



# YALE NATIONAL INITIATIVE

*to strengthen teaching in public schools®*

Curriculum Units by Fellows of the National Initiative

2014 Volume I: Understanding History and Society through Images, 1776-1914

---

## **Power and the Machine: A Visual Examination of Class and Gender through the Industrial Revolution**

Curriculum Unit 14.01.06, published September 2014

by Miles Greene

### **Introduction**

---

*"As the great grandchildren of the industrial revolution, we have learned, at last, that the heedless pursuit of more is unsustainable and, ultimately, unfulfilling. Our planet, our security, our sense of equanimity and our very souls demand something better, something different<sup>1</sup>." -Gary Hamel, ranked by The Wall Street Journal as one of the world's most influential business thinker.*

Not more than 150 years ago, the students in my classroom would not have had the luxury of waking up at a decent hour, eating a healthy breakfast and finding their way to a seat in a classroom filled with a diverse group of peers and a teacher who facilitated their intellectual and emotional growth in the most comfortable and safe way imaginable. During the height of the Industrial Revolution children along with working class men and women experienced arduous 16 hours shifts, endured decrepit living conditions and were exposed to pollutants and diseases that made life in the city a struggle for survival. As a historical phenomenon the Industrial Revolution almost single handedly changed the social, political and economic landscape of Europe and America from that of an agriculturally based society to industrially and commercially centered. Along with this change came a vast array of social consequences; workers experienced demoralization, degradation, financial strain, physical and emotional exhaustion. To effectively understand the social ramifications of this turbulent transition, we must thoroughly examine the experiences of the working man and woman. As an educator working in an urban, working-class community, it is critical to find an enriching and differentiated way to highlight these experiences of such marginalized groups during the 19th century.

By incorporating artwork in conjunction with primary documents students will be given access to a wide array of enriched content that can be used as a tool to improve students' ability to synthesize information and communicate ideas through multiple modalities while teaching about the struggle of those that came before them.

Students in the 21st century are growing up in a world that is more visual and interconnected than it has ever been before. Students are constantly interpreting imagery and text, often in conjunction with one another. However, this process is mostly occurring passively, and unfortunately, outside of the classroom. This unit is relevant to my students because they will learn to become better visual interpreters and understand how to gather facts, identify assumptions, draw inferences and form conclusions. Students will learn to interpret

historical events through artwork and corroborate those events with primary source documents. This unit will demonstrate how subjects like art, social studies and language arts are not self-contained. Rather, many aspects of social science and language arts have tremendous overlap and dual application. In turn, by studying the Industrial Revolution through the framework of art history students will become stronger critical thinkers while learning how art can act as a vehicle to communicate ideas, criticisms, reflections and narrative. Ultimately, the interpretation of artwork will be developed as a tool to better understanding history, its struggles and the human experience.

## Rationale

---

For three years I have taught 10<sup>th</sup> grade World History and 9<sup>th</sup> and 10<sup>th</sup> grade English. As an educator who majored in World History and earned a teaching credential in Social Sciences, my English classes tend to focus more on non-fiction text and research-based writing. As a historian I often focus on the idea of perspective and highlighting to my students how historical events can be understood through a variety of lenses and examined through a wide array of mediums. For the purposes of this unit I look forward to focusing more so on primary sources and artwork to help tell the stories of those who came before us.

Emery Secondary School lies in the near center of the Bay Area; a city small in population but as diverse as the cities that surround it. Emeryville sits between its more recognizable sister cities Oakland and San Francisco. Due to its location, Emery Secondary School is filled with students from all walks of life.

Our total student population rests at around 220 students annually, most of whom are African American and Latino. However, ESS has a strong Middle Eastern and Central Asian demographic. Needless to say, our diverse student population makes our classrooms rich and vibrant. However, with this variety come many challenges. Many students at ESS do not prioritize their education nor see its intrinsic lifelong value. It must also be mentioned that many students at ESS have and continue to face hardship and trauma at home. Students are often raised by their siblings, have troubling relationships with their family and, too often, are not provided basic necessities required to find success in life. Therefore, it is understandable that many students find school difficult amid the many emotional and behavioral conditions they endure. Nevertheless, I have learned how successful these students can be when they take ownership in a subject. As long as my students can find interest and utility in their content, they will buy-in.

Academically, our students are reluctant learners who lack the drive and motivation to see their own potential. Many students at ESS are classified as Below or Far Below Basic proficiency according to California's STAR testing standards. By the time students enter my 9<sup>th</sup> and 10<sup>th</sup> grade English and History classes, too often are they reading and writing at primary school level. Specifically, many students lack the critical thinking skills that Common Core assessments and post-secondary education require. Furthermore, students at Emery Secondary School find difficulty with inter-subject application. That is to say, students' current understanding of content is self-contained by subject. Students at ESS have great difficulty not only in critical thinking, reading and writing but also understanding how content, skills and tools learned in one subject can have great application in other subjects.

## Unit Overview

---

This unit is centered on the Industrial Revolution in Britain and America during the 19<sup>th</sup> century. Historically, the Industrial Revolution is especially unique as a benchmark because it acted as a major transitional force that resulted in the advent of cities, factories, urbanization, and new structuring around labor, class and power. Furthermore, inequities surrounding class and gender were magnified as a result of the dramatic expansion of commerce, industry and the demand for profit. My unit will utilize artwork and primary sources reflecting the issues surrounding the industrial revolution as a means to help students better understand the experience of the industrial worker through the lens of gender and class. Students will examine artwork by a variety of artists along with journals, diaries, letters and other primary sources written by workers who have documented their unique experience as firsthand witnesses to and participants in the industrial revolution. For clarification purposes, my aim is not to teach art, but rather, to use art as a tool to teach a historical event.

This unit will be taught in my 10<sup>th</sup> grade World History class but will utilize reading strategies, writing models that are being taught concurrently in my 10<sup>th</sup> grade English class. The length of the unit will be three weeks. On a block schedule, I see my students approximately 4 hours per week over a three-day period. With that being said, students will be engaged with this unit for a total of 12 hours over a nine day period.

From a content standpoint, this unit aims to help students gain a deeper understanding of how the Industrial Revolution impacted the lives of the common citizen- notably, women, children and working-class laborers. Secondly, students will recognize how the demand for profit on a commercial level completely transformed the way labor was characterized on an industrial level in that workers were subject to exploitation, demoralization and degradation. Thirdly, Students will learn how the social consequences stemming from the industrial revolution significantly lowered the standard of living for working class men and women. Lastly, students will be able to identify trends and patterns between the general experiences of marginalized groups and how these experiences fit into the larger historical context surrounding the rise of industry in America and Great Britain in the 19<sup>th</sup> century.

