

The Industrial Revolution

Lesson Block for Earthschooling
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Teacher Introduction

The Industrial Revolution was a period in which significant changes happened in all areas of life – agriculture, textiles, metal manufacture, transportation, economics, social structure, and even diet. It was a revolution in the way that it completely changed the old ways of doing things but it was not exactly a “revolution” because it was not a quick change as the word “revolution” sometimes implies.

In the same way, this lesson block is also pivotal in the life of the eighth grade child. Since the fifth grade the student(s) has been learning about the progression of culture since ancient times to the modern age (this year). As you may remember, as the teacher, each of these block also corresponded to their own emotional and spiritual development – As the world grew and expanded and developed – so did the student. The consciousness of mankind grew with the child.

The task for you, as the teacher, then is to bring this to life through living examples of this period in history – biographies and writings from people who lived during this time that will allow the student to experience the Industrial Revolution and perhaps even feel some of those conscious changes within themselves through the experience.

Steiner says, “The human being, from the time of his birth, from the time he draws his first breath, until his death, passes through certain processes and phases in his inner life. From birth until death the organism of the human being is permeated by forces of soul. It is not easy for the modern mind to grasp this idea, but my object in speaking of it is to give an example of how Spiritual Science can throw light upon conceptions of earlier times.”

One of the men Steiner was influenced by, Auguste Comte, puts humanity into three phases in evolution. The first stages is the ancient, mythological period when the priesthood ruled the land. The second stage was the metaphysical stage when men tackled problems on topics that were beyond the physical. He then believed that the third stage was the one that Steiner was in and that we are in today – The Science of Given Facts. He then went on to describe how there must also come another stage – on in which there is an ascent from pure science – physics, chemistry, biology, sociology – to a kind of political physics.

A French Historian, Jules Michelet, while writing about the French Revolution, noted, “I am busy with a difficult task, namely to relive, to re-experience and re-suffer the revolution.”

We must then also focus not only on the physical side of the Industrial Revolution but also on how the increased technological advances has enabled humanity, bit by bit FROM the material world. Although this still needs to be realized and taken advantage of by many, the possibilities exist that did not exist before the Industrial Revolution. Basically, instead of spending all day with work of the “hands” modern man now (theoretically if s/he decides to use it) also has more time for the “heart” (spirit) and “head”.

In his speech, “The Development of Thought from the 4th to the 19th Century” given in Dornach on May 15, 1921, Steiner says, “And as a matter of fact in the most recently written histories it is abundantly evident that the presentation of objective facts and events varies considerably according to the nationality of the historian, according to his power of synthesis, his imagination and other faculties.

In a certain respect, Spiritual Science is well fitted to cultivate an objective outlook in the study of history. It is, of course, not to be denied that the measure of talent possessed by the historian himself will always play an important part. Nevertheless, in spite of what our opponents choose to say to the contrary, it is precisely in the study of history that a quality essentially characteristic of Spiritual Science comes into play.

By its very nature Spiritual Science must begin with a development of the inner, subjective faculties in the being of man. Forces otherwise latent in the soul must be awakened and transformed into real faculties of investigation. The subjective realm, therefore, is necessarily the starting-point.”

In this talk he is basically saying that in studying history one cannot ignore the spirit that exists now (during the time of study) and the one that existed then. This is why reading literature from the time is so important. The student must not just learn “history”. They must learn it from the point of view of the person who lived in that period of history.

Steiner gives the following example:

“I could tell you of many ideas and views which would prove to you the difference of outlook in these earlier centuries, but I will give one example only. — Anyone who genuinely tries to understand writings which deal with the world of nature, dating from the time preceding the fifteenth century, will find that he must approach them with an attitude of mind quite different from that which he will naturally bring to bear upon literature of the eighteenth or nineteenth centuries. Before the fifteenth century, all the writings on the subject of nature indicate quite clearly that anyone who experiments

with processes of nature must be filled with a certain inner reverence. Experiments with mineral substances, for instance, must only be carried out in a mood that finds favour in the eyes of certain Divine Beings. Experiments with the processes of nature must be accompanied by a moral attitude of soul — so it was said. But just think of what would happen to-day if it were demanded of someone working to produce a chemical reaction in a laboratory, that his soul must first be suffused with a mood of piety! The idea would be ridiculed.”

Steiner encourages the teacher to look back at the Industrial Revolution with their students in the same way. He wants the teacher and student to “ask questions about the nature and impulses underlying social life.”

