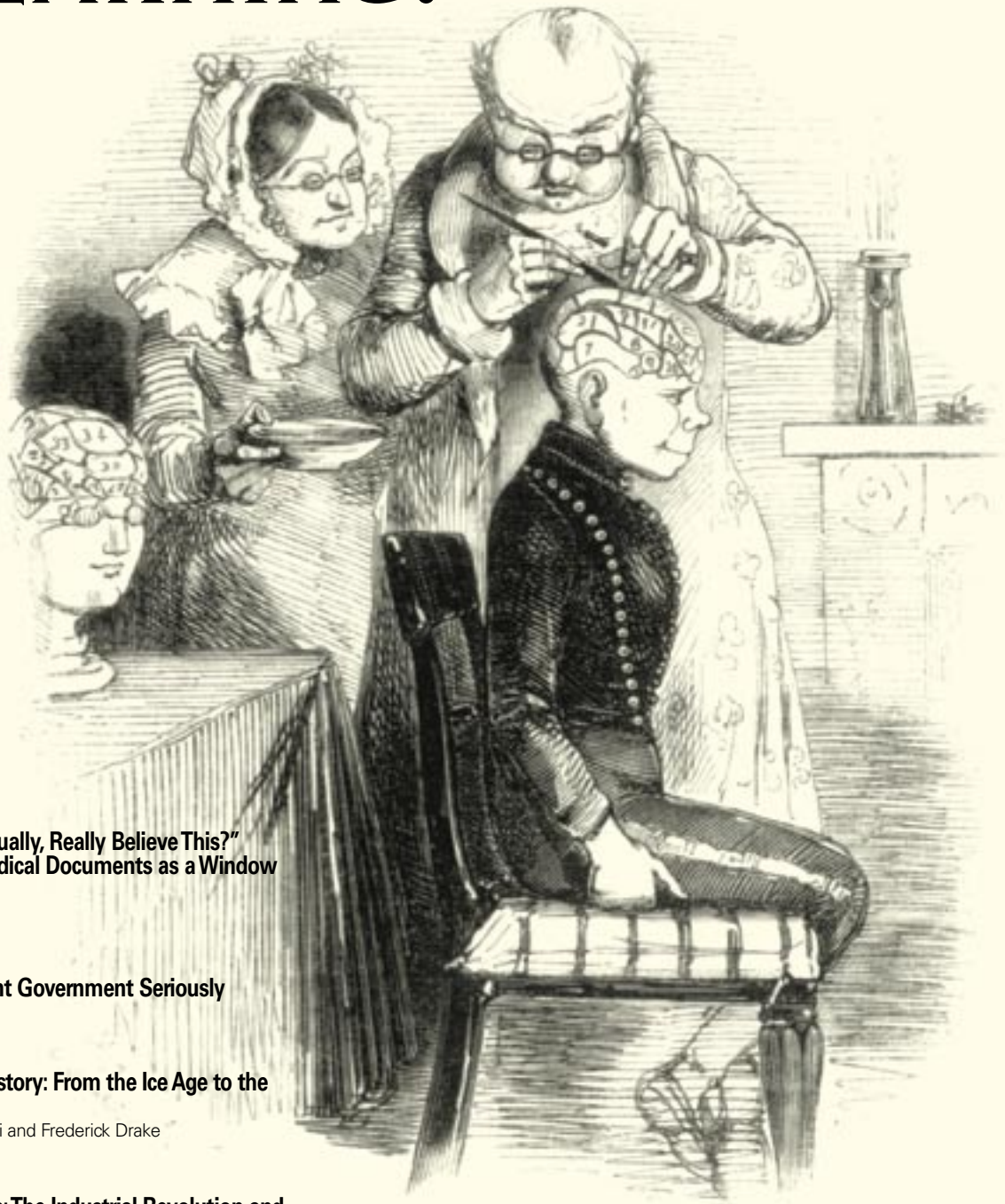




# MIDDLE LEVEL LEARNING.



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# “Did They Actually, Really Believe This?”

## *Authentic Medical Documents as a Window on the Past*

Julie Riley

*PRETEND that you have been time warped to the era of a medical document you will choose. Convince the doctor or specialist who wrote the document that he was not correct, or that he did not use the best way to treat a patient. Explain to him a better treatment or more accurate explanation using the information that you have learned in this course. Remember, the person you are convincing lives in the time of the document and does not know modern anatomical facts. How you will convince the author is up to you: a detailed picture, a written statement, a taped verbal explanation, other possibilities. The goal of the assignment: I would like you to effectively communicate what you have learned about one of the human body systems that we have studied by using your notes and prior resources.*

I handed this challenge to my seventh grade students, along with photocopies of three historical medical documents: a set of directions about proper bloodletting techniques from the Revolutionary War era, another set of directions about tendon repair in a calf from the same period, and a phrenological head depicting “The Affectionate Female.” (If you are not sure just what phrenology is, read on.) My students were definitely intrigued, if a little intimidated, by what I was asking them to do. They needed time to titter and giggle about the documents.

“Miss Riley, did you make these up?” one student challenged me.

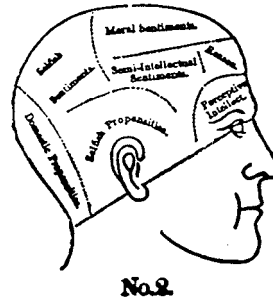
“Did they actually, really believe this?” asked another in disbelief.

I had them hooked. Now all they needed to do was choose a document and use their resources to convince the author.

### On the cover

“A ‘Page’ of Phrenology” from *Illuminated Magazine*.

Library of Congress



*The Affectionate Female.*  
No. 3

This illustration of an “Affectionate Female,” replacing romance with the reading of head bumps, appeared in L. N. Fowler’s *Phrenology and Physiology Applied to the Selection of Congenial Companions for Life* (1842).

### An Assignment Takes Off

This was one of those assignments that takes on a life of its own. My own first contact with historical medical documents occurred after a class conversation about something that appeared in the digestion chapter of our science text. In the early 1800s, William Beaumont studied a patient who had a bullet hole blown in his stomach, which then remained open. Beaumont learned a tremendous amount about the human digestive system by tying small pieces of food to a string, putting them into the hole, and removing them. These seventh graders were fascinated, and had many questions about what Beaumont had done. I explored the World Wide Web and discovered more information at the website of the University of Toledo libraries. Especially intriguing was an actual drawing by Beaumont of that captivating hole.

We had an equally engaging conversation about Phinneas Gage when we studied the brain and nervous system. Gage was a railroad worker who lived in the mid-

1800s and had an accident in which a tamping iron became enlodged in his skull. Miraculously, he survived, but with one unfortunate effect: his personality changed from mild and agreeable to cantankerous and confrontational.