From an academic standpoint, students will develop a rigorous approach to interpreting visual artwork in conjunction with text that has application in Social Science classes. Students will also learn how to consider and make meaning of the context surrounding a piece of artwork itself, namely the significance of the artist's background, biases and intentions, and why understanding these contextual components are important to gaining perspective on an historical topic. Students will learn how to examine evidence, gather facts, identify assumptions and form conclusions from artwork and primary sources. Furthermore, students will learn to corroborate and draw meaningful connections between various art and primary sources and determine their broad historical significance. Lastly, I hope students will gain an appreciation for art as a vehicle for communicating, criticizing and reflecting history as well as contemporary life.

## Background and Content Objectives

---

The Industrial Revolution is an extremely interesting period to examine in World History. Many historians would argue the Industrial Revolution is one of, if not the most, important phenomenon in recent history that is responsible for permanently transforming the social and commercial landscape into the model found in America and Europe today. The Industrial Revolution is generally defined as the transition to new manufacturing processes that took place first in Britain around 1760 and lasted through the late 19th century. This transition was characterized by an overwhelming desire to maximize profit and minimize cost through production. Hand production was replaced by large-scale manufacturing using new machine technologies that were often steam, water and chemically powered. These changes in production methods directed labor out of the house and farms and into factories, textile shops and other production centers, many of which required to be constructed and maintained near sources of water and manpower. The emergence of such centers of production facilitated the growth of newly developed cities, filled with a diverse range of people looking to find work and improve their own standard of living. However, the Industrial Revolution gave rise to many social hardships that would bring about detriment to the industrial worker, especially for the unskilled population and the working woman.

It is worth mentioning that immigration in Britain was not a major factor that led to so many of the class struggles found in the United States. Rather, movement from the country to the city was the primary pattern of movement for workers in Britain. That said, immigration to the United States played a larger role in compounding the problems faced by the working class such as the issues around communication between workers, the inability to political organization and lastly, the variety of factors behind low wages and employment in general. <sup>2</sup>

Before the Industrial Revolution manufacturing was primarily done in the home and small establishments, serving only the immediate, local markets. Farm wives and their daughters produced a variety of goods at home, which in turn were traded with neighbors and sold at nearby country stores. <sup>3</sup> In 1820 women working from their home produced 2/3 of all clothing in the United States. <sup>4</sup> However, these domestic markets were limited by the high cost of transportation. Furthermore, undeveloped land, the small size of the population and limited commercial growth made labor expensive. <sup>5</sup> Thus, the prospect of hand-manufactured goods reaching neighboring markets, let alone returning a healthy profit, was neither likely nor sustainable.

Quite rapidly machine centered industry replaced the limited nature of household production. The first mills in New England offered considerable employment to women and children. Early mills and textile shops offered competed with and displaced local smaller-scale household manufacturers. <sup>6</sup> In 1820 almost 3/4ths of the American labor force worked in the agriculture sector with a merely 7% living in the cities with 2,500 or more residents. Though by 1860, more than 41% of the American work force was working outside of agricultural sectors and living in cities. <sup>7</sup> Furthering this trend towards factory labor were new opportunities found by women who traditionally found little freedom in their own household.

In the early 1800's women were initially drawn to factory and textile work as a means to acquire a degree of independence and a working wage. As mentioned earlier, women engaged in the manufacturing of goods in their own domestic markets, which gave them a respectful place in the family economy but did stifle any possible feelings of autonomy and independence from their male counterparts. <sup>8</sup> Rarely did women conceive of a life beyond the bounds of domesticity. With the rise of the cotton and textile industry around 1820,

women left positions as home-laborers for more attractive work in expanding mill towns such as Lowell, Massachusetts. Employment in the mills and textile factories gave women new degrees of economic and social freedoms. Initially, and although short-lived, women now earned an income that was perceived as satisfactory in that they were being paid for work that had previously been done with little to no monetary compensation. However, this satisfaction would be temporary; from a business and legal standpoint women's position in industry eventually would mirror the subservient position women found at home. Namely, second-class citizenship without the right to negotiate contracts, own property or eventually, earn a wage that could adequately match the cost of living. <sup>9</sup> In addition, there are overwhelming accounts of women relinquishing their wages altogether to the head of household. <sup>10</sup> Women were often encouraged and attracted to work in the newly emerging industries but unfortunately found themselves in positions of subservience, facing new pressures that can arguably be characterized as gender specific but also part of the larger, less discriminatory social impact created by the industrial revolution.

In order for students to fully appreciate the social ramifications surrounding the industrial revolution it is necessary to first identify changes that occurred in labor practices; namely how labor was no longer bound by the rhythms of nature but replaced by the rhythms and mercy of the machine. For the first time in history, work did not stop at sunset, as was the case with agricultural work in the fields. Laborers in factories and textile shops were able to work through the night, often in shifts averaging over 10 hours. The adherence to schedule along with the precision of time symbolized the desire to maximize profit for the factory owner and stakeholders. The working life of laborers was now dictated by the clock and with it, strict adherence to a system that did not change seasonally. Work was consistent, although ever changing, and often specialized. Unskilled laborers were usually in charge of one specific task as opposed to previous work that involved maintenance of machines or the creation of products from start to finish. This streamlined approach to production was partly responsible in keeping wages low, as tasks were relatively mundane and required little to no skill aside from specialized training. Nonetheless, the promise of work and opportunity brought about incredible migration and movement into the city.

