



National Park Service  
with **Teaching MUSEUM Collections**  
Management Program  
<http://www.cr.nps.gov/museum>

## A Task Harder Than Making Bricks

The National Park Service [NPS] *Teaching with Museum Collections* provides lesson plans for teachers to use NPS museum collections in student-centered educational activities. The collections tell the story of America; its peoples, cultures, varied habitats, significant events, and ideas that continue to inspire the world. *Teaching with Museum Collections [TMC]* emphasizes the links between the ‘real things,’ the collections, and the sites where those collections were found, collected, or used. NPS collections include cultural objects, natural history specimens, archival documents and photographs. Lesson plans are linked to national education standards.

### A. Header

- **Lesson Plan Title:** A Task Harder Than Making Bricks

**Developers:**

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- **Grade Levels:** 6-9<sup>th</sup>
- **Number of Sessions and Length of Lesson[s]:** Five [5] 55minute sessions

### B. Overview of this Collection-Based Lesson Plan

- **Park Name.** Tuskegee Institute National Historic Site.  
*Legends of Tuskegee* at [www.cr.nps.gov/museum](http://www.cr.nps.gov/museum)

**Description:** Using a brick made by students at Tuskegee Institute over 100 years ago, students today will discover the importance of self-reliance and hard work. The object-based inquiry will lead to an understanding of Booker T. Washington’s plan to make his people economically independent through practical education at Tuskegee. Washington’s autobiography, *Up From Slavery* provided inspiration to people around the world.

The brick used in this lesson plan, is in the collections at Tuskegee Institute National Historic Site in Tuskegee, Alabama. It is, with other items made on the Tuskegee campus, on exhibit at there, and at [www.cr.nps.gov/museum](http://www.cr.nps.gov/museum).

- **Essential Question:** Why was learning how to erect building by student labor an important part of Washington’s plan?

- **Relevance**

From the earliest beginnings at Tuskegee, Booker T. Washington wanted students to learn more than just agriculture and domestic work. He wanted them to be self-sufficient, and build their own university building using the best practices. Students learnt to the value of labor and learning. The love of work was taught, and how to use nature to work with you instead of against you. Many in the community were against the ideal of having students build their own campus buildings. But, Washington had a dream and he stuck with it. He knew mistakes would be made but that was the ideal of learning for future lessons. Most students were poor. They came from the plantation of the cotton, sugar, and rice farms. During the first nineteen years of existence,



the Tuskegee school plan of having buildings built by student labor was a success. Forty buildings were built and all except four were student-produced.

### C. Museum Collections Used in this Lesson Plan



#### **Brick**

1910

Removed from Tompkins Hall, Tuskegee Institute

L19, H9.5, D 6.8 cm

Tuskegee Institute National Historic Site, TUIN 1800

#### **Nails**

Tampered nails made by students at Tuskegee Institute to build the chapel in 1898.

Iron, L10.1, H9, W 1.1 cm

Tuskegee Institute National Historic Site TUIN 1249-1251

#### **Table**

Built by Tuskegee Institute students for use on campus. The table is an example of skill labor taught on campus in the cabinet shop.

Pine, H 88.75, W 58.5, L 78.5 cm

Tuskegee Institute National Historic Site, TUIN 59

#### **Booker T. Washington's Home, The Oaks, on the Tuskegee Institute campus**

The Den



In his den, Washington surrounded himself with his favorite things: books, degrees, awards and pictures of friends and benefactors. The oriental furniture was a gift to him. Other pieces were built in the cabinet shops on campus.

### **Parlor**

One of the main rooms for entertainment was the parlor room.  
<http://www.cr.nps.gov/museum/exhibits/tuskegee/btwgallery>

### **D. National Educational Standards**

Social Studies

Chapter 3, United States History Standards 5-7

Era 6: The Development of the Industrial United States (1870-1900)

Standard 3: The rise of the American labor movement and how political issues reflect social and economic changes

For more information on national standards, see <http://cnets.iste.org/currstands>

### **E. Student Learning Objectives**

After the session, the learner will be able to:

1. Do an oral presentation on Booker T. Washington, and how Tuskegee's 'practical education' made it such a successful Southern school.
3. Understand how to analyze objects from a museum collection.
4. Learn what it takes construct a building, and how to make a brick.