We were wrapping up our exploration of the nervous, musculoskeletal, digestive, and cardiovascular systems. Students had learned a lot, but could they *use* that information? I was truly interested in the “So what?” aspect of learning, that is, the application of ideas to the outside world. But it was my students’ overwhelming interest in strange historical happenings and the medical documents I uncovered that set this idea in motion.

### Looking at da Vinci

I knew that asking my students to become anatomical historians was something they could not just do automatically. We began



"Dr. Spurzheim. Divisions of the Organs of Phrenology marked externally," printed by Pendleton's Lithographic Company, 1834.

by looking at a different historical document altogether, a drawing of the digestive system by Leonardo da Vinci. I placed it on the overhead, along with a translation of Leonardo's description of his drawing. I asked students to consider the drawing and description carefully and to make observations about what they saw, with particular attention to the similarities and differences between what Leonardo described and what we knew about the digestive system.

An important aspect of our observations involved speculating about what

Leonardo meant by some of the terms he provided. In many cases, we found the language different, but the idea miraculously similar. (It is *amazing* how much Leonardo includes in his descriptions!) We wrote a letter to Leonardo as a class, incorporating our observations, and describing what we knew about the digestive system in plain language that we hoped he would understand.

There was only one more thing we needed to do before students went to work. This was to create a class rubric for what success on this assignment would look like.

My students were used to rubrics in their assignments, but those rubrics were created by *me*. This was the first time I challenged *them* to create their own rubric.

Among the features of the student rubric were: using scientific information accurately, making a convincing argument, and incorporating feedback from a reviewer. Three of the classes agreed that an exemplary piece of work would show some understanding of the time period during which the document was written. It began to dawn on me just how powerful this assignment could be. When students asked "Can we research the time period that our document came from?" was I going to say, "No, you can't!"? With a smile, I waved the green flag, and they were off.

### Acting Like Historians

Students had caused me to see more clearly the importance of what I was asking them to do. They were to act as historians and to practice all the skills, attitudes, and habits of mind that David Kobrin illustrates so clearly in *Beyond the Textbook: Teaching History Using Documents and Primary Sources*.<sup>1</sup> I had asked them to:

- ▶ read and comprehend, using archaic vocabulary
- ▶ discover the main ideas of a picture and piece of writing
- ▶ understand the importance of context and perspective
- ▶ develop a sense of the importance of time and time passing
- ▶ write creatively and persuasively
- ▶ work collaboratively as a community of historians

In a different study, Barton found that students rarely examined historical evidence critically on their own; they needed practice and support in these skills in order to understand that history results from critical reviews of many sources.<sup>2</sup> The assignment my students were undertaking would help



S. S.

S. S. is a vagrant, and inmate of what is termed the Luna House, on Blackwell's Island. He is an Irishman; was formerly a prize-fighter; was sent to the State Prison for five years for assault and battery, with intent to kill, and since his liberation, a period of some six or eight years, has spent most of his time in the city and county prisons of New-York. Before his mind became deranged, he exhibited great energy of passion and purpose, but they were all of a low character, their sole bearing being to prove his own superiority as an animal. He was both vain and selfish.

The drawing shows a broad, low head, corresponding with such a character. The moral organs are exceedingly deficient, especially benevolence, and the intellect only moderately developed. The whole organization, indeed, indicates a total want of every thing like refined and elevated sentiment. If the higher capacities and endowments of humanity were ever found coupled with such a head as this, it would be a phenomenon as inexplicable as that of seeing without the eye, or hearing without the ear.

The subject of this portrait was an Irish vagrant imprisoned in the New York State penitentiary on Blackwell's Island. The engraving is from a series of daguerrotypes by the young Mathew Brady that appeared in the American edition of Marmaduke B. Sampson's *Rationale of Crime* introduced by prison reformer Eliza Farnham. The accompanying text described this man as "of a low character . . . both vain and selfish" possessing "a broad, low head corresponding with such a character" and in which "the moral organs are exceedingly deficient." But some contemporary newspaper reviews found Sampson's book deficient, describing it variously as "quackery . . . and humbug," "false in theory and mischievous in practice," and "about on a par with the catch-penny pamphlets on *Phrenology* by which scheming speculators on public credulity are constantly working to replenish their purses." (See note 7)

them to develop skills in examining historical evidence firsthand. It would also allow them to meaningfully fulfill the NCSS performance expectations for Standard

Ⓜ TIME, CONTINUITY, AND CHANGE, and Standard Ⓜ SCIENCE, TECHNOLOGY, AND SOCIETY.<sup>3</sup>

### So What Is Phrenology?

Interestingly, most students chose the picture of "The Affectionate Female" by F. N.

Fowler as the subject of their assignment. They were intrigued by what they considered the ridiculous nature of thinking that you could look at the shape of a woman's head and decide whether she would be a good choice for a wife. Students who researched the historical background of phrenology in the mid-1800s found that this "pseudo-science" was serious business and developed an enormous following, especially in the United States.

Phrenology is the practice of examining prominent places on a person's skull, and from the bumps, determining what mental faculties and character traits that person possesses. In phrenological studies, the head was divided into different areas believed to correspond to these different traits. For example, reason was located square center in the forehead, while "domestic propensities" were located at the back of the head—perhaps suggestive of what kind of value was placed on women's work. A phrenologist would "read" a person's head and recommend what the person could do to develop traits that were lacking naturally.<sup>4</sup>

While history texts rarely mention phrenology, it was a well-known and important practice in mid-19th century America. And while this pseudo-science may appear ridiculous viewed through modern eyes (and the eyes of contemporary scoffers as well), it is important to note that many modern scientists give phrenology credit for a change in societal thinking about the role of the brain in human behavior. Phrenology may have encouraged scientists to view the brain (rather than the heart) as the major locus of human behavior and to explore the notion that different parts of the brain are responsible for specific behaviors.<sup>5</sup>

### A Window on the Victorians

There were many reasons why Victorian society proved fertile ground for phrenology. This was an era starved for scientific insight into the human mind. Phrenology offered a marriage of science and philosophy using anatomical knowledge—as its proponents understood it—to experimentally "prove" its teachings. "The dedicated phrenologist of the 19th century was confident that he possessed a truly scientific understanding of human nature."<sup>6</sup> Even some physicians accepted phrenology as a new scientific explanation for how the human mind

worked to control functions of thought and personality.

Phrenology can also be seen as the Victorian era's version of "self-help." Although it proclaimed a person's fate to be determined by physical factors, it also held out the promise that people could improve character traits for which they did not possess the appropriate signs or "bumps." Although it presented itself as highly intellectual, phrenology in fact offered an easily understood philosophy expressed in ordinary language that posed no threat to traditional religious values. This self-help opportunity was in synch with Jacksonian America's vision of "self-made individuals."

