

# Students without Borders: Global Climate Change Issues and Food Insecurity

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**Introduction:** Use of this lesson plan is designed for upper-level research courses and encourages students to use and adopt critical thinking and reasoning skills, which are applicable to different social, national, and global issues. Students should be prompted to choose an issue that they can analyze critically. However, within this particular lesson proposal, students will be asked to highlight critical issues in relation to climate change on a global level. Moreover, students will be engaged with college-level students from Africa (Sudan), and the Middle East (Iraq). This interactive, live engagement will allow students the space and the time to collaborate and share climate change issues by not relying on online sources alone; instead, students are prompted to interact and learn from each other and put into place an “authentic” action plan.

## **Geographic Connections:**

**D1.1.9-12.** Explain how a question reflects an enduring issue in the field.

**D1.5.9-12.** Determine the kinds of sources that will be helpful in answering compelling and supporting questions, taking into consideration multiple points of view represented in the sources, the types of sources available, and the potential uses of the sources.

**D2.Civ.2.9-12.** Analyze the role of citizens in the U.S. political system, with attention to various theories of democracy, changes in Americans’ participation over time, and alternative models from other countries, past and present.

**D2.Civ.3.9-12.** Analyze the impact of constitutions, laws, treaties, and international agreements on the maintenance of national and international order.

**D2.Civ.5.9-12.** Evaluate citizens’ and institutions’ effectiveness in addressing social and political problems at the local, state, tribal, national, and/or international level.

**D2.Civ.14.9-12.** Analyze historical, contemporary, and emerging means of changing societies, promoting the common good, and protecting rights.

**D2.Eco.15.9-12.** Explain how current globalization trends and policies affect economic growth, labor markets, rights of citizens, the environment, and resource and income distribution in different nations.

**D2.Geo.2.9-12.** Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions and their political, cultural, and economic dynamics.

**D2.Geo.5.9-12.** Evaluate how political and economic decisions throughout time have influenced cultural and environmental characteristics of various places and regions.

**D2.His.2.9-12.** Analyze change and continuity in historical eras.

## **Vocabulary:**

**Terms:** Human interactions, Climate Change, global citizenship, cultural and environmental characteristics, act, share, and global inquiry research.

**Concepts:** Critical thinking, Inquiry research and questioning, critical political, geographical, and historical analysis

## **Content Standards:**

### [CCSS.ELA-LITERACY.RST.11-12.2](#)

Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

### [CCSS.ELA-LITERACY.RST.11-12.7](#)

Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

## **Essential (Compelling) Question:**

1- what is the main strategy that you will adopt to critically realize, comprehend, and to analyze several global issues in relation to the regions that are assigned to you within this lesson plan? And how would this help you to evaluate the credibility of the data you are collecting from the international students?

**Literacy through the Content Area:** This lesson is for first year college students as the concepts and the inquiry research methodology can be simply adopted in several educational and research classes with a global perspective. Furthermore, the concept of “ Students without Borders” can be simply applied to different national and global regions to educate students to be more globally involved and engaged . As a result, this learning method will support the global awareness of our students in becoming more critical thinkers and thinking outside of the box at the local/national level.

**Placement of Lesson within Broader Curriculum/Context:** This lesson plan is placed at the middle of the semester as students will first be introduced to the tools of choosing, evaluating, and analyzing sources; however, This lesson plan can be taught independently as after students obtain the ability to conduct the inquiry research. This lesson plan will grant students the skills of conducting interviews as a tool to collect data from the people who are knowledgeable and living these social, and global changes and challenges in relation to climate change and food insecurity due to political and environmental crises within the African and the Middle Eastern regions.

## **Learner Background:**

This lesson plan will educate students to adopt the skills of conducting inquiry research. At first students will be introduced to the tools of choosing, evaluating, and analyzing sources. After that students will obtain the ability to conduct the inquiry research. However, the experience of students without borders is quietly unique and new to be practices in this lesson plan. Most of my students are coming from different cultural backgrounds and this considers as a vital tool that meets their interest to be engaged with college students on a global level. Furthermore, the structure of this lesson plan assumes that students have both the prior knowledge to several political, social, environmental, and cultural issues that might affect the climate change.