### **F. Background and Historical Context**

Building Tuskegee Institute

At 25, Washington was appointed principal of the newly established "*Tuskegee Normal School for colored teachers.*" There were no buildings when he arrived. On July 4, 1881, Washington held his first classes for thirty male and female students in the African Methodist Episcopal Zion Church and a shanty. The first permanent building was constructed a year later. It was designed by African-American instructors and built by African-American students, a tradition that would thrive at Tuskegee. In 1885 the first students graduated. By 1906, the school owned 2,300 acres of land and occupied 83 buildings. It had 156 teachers and 1,590 students.

Washington brought the best and brightest teachers to Tuskegee "*not only for the money but also their deep interest in the race.*" He hired Robert R. Taylor, the first black architect to graduate from the Massachusetts Institute of Technology to work at Tuskegee. Tuskegee embodied his total commitment to learning, self-help, practical training, and service to the community. Teachers trained to work with rural communities to improve farming, hygiene, and nutrition.



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Agricultural training provided experience and food for the table. Students learned trades to make them marketable and self-supporting. Tuskegee taught "*classroom education ...practical knowledge, industry, thrift, and economy, that they (students) would be sure of knowing how to make a living after they had left us.*"

An assertive, hands-on principal, Washington attended to every detail, from overseeing faculty and students, to school publications. He monitored the quality of instruction, inspected campus grounds and buildings, and scrutinized students. Washington personally made sure that Tuskegee maintained its excellent reputation.

Students were taught, in addition to their academic subjects, skills in building construction, brick making, woodworking, cooking, handicraft, agriculture, and the blacksmith trade. Student life was regulated and controlled by separating activities and training for men and women. Physical training was encouraged. The Tuskegee doctrine of work required a healthy body. Washington ensured that Tuskegee students recognized the moral and spiritual value of religious worship. Students attended daily non-denominational chapel services.

Female students learned home economics, dressmaking and weaving. They made brooms, rugs, hats, chairs, baskets, and soap. For many years, the products of this practical training dressed the students and furnished Tuskegee rooms. A broad range of mechanical industries were taught, including electrical engineering, carpentry woodworking, roofing, and printing. The print shop provided training for students, and supplied the school with needed products.

#### Brick Making

*It was my aim...to ...have the buildings erected by the students themselves...*  
Booker T. Washington, *Up From Slavery*

Washington dreamed of Tuskegee Normal School as a "*city upon a hill.*" He envisioned the structures made of brick rather than wood. Bricks would make the campus permanent. Bricklaying, a practical, productive skill, was taught. The Tuskegee brickyard produced enough bricks to sell the surplus to the community and provide the school with an income. Brick making, begun in 1883 was not an instant success. Only after ruining many bricks did the novice brick makers finally master the craft. Tuskegee students used brick fired from clay dug on the Tuskegee farm to erect many of the school's buildings.

In his book *Up from Slavery*, Booker T. Washington wrote "*In the early days of the school I think my most trying experience was in the matter of bricking making.*" *The students were assigned the job of prospecting and mining clay from campus clay pits. There was a brickyard located in the center of campus, in which students shaped bricks by hand as well as by machine. This included a brick press and probably a stiff-mud machine. After several attempts the students discovered the correct formula necessary for creating bricks.*

#### Bricks

In 1884, the first brick was laid in the foundation of Alabama Hall, Tuskegee Normal School. This brick represented a culmination of an arduous process that brought together, politics, and race in the American South during the early Post Reconstruction era. This brick, a carrier of



meaning, a small masonry unit, almost rock like in shape, its surface a mottled topographic of pits, dents and other deformation, was inscribed with the stories of its making. It was one of the thousand of bricks to be made by students for the construction of Alabama Hall. The hall was named for the State that had withheld, and given black students' rights. The brick making program at the Tuskegee Institute, as an act of place-making, established existential foothold for Southern blacks in the Post Reconstruction era.

### **G. Materials Used in this Lesson Plan**

*Similar Items:* Brick, nails, measuring tape.

*Other Materials:*

Pencils, paper and dictionary, download images of historic buildings at Tuskegee Institute from the National Park Service *Legends of Tuskegee: American Visionaries* web exhibit ([www.cr.nps.gov/museum](http://www.cr.nps.gov/museum)).