Such an opportunistic vision could be turned to social purposes of more and less consequence. For example, phrenology was applied to the analysis of criminal behavior and used by prison reformers to argue for less reliance on the gallows. Eliza Farnham, matron of Sing Sing Prison in New York State, followed the English phrenologist Marmaduke Sampson in holding that crime "was the result of overdeveloped faculties of destructiveness or amativeness and underdeveloped faculties of reason or spirituality—all subject to correction."<sup>7</sup>

Phrenology was also employed to give racial stereotypes a "scientific" foundation supposed to "prove" that black and red people held traits that made them naturally subject to whites. *Phrenology: Proved, Illustrated, and Applied* by the Fowler brothers (who provided the phrenology document that students examined), brashly illustrates how the practice was used to justify discrimination and uphold white men's power. "Indians," the authors claimed, "show an extreme development of destructiveness, secretiveness, and cautiousness which would create a cruel, bloodthirsty, and revengeful disposition—a disposition common to the race."<sup>8</sup> Similarly, the African race in America was alleged to show "...

smaller reasoning organs" making its members "...predisposed to lead a life of ease and idleness."<sup>9</sup> These observations offered a well-defined agenda for the racist use of phrenology. The cause of women's rights, too, suffered assault from the "finding" that women lack the evidence of intelligence displayed by men.

These instances highlight the danger that ideas that a society mistakenly believes to be scientific can be used to promote social prejudice and discrimination.

Despite such unsavory uses, phrenology was warmly embraced by many segments of Victorian society. Women styled their hair to show off certain phrenological signs. Employers advertised for employees with given phrenological traits. Phrenological profiles are available for many famous people of the mid-1800s. Had students researched far enough, they would have found that yes, indeed, a phrenological expert visited Phinneas Gage.<sup>10</sup>

### Some Reflections

This assignment using historical medical documents brought together many aspects of what I hold most important about teaching. It challenged students to use their knowledge rather than just remembering facts. It propelled students—through the shock of what they discovered in connection with their primary documents—into a new level of understanding history. It pushed students to a new level of accountability as they worked to meet the expectations they had themselves created.

I didn't realize the power of this assignment until students grew deeply involved in the process and the historical conversation it engendered. I learned as much about teaching as the students learned about phrenology and bloodletting. In the end, it was the students who took this assignment to rich new places. 📖

### Notes

1. David Kobrin, *Beyond the Textbook: Teaching History Using Documents and Primary Sources* (Portsmouth, N.H.: Heinemann, 1996).
2. Keith C. Barton, "I Just Kinda Know": Elementary Students' Ideas about Historical Evidence," *Theory and Research in Social Education* 25, no. 4 (1997): 407-430.
3. National Council for the Social Studies, *Expectations of Excellence: Curriculum Standards for Social Studies* (Washington, D.C.: NCSS, 1994).
4. Minna Morse, "Facing a Bumpy History: The Much-Maligned Theory of Phrenology Gets a Tip of the Hat from Modern Neuroscience," *Smithsonian* 28, No. 7 (1997).
5. Tomas Hardy Leahey and G. Leahey, *Psychology's Occult Doubles: Psychology and the Problem of Pseudoscience* (Chicago: Nelson-Hall, 1983).
6. David de Guistino, *Conquest of Mind: Phrenology and Victorian Social Thought* (Totowa, N.G.: Rowman and Littlefield, 1975).
7. Madeleine B. Stern, "Mathew B. Brady and the Rationale of Crime: A Study in Daguerreotypes," *Library of Congress Quarterly Journal* 31, no. 3 (July 1974): 127-135.
8. O. S. & L. N. Fowler, *Phrenology: Proved, Illustrated, and Applied* (New York: W.H. Colyer, 1837).
9. *Ibid.*
10. Morse.

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- National Library of Medicine: <http://www.nlm.nih.gov>
- New York Academy of Medicine Library Historical Collections: <http://www.nyam.org/>
- University of Toledo Libraries: <http://www.cl.utoledo.edu/>

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# Taking Student Government Seriously

J.R. Bolen

Effective student governments are, as an NCSS position statement has pointed out, “laboratories in which students can learn and practice essential citizenship skills, respect for human dignity and the value of the democratic process.”<sup>1</sup>

If they are organized properly, student governments can also be an important supplement to the curriculum. At La Mesa Middle School, social studies teacher Rob Appenzeller and I (then a student teacher) asked ourselves what would happen if a student government were established on the model of the three-branch U.S. government itself. Wouldn't this be a stimulating way of introducing students to the roles and activities of the three branches of government?

Rob and I had an additional concern that prompted us to suggest a new kind of student government at La Mesa. Most high and middle school student govern-

ments are oligarchies in which an elected few have the authority to spend money and make important decisions without having to report back to their peers who make up the student body. In the absence of checks and balances, there is no guarantee that these decisions are representative.

In an attempt to foster a new kind of student government, we organized an experiment at La Mesa that took place from 1996 to 1998, after which it was put on hiatus. This student government imitated the United States government in format, with Rob and myself acting as advisors, joined the second year by social studies teacher Mike Settani.

## Structure

The branches of the government were:

1. *A Legislative Branch.* The Student Congress consisted of a Senate and House of Representatives. In line with the school's commitment to the principle of teaming, La Mesa Middle School has seven teams, separated by grade levels. In the elections to the Congress, these teams were treated as the

equivalent of states, and the members of each team elected two senators to represent them in the Team Senate. Each team was also separated into four to six advisories, which served as the equivalent of congressional districts and elected members to the House of Representatives.

In the student Congress, nine standing committees were also established—three in the Team Senate, five in the House, and a Rules Committee consisting of members from both Houses. The Rules Committee defined floor debate policy for each proposed bill. Respecting the limitations of time, bills were presented for approval to a joint session of both houses.