**Objective(s) for Lesson:** Students will be able to:

- Critically choose social, cultural, environmental, political, and global issue(s) to research.
- Apply their critical thinking tools in questioning, evaluating, and comparing diverse global issues among Africa, Middle East, and the United States.
- Critically realize the similarities among global influence of the climate of war, and the climate change to the food insecurity and the hunger issues among the chosen region (U.S., Africa, Middle East).
- Motivate students to be critically engaged, and to share their experiences in relation to the impact of the climate of war and the climate change on citizens.
- Analyze and to critically think of the questions that will help them to propose global solutions to the impact of climate change. How these global issues might be solved on the individual levels.
- Define the terms climate change, climate of war, share to act, nationalism and imperialism.
- Finally, students will be able to engage with students on the global level for the purpose of collecting data, sharing critical experiences for the purpose of act- Share, Care, and Act.

## **Integration of 21st century skills:**

With the launch of the technological education and the revolution of social media, students of this course and within this specific lesson plan will cross the borders of their classroom and will be sharing knowledge, information, stories, and data by the positive application of technology and social media. Students will be able to be globally engaged without actual travel to the regions that they are focusing on.

Critical thinking and inquiry research will grant students their agencies. Students will have the right to be free thinkers and researchers. Teaching students to practice their agencies within the

educational level and classrooms will support them to practice and experience the educational democratic environment. This in turn, will lead them to become active learners instead of being passive learners. This in turn will grant them the ability to research and to question their surroundings. Furthermore, it will better enhance the students to be positively engaged with diverse national and global issues for the purpose of being agents of change.

**Assessment:**

As this is a lesson plan that aims to teach students the skills of developing global critical thinking skills through the adaptation of global inquiry research, the teacher will evaluate students’ ability to:

- Create inquiry research questions that need to be researched in relation to global climate issue(s) for the purpose of studying its impacts on food insecurity
- Create global self-awareness that effectively addresses significant climate change issue(s)
- Create cultural diversity awareness through the understanding of multiple worldviews, experiences, and power structures while initiating meaningful interaction with other cultures in order to address significant global climate change issue (s).

The instructor will observe the students’ engagement relative to the application of the concept of 'students without borders'. The students will be divided into two groups in order to evaluate the level of their understanding and inter-communication skills, as well as their ability to collaborate with each other. The instructor will evaluate the students’ ability to create global inquiry research proposal questions, and will assess their ability to propose solutions to their research questions.

**Lesson Plan Rubric:**

	<b>Substantially Developed/ Global- Level</b>	<b>Moderately Developed/ Macro- Level</b>	<b>Minimally Developed/ Meso-Level</b>	<b>Inadequate/ Micro- Level</b>
<b>Global Self-Awareness</b>	Effectively addresses significant issues in the natural and human world based on articulating outside of one’s identity within a global context.	Evaluates the global impact of one’s own and others’ specific local actions on the natural and human world.	Analyzes ways that human actions influence the natural and human world.	Identifies some connections between an individual’s personal decision-making and certain local and global issues.
<b>Perspective Taking</b>	Evaluates and applies diverse perspectives relative to complex issues within a global climate change approach in the face of multiple and even conflicting positions (i.e. cultural, multi- disciplinary, and environmental issues.)	Synthesizes other perspectives (cultural, multi- disciplinary, and environmental issue) when investigating issues within a global climate change approach.	Identifies and explains multiple perspectives (cultural, multi- disciplinary, and environmental issue) when exploring subjects within natural and human systems.	Identifies issues on a value preference level; that is preferential to one’s own positioning.