The sudden urbanization that was brought about by industrialization caused tremendous stratification and hardship within cities. From 1840 to 1860, the population of Philadelphia nearly doubled while the population in New York increased over twofold. The overall number of cities with 8,000 inhabitants or more increased from 44 to 141 in America in this 20-year period. <sup>11</sup> To match the demands of rapid migration into the city, boardinghouses and others centralized living quarters were built in haste. Often, developers who prioritized establishing a permanent labor force over ensuring a decent standard of living overlooked the integrity of building foundations. <sup>12</sup> Secondly, the high cost of living coupled with the huge influx of migration into the cities made living conditions less than ideal for workers, especially women and immigrants. The cost of living in the city rose steadily as the population increased. It is estimated that the cost of provisions increased 50% in cities such as New York between 1843 to 1850. <sup>13</sup> In the winter of 1853, families were faced with a 30% increase in food and fuel costs as compared to the previous year. <sup>14</sup> Needless to say, life for the working class was difficult, as the problems associated with rapid urbanization seemed to be exponentially compounded year after year. Norman Ware cites Dr. Josiah Curtis' essay, *Brief Remarks on Hygiene in Massachusetts*, regarding a report that houses were regularly occupied by as many as 40 individuals, with up to 11 living in a single room and as many as 8 men and women sharing a bed. <sup>15</sup> Furthermore, Dr. Henry Clark's Report of the Committee on Internal Health, chronicles the finding of one particular cellar that was regularly used as a communal sleeping apartment occupied by 39 persons and included the finding of a dead infant baby as reported by a police officer. <sup>16</sup> This focus on steering workers into the city with no regard for safety or well-being illustrates how the desire to maximize profit and minimize cost was a central culprit in the degradation

of the worker.

Conditions of sanitation in sprawling urban metropolises had both immediate and prolonged damaging effects on the mental and physical health of the worker. It was reported in health inspections that the water supply for the cities had undergone widespread contamination due to lack of a proper drainage system.<sup>17</sup> Furthermore, pollutants caused by decomposing animals, food waste and a general degree of dampness plagued living spaces, a problem that was increased even more so due to overcrowding and the general pressures surrounding population growth.<sup>18</sup> There was also a general disregard by city planners and engineers to address these problems around sanitation as often the morality and behavior of the working class was called into question. Operations officers, or those in charge of property or some aspect of infrastructure, often questioned and placed blame on the habits of the worker. In order to combat the issues surrounding "irresponsible" or "unqualified" officers, health inspectors suggested appointing district medical officers who would be accountable for educating the population and overseeing the improvement of sanitation.<sup>19</sup> Consequentially, poor sanitation was perceived to be responsible for moral destruction, reckless behavior, intemperance and the disintegration of the home.<sup>20</sup>

Problems surrounding poor sanitation did not end with simply poor health. In Great Britain during the 1840s, Edwin Chadwick, who led a government inquiry into sanitation concerns, found the "annual loss of life from filth and bad ventilation [were] greater than the loss from death or wounds in any war which the country has been engaged in modern times." Furthermore, in 1843 there were 43,000 cases of widowhood and 112,000 cases of destitute orphanage. Lastly, the average lifespan in Industrial Britain was 45, while the average population for neighboring Sweden was 13 years higher.<sup>21</sup> Children were also noticed to be "inferior" in general health as compared to other populations. The general consensus of the time was that poor sanitation and living conditions coupled by the pressures brought about by population characterized urban life for the worker as, again, dehumanizing and demoralizing. Unfortunately, market forces on a macro-scale were all too capable of furthering this downward social trend for the industrial worker.

Economic depressions that sporadically impacted the cities made matters worse. The depression of 1837-1839 left more than 1/3<sup>rd</sup> of the working population of New York City unemployed.<sup>22</sup> Furthermore, wages not only failed to match the rising cost of living in the city, but also fell steadily in many sectors between 1820 and 1860. For example, Boilers in Pittsburgh earned an average of \$7.00 per ton of iron ore produced in 1837. By 1858, that figure had steadily dropped to as low as \$3.00 per ton. Similarly, Puddlers earned an average of \$4.25 per ton in 1837 but \$1.90 in 1858.<sup>23</sup> With wages steadily being lowered and the cost of provisions steadily increasing, many laborers were completely incapable of keeping up with the cost of living let alone establishing any degree of wealth or comfort. Thus, class stratification was on the rise as workers were forced to take up collective residency amid a growing number of people in an already degrading standard of living.

However, the working class, especially women, were able to find some degree of agency at the time. Many women who worked in textile shops and factories were unable to live with their families. Instead, private boarding houses were built to house dozens of women. The separation from family heightened the importance of developing close relationships with peer groups.<sup>24</sup> In this setting women were sowing the seeds for the first labor movements that sought advocacy for the industrial worker through organization- a tool that was lacking in the ethnically and linguistically diverse population of the immigrant communities. Working women were isolated while at work, usually left under the supervision of a male overseer. Management of laborers was largely dependent upon the intelligence and skills of the worker, which in turn discouraged micromanagement and facilitated a high degree of interaction and socialization between workers. Managers tried to stifle any



inklings of fraternization as it often resulted in growth and solidarity amongst the working class. <sup>25</sup> And, although women were just as technically capable as their male counterparts, they were restricted from holding supervisory and highly physical positions. <sup>26</sup> But, women did have an advantage finding work as they were chosen more often for technical jobs because they were cheaper to hire. <sup>27</sup>

Nonetheless, women and men alike endured tremendous labor inequities that characterized life in the factories as physical and emotionally tumultuous. Shifts were often 14 to 16 hours in duration with a short break for lunch if workers were lucky.

Children too were subject to immense family pressure at home and mistreatment at work during the Industrial Revolution. The economic necessity of the working child as a means to increase a family's income took priority over education. Consequentially, families became larger and less educated as schooling was replaced with industry work for a child as long as there was a financial strain. It was not uncommon for children as young as 8 years old to be employed in factories engaging in work that was extremely dangerous. Similarly to the adults, children worked shifts that were sometimes 16 hours in length, starting very early in the morning and stretching through sundown. This meant children were unable to obtain a sufficient amount of sleep. Children often had to be physically pulled out of bed and hauled off to work. There was rarely time for breakfast and instead, forced to work through the day on an empty stomach. Children were managed by an overseer who used physical coercion as a tool to ensure production quotas were met. Overseers ranged in age from teenagers to adults but all were responsible for maximizing profit and minimizing problems. Children were fiercely beaten for being late to work, showing signs of exhaustion or not meeting production quotas. Children would try and escape the clutches of their overseers by running away or not showing up to work. But, children were almost always apprehended and punished accordingly. Children who ran away or were late to work had their pay docked. By many accounts children were required to work by their parents who saw their child's employment as a necessity to the survival of the family. Parents were given low pay, sometimes 6 pounds sterling in exchange for a years worth of their child's labor.