Print out "Analyzing an Object" make copies for class. Art making materials including special supplies binders for journals, white glue, water, Plaster of Paris, mixing bowl, spoon and fork, soap dish mold [can be purchased from a local craft and home supply store].

### **H. Vocabulary**

Brick yard  
Press  
Clay  
Prospecting  
Mining  
Trades  
Self reliance  
Commitment  
Pride  
Dignity  
Fault line

### **I. Teacher Tips**

Teachers will need to encourage and incorporate the following into the lesson:

- Download images in color, of the brick, Tuskegee Institute buildings and Booker T. Washington and laminate for class use.
- Adapt activities for different grade levels.
- Use this lesson plan together with other NPS *Teaching with Museum Collections* lesson plans from Tuskegee Institute National Historic Site.



**J. Lesson Implementation Procedures:**

*Activity 1: Introduction and Warm Up*

Have students ‘read’ the brick made by Tuskegee students. The “How to Read an Object” activity will introduce the learner to the idea of learning through museum collections. Tell the learner they will be using objects from a National Park Service web site as a source of learning and information. Explain that they will learn to look very closely at the brick and nails. From close observation, they will be able to deduce historical, cultural and social information and to draw inferences about life then and now. Ask questions that draw on observational skills, and develop activities that exercise powers of deduction, inference, and creativity based on this lesson introductory lesson.



### Analyzing an Object

Adapted from

*Artifacts in Historical Context/Looking at Artifacts, Thinking about History*

Provided by Sara Mark Lesk]

To expand our understanding of each object, please log on to [www.cr.nps.gov/csd](http://www.cr.nps.gov/csd), select an object and answer the questions below. Do a page per object. Cite your sources where possible.

**Object:** \_\_\_\_\_

**Object Catalog Number** \_\_\_\_\_

#### **Who was the maker/designer of the object?**

What knowledge and experience did the maker have?

Was it produced by an individual or group?

Was either individual/group identified with an artistic, political or ideological movement?

#### **What was the occasion?**

When and where was it made?

Did it change over time?

What events or conditions affected it?

Has its use changed over time?

#### **What was the purpose of the object?**

Why was it made?

Who would benefit or be harmed by the object?

How was it actually used?

#### **How does the object reflect the person, his community, the nation and culture at the time it was made?**

What values does the object reflect?

What does it say about taste?

What does it say about technology?

#### **How has the object's meaning changed over time?**

What was its original meaning?

Has the meaning changed over time?

What developments caused the change?

Did the object play a role in causing the change?

#### **How does the object expand your knowledge about the period?**

What does it tell you about the social conditions of the era?

What cultural issues does it raise?

#### **Who was the audience?**

Why was it created?



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Who was the intended audience?

How would the audience have interpreted or valued the item?

Who would benefit or be harmed by this item?

How did different users interpret the object?



### Activity 2 Drawing and Measuring

When constructing a house it is important that students understand to-scale drawing and linear measurement as it relates to house construction. Have each student make a measuring tape, using standard or nonstandard measurements. Cut and glue or tape the segments together.

Have students measure and develop to-scale line drawings of a desk, classroom, school auditorium, bathroom, hall, or another area of interest. Students should include to-scale contents of the structure. Have the students go to places where pipes are located and measure lengths of pipes and record their findings. Have students then measure their own rooms at home and bring those findings to discuss with class. Students can supplement these line drawings with drawings or digital photographs of the structure exteriors and interiors.

### Activity 3 Learning to Work.

Have students work in groups of 4. Provide them with copies of Washington and different curricula that were taught at Tuskegee Normal and Industrial School. Have the students do additional research about Washington and his educational philosophy, what subjects were taught, and how these subjects prepared students for independence and self-sufficiency, and what professions they followed after graduation. Each group will turn in a 5-6 page research paper on their findings.

Students can develop and graphically present a schedule for classes and extra-curricula activities for different programs, such as the aeronautical school, on the Tuskegee campus.

Extra Credit: Power Point Presentation

### Activity 4: Home Styles

Have students analyze and describe the interior, and personal style and tastes of the inhabitants of “The Oaks.” Students will draw or take photographs of their own rooms and homes. Students will compare and contrast Booker T. Washington’s furnishings, home and taste with style and furnishings of their own homes, or selected historic buildings in their home town. Students can do a ‘make over’ of Washington’s parlor, to see what contemporary furnishings would look like in the structure.