<b>Cultural Diversity</b>	Analyzes and adapts a deep understanding of multiple worldviews, experiences, and power structures while initiating meaningful interaction with other cultures to address significant global problems.	Analyzes substantial connections between the worldviews, power structures, and experiences of multiple cultures historically or in contemporary contexts, while incorporating respectful interactions with other cultures.	Explains and connects two or more cultures historically or in contemporary contexts with some acknowledgement of power structures, demonstrating respectful interaction with varied cultures and worldviews.	Describes the experiences of others historically or within a contemporary context primarily through one's cultural perspective, demonstrating some openness to varied cultures and differing worldviews.
<b>Personal and Social Responsibility</b>	Takes informed and responsible action to address ethical, social, and environmental challenges in global systems, and evaluates the local and broader consequences of individual and collective interventions.	Analyzes the ethical, social, and environmental consequences of global systems and identifies a range of actions informed by one's sense of personal and civic responsibility.	Explains the ethical, social, and environmental consequences of local and national decisions on global systems.	Identifies basic ethical dimensions of some local or national decisions that have global impact.
<b>Understanding Global Systems</b>	Uses deep knowledge of the historic and contemporary role and differential effects of human organizations and actions on global systems in order to develop and advocate for informed, appropriate action required to solve complex climate change issues.	Analyzes major elements of global systems, including their historic and contemporary inter-connections and the differential effects of human organizations and actions, proposing elementary solutions to complex climate change issues.	Examines the historical and contemporary roles, interconnections, and differential effects of human organizations and actions on global systems within the human and the natural worlds.	Identifies the basic role of some global and local institutions, ideas, and processes in the human and natural worlds.
<b>Applying Knowledge to Contemporary Global Contexts</b>	Applies knowledge and skills to implement sophisticated, appropriate, and workable solutions to address complex global problems using inter-disciplinary perspectives independently or with others.	Plans and evaluates more complex solutions to global challenges that are appropriate to their contexts using multiple disciplinary perspectives (such as cultural, historical, and scientific).	Formulates practical yet elementary solutions to global challenges that use at least two disciplinary perspectives (such as cultural, historical, and scientific).	Defines global challenges in basic ways, including a limited number of perspectives and solutions.
<b>Identifies and summarizes the problem/question to be investigated</b>	Uses prior knowledge to identify hypothesis and inquiry questions. Breaks questions down into a series of steps that will lead to workable solutions to be addressed in the proposal. Identifies complexities and nuances in the questions.	Has identified an appropriate topic but lacks clearly stated hypothesis. Breaks questions down into incremental steps, but has not identified all the complexities and nuances inherent in the question.	Uses prior knowledge to identify a question to be researched and organized as a catalogue of information about the topic rather than pointing toward a hypothesis.	Question identified is too broad or vague to provide a coherent thesis

<b>Analysis/Synthesis</b>	Complete synthesis and discussion of climate change issues. Depth of insight/analysis.	Adequate discussion of climate change issues. Adequate depth of insight/analysis.	Vague discussion of climate change. Little insight/analysis; that which is provided is conventional or underdeveloped.	Vague discussion of climate change issues. Lack of insight/analysis.
<b>Logic and Argument Construction</b>	All ideas flow logically. The argument for the proposal is clearly constructed.	All ideas are strong but the argument for the proposal is not clear.	Logic may often fail or the argument may often be unclear.	Ideas do not flow logically, and there is no clear and specific argument.
<b>Collaborative Discussion</b>	Consistently and actively works with the group members, willingly accepts and fulfills individual role with the group and takes leadership.	Works toward group goals without occasional prompting; accepts and fulfills individual role within the group.	Works toward group goals with occasional prompting.	Works toward group goals only when prompted.
<b>Mechanism</b>	Sentence structure and grammar is excellent. Excellent flow and transitions appropriately between paragraphs.	Sentence structure and grammar is strong. Strong flow and paragraphs transition.	Problems in sentence structure and grammar. Illogical flow and issues with paragraphs' transitions.	Weak sentence and several grammatical issues. No logical flow and no logical paragraph transitioning.