The physical aspect of work in the factories was demanding. It was not uncommon for children to develop irregularities and abnormalities from labor that was cumbersome and repetitive. For example, some machines required children to use their legs and feet in conjunction with their hands for extended periods of time. Thus, some children's legs or arms started to show signs of curvature or bending from constant use, a consequence that was compounded by the lack of shift breaks and unyielding operation requirements of the machines. <sup>28</sup> Lacerations, bruises, loss of limb and even death were not uncommon among the child laborer. Generally, the child's experience in the factory was characterized by long hours of arduous work that consequently took a tremendous toll on the physical and mental health of the child. Child laborers would not see improvement in their circumstances until the working-class began responding to such inequities and expediting policy changes around labor.

## **The Role of Artwork and Primary Documents**

---

Initially, students will be presented with artwork and encouraged to ask questions, make inferences and draw conclusions using the methods, activities and strategies listed below. Students will learn how to analyze detail, draw meaningful connections between visual representations and be expected to articulate their thoughts

around pieces of artwork through the framework of the unit's essential question.

Students will be given contextual information around the artwork such as the artist's name and background, the year and location in which it was painted and more detail surrounding the unique subjects or topic of each paintings. In doing so, students will have the opportunity to corroborate their own assumptions and inferences. Students will draw parallels and find contrast between pieces of artwork, identify trends and patterns around the worker's experience during the Industrial Revolution and most important, determine the significance and dynamics surrounding gender and class in America and Britain during the 19<sup>th</sup> century.

Concurrently, students will be introduced to a wide array of primary documents in order to help students further understand the struggle of the worker. Students will make meaningful connections between artwork and primary sources, and learn how these two vehicles of understanding history can work in conjunction, compliment one another or sometimes conflict. Nevertheless, students will be given the opportunity to examine a defining benchmark of world history by combining evocative imagery and rich text into a unit that is intellectually stimulating and accessible to the varying types of learners in the classroom.

### **Primary Documents with Annotation**

The following six documents are compiled by Fordham University in a collection titled Internet History Sourcebook. Specifically, for the purposes of this unit, I will be utilizing the Section included in the Internet History Sourcebook titled "Social and Political Effects of the Industrial Revolution." The address to this source is referenced in the section of this unit titled "Resources." Below each title is a short synopsis of the document's context as well as its utility and significance in relation to better understanding the social ramifications surrounding the Industrial Revolution.

#### *The Life of the Industrial Worker in Nineteenth-Century England*

This primary source is a collection of interviews done by Michael Sadler, chairman to the parliamentary investigation into working conditions in the textile factories in Britain in 1832 that resulted in passage of the Act of 1833 which limited hours of employment for women and children in textile factories.

In this document students will learn how women and children were overworked, beaten and deprived of sleep and food in order meet production quotas. The document contains interviews by a number of workers, all of whom illustrate the dehumanizing aspects of life in the factory, while offering criticism about the necessity of working to survive. Essentially, this piece offers an accessible way students can grasp the terrors surrounding industry work for women and children.

#### *Chadwick's Report on Sanitary Conditions*

This primary source is a summary taken from Edwin Chadwick, a social reformer in Britain, who was commissioned to investigate the living conditions and sanitary conditions during the 1840's. This source is a small, but representative, excerpt from the original 400 page report titled *Report from the Poor Law Commissioners on an Inquiry into the Sanitary Conditions of the Labouring Population of Great Britain*. The outcome of this report lead to the Poor Law which in 1834 created a more accessible relief apparatus for the working class people of Great Britain.

This document can be used to illustrate the social aspects around the pressures of population in newly developed cities. For example, the contamination of water, the inadequacies surrounding drainage and



infrastructure and how these problems contribute to the degradation of health and average life expectancy. Interestingly, Chadwick contributed some of these problems to the moral deficiencies and unhygienic habits of the worker.

### *The Physical Deterioration of the Textile Workers*

This collection of primary documents includes a wide range of accounts from doctors to politicians regarding the nature of industry work and its physical effects on the body. Students will find how mundane repetition of tasks often lead to disfigurement and injury in laborers. Secondly, the quality of air, improper ventilation and overall disregard for safe working conditions eventually caused a general pattern of physical deterioration in the working class that could be quantified through the mid 20<sup>th</sup> century.

The additional utility that comes from this source are its points on legislation in that workers challenged the working environment and policies, or lack thereof, during the Industrial Revolution. Although the social responses to the degradation of the worker are not the focal point of this document, students will understand how the social and labor problems stemming from poor conditions in the factories prompted some degree of dialogue within the working class. It is important that students are exposed to the ways and means by which laborers organized to and advocated for protections in their working environments.

### *Harriet Robinson: Lowell Mill Girls*

This primary source is an autobiographical account of Harriet Hanson Robinson's life as a female factory worker starting at age ten in the textile mills of Lowell, Massachusetts. This document illustrates the hardships women faced in the factories as well as the gender restrictions that were enforced by their male overseers. However, Robinson also highlights the rising degree of agency women held as conditions and treatment eventually warranted the organization and politicization of female workers.

This document can be used to help students understand how women were manipulated into believing life in the factory was promising, financially liberating and socially relaxing. In that, all too often women were forced to forfeit their earnings to the men in their family, usually resulting in a level of subservience that paralleled life before the transition to industrial work. Lastly, students will see how the arrangement and structure of the women's living situation along with their working schedules helped to facilitate organization and political action which eventually led to a strike in Lowell in 1836. Although this strike did not have a successful outcome, it did set a precedent for future labor movements and political representation for the working woman.

### *Andrew Ure: The Philosophy of the Manufactures, 1835*

This primary document is a short essay written in 1835 by Andrew Ure, professor at the University of Glasgow. In this essay Ure articulates a common viewpoint held by himself along with other enthusiastic manufacturers and factory owners in that the Industrial Revolution was a divine blessing. This document is very useful in that it offers students a perspective on the industrial revolution that contrasts with that of the working class, and secondly, illustrates the rationalization for factory work as a necessity for the advancement of humanity.

Students will take interest to Ure's argument that industry makes life easier and more comfortable for everybody, especially in comparison to life for both men and women prior to the industrial revolution. He sees the advent of the machine as "providence" and the rise of industry as a "blessing," while making the case that work in the factories is neither exhausting nor painful. Although there is a large degree of truth to Ure

argument regarding the boom of convenience that came with the Industrial Revolution, Ure seems to encompass a general disconnect from the experience of the worker in that he tends to discount arguments against industry work while expressing a zeal for industry as a means to improve the condition of all people living around the world who have the privilege to be part of this new age of industry.

