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They Changed the World: Learning American History at Wright-Dunbar Interpretive Center / Hoover Block: Grade 9 (10) Field Trip Model

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**LEARNING AMERICAN HISTORY AT
WRIGHT-DUNBAR INTERPRETIVE CENTER / HOOVER BLOCK:
GRADE 9(10) FIELD TRIP MODEL
By- Timothy Binkley**

Lesson Title: "They Changed the World"

Lesson Location: Wright-Dunbar Interpretive Center, "Turn of the Century" exhibit

Time Allotment: Main activity and extensions: 90-120 minutes
Pre- and Post-Field Trip activities: allow time as needed for completion

Overview: The period 1875-1925 was a time of vast scientific, technical and social change in America. This was also a period of changing popular tastes in literature and the arts due to the emergence of the middle class and modern consumerism.

Dayton's own Wright Brothers and Paul Laurence Dunbar were among those instrumental in changing our society at the turn of the Twentieth Century. At the Dayton Aviation Heritage National Historical Park's Wright-Dunbar Interpretive Center, these men's lives and careers are explored. In the exhibit, "Turn of the Century", their achievements are noted in the context of their changing times.

It can be argued that the Wrights' careers in inventing and Dunbar's career in writing are linked to the rise of standard of living and the emergence of the middle class in the United States. They were very much a product of their age. Yet, they also helped to produce a new age of change.

Standard(s): History Benchmark B: "Explain the social, political and economic effects of industrialization." (p.29)

Indicator(s) Addressed: Grade-Level indicator for Grade Ten, *Industrialization*:

1. Explain the effects of industrialization in the United States in the 19th century including:

e. The emergence of a middle class and its impact on leisure, art, music, literature and other aspects of culture. (p. 52)

2. Analyze the impact of industrialization and the modern corporation in the United States on economic and political practices with emphasis on:

c. Standard of living.

Media Resources: National Park Service "Turn of the Century" exhibit, first floor of the Wright-Dunbar Interpretive Center, DAHNHP.

Preparations for Teachers:

Our field trip destination is in the neighborhood now known as the Wright-Dunbar Village. The National Park Service's Wright-Dunbar Interpretive Center, located at the corner of West Third and Williams Streets, includes a reception area, bookstore, theater, and exhibit gallery. The center's exhibits focus on the Wright brothers' printing and bicycle businesses, their family history, and their association with poet, Paul Laurence Dunbar. Adjacent to the Interpretive Center is the Wright Cycle Company building which housed the Wright Brothers printing and bicycle businesses from 1895-1897.

For additional information on the Wright-Dunbar Interpretive Center, see http://www.nps.gov/daav/cul_wrightcyclecompany_way.htm and related web pages.

See also pages 31-38 in Mary Ann Johnson's book: *A Field Guide to Flight on the Aviation Trail in Dayton, Ohio* (Dayton: Landfall Press, 1986). Multiple copies of this book are available at the Dayton Metro Library system (Catalogue no. T77173 J68F). ISBN 0-913428-58-2.

For your own information, you may wish to review details of the lives and careers of Paul Laurence Dunbar and the Wright Brothers.

- For Dunbar data, see <http://www.coax.net/people/LWF/dunbar.htm>
And http://www.boondocksnet.com/editions/anp/anp001_e.html
- For Wright data, see <http://www.hfmgv.org/exhibits/wright/> and <http://www.time.com/time/time100/scientist/profile/wright.html>

Note: For connections between American literature and cultural history, you may wish to view (or print) the "Brief Timeline of American Literature and Events" by decade at <http://guweb2.gonzaga.edu/faculty/campbell/enl311/1880.htm> .

For additional information about Paul Laurence Dunbar and his work, see <http://guweb2.gonzaga.edu/faculty/campbell/engl462/dunbar.htm> . This website features significant links to University of Dayton and Wright State University Dunbar data.

It is worth noting that the Dayton Aviation Heritage National Historical Park has produced the following teaching guides / lesson plans: "From Wheel to Wing: A Guide to Teaching the invention of Flight" and "The Wright Story: A Teaching with Historic Places Lesson Plan on the Wright Cycle Company Building." These two excellent resources are available for your use. Call 937-225-7705 to ask for copies.

REMEMBER TO MAKE YOUR RESERVATIONS WELL IN ADVANCE. Please call the Dayton Aviation Heritage National Historical Park (937-225-7705) to schedule your visit.

Before taking this field trip, in the classroom: Tell students that they will be expected to take notes during the field trip. Therefore, they will need to take paper or writing pads and a pen or pencil with them.