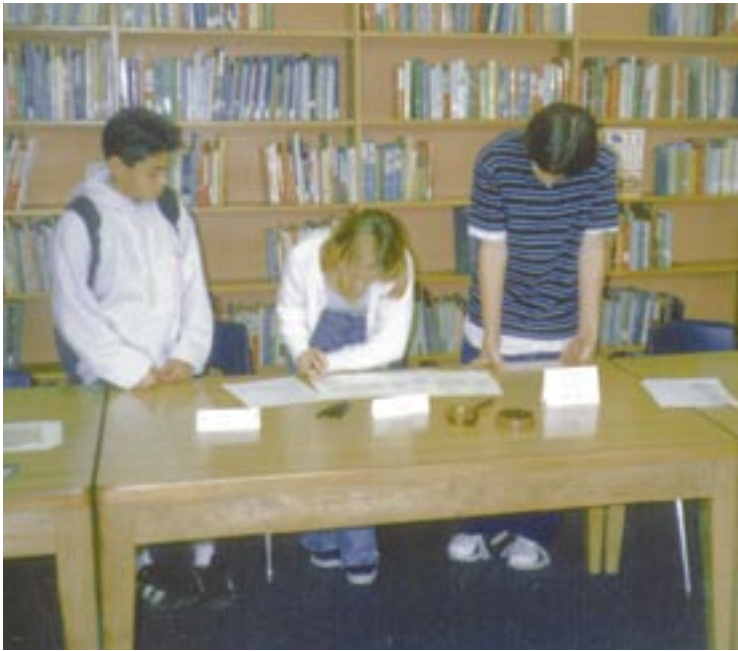
2. *A Judicial Branch.* The Student Judiciary Panel consisted of four students and three staff members, one of whom had to be the school Principal or Vice-Principal. In one respect, the panel was unique because the four students could ultimately decide against the three staff members. The balancing factor was that challenges to laws before the panel could not be in direct conflict with the established Rules and Regulations of the La Mesa-Spring Valley School District, or California and Federal Constitutions and statutes.

In January 1997, a bill from the House Judiciary Committee for the creation of an Attorney General position received approval from the Student Congress. This position was assigned responsibility for the presentation of problems to the Student Judiciary Panel on behalf of the student body.

One case heard by the Judiciary Panel occurred when the President Pro Tem of the Team Senate was suspended for fighting and automatically placed on the Loss of Privilege (LOP) list. A student on the LOP list cannot participate in extracurricular activities, including the student government. The student government advisor acted on the authority accorded him by the Associated Student Body (ASB) Constitution to remove



J.R. Bolen



ASB President (middle) of new government signing the first bill passed by the student congress.

J.R. Bolen

a member from office for not fulfilling his or her duties. Upon removal, the Senator quickly filed a complaint with the Clerk of the Judiciary Panel. The panel, however, found in favor of the student government advisor, returning a verdict that he had acted within his constitutional rights. Five justices voted in the majority, with one dissenting, and the other absent.

**3. An Executive Branch.** This branch was made up of two parts. The first was the Executive Board, consisting of the President and other officers, which was elected by popular vote once a year at ASB Conventions. The second part was the Student Council, made up of the Executive Board, appointed Commissioners (cabinet members), and elected Team Leaders (governors). The Student Council was the old oligarchical student government, accorded a new role under the new system.

Although the executive branch had lost a lot of power under the new system, its members were supportive of the change. The Student Council met weekly before school. Its primary functions were to support legislative acts and oversee student activities. The latter included bimonthly spirit assemblies and a biweekly news program

explaining what was going on in the Student Congress and informing students of current events. On Fridays, six televisions in the lunch area replayed the news programs, which consisted of humorous skits, trendy music, and unique narration to capture the attention of the student body.

### Activities

In the discussion and passage of proposed legislation, students regularly showed a strong commitment to the responsibilities of government. One of the first bills passed by the Student Congress was the 1996-97 Budget, which was hotly debated on the floor and passed with a couple of amendments. In their discussions of financial allocations, members of the Congress continued to show a consistent sense of responsibility and vigilance. In one case, for example, a bill allocating funds to support a field trip was rejected in the final vote after the chairperson of the Finance/Budget Committee pointed out that it did not meet the established requirements for budgetary support by the student government.

The students were also determined to make sure that representatives took their

duties seriously and were responsive to their constituents. One early act required all representatives to report back to their advisories (districts) and obtain input on how to vote on upcoming bills. Another measure, the Mandatory Attendance Act, required all representatives to attend meetings and allowed them only two unexcused absences, after which the representative would automatically be removed from the position.

One of the most interesting accomplishments of the student government was the School Safety Act, which established a right for students to come to school without being mentally or physically abused on their birthdays or at any other time. During the debate on the bill, student representatives presented complaints from their constituents about being punched or verbally harassed on their birthday. Violation of the School Safety Act would result in charges filed by the Attorney General, and the culprit being reported to the Vice-Principal for disciplinary action, and possibly presented before the Student Judiciary Panel. While it is difficult to ascertain the exact effects of the School Safety Act (no charges were ever brought by the Attorney General), the public airing of the problem was a major step forward.

One incident that truly brought a smile to my face occurred on a day after Standing Committee meetings. A student approached me and inquired whether, if a student supported another person's bill, he or she could then have the other person vote for his or her bill. I looked at the student and smiled, replying, "Yes, of course you can, that is called lobbying." To teach the concept of lobbying through a textbook is one approach, but to have a student learn by doing makes the concept unforgettable.

The experience of participation in government led many students to become more assertive about what they considered to be their rights. One day in the first year,



Speaker of the House (2nd elected speaker)

a student was sent home for coming to school with hair dyed green. The following day, almost a hundred students rallied in her support, declaring the decision a violation of individual rights. The student was allowed to return to school. Whether or not the situation was correctly resolved, the important fact was that students recognized their right to peacefully assemble in front of the school.

Where the rights of students to decide their own life-style begin and end can be a divisive issue. One such dispute caused a major backlash from teachers and helped to force the student government into hiatus. This was a proposition in the second year of the government to allow gum chewing in the classroom, in the face of a school policy against it. When the staff reacted overwhelmingly against the idea, the students thoughtfully created an addendum calling for a schoolwide clean-up of all gum before gum chewing would be allowed in classrooms. Extensive arguments were made by students for and against the proposal in the school and on the student government website. But the student government lost support from the staff and began to falter, eventually being placed in hiatus.

The student government's problems were compounded by a change in the time period allocated for meetings. Originally, the meetings took place during the advisory period, a thirty-minute time-slot every morning that is primarily used to enhance the reading and writing skills of the students. Although representatives missed the advisory, I believe that they sharpened their skills through preparation and involvement in debates, as well as by creating and presenting legislation.

In the second year of the new student government, the administration decided that a school-wide focus on reading was needed to improve reading skills. A major schedule change eliminated the advisory period, inserting in its place a Sustained Silent Reading period in the middle of the day. This period rotated around three lunch periods, one for sixth grade, one for seventh grade, and one for eighth grade. The student government no longer had any universally shared period in which to hold congressional meetings. The administration believed that the Student Congress was successful enough to survive a switch to holding meetings before school along with the Executive Branch. However, due to the bus-

ing of several students, the pool of available students was depleted, resulting in lower participation.

## Reflections

As experience showed, the success of a student government of this kind requires the support of the administration, the staff, and the students; a universal meeting period; and the enthusiasm and dedication of advisors (three at La Mesa). Mutual agreement is needed on the scope of the government to deal with issues involving the behavior and life-styles of students.