## Materials/Resources:

**Technological Resources:** Students have access to computers and to the internet service.

## Historical Background:

- **Iraq:** Historical Background about one of the middle eastern countries:

<https://prezi.com/qdud3y1fq-i0/copy-of-mesopotamia/>

- **Sudan:** <https://www.youtube.com/watch?v=qgkYEpxAN6I>

## Readings:

<http://www.independent.co.uk/environment/climate-change/ipcc-report-paints-bleak-picture-of-war-famine-and-pestilence-climate-change-is-happening-andno-one-in-the-world-is-immune-9224777.html>

- <http://www.carbonbrief.org/blog/2015/03/scientists-discuss-the-role-of-climate-change-in-the-syrian-civil-war>
- <http://www.theguardian.com/environment/green-living-blog/2010/jul/08/carbon-footprint-iraq-war>
- [http://priceofoil.org/content/uploads/2008/03/A%20Climate%20of%20War%20FINAL%20\(March%2017%202008\).pdf](http://priceofoil.org/content/uploads/2008/03/A%20Climate%20of%20War%20FINAL%20(March%2017%202008).pdf)

### **Climate Change Impact on Iraqi Water and Agriculture Sectors:**

- <http://iraqieconomists.net/en/2013/04/05/climate-change-impact-on-iraqi-water-and-agriculture-sectors/>
- <http://www.irinnews.org/report/72985/sudan-climate-change-only-one-cause-among-many-for-dar-fur-conflict>
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### **Climate Change and Drought in Sudan:**

- <http://www.ifad.org/climate/regions/nen/drought.htm>
- <http://www.irinnews.org/report/72985/sudan-climate-change-only-one-cause-among-many-for-dar-fur-conflict>

### **Lesson Development/Instructional:**

1. **Brainstorm Activity- (20 minutes):** Number of students (15 students). The entire class should have access to computers and technology. Students will brainstorm regarding the direct and the indirect impacts of climate change as it affects food insecurity. As a specific instruction to this activity, students will be asked to consider the diverse issues related to climate change, i.e., impact of war; disease; water shortages or challenges, etc... Students will be asked to brainstorm regarding inquiry research questions that will lead them to the argument construction stage.
2. **Visual Background Information- (20 minutes)** Students will watch two videos that will help them to obtain a general background related to the African country (Sudan) and to the Middle Eastern country (Iraq). This visual background will help them to be more engaged and to be able to visualize the geographic nature of those two regions. Furthermore, students will collaboratively read and analyze the assigned readings critically in order to gain additional information related to the climate change issues in both Africa and the Middle East in order to compare to the climate change issues in the U.S.
3. **Collaborative Background Information- (20 minutes):** Students will be discussing and sharing the background of the two assigned regions. In this collaborative activity the class will be divided into two groups (Group 1 & Group 2). Group 1 will be working collaboratively with the African group, and Group 2 will be working with the Middle Eastern Group. The specific task of this activity is to share the background information of each region and to share the climate change impact stories collaboratively. U.S. students will interact with those students, share information, ask questions, and discuss global climate issue(s) that they want to research.
4. **Inquiry Research Proposal Construction- (1 hour):** Using Google Drive, students will collaboratively produce a two-page inquiry research proposal for presentation. Students

must synthesize their research questions, and incorporate all other activities completed within the session in order to present their data and their collaborative findings to the class.

### **Students Needing Differentiated Instruction:**

Since there are generally students of varied abilities in your classroom, identify ways to modify and enrich this lesson. Consider that students may represent a range of ability and/or achievement levels, including students with IEPs, gifted and talented students, struggling learners, and English language learners. Please address these two questions:

- Through observational analysis, the instructor will assess group collaboration in order to pair students appropriately so that there is a balance amongst the groups members, to include students with IEPs, gifted and talented students, struggling learners, and English Language Learners.
- In order to provide opportunities for enrichment/higher level of challenge for students, the instructor is encouraged to hold brief one-on-one sessions with all students throughout the session in order to assess and determine that all students are engaged and understanding the concepts that are being used within this lesson plan. Students should be encouraged by the instructor to feel comfortable in presenting their ideas and to present their proposed solutions to the different global climate change issues.