Activity Description:

PRE-FIELD TRIP INTRODUCTORY ACTIVITIES

A. Read a Book!

The following books are recommended student reading before the field trip:

How We Invented the Airplane: An Illustrated History, by Orville Wright, Edited by Fred C. Kelly. (New York: Dover Publications, 1988) [ISBN 0-486-25662-6]

[Note: The text of this book is available free online as a pdf file from the FAA

Paul Laurence Dunbar: Portrait of a Poet, by Catherine Reef. (Berkeley Heights, NJ: Enslow Publishers, Inc., 2000). [ISBN 0-7660-1350-2]

B. Internet Introduction with Discussion Questions and Math Problems
(30 minutes)

[Today / Tomorrow] we will be visiting the Dayton Aviation Heritage National Historical Park. Before we actually go there, let's get to know the park a little bit by viewing their web site.

PROJECT OR HAVE STUDENTS LOG INTO: <http://www.nps.gov/daav/home.htm> .
Note "Dayton Aviation Heritage" and "Cultural Significance" paragraphs.

Scroll down to the bottom of the page. Have students note the date that this park was established (October 16, 1992). Ask: How long ago was that? Ask: Does it surprise you to know that new National Parks are being created today?

View http://www.nps.gov/daav/park_partners.htm . Note how our local National Park is a partnership. Several organizations work with the National Park Service to preserve and present the history of aviation in the Miami River Valley. Have students note the names of the four partner groups.

Ask: Where are Dayton's National Park sites? Let's take a look at the map:
http://www.nps.gov/daav/pla_mapsdirections.htm# . Click on the map to enlarge it. If possible, have students locate their school or neighborhood on this map.

State: Many more visitors came to the Dayton Aviation Heritage National Historical Park in 2003. One reason for this increase is that the Huffman Prairie Interpretive Center opened in December of 2002 and the Wright-Dunbar Interpretive Center opened in June on 2003.

Ask: Can anyone think of other reasons why many more people visited the Dayton Aviation Heritage National Historical Park in 2003 than in 2002? [*Answer: to celebrate 100 years of powered flight*]

Ask: How did you participate in the celebration of flight? What do you want to remember so that you can tell your children about it some day?

State: The Wright Brothers flew their first airplane near Kitty Hawk, North Carolina, on December 17, 1903. Ask: Why do you think so many people came to Dayton to celebrate the 100th anniversary of powered flight? Among the answers given by students, hopefully the following facts will be mentioned:

- 1) the Wright Brothers were from Dayton, and
- 2) that they returned to Dayton to continue their research, refine their aircraft, secure patents and teach others to fly.

Of the four National Park sites in the Dayton area, the one we are going to visit is the Wright-Dunbar Interpretive Center. It is located in the area of West Dayton where Paul Laurence Dunbar and the Wright Brothers lived. Let's view their web page now. http://www.nps.gov/daav/cul_wrightcyclecompany_way.htm

Click to activate the pdf files shown below the main text:

http://www.nps.gov/daav/media/pdf/way_WDIC_westSide.pdf

http://www.nps.gov/daav/media/pdf/way_WDIC_WheelsToWings.pdf

View also: http://www.nps.gov/daav/pla_fac_wrightcycleco.htm.

FIELD TRIP

Upon arrival, introduce the National Park Service staff member who will be assisting. Share a brief word of welcome and state these guidelines for visiting.

We ask you to:

- Stay with your group at all times;
- Listen carefully to the guide and teacher;
- Ask questions as you go;
- Respect other visitors who are here to enjoy the park;
- Respect the property by not littering and by not touching artifacts unless invited to do so.

In the entryway (just beyond the bookstore and restrooms), pause to read and process the large introductory signs:

- "Dayton's West Side"
- "Dayton Aviation Heritage National Historical Park"
- "The Wright Brothers"
- "The Wright Company"
- "Local Aviation Industry"
- "Aviation Trail, Inc."

Guide the class into the theater to watch the introductory film. (20 minutes)

Exit the theater and enter the "Turn of the Century" Exhibit.

Students- look carefully at the exhibits in this room. Your assignment is to find nine (9) different objects dating from 1875-1925 that are shown or mentioned in the exhibits. Take

notes on what they are, who invented them and when they were invented. Then, using graph paper, chart the invention dates and information on a time line of your own construction.

Do you see possible similarities between inventions? Did some lead to others? If so, note what led to what on your chart by circling related items and connecting them with double lines.

Make a parallel timeline tier on your graph paper and record information about nine (9) literary figures and their published works. Note similarities and differences in literary styles of the listed authors. Can you guess who may have influenced whom?

Teachers: "FYI"- here is data from the "Turn of the Century" exhibit. This information is the basis for the above activity.