Steiner uses the example of Saint-Simon as a historian to model. He says, “In the first half of the nineteenth century, we find a representative personality in *Saint-Simon*, a son, as it were, of the French Revolution, and who had thoroughly imbibed the scientific thought of his time. Saint-Simon was one whose mind, at the end of the eighteenth and beginning of the nineteenth centuries, may be taken as a typical example of the scientific thinking of the day. He was also deeply concerned with the social problem. He had experienced the aftermath of the French Revolution and had heard the cry for Liberty, Equality, Fraternity resounding from the depths of the human soul. But it had also been his lot to experience the disappointments suffered by Europe after the Revolution. He witnessed the gradual emergence of what, later on, became the burning social question. And if we study the whole temper and outlook of Saint-Simon's mind, it is clear that he was a firm believer in the fact that knowledge can ultimately lead to ideas which will be fruitful for the social life, provided always that these ideas are in inner harmony with the demands of the times. He was convinced that study, understanding and enthusiasm for the tasks of social life would lead to the discovery of something which could be communicated to men, and that they would respond to knowledge born of enthusiasm for the betterment of social life and presented to them in a form suited to the conditions of the age. Betterment and progress — so thought Saint-Simon — will come about in the social life of Europe through the co-operation of individuals who have both understanding and strength of will.”

As a teacher you need to keep this in mind as you read about the Industrial Revolution below. As “mechanical” and “industrial” as it all was the underlying movement behind it in history was a spiritual drive and you can see this reflected in the way everyone talks about the period. You can see how passionate everyone was about their point of view as well when you read the letters back and forth from company to employee (below) at the wool factory.

The Industrial Revolution also expanded the spiritual experience. Steiner says, “Saint-Simon thought about how for long ages the instruction and education of the people were in the hands of the priesthood and the priests were the bearers of the spiritual life.

But now you could be a bearer of the spiritual life through other means.... he set out to build up a science of social life and action that should be in line with the principles of chemistry, physics and physiology. Saint-Simon considered that this kind of thinking was evitable because of the overwhelming importance which industrial life was beginning to assume in his day, and he was convinced that no further progress would be possible in industry if it remained under the old conditions of subordination to the military class and to the priesthood.”

There is also the issue of individual freedom that we need to tackle when teaching about the Industrial Revolution. It is this same issue that the eighth grader is trying to come to terms with: How does one reconcile the needs of a person to be a “cog in the wheel” in an industrial society to the desire of the person to be an individual? This is something that people during the Industrial Revolution had to come to terms with and something we have to come to terms with in today’s society. And the eighth grader is entering an era in their life when this starts to come to the surface. You may even notice that they are a bit more defiant this year than previous years and that they don’t want to “go with the crowd” or “do things just to please you”. They really want to express their individuality. However, they need to learn to do this in a way that will work in the modern age. Even an independent farmer, in today’s world, must become part of a larger entity or group to survive and meet the demands of modern society.

Steiner closes his speech by talking about the different results that come about when someone approaches science in a spiritual way versus a “straight facts” manner. He says, “Some say man is capable only of recording the results of observation and experiment. And then, when this attitude creeps into the realm of social science, the scientific mode of observation is applied, as in Darwinism, in the study of the evolution of man.

It is strange how in the nineteenth century the human mind is beset by a kind of inner agnosticism, how it gradually loses faith even in itself. There was a radical increase of this agnosticism in the middle of the nineteenth century.”

Student Introduction

This is the beginning of the lesson for your student (that you will be teaching/reading/telling them)

The Industrial Revolution was not just a historical event and not just in industry. Even though the name says INDUSTRIAL REVOLUTION this is misleading. This revolution changed every aspect of life for mankind. The “old ways” saw man close to the earth – farming and living in synchronicity with the seasons and the rhythm of the days. This past society was conservative and held fast to their customs and social structures. The Industrial Revolution changed that way of life.

Prior to industrialization in England, land was the primary source of wealth. The landed aristocracy held enormous powers the feudal system. We learned about this when we studied the feudal system and early England in Seventh Grade. Be sure to mention this to the student(s) as you ease into the study of the Industrial Revolution. The impact of this period can only be understood with knowledge of the period that came before it. Otherwise, the impact is lost (since we are all so used to these things now).

The new “modern” era found people living in cities, near factories and removed from the “earthy” existence they had enjoyed. Instead of working near home and with their family the human being was placed into an impersonal setting in a large building with people they didn’t know.

But with the increase in productivity there was more money available, more products available, more chances to meet a mate (at work or in the city), more food available for each person and the possibility for marriage for everyone (in the old system an apprentice could not marry). This led to a growth in population. The social hierarchy was changed because those people who were ambitious enough to start their own factories were not necessarily part of the royal class but they could attain the same privileges with their wealth.

These changes played out on the stage of America and Britain and spread to other areas of the world from there. However, how they used the new resources available to them differed. The focus in England was on making the machines better. The focus in America was on making the production more efficient so entrepreneurs could be more productive. Englishman James Watt changed the way factories worked by introducing steam power. Englishman John Wilkinson invented a precision boring machine that made efficient steam engines possible. American, Eli Whitney solved issues of speed and mass production and delivered 10,000 army muskets to the US Government from his new factory. American James Watt (see more below) created a new rotary steam-engine that enabled factories to open in more locations. American Henry Ford followed