

## **Cultures of Innovation: Intersection of Social Studies and STEAM**

### **in East Africa, Summer of 2023**

#### **Curriculum Units**

These lesson plans will contribute to teaching various topics through an African centered approach crafted by the educators participating in the Fulbright Hays Group Projects Abroad in Kenya. Please use the resulting lesson plans as you see best in your classroom or learning environment.

*\*The content of these curriculum units were developed under a grant from the Fulbright-Hays [Group Projects Abroad \(GPA\)](#), [U.S. Department of Education](#) in partnership with the [Center for African Studies](#) at the University of Pittsburgh. However, this content does not necessarily represent the policy of the Department of Education, or the Center for African Studies and you should not assume endorsement by the Federal Government.*

## Title Page

# **William James Schoy IV Fulbright Hayes Project Lesson Plan #2 Leaders of Conservation and Collective Action**

This lesson plan may be suitable for High School teachers seeking to connect students' foregrounded local grassroots knowledge of environmental causes with environmental causes that are national and international.

This lesson plan encourages students to research the two examples of Arbor Day and the Greenbelt movement, two notable environmental movements.

## Acknowledgements

Funding for this project was provided by the U.S. Department of State through a Fulbright-Hays Group Projects Abroad Grant, 'Cultures of Innovation: Intersection of Social Studies and STEAM.'

This project was co-led by Dr. Maureen K. Porter and Dr. Filippo Gao Lubua, faculty members at the University of Pittsburgh. As part of the 14-member cohort, I wish to thank both Maureen and Filippo, along with my fellow travelers, for being on this journey.

The support provided by Irene Muthoni Kibandi, the University librarian from St. Paul's University; Professor John K. Chang'ach from Moi University; Dr. Macrina Leilei, Associate Director, and Dr. Anna-Maria Karnes, Assistant Director for Academic Affairs, both from the Center for African Studies at the University of Pittsburgh, was essential in the planning and implementation stages of this trip.

Additionally, I wish to thank Bancy Gichovi and Joyce Mutsoli, our cultural ambassadors, for supporting our travel.

From being greeted and welcomed at St. Paul's University, being immersed in Nairobi, traveling to Eldoret, attending lectures at Moi University, and more, I was humbled by our hosts' patience and kindness during our stay in Kenya.

The lesson plans drawn from this trip were inspired by, and eventually illustrated through, iterative, evolving, and defining moments, and were designed to be accessible for teachers and students in the U.S. context.

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**GRADE: 12**

**SUBJECT: Social Studies**

**TOPIC: Leaders of Conservation and Collective Action**

**Lesson Duration: 2-3 Periods**

### PENNSYLVANIA ACADEMIC STANDARDS:

1] 8.3.12.C: Grade 12- Evaluate how continuity and change in U.S. History are interrelated with the world

- Belief Systems and Religions
- Politics and Government
- Physical and Human Geography
- Social Organization

2] 8.4.12.A: Grade 12- Evaluate the role groups and individuals played in the social, political, cultural, and economic development throughout world history

### LESSON OBJECTIVES:

1] Students will evaluate the leaders of Arbor Day and the Greenbelt movement, drawing comparisons and contrasts

2] Students will research and evaluate local student-led groups, such as SEED, to draw comparisons from group efforts, and offer advice based on the past models, for these student-led groups.

### MATERIALS AND TECHNOLOGY:

- Paper and Pens for groups to make Timeline sheets from (MacDonald, 2005) and (Lou & Griggs, 2020)
- Presentation Materials for assigned groups to put together a presentation about a school or local environmental community group planting trees or promoting conservation efforts.

## PROCEDURE (Introduction, Body, Closing):

Introduction:

**Warm up:** As students walk into class, post the following prompts on the board:

1. Why is it important to protect the environment?
2. Who are some people or organizations you know of that protect the environment?

Begin with a brief discussion on environmental issues and the various ways that the public or government decides environmental policies.

Ask students to list conservationist or environmental groups they are familiar with.

How do these groups conserve the environment or advocate for environmental protection?

**Watch:**

1] (Ecosia, 2020) *Professor Wangari Maathai at 80*

Link: <https://www.youtube.com/watch?v=yC9wZTJmDqA>

2] (TV20 Cleveland, 2016) *Bottom line up front: The History of Arbor Day* Min: 0-3:10

Link: <https://www.youtube.com/watch?v=nd4C0rO8TCY>

Before showing the film, distribute Similarities/Differences tables sheet as a primer for the students to reference while watching the film. [Refer to Lesson Plan two “Table Similarities and Differences.”]

Body:

[Refer to Lesson Plan 2 Handouts Timeline Brief Bios Assignment]

- Divide the class into small groups of 3-5, considering different strengths and students’ ability to work together. Assign or ask students to choose roles such as notetaker, researcher, designer, etc.

**Provide handouts of:**

a. MacDonald, M. (2005, March 26). The Green Belt Movement, and the Story of Wangari Maathai. YES!

Magazine

b. Lou, M., & Griggs, B. (2020, April 24). *What is Arbor Day? The meaning behind the tree holiday.*

CNN. <https://www.cnn.com/2020/04/24/us/what-is-arbor-day-trnd/index.html>

### **Timeline Assignment**

1] Ask groups to create a timeline using documents, dates, specific events, and illustrations if necessary.

