

Author Name: Aileen Geary	Content Area: History (could be modified for science)
Title: The "Science" of Racism	Inspired by Earthwatch Expedition: Early Man in Spain
Lesson Time Frame: 3-5 periods	Student Level: High School

Narrative: One of the suggested readings for the Early Man in Spain expedition was Roger Lewin's *Bones of Contention: Controversies in the Search for Human Origins*. This book examines the role subjectivity has played in paleoanthropology. I was particularly inspired by four charts that appear in the illustrations following p. 252. They show the "human family trees" created by British and American anthropologists and demonstrate their "predilection for seeing white, Nordic races as the pinnacle of human evolution." Today, we are accustomed to thinking of race as an important division among humans, and yet genetically, current research shows that race is not a valid classification. This lesson will lead students to examine how the preconceptions of early scientists led to the enshrining of principles of racial inequality and to the still-existing questions surrounding race and power today. I will use this lesson with my World History classes when we are studying European imperialism in Africa.

Academic Standards Addressed	Illinois State Standards in Social Studies: <ul style="list-style-type: none"> • Problem Solving: Students will recognize and investigate problems; formulate and propose solutions supported by reason and evidence. • Working on Teams: Students will learn and contribute productively as individuals and as members of groups. • Making Connections: Students will recognize and apply connections of important information and ideas within and among learning areas. • Using Technology: Students will use appropriate instruments, electronic equipment, computers and networks to access information, process ideas and communicate results.
Goal	Students will gain an understanding of how preconceptions have tainted science and social science in the area of race, evolution, and genetics, and will learn to look for ways in which to guard against this phenomenon today.
Performance Indicators	Students will be able to identify the terms "social Darwinism" and "eugenics." Students will be able to outline the history of the concept of race and how it relates to social Darwinism and eugenics. Students will be able to identify how this "scientific racism" was used to support colonialism, segregation, and genocide.
Background Information	Students should have a basic understanding of who Darwin is and of the basics of evolutionary theory. They should also have a basic understanding of the scientific method.
Materials	-"Scientific Racism" in Enlightenment Europe: Linnaeus, Darwin, and Galton" An overview of the attitudes about race since the Enlightenment (this is a college student's paper, but as a quick intro to terms and key actors, it works.) http://serendip.brynmawr.edu/biology/b103/f00/web1/hossain.html - EugenicsArchive.Org: Image Archive on American Eugenics Movement. http://www.eugenicsarchive.org/eugenics/list3.pl - Excerpts from Social Darwinists Herbert Spencer, William Graham Sumner,

	<p>Lothrop Stoddard (available here: http://www.fordham.edu/halsall/mod/modsbook36.html)</p> <p>- DNA Interactive – tracing the American eugenics program and its successor in Germany http://www.dnai.org/e/</p> <p>-The Human Genome Project, especially: "Genetic Anthropology, Ancestry, and Ancient Human Migration" which explains that "DNA studies do not indicate that separate classifiable subspecies (races) exist within modern humans" http://www.ornl.gov/sci/techresources/Human_Genome/elsi/humanmigration.shtml</p> <p>-Evolutionary trees created by Earnest Hooton, Elliot Grafton Smith, Henry Fairfield Osborn, and William King Gregory (all available in Lewin, Roger. <i>Bones of Contention: Controversies in the Search for Human Origins</i>. 2nd ed. Chicago: U of Chicago Press, 1997.)</p> <p>Possible: Rudyard Kipling's "The White Man's Burden"</p> <p>Episode 1 of PBS's "Guns, Germs, and Steel"</p> <p>Manier, Jeremy. "Peers horrified by famed scientist's race remarks." <i>Chicago Tribune</i>. 19 Oct. 2007.</p> <p><http://www.chicagotribune.com/services/newspaper/printedition/friday/chic-watson19oct19_0_4157889.story>.</p>
Technology	<p>Internet access is necessary at least for teacher. This lesson could be conducted as a web quest, in which case students would all need internet access, as well.</p>
Instructional Procedure	<p>Day One: Begin by asking students what "race" means. As you draw out their ideas about race, ask them when they think this concept originated.</p> <p>Together, read "Scientific Racism" essay or a similar overview. Ask how the concept of race changed during this time period. How did this new concept of race justify existing power struggles?</p> <p>If you are going to conduct this assignment as a web quest, allot 1-3 days at the computer, depending upon length of class period and level of depth you expect from students. Their overall assignment is to a) determine how the backing of the science community impacted social policy b) identify times/places where the preconceived notions of scientists and social scientists blurred their judgment c) use current understanding of genetics to identify the errors in the 19th/early 20th century science and d) brainstorm areas of current social/scientific controversy where we may be even now repeating the same mistakes. If computer access is an issue, or if you want to provide a more structured activity, choose the readings yourself and excerpt them down to manageable pieces for your group.</p> <p>The last day should begin with a Pair/Share about what students found followed by a full class discussion.</p>
Assessment	<p>Assessment will be based on completion of web quest notes and class discussion. Either a paper or an essay test could be used to allow students to demonstrate their research and thinking. Students will be asked to analyze how these concepts of race supported European imperialism in Africa.</p>

The "Science" of Racism

How did social scientists interpret evolutionary theory?

	Identify the main arguments about the implications of evolutionary theory for each of the following:
Herbert Spencer	
Lothrop Stoddard	
Francis Galton	
Earnest Hooton	
Elliot Grafton Smith	

How did these "scientific" theories of race and evolution influence public policies?

Policy example	Explanation of how it is related to one or more of the above theories.

Compare 19th/early 20th century ideas about genetics to current understandings:

	19 th /Early 20 th century idea	Today's understandings
What is "race"?		
Nature v. nurture		
Connections between "race" and "intelligence"		