*Observations on the Loss of Woollen Spinning, 1794*

This excerpt from a larger source with various authors paints a vivid picture of women's dichotomy stemming from the transition from work in the "Cottage Industry" to factory and textile work. This document is significant to students as it articulates the financial and domestic strain women experienced while being subject to the volatile and precarious wool spinning industry. The author talks about the burden of raising children while finding time to work for a low wage that hardly justifies the time and energy required to perform the tasks at hand. Nevertheless, the author recognizes the value in exposing young children to labor as a means to instill work ethic and a sense of "wholesomeness." Furthermore, the author argues the social and domestic ramifications that come with herding dozens of young boys and girls in working environments as detrimental; essentially, an approach to work that promotes fatigue, poverty and ultimately robs families from the opportunity to raise and develop decent young men and women. Lastly, students will be faced with the question posed by the author: to what degree is the sacrifice of one's happiness worth in exchange for one's livelihood. This question should resonate strongly as we are all still faced with this conundrum that some say was created and sustained by capitalism.

### **Artwork Annotations**

In the following section I will chose two pieces of artwork to give a brief analysis of their content in an effort to help guide teachers' understanding of their utility in the classroom using the activities listed in the section below titled "Activities."

*Joseph Wright of Derby, An Iron Forge, 1772, Tate Britain*

In *An Iron Forge* we are introduced to a varying group of individuals contributing in some degree in the forging of iron. This scene takes place in a nighttime setting but is contrasted by the magnificent light that is glowing from the center of the iron forge- arguably representing the noble and virtuous work that industrialization may bring front and center to the lives of those who participate. We are shown the overseer who is dressed rather dandily, symbolizing his own lack of principal through his distance from any form of manual laborer. In contrast to the overseer we are give the faceless worker who is hunched over, and clearly exhausting himself for the sake of providing for his family, who stands uneasily next to the overseer, protecting the child from the heat of the forge. Despite the concerned looks, we are presented with a sort of heroism for the common man and the working class life. The proximity of the family to the forge suggests a degree of divine approval or blessing for the well-intentioned and honest work of the worker.

*Thomas Allom, Powerloom Weaving, 1835*

In *Powerloom Weaving* we are given a clear representation of the subservience of women in the factory setting during the Industrial Revolution. We are shown a textile factory full of obedient women sitting behind highly standardized machines that fill the factory from wall to wall. Front and center is a woman crouching near what seems to be a broken machine as her male overseer is using his hands to direct order and instruction. This scene can be interpreted as the domineering male demonstrating his power against a woman who is clearly being characterized as shameful, fearful, subservient and compliant, as indicated by her body

language and position in relation to her male counterpart. What is also as symbolic as it is interesting is the group of women behind the overseer's back. This positioning of women could be interpreted as women plotting, organizing or simply passing information secretly when time permits. It should also be noted that the women who are "properly" doing their work while seated behind the powerloom seem to have no quarrel with the overseer. Rather, it is only when the woman falls out of line, or takes matters into her own hands, that she draws the attention of the male overseer and thus, is deemed insubordinate and requiring chastisement. Students will surely recognize the effectiveness in this print as an accurate reflection of the gender dynamic in the factory.

## Instructional Strategies

---

### Socratic Questioning Model - SQM

The questioning model that will be used in this unit is centered on the Foundation for Critical Thinking's Socratic Questioning Method. Further information about this questioning method can be found at the website referenced in the section of this unit titled "Resources."

The goal of the Socratic Questions Method as stated by the Foundation for Critical Thinking is to help students develop an executive thinking model- essentially, a model that is framed around a powerful and rational pursuit of plausibility, truth and significance. The Socratic aspect of this model refers to the systematic approach as well as the aim to reach depth. In essence the SQM is a processing model that is practiced through public discussion in the classroom. In practice, teachers intellectually stimulate students by asking questions that lead to more sophisticated questions in an effort to reveal assumptions, make connections, draw inferences and eventually formulate conclusions.

The SQM works under the assumption that every answer (fact, statistic, declaration) has an implied question that sometimes goes unaddressed and unrecognized. Thus, the act of critically thinking is driven by critically questioning. However, the majority of students are not versed in this practice by the time they reach secondary school and so it is important for educators to lend students "artificially cognition" until they develop the questioning tools themselves. Doing this requires teachers to engage, recognize and focus on a handful of critical aspects that characterize the Socratic Questioning Model.

Teachers are encouraged to respond to students' comments with questions that push students to develop their ideas further. In doing so, teacher should seek to understand the basis by which students gave a particular answer. Namely, identifying students' assumptions, inferences that have been made, and prior knowledge about content. Furthermore, teachers must recognize that all thoughts are interconnected in that they can be traced backwards and forwards to other thoughts students may have. It is the purpose of the teacher to pursue these connections. This strategy adheres to the Common Core focus around evidence-based learning in that it encourages students to validate their own thinking by qualifying their own responses.

Teachers should also aim to discover a student's agenda. What is the student ultimately trying to say? What assertion or declaration is being made or attempting to be made? It is important to recognize that all thoughts have presupposed information at the basis of their existence. Ask students: what information are you basing your answer on? What facts are you considering? What personal experiences are you integrating into the understanding of this material?

For the sake of this unit the function of this questioning model is to help student address the overarching question: How did the Industrial Revolutions of the 19<sup>th</sup> century impact the lives of women and working class men? More specifically to the medium of artwork, the overarching question is: How does this piece of artwork characterize the experience of the worker during the Industrial Revolution?

### **Questioning Artwork**

Often times examining artwork through a historical framework can be a daunting task, especially for reluctant high school learners. Nevertheless, it is important to tell students that interpreting artwork can be done by anybody. It is not so much about "getting it right" as much as it is about "working it out." Working it out requires interpreters to start with the obvious and make connections as you go. For example, simple questions such as "What do you see in this piece" should not be overlooked. Allow students to list details as they are made aware. The more time spent compiling factual evidence in a picture- namely who is being represented, where it takes place, what event is being depicted and when it is occurring- the easier time students will have drawing connections between these details and the inferences by which they are made. Students should be paying special attention to clothing, expression, body language, lighting, positioning, and scale. Next, students should develop meaning around the details in the piece. For example, questions around why a particular subject is engaging in certain behavior, the relationship between people or subjects and the significance of the atmosphere or setting. As a general rule of thumb students should be asked to qualify their responses with evidence. This may come in the form of a detail in the artwork, excerpt from text or even an anecdotal experience. Try and steer students towards drawing conclusions around what it would be like to experience whatever is being depicted in the artwork. For example, students may be asked to infer about the five senses: What would you smell, hear, see, touch, feel if one was placed inside the piece?