1) Inventions from the period 1875-1925:

1876	Telephone	Alexander Graham Bell
1876	Combustion Engine	Nikolaus A. Otto
1879	(Incandescent) Light Bulb	Thomas Edison
1885	Automobile	Karl Benz
1885	Motorcycle	Gottlieb Daimler
1886	Linotype Composing Machine	Ohman Mergenthaler
1888	Pneumatic ("air-filled") Tire	John Boyd Dunlop
1895	Glider (wind-powered aircraft)	Otto Lilienthal
1896	Aerodrome (powered unmanned aircraft)	Samuel Pierpont Langley
1899	Zeppelin (rigid lighter-than-air flying machine)	Ferdinand Graf von Zeppelin
1902	Air Conditioner	Willis H. Carrier
1903	Airplane (powered, manned, heavier-than-air craft)	Wilbur & Orville Wright
1911	Automobile Self-starter	Charles F. Kettering

2) Authors of note published between 1875 and 1925:

1884	Mark Twain	<i>The Adventures of Huckleberry Finn</i>
1887	Charles Chestnutt	<i>The Gopher and the Grapevine</i>
1890	Eugene Field	<i>A Little Book of Western Verse</i>
1892	Paul Laurence Dunbar	<i>Oak and Ivy</i>
1895	Stephen Crane	<i>The Red Badge of Courage</i>
1895	Ida Wells	<i>A Red Record</i>
1900	James Weldon Johnson Hymn: "Lift Ev'ry Voice and Sing"	
1900	Frank Baum	<i>The Wizard of Oz</i>
1901	Booker T. Washington	<i>Up From Slavery</i>
1903	Jack London	<i>Call of the Wild</i>
1906	Upton Sinclair	<i>The Jungle</i>
1910	W.E.B. DuBois	<i>The Crisis</i>
1916	Carl Sandburg	<i>Chicago Poems</i>
1921	Edith Wharton	<i>The Age of Innocence</i>

Assessments with Rubrics:

To assess the effectiveness of this activity, collect the double time lines at the end of the day and grade them according to the following criteria:

DOUBLE TIME LINE CHARTING PROJECT RUBRIC - GRADE 9

	DATA	CHRONOLOGY	MECHANICS	EFFORT
4	All data correct	All items in order	Very legible	Much effort
3	Most data correct	Most items in order	Mostly legible	Some effort
2	Some data correct	Some items in order	Rather illegible	Little effort
1	All data incorrect	No items in order	Very illegible	No effort

- Extensions:*
- 1) In small groups, have the students share their charts and data. Ask them to decide which of these inventions they wouldn't mind living without, and which they would find most necessary.
 - 2) Discuss: What role did advancements in science, technology and literature play in creating the American middle class, and what role did the American middle class play in creating them?
 - 3) Ask: "In addition to changes in technology and literature, what else was changing in the United States of America during the period 1875-1925?" Discuss as many political, social, and economic changes as time permits, including changes in music and the arts.

[Some possibilities: U.S. Centennial, The End of Reconstruction, Indian Wars / Settlement of the West, Plessy v. Ferguson, the Progressive Movement, American Colonialism / Spanish-American War, Panama Canal, Robber Barons / Monopolies, Labor Unions / Strikes, Changes in Immigration Patterns, Urbanization, Establishment of National Parks, World War I, Articles 16 (Income Tax, 1913), 17 (Direct Election of Senators, 1913), 18 (National Prohibition, 1919) and 19 (Woman Suffrage, 1920) of the Constitution, etc; and in the arts: Ragtime, Jazz, John Philip Sousa, Musical Theater / Vaudeville, Impressionism, Post-Impressionism, etc.]

Note: The website <http://www.infoplease.com/ipa/A0903595.html> presents a very nice timeline of U.S. History.

For an excellent website featuring an easily understood timeline connecting art history with other cultural developments, visit <http://www.sanford-rtedventures.com/study/study.html> .

Helpful music history timelines include: <http://www.infoplease.com/spot/musicime2.html> and <http://www.classicalworks.com/his.pages/timeline.html> .

4) Continue touring! (Approx. 45 minutes, if time allows)

While half of the class visits the rest of the Wright-Dunbar Interpretation Center, take the remaining students out to see

A) the Wright Cycle Company building (adjacent) and

B) the empty lot across the street (1127 West Third) where the Wright Brothers' final cycle shop stood until 1936. This building, which the Wright Brothers rented from 1897 to 1916, is now preserved in Greenfield Village, a living history museum that Henry Ford founded in Dearborn, Michigan. The students may remember visiting a reproduction of this bicycle shop at Carillon Historical Park.