A powerful reason for taking the idea of a school government seriously is its potential to enhance the social studies curriculum. Rob and I found that the student government was an especially useful experience in the eighth grade, when students learned about U.S. history and the Constitution using the *We the People* textbook created by the Center for Civic Education. The enthusiasm of La Mesa students for the experiment left no doubt in our minds that a thriving, soundly based student government can lead students down a road to increased civic understanding that they would not otherwise travel. 📖

## Note

1. National Council for the Social Studies, "NCSS Guidelines and Principles for Student Government" (NCSS position statement), *Social Education* 60, no 5 (September 1996): 307. Available on NCSS Online: <http://www.ncss.org/standards>

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# Acting Out History

## from the Ice Age to the Modern Age

Denee J. Mattioli and  
Frederick Drake

What needs to happen in a classroom to make students like history? Seventh grade teacher Michael Welch appears to know a secret: how to get young adolescents—so often self-conscious in front of their peers—to throw off their inhibitions and get into acting out the past. It may be in the role of a Japanese child emperor, a horse being traded by Moroccans, or sirens calling to Ulysses. And, it may be that this teacher's secret of success is getting onto the floor and into the spirit of things along with his students.

A common criticism of history teaching in our schools is not that the subject matter is beyond students' comprehension, but that it may be difficult to understand when presented solely as it is in textbooks—with names, dates, timelines, and endless streams of information.<sup>1</sup> While textbooks have been criticized for having achieved a uniform dullness, we must acknowledge that a textbook's purpose is to present information. Most do that.

One way to overcome the sameness of this form of presentation is through the incorporation of the humanities: literature, dance, music, drama, and the visual arts. Such content is not only valuable in itself, but can serve as another vehicle to help students learn to question, think analytically, solve problems, and make decisions—all skills required for students to construct their own knowledge.<sup>2</sup>

In seeking examples of how to integrate the humanities into regular class

work, we spent a month observing Welch's seventh grade world history class. Our goal was to identify the conditions and practices that lead to high achieving students who regularly rank social studies as their favorite subject.

Our fear was that we would find a charismatic teacher to whom students were drawn, and that it alone would explain the reason for the strong responses of class members. We did find that. But we also found well-known, proven methods of teaching that were held together with some exciting—yes, even inspiring—“glue.”

### Classroom Atmosphere

Mr. Welch's classroom appears different from most seventh grade social studies classrooms. Probably the most obvious difference is the arrangement of the desks in clusters around three sides of the room, leaving wide open floor space. This arrangement gives the room a casual appearance. More importantly, it allows students to move freely to act out the lesson and to form discussion groups.

Often, music (usually related to the lesson) is playing softly as students enter the classroom. The room is always an object-rich environment where students can see tangible connections to the far-off times and places they are studying. The room is further inviting because of its smells. The teacher often uses oils that give the room a subtle but pleasant aroma.

To encourage students to get into the lesson's drama, the teacher helps them move beyond any discomfort about their bodies by getting down on the floor and



Students mourn the loss of community members

Ronald V. Morris

involving himself in the processes he expects of them. Finally, students are encouraged to talk and express their feelings about what is happening in class.

To the casual observer, this classroom may appear very unstructured. On closer observation, it becomes clear that it is highly organized, and that planning a unit of this type takes a great deal more time than a traditional lesson. However, there is much less time spent in correcting paperwork.

The requirements of the teacher are:

1. Develop an inviting and comfortable atmosphere.
2. Provide objects (or pictures of objects) that allow students to develop skills of analysis and interpretation.
3. Make long range plans in order to link lessons and provide the context for students to make connections.
4. Use questions that lead students to continue questioning and to make predictions.

5. Be confident enough to provide opportunities for students to make decisions, solve problems, and carry out discussions
6. Think, plan, and present history as action requiring student participation.

## The Day's Lesson

### The Use of Objectives

Each day begins with five to seven minutes of review of the previous day's lesson, followed by two or three minutes used for stating the objectives of this day's class. These objectives are stated as questions in language students can understand, and represent the crucial center of any lesson. The objectives are listed on posters, arranged in an order that follows the flow of the lesson, and attached to classroom walls. The brief review and the overview of objectives are well planned and flow so that students can understand the connection between lessons.

Review takes place with a partner or in small groups of three or four, so that every student can respond to every question. Seventh graders are generally very social beings, and the teacher capitalizes on this by inviting them to talk. The discussion is raised to a higher level by asking students not only what they think about an issue, but how they would justify their opinion. For example: Was the introduction of iron into Japanese culture an advantage or a disadvantage? Why? After students discuss this within their groups, one student in each group is called upon to summarize their response. This may be followed up with another question.

### Setting the Scene

During the next few minutes of class, students in small groups rotate to stations. Typically, there are three stations with eight students (two groups of four) at each station. The stations include photographs, art reproductions, sculpture, poetry, pottery,

lines from literature, or some other kind of artifact accompanied by questions for students to discuss as a group. These well-planned questions may require photo interpretation, analysis of an artifact, or interpretation of a written piece. This often results in students developing questions of their own and making predictions as to what will happen during the lesson to come.

### Acting Out the Lesson

The largest amount of the class period is used to act out the history lesson—something that engenders enthusiasm on the part of teacher and students alike. The teacher delivers a well-planned lecture in a storytelling format, acting simultaneously as the director of a drama. Students play the roles of people, animals, and objects, acting out the events the teacher is narrating. The teacher stops regularly to ask students what their characters are thinking about or what they think might happen next. For example, if the objective is to understand a slave revolt, a student playing a slave may be asked, "How do you like being treated like dirt? What do you want to do to your master?"

The use of space depends on the lesson being taught. If it is about the war between Sparta and Athens, for example, the space will be divided in two. Space can also be used vertically. When examining the social structure of ancient Egypt, the teacher asks Pharaoh to stand on a desk, nobles and priests to sit on desks, and peasants to sit on the floor.

### Gestures and Mnemonic Devices

Acting out the lesson entails use of mnemonic devices, hand actions, and gestures used to help students remember names, terms, and vocabulary. Signs are used to identify not only important figures (the main characters in the drama) but nameless, ordinary people like the merchants of Athens or the women of Sparta. Each

student should have a sign, since this helps the student to feel recognized and a part of the lesson, as well as making visible the history of common people. The signs may also include simple drawings that symbolize the role of a character, such as a crown for a monarch or a cross for a clergyman.

This use of classroom drama certainly demonstrates Seymour Papert's thesis that when learning something abstract or remote, children should be able to put their whole bodies through some kind of experience before moving to paper and pencil or computer and monitor applications.<sup>3</sup> As each objective is addressed during the acting out of the lesson, it is checked off the posted list.

### Lesson Summary

The last five minutes of the class period are spent in summarizing the day's lesson. Literature or poetry is often used, and there is usually an attempt to tie what has been learned to the lives of the students. During this summary, the students return to their desks. The teacher focuses the discussion on questions that require students to state opinions, make judgments, and evaluate the actions and consequences learned in the lesson. Again, students talk over their responses with a partner or in their small group.