As a general model for interpreting art, pieces should be presented to students broadly and without direction. Initially, let students consider and digest the piece from a broad lens and allow them to take the time to zoom into specific details of a piece. As students begin to account for superficial detail, prompt them in a manner that encourages them to slowly step back, making connections between different aspects of the piece as they move back. In a sense, the explanation of this approach can be simplified as starting wide, zooming in and zooming back out, making connections along the way.

See section below titled "Artwork Annotations" for examples of classroom utility and how pieces can be intellectually framed for students.

### **Reading Strategies**

Below is a reading model that can be used to effectively promote critical thinking with students while they examine the assortment of primary documents listed and annotated above. This model is based on a strategy called Four Reads that is authored by New York City educator Bayard Faithful and presented by Teachinghistory.org. The full URL address is listed below in the section titled "Resources."

#### *Four Readings - Learning to Read Primary Documents*

According to author Baynard Faithfull, Four Reads is a four-step process that helps students develop an approach to reading primary sources like historians. As historians, we read text on many different levels, often rereading passages or entire documents over. Students being exposed to primary text sometimes do not initially understand the amount of insight one can gain by looking at a document contextually. That is to say, we must teach students to consider the author, their gender, the time period and location in which it was

written, its title and many other clues that are often overlooked by reluctant readers. Ultimately, students need to learn that reading primary documents effectively requires a different approach than reading a secondary source. Baynard breaks this process down into two sections: Teacher Preparation and Classroom Implementation. Teacher Preparation focuses on familiarization while the latter includes four different steps to help students utilize contextual information prior to and in conjunction with exploring the document's arguments.

Faithfull states Four Reads is a "teacher-lead process that depends on transparency and discussion."<sup>29</sup> It is crucial that students be made aware of the purpose of each step before hand so students can conceptualize the approach and objective to reading. However, in order to do so, The Four Reads strategy first requires teachers prepare for reading through two steps independently, before students are introduced to the documents.

### **Teacher Preparation**

Faithfull begins by outlining the steps required by the teacher to gain sufficient mastery over a primary source. First, read the primary document yourself taking note of contextual clues that influence your own understanding of the document. Faithfull suggests underlining the main argument and its supporting evidence, taking notes in the margins along the way about the author's purpose and credibility in relation to his or her argument.<sup>30</sup> Faithfull continues by stating teachers should "write questions" they have about the document and with each of these steps "make a mental note of your reading and thinking processes so you can model these for students later." Lastly, understand further research may be needed on the part of the teacher to more effectively use a primary document as a learning tool.

The second step teachers must take before introducing the document to students centers around comprehension and ensuring students will have a safety net to fall back. Teachers must take note of "difficult vocabulary, obscure references, or confusing syntax."<sup>31</sup> Faithfull recommends creating a vocabulary box near the end of the document or on a separate sheet of paper, where students can define words, with the help of their teachers or peers. Nevertheless, teachers should be prepared to address discrepancies that come with examining language that, stylistically, differs from contemporary language students are exposed to nowadays in the classroom. Once teachers have adequately prepared for utilizing the primary documents in class, students will follow a four-step reading model, as the title of this strategy implies.

### **Classroom Implementation**

The classroom implementation of Four Reads begins with the introduction of the document to each student. To maximize accessibility, give a copy to each student as well as projecting the document using a computer or smart-board. Remember that students must be made aware that the purpose of this exercise is to teach them how to read like historians, meaning they must consider context, origin, purpose and argument. The first attempt at reading the primary document focuses on reading for origin and context. Students should give their attention to the title, date, author or any other clue about the document's origin. Students should be encouraged to develop questions around the author, the historical context in which it was written and its origin. Finally, students should be asked how their findings around the document's context and origin impact their own understanding of the document's argument, which will be examined during the second step.

The second step of Four Reads is reading for meaning. The goal is for students to identify and understand the primary argument or main idea of the text. Faithfull suggests students "underline the sentence[s] or phrase[s]

that best capture the author's main idea." Furthermore, "In this reading, students should skip over difficult vocabulary or sections." <sup>32</sup> The idea is for students to avoid being discouraged or stuck with the reading. Once students have finished annotating the document, spark a class discussion around students' interpretation of the document's main idea. Have students share their annotations with one another until a general consensus is found. Faithfull reminds us that, "Discerning the main argument is often difficult, but the process of wrestling with different claims is well worth it." <sup>33</sup> Next, ask students to characterize the document as a whole. Is the document persuasive, private, or academic? Is the document clear and concise or is it confusing? Who is the audience of this document? Once these steps have been taken to help students comprehend the entirety of the document, go back over any vocabulary words or phrases that students were unable to define or extrapolate meaning.

The third step in Four Reads is to read the document for its argument. Faithfull asserts students should examine how the argument is constructed, where the evidence lies and if there are any supporting facts, examples or anecdotes. Students should use the margins to annotate their findings and comment on the validity or strength of the author's argument. The point here is "for students to see that most primary documents present arguments, and that arguments need to be understood and then interrogated for logic and credibility." <sup>34</sup>

The last step in Four Reads is to have students read like a historian. For this final reading, students should consider all of their findings regarding context, argument and evidence in an effort to bring their mastery of the document full circle. This is the time to ask students difficult questions about the documents effectiveness. Is this document effective? Does it contain a logical argument? Why do you think it is effective? Where do you believe its faults lie? Do you think the audience of this document would be persuaded by what is being said? How would its original readers respond to what is being said? Finally, how does this document fit into the broader historical narrative of the time period? Is it representative? What does it say and how does it compare to our own understanding of the particular historical event through which it was written?

## Activities

---

### Silent Session

This is an early activity to introduce students to artwork in a historical context. Choose four or five pieces of artwork that represent a variety of styles or themes that will be explored in this unit. Hang one piece of artwork in each corner of the room and withhold their titles and authors, or any information that may give students clues about the piece in its historical context. The goal is to facilitate a space for students to discover the beauty of artwork not only as an expressive medium but also as a tool for understanding history and the people who came before us. Give students 10 minutes for which will have the opportunity to silently walk around the "gallery" and experience historical artwork in their own space. There should be no talking, so as to encourage students' awareness of their own emotional and intellectual reactions. Students may be given a blank sheet of computer paper to note any feelings, ideas, reactions, assumptions or conclusions about the works of art. Be sure to tell students there is no right or wrong way to examine art. Artwork speaks to everybody different, as everyone sees artwork from the lens of his or her own experiences. It is through this independent interpretation that a rich a vibrant discussion about the gallery will arise.