5) "The Wright Brothers: 59 Seconds over Kitty Hawk and over 59 years in Dayton!" by-Julieanne Phillips, Ph.D.

Both Ohio and North Carolina lay claim to the Wright Brothers historic first flight on December 17, 1903. The Wright Brothers lived in Ohio most of their lives, but flew their first flight in North Carolina.

Both states have memorialized the Wright Brothers on their license plates

"First in Flight" North Carolina
<http://www.pl8s.com/n/ncar.htm>

"Birthplace of Aviation" Ohio
<http://www.oplates.com/bicentennial.asp>

... And on their state quarters.

North Carolina Quarter
http://www.usmint.gov/mint_programs/50sq_program/states/index.cfm?state=nc&CFID=10961146&CFTOKEN=94050565

Ohio Quarter
http://www.usmint.gov/mint_programs/50sq_program/states/index.cfm?state=oh&CFID=10961146&CFTOKEN=94050565

There has also been much discussion among the state's politicians' on who has the right to claim the Wright Brothers as their "own."

http://www.enquirer.com/editions/2003/06/13/loc_oh-flightfight13.html

Citing the above sources, hold a class discussion on which state should lay claim to the Wright Brothers. Why? Or should they be “shared” between the states? Why? Why do students think that multiple states claim a distinguished figure or accomplishment? Cite other examples of famous people and their accomplishments and who “claims” them. Can students think of other historic figures that have multi-state connections?

For example, Abraham Lincoln was born in Hardin County, Kentucky on February 12, 1809 <http://www.nps.gov/abli/> but moved to Illinois when he was 21 and lived most of his life there until he was elected president in 1860 <http://www.nps.gov/liho/> Both are National Historic Sites.

Edison National Historic Park, honoring Thomas Edison, is located in West Orange, New Jersey the home of Edison’s laboratory <http://www.nps.gov/edis/> But, Ohio, Michigan and Florida also claim Edison. Ohio is Edison’s birthplace (Milan, OH) <http://www.tom Edison.org/> . He spent much of his childhood in Michigan www.michmarkers.com/startup.asp?startpage=L0239.htm . Florida houses Edison’s winter estate in Fort Meyers <http://www.edison-ford-estate.com/>

VOCABULARY

The New Dictionary of Cultural Literacy, Third Edition. 2002.

standard of living

A term describing the amount of goods and services that an average family or individual views as necessary.

FOLLOW-UP ACTIVITIES

Cross-discipline Activities:

ART / SCIENCE: Review the inventions on display. Imagine and design (on paper) a new invention that combines features of several of the items shown here. Present this to the class and explain: 1) what it is; 2) what it does; 3) why it should be invented; and 4) what it will be called.

ART / HISTORY: Using department store advertising catalogues, cut out at least 24 images of standard items that are readily available to middle class families today. Research these items to find out when they were invented. Make two collages out of them: one featuring items that were invented before 1875, and the other featuring items invented since 1875.

ENGLISH COMPOSITION: Imagine you are an inventor trying to patent an invention (one on display or one of your own making). Write a letter to the patent office explaining your invention. Be sure to mention what it is called, what it does, what it is made of, how large it is and why it might be important.

ENGLISH COMPOSITION: Imagine you are an author trying to get your new work published. Write a letter to an imaginary publishing company introducing your work. Be sure to mention what kind of writing you are submitting, what inspired you to write, and who has influenced your writing style most. Attach a brief sample of your literary work (1-2 pages of prose or poetry).

ART HISTORY / MUSIC HISTORY TIMELINE: The assessment project was to create a double timeline featuring technology and literature. As a follow-up activity, research developments in the fields of art and music during the period 1875-1925. Make a double timeline: one for significant composers, compositions and performers of music, and one for significant artists, works of art and art movements.

RESEARCH / COMPOSITION / TECHNOLOGY GROUP PROJECT

The goal of this project is for each group to produce 5-7 minute infomercials!

Begin by dividing the class into groups of 5-7 students. Each group will choose one of the following scenarios to produce:

- Paul Laurence Dunbar encouraging people to buy bicycles from and get their printing jobs done by the Wright Brothers, or
- Orville and Wilbur Wright [*alternately, Orville and Catherine Wright*] encouraging people to read and buy Paul Laurence Dunbar's books and to hire him as a speaker for their next social event.

The steps in this group project include: (1) researching the products to be sold, (2) deciding who the advertising is aimed at, (3) writing the text (in the style of Dunbar or the Wrights), (4) acting it out, (5) recording it on videotape, and (6) playing it for the class. Every team member must be included in the production.

Materials Needed: Blank paper, lined paper, graph paper, pencils with erasers, clip boards or other writing surfaces, straight edges, colored pencils.