## Ending a Unit

### World History Timeline

At the end of each unit, students identify the major events within it, and create a segment to be added to a world history timeline that grows as the year progresses. This serves as a constant review for students and is a graphic representation of the chronology of these studies.

### Forms of Review

The end of unit review is based on the same objectives used to guide students throughout the unit. For some of the units, students

develop their own artifact displays, and the classroom becomes a museum of exhibits where students demonstrate what they have learned.

### Assessment

The unit tests cover the difficult concepts world history presents. They are not “easy” tests. They consist of multiple choice and short essay questions, and require students to synthesize and reorganize information. Students are often asked to compare and contrast one civilization or group of people with another. They are often asked Why? questions that require them to apply what they have learned. The students in this

heterogeneous classroom tend to do well regardless of their measured academic ability. Most students perform at an A or B level. 📖

### Notes

1. National Society for the Study of Education, *Textbooks and Schooling in the United States* (Chicago, Ill.: University of Chicago Press, 1990).
2. National Center for History in the Schools, *National Standards for World History: Exploring Paths to the Present* (Los Angeles: University of California, LA, 1994); John Goodlad, *Arts and the Schools* (New York: McGraw Hill, 1980); John Goodlad, *Educational Renewal: Better Teachers, Better Schools* (San Francisco: Jossey-Bass Pub., 1994).
3. Seymour Papert, *Mindstorms: Children, Computers, and Powerful Ideas* (New York: Basic Books, 1980); Seymour Papert, *The*

*Children's Machine: Rethinking School in the Age of the Computer* (New York: Basic Books, 1993).

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## A Prehistoric People Unit

A pine scent wafts through the air, creating a positive mood and suggesting the natural environment of the Ice Age. As the students enter the classroom, they hear music from the long-preserved culture of Australian aborigines, which evokes ancient times.

The students sit in groups of four and build an answer in their minds to the questions: What do you think the natural environment was like in the Ice Age, about 30,000 B.C.? What do you think the people then were like?

Twenty-two unit objectives are introduced. For example, students are to find answers to the questions: What two things was the economy of these people based on? What kind of social group did these prehistoric people live in? Why that size of group?

Students begin to act the roles of people of the time. They learn about the climate (“Shiver! Make your teeth chatter!”) and plant life. Some students portray animals of the time—ibexes, mammoths, and saber-toothed tigers. (Teachers may need to point out that dinosaurs lived so long before the Ice Age that no human being ever saw a living dinosaur.)

Questions about how Ice Age people made a living are used to introduce the concepts of an economy and technology. Three stations in the classroom have prehistoric tools: an ax and stone spear; a simple basket made of twigs; and a stone grinding set. Students decide what the tools are made of and what purpose they served, and then act out hunting and gathering roles.

The study of social groups starts with the family, as students

build an understanding of the roles that had to be performed by different family members to guarantee survival. They examine different gender roles and the way children were brought up. Students come to realize that each family on its own was unable to ensure its survival. Families had to combine with others into bands, which needed a ruler (a “government”) to make decisions affecting the welfare of all.

The students also consider the kind of religion that people practiced in prehistoric days, and the answers that prehistoric people may have believed they had to the great questions of life. As groups visit stations with examples of prehistoric art, they are able to see what features of life Ice Age peoples thought were worth recording and to consider why.

At the start of the unit, students write down their preliminary ideas about prehistoric people. Later, they are required to write an essay on the subject that shows an understanding of eleven concepts: climate, plants, animals, making a living, technology, social groups, government, education, gender roles, religion, and art.

To show students how to do it, Michael Welch writes a model essay incorporating his thoughts about his seventh-grade class, using each of these concepts.

Other assignments include the performance of scenes from a novel about prehistoric people, and a choice between creating a song about the prehistoric way of life and making a mini-museum of Prehistoric People.



# MODERN TIMES

THE INDUSTRIAL REVOLUTION AND THE CONCEPT OF TIME

## Frans H. Doppen

Joseph Khazzaka has suggested that the flashback approach is one way of making the teaching of world history more effective and relevant to today's students.<sup>1</sup> The flashback approach can help make an historical event such as the Industrial Revolution more real to students by encouraging them to think about how their own lives have been affected by the process of industrialization.

The typical world history textbook covers the Industrial Revolution in a factual manner by discussing its beginnings in 18th century Great Britain and its spread throughout Western Europe, the United States, and Japan during the 19th century.<sup>2</sup> However, presenting the Industrial Revolution as a series of historical inventions and occurrences denies the reality that it is an ongoing process that continues to shape contemporary society. Students need to become not only more knowledgeable, but also more reflective, about how the Industrial Revolution has shaped the modern world in which they live.

Jeremy Rifkin has described time as the primary conflict in human history. He asserts that every culture has its own unique

set of temporal fingerprints and that to know people is to know the time values they live by.<sup>3</sup> He also believes that children who have been immersed in the time world of the computer are often unable to readjust to the world of clock culture. This is especially apparent when it comes to learning how to reflect. In the computer world, "reflection is often as close as the flick of a keystroke."<sup>4</sup> Reflection, however, is a slow and time-consuming process.

The Industrial Revolution forever changed humankind's perception of time. Time became such a scarce commodity in industrial society that busyness became a new way of life. For example, European visitors to the United States have long been fascinated with its frantic pace of life. As early as the 1830s, an English observer noted that the average New Yorker "always walks as if he had a good dinner before him, and a bailiff behind him," while another visitor described American eating habits as "gobble, gulp, and go."<sup>5</sup> These observations could well have been made in our contemporary world.

What follows are several approaches to increasing student understanding of how the Industrial Revolution changed our concept of time and what the lasting effects of these changes are on modern life.

## Looking at Daily Life

An excellent way to begin exploring how the Industrial Revolution has changed our concept of time is with an examination of daily life. Middle school students are often eager to share their experiences with others. Open discussion with questions that focus attention on what the daily lives of your students really look like. For example,

- When did you get up this morning?
- How did you get to school?
- When did you have to leave home to get to school on time?
- At what time does this class period begin and end?

- Is your whole school day divided into periods of this length?
- Where will you go when school lets out? Who will be there? What will you do? How long will you stay?
- When and with whom will you eat dinner?
- When will you likely go to bed?

Many of the responses will include exact, often digital, references to time. They may indicate a hectic life-style in which families no longer have one daily meal where all members sit down at the dinner table together. Students may also become aware of many similarities in life-style that exist among them.