After students have walked the gallery, ask them to respond to the following questions openly with the class, or with a partner. How did you feel looking at the artwork? What drew you to a particular piece of art? What did you like/not like about what you saw in the pieces? What stories were being told in the pieces? Could you relate with anything that was going on in the artwork? What historical themes do you think were in the artwork in our gallery? Why do you think these pieces are important? Remember it is important to validate what students are saying especially if this activity is used as the introduction to the artistic interpretation in the classroom. Use this activity as a corral to guide students, often serendipitously, towards seeing artwork as a vehicle for understanding history.

### **Precision of Language**

Precision of language is a multi-step activity that centers around students creating a set of vocabulary words that reflect a particular piece of artwork, and eventually using these words to developing sentences. This activity can act as a segue into a separate activity called "90 words." Often, when examining artwork, students will naturally respond with language that is rooted in emotion just as much as it is rooted in historical context. This activity aims to help students improve their own use of language through critical analysis of artwork while helping students articulate the conclusions they have formed while interpreting art using a scaffolded approach.

For this activity, divide the students into groups of four or five, with each group receiving one piece of artwork. Give each group one piece of paper and assign one member of the group to be the recorder. If you plan on using this activity more than once, rotate the role of recorder within the group as to promote a sense of community while being equitable. It may also be helpful to assign a timekeeper as well. Students will be given five minutes to examine the piece of artwork as a group with the intention of writing down all words, feelings, topics and associations that are evoked while studying the piece of art. It may be effective to model this step of the activity on the project using a separate image and asking everyone to participate by sharing words, feelings, and associations that come to mind. Nevertheless, after the five minutes are up students should have a healthy list of vocabulary words that reflect the students' responses to the artwork but also their understanding of that particular historical event.

At this point the teacher may decide to have a classroom discussion around some of the art that is being interpreted. Teachers can check and correct student understanding about a topic in the Industrial Revolution in a fluid, organic class discussion. Once students have demonstrated an adequate degree of understanding around the topic of their art piece and developed a means to articulate this understanding, teachers can allow the next step of the activity to unfold.

Students should now take out a blank sheet of lined paper and a pencil. Next, students within the group will take turns choosing one word at a time that speaks to them, until all words are accounted for and assigned to a student. Students will then have 5 minutes to compose one sentence about their piece of artwork that contains one word from their list until all of their words have been accounted for, in the form of a sentence. Ultimately, students will have written several sentences about their piece that contains powerful language that highlight both the emotional and historical aspects of the artwork they have examined. This activity will help students examine artwork as a historical story telling device collectively with other students while practicing documenting their findings and conclusions in a way that is both unique to their own interpretation and informative to their peers. Furthermore, this activity can easily premise the "90 words" activity.

## 90 Words

90 words is an activity that is based around the short description panels found next to artwork in museums. In most museums, there is a short synopsis that often includes information on the artist's background, purpose and general story behind the piece of artwork that is being presented. For this activity students will construct a description for a piece of artwork that is no shorter than 70 words but no longer than 100 words, as that generally tends to be the case in many museums. This poses a challenge in that students are often comfortable responding to "short answer" questions and longer, drawn out essays, but often struggle with concise and descriptive paragraph length responses. Learning to formulate a healthy and concise summary on a topic will improve students' capacity and efficacy for outlining and assigning value to information that will either be deemed useful or insignificant.

Students may want to use the sentences they created in the previous activity or start from scratch. Nevertheless, teachers will want to model this activity to the class by constructing their own 90 word description of a painting. Furthermore, students may benefit from seeing actual museum description synopsis as to better understand its purpose. For the most part, students should focus on responding to the five "W's": What, who, where, when, and why. In other words, students should aim to create one to two sentences for each "W." For example: Who authored this piece of artwork? Who is being represented? When was this artwork created? Where is the location of this scene? Why was this artwork created? What is being depicted? Then, organizing the sentences so they create a cohesive and eloquent paragraph. This activity can act as either an assessment for students to demonstrate their understanding of a piece as well as an instructional activity for short writing exercises.

## Step Into My Shoes

For this culminating activity students will be utilizing artwork and text in conjunction with one another. Ideally, this activity should occur after students have had much practice analyzing both primary sources and pieces of artwork using the Four Reads and Socratic Questioning Model, respectively. For this activity, students will be choosing a piece of artwork that resonates with them. It should be noted that in order for this activity to be implemented properly, the artwork must contain a person- as students' will chose to write from the perspective of a character 'subject.' If a students is adamant about choosing a piece that does not contain any individuals, the student can decide to make up a character that may exist in the space depicted in that particular painting or print.

Student will choose a character-subject to step "into" with the intent on creating a fabricated primary source outlining a typical experience of their subject, as they exist in their environment. For example, students may choose to write as a woman who is illustrated in a textile painting, or a man engaging in back breaking labor in the factory. Whatever the case, students should consider the style, tone and purpose of the primary sources they examined earlier in the unit as to maximize authenticity. For further effect, students can compose a final draft on a weathered piece of paper using an appropriate writing utensil. Depending on student literacy, teachers may want to offer guiding questions and sentence starters like: What was life like for this person? What were their thoughts on work? What kind of hardships did they have to deal with? Who are they writing to? If students are having difficulty starting, ask them to write about the subject of the painting their character lives in. What was that day like at work? What kinds of things could be heard, smelled, felt in their environment? What sort of feelings where being experienced at that particular moment in time? As a way to finalize and validate students' work, give them the option to share their letters with the rest of the class.

## Resources

---

### Internet Resources

The Critical Thinking Community, The Foundation for Critical Thinking

<http://www.criticalthinking.org/pages/the-role-of-socratic-questioning-in-thinking-teaching-learning/522>

Fordham University, Modern History Sourcebook, Industrial Revolution

<http://www.fordham.edu/halsall/mod/modsbook14.asp>

Teaching History.org, Four Reads: Learning to Read Primary Documents

<http://teachinghistory.org/teaching-materials/teaching-guides/25690>

### Paintings, Prints and Photographs

See above section titled "Questioning Artwork" for a questioning model being applied to some of the paintings and prints listed below.

