropist and their role in a public health issue:

- 
- 
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Final Persuasive Speeches must include the following:
- Typed, double-spaced
- A title
- reference to at least 3 documents viewed in class
- reference to the Rockefeller Sanitary Commission, from notes, discussion and work we did in class
- reference to the time period we are studying: the Industrial Age
- At least 3 paragraphs in length
- Last paragraph must make reference to a modern day philanthropist and their role in a public health issue today
- Your opinion
- Be persuasive, creative and logical
- Be historically accurate
- Use critical thinking
Directions: The last step in preparing your persuasive speeches is to research a modern day philanthropist and their work in public health issues. At this point, you should have conducted most of this research. Now you will be responsible for reading an article that connects the Bill and Melinda Gates Foundation and the Rockefeller Sanitary Commission. Read the article you have been assigned, take notes and then you will be responsible for “teaching” a classmate about your article.

Group A Article: “Reinventing the Toilet”
http://thedailyparadox.wordpress.com/tag/rockefeller-sanitary-commission/

Group B Article: “Lancet article misses the point with Gates criticism”

Take your notes here:
Privies at Proctor, N. C. showing how the stream is utilized to carry off the excretions from the closets. This view is from a bridge on the main street of the village.
**Before and after treatment Ulcer Cases**

Selma Ellis. ....Extreme case of hookworm disease: age 16, 62 ½ pounds; anemic ulcer on leg; ill for 8 years.

Fig. 7 in R.S.C. Second Annual Report, 1911
Selma Ellis who is being treated with decided improvement for hookworm disease at State County Hospital, Fair Bluff. When he entered the hospital, August 3rd, he weighed 62 ½ pounds, his hemoglobin was 14%, his red blood corpuscles were 1,050,000. The last worms were expelled, September 9th. The day he was discharged from the hospital, his weight was 79 pounds, his hemoglobin was 55% and his red corpuscles were 4,512,500.
Gentlemen:

For many months my representatives have been inquiring into the nature and prevalence of "Hookworm Disease", and considering plans for mitigating its evils. I have delayed action in this matter only until the facts as to the extent of the disease could be verified and the effectiveness of its cure and prevention demonstrated. The wide distribution and serious effects of this malady, particularly in the rural districts of our Southern States, first pointed out by Doctor Charles Wardell Stiles of the United States Public Health and Marine-Hospital Service, have now been confirmed by independent observations of other distinguished investigators and physicians, as well as by educators, and public men of the South.

Knowing your interest in all that pertains to the wellbeing of your fellowmen and your acquaintance with this subject, I have invited you to a conference in the hope that it may lead to the adoption of well-considered plans for a co-operative movement of the Medical Profession, Public Health Officials, Boards of Trade, Churches, Schools, the Press and other agencies, for the cure and prevention of this disease. If you deem it wise to undertake this commission I shall be glad to be permitted to work with you to that end and you may call upon me from time to time for such sums as may be needed during the next five years for carrying on an aggressive campaign up to a total of One Million Dollars ($1,000,000).

While it would be a privilege to act in any movement which offers assurance of relieving human suffering, it is a peculiar pleasure to me to feel that the principal activities of your Board will be among the people of our Southern States. It has been my pleasure of late to spend a portion of each year in the South and I have come to know and to respect greatly that part of our country and to enjoy the society and friendship of many of its warm-hearted people. It will therefore be an added gratification to me if in this way I may in some measure express my appreciation of their many kindnesses and hospitalities.

Very truly,

John D. Rockefeller

To Dr. William H. Welch, Professor of Pathology in Johns Hopkins University President of the American Medical Association.

Dr. Simon Flexner, Director of Rockefeller Institute for Medical Research.

Dr. Charles W. Stiles, Chief of the Division of Zoology, United States Public Health and Marine-Hospital Service; and discoverer of the American species of Hookworm, and the prevalence of the disease in America.

Personnel Record: Francis Arthur Bell, 1939

“I am still practicing medicine and surgery, and am treating adults now, who were children during the hookworm campaign of 1910. These patients often refer to the days when, with a projection machine, alcohol-lighted, I lectured in the different country churches and school-houses on the life cycle and dangers attendant to the Necator Americanus. These adult patients are the children I addressed publically twenty-eight years ago, and they still remember the pertinent points of my lectures and are now putting them to practical use in regards to health measures and sanitation.