## Speed Trap

A good next step is to introduce students to the concept of a "speed trap." Walljasper asserts that many people in modern industrial society find it hard to slow down despite a constant stream of new inventions designed to perform tasks faster and presumably save time. As he puts it:

It wasn't supposed to turn out this way. As a kid in the 1960s, I remember hearing that one of the biggest challenges of the future would be what to do with all our time. Amazing inventions were



going to free up great stretches of our days for what really matters: friends, family, fun. But just the opposite has happened. We've witnessed a proliferation of dazzling time-saving innovations—jet travel, personal computers, Fed Ex, cell phones, microwaves, drive-through restaurants, home shopping networks, the World Wide Web—and yet the pace of life has been cranked up to a level that would have been unimaginable three decades ago.<sup>6</sup>

Without reading Walljasper's list, students might be asked to name inventions (or elaborations on inventions) in their own lifetime that may be said to create a speed trap. They could move backward in time by asking the same question first of their par-

ents, then of their grandparents (or some other member of this generation).

### From Sun Time to Factory Time

By now, students should have developed more ability to reflect on how they are products of the world in which they live, as are their parents, and preceding generations back to the age of the Industrial Revolution. They can consider some of the profound changes entailed in the conversion from an agricultural to an industrial nation as the factory clock replaced sun and season in determining what constituted a day of work.

According to Daniel Boorstin:

So long as mankind lived by raising crops and herding animals there was not much need for measuring small units of time. The seasons were all important—to

know when to expect the rain, the snow, the sun, the cold. Why bother with hours and minutes? Daylight was the only important time, the only time when men could work. To measure useful time, then, was to measure the hours of sun.<sup>7</sup>

“Punctuality” was a new word that entered the popular vocabulary in the late 18th century, and it was associated particularly with being on time for work. Factory life required workers to adopt a new time orientation, one arbitrated almost exclusively by the ownership class until late in the Industrial Revolution. True, workers who loathed factory time could vote with their feet, sometimes threatening the ability of factory owners to secure a labor force. More commonly, workers were exhorted by various means to



Library of Congress

“Strive to Excel” was the motto of this hoop skirt manufactory shown in a wood engraving from *Harper's Weekly* on February 19, 1859. According to an article in Oliver Jensen's *The Revolt of American Women*, some 500 labor-saving devices were in use at the factory, where women's wages averaged \$4 per week. But one woman was recorded as earning \$16 per week based on experience and “industry.” What do students guess to be the chief component(s) of “industry?”



This drawing from *Frank Leslie's Illustrated Newspaper* on June 8, 1872, bears the caption: "New York City—The Eight-Hour Movement—A Group of Workingmen on a Strike in one of the Up-town Wards." How do students think this demand relates to changes that occurred during the Industrial Revolution?

Library of Congress

adjust to the new industrial rhythm. As Rifkin reports about 19th century England:

....getting workers to work at the appointed clock hours was a recurring problem. In Lancaster as in other industrial cities, a steam whistle would blow at five in the morning to wrest people from their sleep. If that proved insufficient, employers would hire "knockers up," men who went from flat to flat "rapping on bedroom windows with long poles." Sometimes the knockers even pulled on strings "dangling from a window and attached to a worker's toe."<sup>8</sup>

This passage should not only amuse students, but help them realize why workers resisted change. In fact, middle school students may more readily appreciate the difficulties of living by the clock than do others. Their own internal clocks may be making it harder for adolescents to "punch in" at school early in the morning than it is for either younger children or adults.

### The Industrial Revolution and Society

Phyllis Deane has developed a framework of the Industrial Revolution as six intertwined revolutions: agricultural, demographic, commercial, transportation, iron and textile, and mentality.<sup>9</sup> Her model can help students to see the Industrial Revolution as a holistic process that had an impact on nearly all aspects of society. The revolution in mentality can be examined in terms of some of the new ideologies that emerged as a result of the Industrial Revolution.

For example, Engels laid blame for the degraded condition of the working class in mid-19th century England on the ownership class: He wrote:

So long as they are making money it is a matter of complete indifference to the English middle class if their workers eat or starve. They regard hard cash as a universal measuring rod. Anything that yields no financial gain is dismissed as "stupid", "impractical", or "idealistic".<sup>10</sup>

Engels likewise depicted the bourgeoisie itself as so "degraded by selfishness and moral depravity as to be quite incapable of salvation." For example, he used the following extract from an article in the *Manchester Guardian* in which a middle class woman complains about the presence of the poor on city streets:

For sometime past numerous beggars are to be seen on the streets of our town. They attempt—often in a truly brazen and offensive manner—to arouse the pity of the public by their ragged clothes, their wretched appearance, their disgusting wounds and sores, and by showing the stumps of amputated limbs. I should have thought that those of us who not only pay our poor rates but also subscribe generously to charitable appeals have done enough to claim the right to be shielded from such disgusting and revolting sights.<sup>11</sup>

Students could examine the basic tenets of communist theory in comparison with the liberal doctrine of laissez faire capitalism and discuss how each is rooted in the Industrial Revolution. They could also relate their historical understandings to a 20th century commentary on the failures of capitalism, Charlie Chaplin's silent film *Modern Times*.

### Modern Times

*Modern Times* features Charles Chaplin's last appearance as the Little Tramp, here desperately trying to survive during the Great Depression.<sup>12</sup> *Modern Times* is a satire of the corporate world of the early 20th century when it first came under the influence of Taylor's ideas of scientific management.<sup>13</sup> The film is slyly subtitled "A story of industry, of individual enterprise, humanity crusading in the pursuit of happiness"—words that flash across the screen

as workers flock sheeplike into a factory.

In examining this film with students, I use an activity sheet with focused questions aimed at helping them to appreciate its social commentaries. Some sample questions are:

- What does Charlie have to do before he is allowed to go to the factory bathroom? (Punch his time card.)
- What is the purpose of the Billows Feeding Machine? (To enable workers to remain on the assembly line while eating lunch, i.e., “time is money.”)
- What other efforts to increase the speed of production are demonstrated in the movie? What effect do they have on Charlie?
- Charlie picks up a flag that falls from a truck during a labor protest. What does it represent? What does it appear to mean to Charlie? (It’s a communist flag. Although its meaning seems unclear to Charlie, it suggests that some factory workers seeking to improve their working conditions were open to new political ideas, such as communism.)
- Does or doesn’t this movie have a happy ending?

Among other things students might reflect on is the very title of *Modern Times*, a reminder that people living during the Great Depression were just as convinced they were living in modern times as are students today. In what ways do students see their own time as “modern?” What similarities and differences do students see between their own time and the era of the Depression?