### Activity 5: Making a Brick

Students make bricks as a group activity.

Brick-making involves four stages of work, and in each kilns there is almost a regional division of labor. The first is digging of the earth and wetting it. The next step filling mud in moulds. The third step is baking. The fourth stage of work is removing the baked bricks.

2 cups coarse fill

3 Measuring cups – 1/8, 1/4 and 1/3

Mixing Bowl



#### Spoon and Fork

- 1 1/8 cups of water
- 2 1/4 cups of plaster of Paris
- 1 1/8 cups of white glue

#### Procedure for Making Bricks

Measure 1/3 cup of the fine fill and 1/8 cup of white glue into a bowl. Mixed together using a fork until the fill was covered with glue. Press the mix into a 4 oz soap mold with the backside of the spoon to make sure there were no air pockets. Let dry in the mold for three days, and then let it dry completely for another 5 fives.

After the student make several bricks in their groups, Have a group discussion on what a 'fault line' is and how a fault line can protect them from in climate weather. Divide the groups into smaller groups and have them to build a wall without fault lines. Give them time to discover the different possibilities and write down their findings.

Teamwork and group investigation is a must.

#### Wrap Up Activity and Discussion

### **K. Evaluation/Assessment for Measurable Results**

Teachers are to inform the students that group participation is expected of them and a scoring tool will be provided so they will understand expectations before they begin. The teacher will give a test on Booker T. Washington. This test will help her to understand the student's background knowledge of Washington. Later, the teacher will re-test the class to see how much knowledge they have gained.

1. Written assignments
2. Line drawings and measurements and other materials presented
3. Oral presentation of research projects.

### **L. Extension and Enrichment Activities**

Invite an architect and builder to speak to the students. Arrange to have the class take a guided tour of a building site. Have the students volunteer at your local Habitat for Humanity.

### **M. Resources**

#### *Reading List*

Goetcheus, Cari, *Booker T. Washington, The Man and His Landscape*. NPS Cultural Resource Management. Volume 22, No. 8. 1999.



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Harlan, Louis. *Booker T. Washington, The Making of a Black Leader, 1856 – 1901..* Oxford University Press, 1972.

Harlan, Louis. *Booker T. Washington, The Wizard of Tuskegee, 1901- 1915.* Oxford University Press, 1986.

Washington, Booker T. *Up From Slavery* Dover Publications, Inc. 1985

McLeister. Kathleen NPS Historic Furnishings Plan for The Oaks, Tuskegee Institute National Historic Site, Chapter C: Historic Occupancy. August 1980

#### Web Sites

*American Visionaries: Legends of Tuskegee: Booker T. Washington, George Washington Carver and The Tuskegee Airmen* at [www.cr.nps.gov/museum](http://www.cr.nps.gov/museum)

Visual materials from the **Booker T. Washington** papers [finding aid]. Library of Congress. [PDF rendered 2004-08-13.84704.89]. Prepared by the Prints & Photographs Division.

<http://lcweb2.loc.gov/service/pnp/eadxmlpnp/2002/pp002010.pdf><http://>

<http://memory.loc.gov/ammem/> and enter Booker T. Washington” and “Tuskegee Institute”

[www.nlmuseum.org.uk/brick.php](http://www.nlmuseum.org.uk/brick.php)

[http:// www.schools.sd68.bc.ca/ed611/mosdell/Brick.htm](http://www.schools.sd68.bc.ca/ed611/mosdell/Brick.htm)

<http://www.yucaipaforge.com/adobe/Palomares.html>

<http://www.schools.sd68.bc.ca/ed611/mosdell/Brick.htm>

#### N. Site Visit

- ❑ Pre-visit: Before the visit, have students visit the institution’s website for an overview or provide brochures and other written materials about the site. Have each student come up with 2-3 questions to guide the visit. Work with park interpretive and museum staff to arrange the visit with challenging activities.
- ❑ Site visit: At the site, have students select at least two objects to analyze. Provide “How to Read an Object” sheets.
- ❑ Post-visit: See extension activity list for ideas for post-visit student presentation ideas.
- ❑ Virtual visit. Tour the National Park Service museum exhibit, Legends of Tuskegee at [www.cr.nps.gov/museum](http://www.cr.nps.gov/museum).