In those early days of the fight against hookworm and soil pollution, it was difficult to get an audience of adults to attend a lecture concerning health matters, but the children attended in full force. These young people would carry the message home to the older ones, who would later question me all matters pertaining to sanitation. In this way, I taught the doubting adults thru the children. The point I wish to make is that any proved scientific fact that conflicts with local time-worn traditions must be "put-over" by intensive education of the children. This is proven by the fact that, from my personal observation over a period of twenty-eight years, more lasting good was done by the Rockefeller Foundation in eastern South Carolina than any other effort along public health lines in that period of time. The fathers and mothers of today are the children I taught twenty-eight years ago.”

Date filled out 2-10-39

Francis A. Bell, MD

Signature of Informant
I believe the survey of the Rockefeller Sanitary Commission is the first widespread use of the microscope to demonstrate to the layman the cause of a preventable disease, and thus aid greatly in the application of the doctrine of preventive medicine.
### Statistics from Sanitary Commission

<table>
<thead>
<tr>
<th>State</th>
<th>Number of schools inspected</th>
<th>Number of persons examined</th>
<th>Positive diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>On record</td>
</tr>
<tr>
<td>Alabama</td>
<td>31</td>
<td>1,262</td>
<td>891</td>
</tr>
<tr>
<td>Arkansas</td>
<td>46</td>
<td>450</td>
<td>2,250</td>
</tr>
<tr>
<td>Georgia</td>
<td>163</td>
<td>17,775</td>
<td>4,572</td>
</tr>
<tr>
<td>Louisiana</td>
<td></td>
<td></td>
<td>(no record)</td>
</tr>
<tr>
<td>Mississippi</td>
<td>150*</td>
<td>472</td>
<td>9,331</td>
</tr>
<tr>
<td>North Carolina</td>
<td>233</td>
<td>33,162</td>
<td>4,408</td>
</tr>
<tr>
<td>South Carolina</td>
<td>115</td>
<td>200</td>
<td>4,900</td>
</tr>
<tr>
<td>Tennessee</td>
<td>136</td>
<td>1,564</td>
<td>3,055</td>
</tr>
<tr>
<td>Virginia</td>
<td>300*</td>
<td>2,500*</td>
<td>25,000*</td>
</tr>
</tbody>
</table>

*Estimated
<table>
<thead>
<tr>
<th>State</th>
<th>Area (sq.miles)</th>
<th>Population</th>
<th>% living in country</th>
<th>Sanitary conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>51,000</td>
<td>2,138,000</td>
<td>70</td>
<td>Of 31 schools inspected only 1 to 5 has privy of any kind for girls, and but 1 to 10 has privy of any kind for boys. Inspection of schools, churches, farms, saw mills has failed thus far to discover one sanitary privy outside of cities and towns.</td>
</tr>
<tr>
<td>Arkansas</td>
<td>53,045</td>
<td>1,500,000</td>
<td>80</td>
<td>Of homes, schools and churches outside of cities, majority have no privy of any kind; sanitary privies very rare.</td>
</tr>
<tr>
<td>Georgia</td>
<td>58,980</td>
<td>2,609,000</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>Louisiana</td>
<td>46,340</td>
<td>No record</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Mississippi</td>
<td>46,340</td>
<td>1,708,272</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>North Carolina</td>
<td>52,000</td>
<td>2,246,000</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>South Carolina</td>
<td>20,170</td>
<td>1,515,400</td>
<td>80</td>
<td>50% of homes in rural districts have no closets, 50% of schools have no closets, churches no toilets, very few sanitary closets.</td>
</tr>
<tr>
<td>Tennessee</td>
<td>42,050</td>
<td>2,185,789</td>
<td>80</td>
<td>Of 456 homes inspected none have sanitary privies and only 286 have privies of any kind. At country homes, schools, churches and saw mills privies of any sort reported exceptional.</td>
</tr>
<tr>
<td>Virginia</td>
<td>40,125</td>
<td>1,854,194</td>
<td>83.5</td>
<td>From a record of 1000 farms inspected 15% were using a privy of any kind. Of 7000 schools in the state only 3850 have privy of any kind.</td>
</tr>
</tbody>
</table>