### Walljasper’s Timeline

Dramatizing Walljasper’s timeline of increases in speed since the Industrial Revolution is a good follow-up to viewing *Modern Times*. It includes many humorous comments on time-saving inventions and human reactions to increased speed. Students can have fun



Library of Congress

This 1876 lithograph of the Bellaire Manufacturing Company, located in the Upper Ohio River Valley, is a good illustration of Deane’s framework of the Industrial Revolution as six intertwined revolutions. How many of these revolutions do students observe in progress in this picture?

working in groups to create skits dramatizing milestones along this timeline—perhaps using the antics of the Little Tramp as a model. Some examples of timeline entries follow:

- Late 1700s: Improvements in upholstery technology in France allow stagecoaches to pick up speed; an increase in road deaths is one immediate result.
- 1876: Wind-up alarm clocks are introduced by Seth Thomas. Punctuality takes a big stride forward now that there’s no longer any excuse for being late for work.
- 1883: Life in the U.S. is still slow-paced enough that each town sets its own time. New Orleans, for instance, is 23 minutes behind Baton Rouge. Under pressure from the railroads, the federal government creates time zones, and soon all watches are synchronized.
- 1890s: The golden age of the bicycle. Some warn that these new vehicles, which move at a pace four times faster

than walking, will bring about an epidemic of “bicycle face”—that is, permanent disfigurement caused by pedaling into the wind at high speeds.

- 1913: Henry Ford introduces the assembly line, cutting the time it takes to produce a car from 14 person-hours to just 2.
- 1953: Carl Swanson introduces the first TV dinner: turkey, gravy, cornbread, peas, and sweet potatoes.
- 1980s: The nanosecond, a measure of time lasting one-billionth of a second, is invented.<sup>14</sup>

### Reflections on Time

Providing students with background information or having them research the history of time can enhance their understanding of how the organization of time is an arbitrary solution resulting from different historical experiences. According to Daniel Boorstin, there are few greater revolutions in human experience than the

movement from the seasonal or “temporary” hour to the equal hour. Here was man’s declaration of independence from the sun, new proof of his mastery over himself and his surroundings. Only later would it be revealed that he had accomplished this mastery by putting himself under the dominion of a machine with imperious demands all its own.<sup>15</sup>

Ask students to write an essay reflecting on Boorstin’s statement, with particular attention to the concept of time and/or the relationship between man and machine created by the Industrial Revolution. Students may offer their own view of whether modern technology (the continuing Industrial Revolution) is making their own lives better or worse. Their essays should reflect student learning during this unit as well as offering students the opportunity to develop their own personal interpretations of an essential historical process. 📄

### Notes

1. Joseph Khazzaka, “Comparing Two Approaches to Teaching World History,” *Social Education* 61 (April/May 1997): 210-214.
2. T. Walter Wallbank, Arnold Schrier, Donna Maier, and Patricia Gutierrez-Smith, *History and Life* (Glenview, Illinois: Scott, Foresman and Company, 1993).
3. Jeremy Rifkin, *Time Wars: The Primary Conflict in Human History* (New York, NY: Henry Holt and Company, Inc., 1987), 1.
4. *Ibid.*, 25.
5. Ray Walljasper, “The Speed Trap. Why It’s So Hard to Slow Down—and Why We Can’t Wait,” *Utne Reader* 80 (March/April 1997): 40-47.
6. *Ibid.*, 41-42.
7. Daniel J. Boorstin, *The Discoverers: A History of Man’s Search to Know His World and Himself* (New York: Vintage Books, 1985), 26.
8. Rifkin, 90-91.
9. Phyllis Deane, *The First Industrial Revolution* (Cambridge: Cambridge University Press, 1976).
10. W. O. Henderson and W. H. Chaloner, eds., *Engels: The Condition of the Working Class in England* (Stanford, CA: Stanford University Press, 1968), 313.
11. *Ibid.*, 314.
12. *Modern Times* (Beverly Hills, CA: FoxVideo Inc., 1992). (87 Min., B&W, 1936).
13. Frederick W. Taylor, *Shop Management* (New York: Harper & Row, 1911); see also

# A Great Wrong!

## SEE HOW ONE YEAR OF FACTORY LIFE AGES LITTLE GIRLS




This little girl, eight years old when she went to work in a Georgia cotton mill. The sun shining in her face causes a slight frown, but she has rosy cheeks and a childish expression.

This is another picture of little Gie one year after she began work in the cotton mill. Her childhood has gone forever. How much was it worth to the mill, to society, to her?

## Our National Disgrace

Two million children in this country are at work, while other children play or go to school. Two million children sacrificed to greed! Here is the record. Read it.

10,000 Boys from 9 to 13 years old work in the Coal Breakers.

7,800 Children work in Glass Factories. Hundreds of them work ALL NIGHT.

60,000 Little Children toil in Southern Cotton Mills. Little girls 8 years old work through a TWELVE-HOUR NIGHT.

Little Messenger Boys are ruined by NIGHT calls at Houses of Vice.

“The truth is, these child victims are working for us. They are working for me. They are working for you.”—HON. CHARLES F. NEILL, United States Commissioner of Labor.

**DETACH, SIGN AND RETURN**

**MEMBERSHIP ENROLLMENT**

I take pleasure in contributing \$..... to the work of the National Child Labor Committee. Please enroll me as:

[ ] An Associate Member.  
[ ] A Sustaining Member.  
[ ] A Guarantor.

Name.....

Address.....

Make all checks or orders payable to the National Child Labor Committee, 207 Fourth Avenue, New York City.

[1905]

The National Child Labor Committee is a purely philanthropic organization formed to secure and enforce legislation that will stamp out this enormous evil. We are struggling to save millions of children from the stunted bodies and blighted minds caused by industrial slavery. You can help us by becoming a member of the Committee and lending your influence to the enactment of necessary laws in your own State.

\$2 will make you an associate member; \$25 a sustaining member and \$100 a guarantor. This money will all be expended in saving little boys and girls from a life of ignorance and misery. Put your shoulder to the wheel and help us all you can. The cause is a noble one. If your boy were at work in a coal mine, or a glass factory, or the cotton mills, you would be grateful to those who were trying to save him. Others will now be grateful to you.

Detach the coupon now—before you turn this page—and become at least an associate member. Your \$2 may save a little boy or girl from industrial slavery.

**National Child Labor Committee**  
207 Fourth Ave., New York City. Century Building, Atlanta, Ga.

**OFFICERS:**

Felix Adler, Chairman	Samuel McJannet Linday, Secretary
Homer Folks,	
Chas. Chairman	A. J. McKeown, Assistant
V. Enoch May, Treasurer	Owen R. Lovvick, Secretaries

“A Great Wrong!” screams the headline in this 1905 advertisement placed by the National Child Labor Committee. How is this wrong described in the accompanying text? What aspect of Deane’s framework of six revolutions does this ad most clearly illustrate?

Ralph B. Kimbrough and Michael Y. Nunnery, *Educational Administration: An Introduction* (New York: Macmillan Publishing Company, 1988), 259-260.

14. Walljasper, 42-47.
15. Boorstin, 39.

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