- Joseph Wright of Derby, *An Iron Forge*, 1772, Tate Britain Museum
- Phillip James deLouthembourg, *Coalbrookdale by Night*, 1801, Science Museum London
- William James Muller, *Forging the Anchor*, 1833, Bristol Museum & Art Gallery
- Adolph Menzel, *The Iron Rolling Mill*, 1872, Staatliche Museen zu Berlin
- John Ferguson Meir, *The Gun Foundry*, 1866, Putnam Country History Society
- Thomas Allom, *Powerloom Weaving*, 1835
- William Orpen, *The Wash House*, 1905, Studio International
- Samuel Melton Fisher, *Clerkenwell Flower Makers*, 1896, Museum of New Zealand Te Papa Tongarena
- R. Barnes, *Making Artificial Flowers*, 1889, Peter Jackson Collection
- Cyrus Cuneo, *The Cotton Lock Out: A War of Women*
- Making Creams, Fry's Cocoa Advertisement, Illustrated London News, March 22, 1984

### Readings for Students

See section titled "Primary Documents" for annotated descriptions of each source.

- Harriet Robinson: Lowell Mill Girls
- Andrew Ure: *The Philosophy of the Manufacturers*, 1835
- Observations on the Loss of Woollen Spinning, 1794
- Gaskell, P., *The Manufacturing Population of England. The Physical Deterioration of the Textile Workers*, 1833, London
- Chadwick, Edwin, *Report from the Poor Law Commissioners on an Inquiry into the Sanitation*
- *Conditions of the Labouring Population of Great Britain*, Chadwick's Report on Sanitary Conditions, 1842, London

## Appendix

---

### State Standards

This unit will aim to adhere to the Common Core Social Science standard R.H.9-10.2 in that students will determine the central ideas or information of a primary or secondary source and provide an accurate summary of how key events or ideas develop over the course of the text.

This unit will aim to adhere to the Common Core Social Science standard R.H.9-10.6 in that students will compare the point of view of two or more authors for how they treat the same or similar topics, including which details they include and emphasize in their respective accounts.

This unit will aim to adhere to the Common Core Social Science standard R.H.9-10.9 in that students will compare and contrast treatments of the same topic in several primary and secondary sources.

## Bibliography

---

Dublin, Thomas. *Women at Work*. New York: Columbia University Press, 1979.

Fathfull, Bayard. *Four Reads: Learning to Read Primary Documents*. 2010.

<http://teachinghistory.org/teaching-materials/teaching-guides/25690> (accessed July 20, 2014).

Huneault, Kristina. *Difficult Subjects: Working Women in Visual Culture, Britain 1880-1914*. Aldershot, Hants: Ashgate Publishing Limited, 2002.

Thinking, Foundation for Critical. *The Role of Socratic Questioning*. 1990.

<http://www.criticalthinking.org/pages/the-role-of-socratic-questioning-in-thinking-teaching-learning/522> (accessed July 11, 2014).

University, Fordham. *Modern History Sourcebook Industrial Revolution*. September 22, 1997.

<http://www.fordham.edu/halsall/mod/modsbook14.asp> (accessed July 9, 2014).

Ware, Norman. *The Industrial Worker 1840-1860*. Chicago: Elephant Paperbacks, 1990.

Wilentz, Sean. *Chants Democratic: New York City and the Rise of the America Working Class, 1788-1850*. New York: Oxford University Press, 2004.

## Notes

---

1. Hamel, Gary "Capitalism is Dead. Long Live Capitalism" The Wall Street Journal September 21, 2010
2. Tim Barringer, "Understanding History and Society through Images, 1776-1914" (seminar, Yale National Initiative: Yale University, New Haven, CT, July 14<sup>th</sup>, 2014)
3. Dublin Thomas, *Women at Work* (New York: Columbia University Press, 1979), 4
4. Dublin, 3
5. Dublin, 3
6. Dublin, 5
7. Dublin, 4
8. Dublin, 4
9. Dublin, 1
10. Robinson Harriet H., "Early Factory Labor in New England" in *Massachusetts Bureau of Statistics of Labor, Fourteenth Annual Report* (Boston: Wright & Potter, 1883) as quoted from Fordham University. Modern History Sourcebook Industrial Revolution. September 22, 1997.
11. Ware Norman. *The Industrial Worker 1840-1860* (Chicago: Elephant Paperbacks, 1990), 10
12. Ware, 14
13. New York Daily Tribune, Nov. 14, 1850 as quoted in Ware, 31
14. Ware, 31
15. Curtis Dr. Josiah, *Brief Remarks on the Hygiene in Massachusetts* (Philadelphia, 1840) pg.5 as quoted in Ware, 14
16. Dr. Henry Clark, 1849, Document number 66, Report of the Committee on Internal Health, Ware, 13
17. Chadwick Edwin, *Report from the Poor Law Commissioners on an Inquiry into the Sanitation Conditions of the Labouring Population of Great Britain* (London, 1842) 369-372 as sourced by Fordham University. Modern History Sourcebook
18. Chadwick, 369-372
19. Chadwick, 369-372
20. Chadwick, 369-372
21. Chadwick, 369-372
22. Ware, 16

23. Pennsylvania: Bureau of Industrial Statistics, Annual Report, 1882 Leg. Doc. 8, "Labor Troubles in Pennsylvania" pg. 262 as quoted in Ware, 27

24. Dublin, 27

25. Ware, 59

26. Ware, 64

27, Ware, 64

28. Gaskell P, *The Manufacturing Population of England* (London, 1833) pg. 161-162, 202-203 as sourced by Fordham University. Modern History Sourcebook

29. Bayard Faithfull, "Four Reads: learning to Read Primary Documents" *Teaching History*. 2010

30. Bayard Faithfull, "Four Reads: learning to Read Primary Documents"

31. Bayard Faithfull, "Four Reads: learning to Read Primary Documents"

32. Bayard Faithfull, "Four Reads: learning to Read Primary Documents"

33. Bayard Faithfull, "Four Reads: learning to Read Primary Documents"

34. Bayard Faithfull, "Four Reads: learning to Read Primary Documents"

---

<https://teachers.yale.edu>

©2023 by the Yale-New Haven Teachers Institute, Yale University, All Rights Reserved. Yale National Initiative®, Yale-New Haven Teachers Institute®, On Common Ground®, and League of Teachers Institutes® are registered trademarks of Yale University.

For terms of use visit [https://teachers.yale.edu/terms\\_of\\_use](https://teachers.yale.edu/terms_of_use)