Have students use chart paper to create their timelines. The charts can then be displayed so that comparisons can be made with other groups.

After this, direct a brief guided discussion of timelines and any significant differences between groups.

### **Brief Bios Assignment**

2] In the same assigned groups prompt students to find another leader of an environmental protection group with instructions to answer the guided questions.

1. [*Refer to Lesson Plan 2 Handouts Timelines Brief Bios assignment*]

List of environmental groups to consider:

Trees for the future

Plant for the planet

### **Guiding Questions:**

When creating your brief bio for the leader of your chosen group answer the following prompts:

- A. When and where did was the group founded?
- B. Why did they choose to create this group?
- C. What were the first things they did with this group while pursuing their goals?
- D. What challenges or issues did they face while working with their group?

Closing

### **Exit Ticket:**

#### **Procedure:**

After Students fill out worksheet for Group Assignment bio transition into Exit Ticket activity.

After a brief teacher-led discussion and a few responses from students related to the exit ticket guided questions, ask groups to fill out answers to hand in at the conclusion of class.

**Exit Ticket Guided Questions:**

1. How do the lessons from the content we reviewed and the research you completed guide what you would do with a similar group?
2. What do you find most interesting about the two examples of Wangari Maathai and the Greenbelt Movement and Morton with the creation of Arbor Day?
3. During your research into your own environmental group, what similarities or differences did you find compared to the previous content we discussed?
4. What are the similarities and differences between the leader your group chose to research and the previous content we have gone over?

**ADAPTATIONS & ACCOMMODATIONS (Specific and General):**

**Flexible Grouping:** Allow students to work in diverse group configurations, considering their strengths and needs, to promote collaboration and peer support.

**Peer Support:** Encourage peer mentoring or buddy systems, pairing students who may benefit from additional support with classmates who can assist and provide encouragement.

**Clear Instructions and Expectations:** Provide clear and concise instructions, using visual cues or step-by-step guidance, to ensure that all students understand what is expected of them.

**ASSESSMENT (Formative and/or Summative):**

Formative

**ASSIGNMENT:**

Instructor Choice



## REFERENCES

- Ecosia. (2020). *Prof. Wangari Maathai at 80: Tree planter, Nobel Prize laureate, revolutionary* [Video]. In *(YouTube)*. <https://www.youtube.com/watch?v=yC9wZTJmDqA>
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- The Green Belt Movement. (2019). *Short version The Legacy of Wangari Maathai Women as Green Agents of Change* [Video]. In *(YouTube)*. <https://www.youtube.com/watch?v=Oj2cZhU56hE>
- TV20 Cleveland. (2016). *Bottom Line Up Front: The History of Arbor Day* [Video]. In *YouTube*. <https://www.youtube.com/watch?v=nd4C0rO8TCY>

## APPENDIX 1: LESSON PLAN 2 HANDOUT

Lesson plan 2 Handout:

**Instructions:**

While watching the films on the stories of Wangari Maathai and J. Sterling Morton and their causes, jot down any similarities and differences that you notice.

<b><u>Similarities</u></b>	<b><u>Differences</u></b>

## APPENDIX 2 LESSON PLAN 2 TIMELINE GROUP ASSIGNMENT, BRIEF BIOS, EXIT TICKET

In class assignment guidelines:

### 1. Timeline Group Assignment

#### **Instructions:**

1. Work in groups of 3-5. Students can be assigned roles such as Notetaker, Researcher, Designer etc.
2. Refer to MacDonald (2005) and Griggs (2020) to create a timeline of each article.
3. After this select an environmental group and draft a brief sketch of that group's leader or founder.

#### **Notes as you work on your timeline:**

1. Utilize documents, dates, specific events, and illustrations as necessary
2. You may choose to use chart paper for your own groups in preparation for it being hung to compare with other groups.

### 2. Brief Bios

#### **Instructions for Brief Bio:**

2. When creating your brief bio for the leader of your chosen group, answer the following prompts:
  - A. When and where was this group founded?
  - B. Why did they choose to create this group?
  - C. What were the first things they did with this group while pursuing their goals?
  - D. What challenges or issues did they face while working with their group?

**TimeLine Example**



## **Group Assignment Bio for Chosen Environmental Group Leader**

1. When and where was this group founded?
2. Why did they choose to create this group?
3. What were the first things they did with this group while pursuing their goals?
4. What challenges or issues did they face while working with their group?

## **Exit Ticket**

**Procedure:** After students fill out worksheet for Group Assignment bio transition into Exit Ticket activity. After a brief teacher led discussion and a few responses from students related to exit ticket guided questions, ask groups to fill out answers to submit at the conclusion of class.

### **Exit Ticket Guided Questions:**

5. How do the lessons from the content we reviewed and the research you completed provide guidance for what you would do with a similar group?
6. What do you find most interesting about the two examples of Wangari Maathai and the Greenbelt Movement and Morton with the creation of Arbor Day?
7. During your research into your own environmental group, what similarities or differences did you find compared to the previous content we discussed?
8. What are the similarities and differences between the leader your group chose to research and the previous content we have gone over?