

Learning from the Past About Sustainability, Lessons from Tokugawa Japan for the Future

Bob Osborne, Hill Regional Career High School, New Haven, CT, AP World History, 11th and 12th Grade, Four Block Classes for 86 Minutes, One At the End of the First Quarter (Visit the Peabody Museum), Second at the End of the Second Quarter, Two Plus Classes after the AP Exam in May

Introduction: *These lessons are designed to teach from the past what a sustainable society looks like and what we can learn from the Tokugawa Period of Peace in Japanese History that can be applied to adapting to climate change in the future. The lessons were inspired by the Yale Pier Institute on Climate Change and Food Security, the Peabody Museum Exhibit, Samurai and the Culture of Japan's Great Peace and the lecture presented by Yale Professor Fabian Drixler at the Peabody Conference.*

Geographic Connections: *climate, climate change, deforestation, desertification, archipelago, Kyushu, Shikoku, Honshu, Hokkaido, Edo, Kyoto, Osaka, Nagasaki, Ainu Peoples, Buddhism and Shintoism*

D2.Geo.7.9-12. Analyze the reciprocal nature of how historical events and the spatial diffusion of ideas, technologies, and cultural practices have influenced migration patterns and the distribution of human population.

Vocabulary: *sustainable society, climate change, adaptation, mitigation, preservation of resources, demographic pressure, conservation famine, irrigation, deforestation, Tokugawa Shogunate, Samurai, Edo, daimyo, bakufu*

Content Standards: *Connecticut Social Studies Framework, Inquiry Objectives, Grades 9-12*

C3 Framework Dimension and Indicator: D.3.1.9-12, INQ 9-12.6, Aligns to Common Core State Standards: RH.9-10.1-10 & RH. 11-12.1-10, WHST.9-10.1 & WHST.11-12.1 Framework Dimension and Indicator: D1.1.9-12, INQ 9-12.1, Common Core State Standards: RH.9-10.1 & RH. 11-12.1

Essential (Compelling) Question: *How does a society become sustainable?*

Literacy through the Content Area: *Common Core Standards For Literacy in History/Social Studies, Science, and Technical Standards, Reading Standards for Literacy in History/Social Studies 6-12, Grades 11-12 students: Key Ideas and Details, 1, 2 and 3*

Placement of Lesson within Broader Curriculum/Context: *These lessons will fit in the context of an AP World History Course in three places. There will be an introduction to the Tokugawa Shogunate by touring the Samurai and the Culture of Japan's Great Peace and viewing a video titled, "Japan- Memoirs of a Secret Empire".*

Then there will be further readings and discussions about sustainability and the Tokugawa Shogunate at the end of the second quarter. After the extended preparation before the AP Test in May then the Tokugawa Shogunate will be the start up for an extended study of climate change and sustainability in the future.

Learner Background: *In my AP World History Class there is a broad spectrum of skills and levels of preparation for the course in general and a minimal knowledge about sustainability, climate change and society's efforts to adapt to it.*

Objectives for Lesson:

1) Students will be able to understand what makes a society adaptable and the ways it can respond through adaptability.

2) Students will understand that the 250 year long peace in Japan during the Tokugawa Shogunate provided an opportunity for sustainability in society.

3) Students will understand that some of the adaptations made by the Japanese in that period can be employed today in response to deforestation and failure to feed a growing population adequately.

4) Students will understand the importance of social responsibility and consideration of actions needed to help society thrive.

Integration of 21st century skills: *Because the goal of these lessons is to improve world citizenship by learning principles of sustainability from the past in Tokugawa Japan and apply it to adapting to the impact of climate change in man's future it will require the use of 21st Century Skills. It is implicit in their design that these lessons will require interactive learning, higher level thinking skills and critical thinking, solving real world problems, effective communication and a basic understanding of the strategic use of technology.*

Assessment:

The assessments for these lessons will be both formative and summative with the sequence being formative, specific summative assessments as material is presented and then each of the three lesson clusters will require a thoughtful formative assessment that will be designed to demonstrate understanding of specifics and the underlying principles that will be required as the basis for the next lesson cluster. At the end, each student will have to write a 3-page research paper on the feasibility of one aspect of sustainability.

Materials/Resources: *There are three types of materials to be used as resources in these lessons.*

Books:

- 1) Brown, Azby *Just Enough, Lessons in Living Green from Traditional Japan*, Tuttle Publishing, Tokyo/ Rutland, Vermont / Singapore 2012
- 2) Drixler, Fabian, et al *Samurai and the Culture of Japan's Great Peace*, Peabody Museum of Natural History, Distributed by Yale University Press, New Haven and London, 2015
- 3) Richards, John F. *The Unending Frontier, An Environmental History of the Early Modern World*, University of California Press, Berkeley, Los Angeles, London 2003
- 4) Walker, Brett L. *A Concise History of Japan*, Cambridge University Press, Cambridge 2015

PowerPoint Presentations: (Not in Public Domain)

- 1) Krishnan, Srinath "Introduction to Climate Change" University of Connecticut
- 2) Radzilowicz, John G. "Communicating the Science of Climate Change" University of Pittsburgh, California University of Pittsburgh
- 3) Weiss, Doctor Harvey

Video:

- 1) PBS Home Videos, "EMPIRES, Japan- Memoirs of a Secret Empire" 2004

Lesson Development/Instructional Strategies: *There will be three sequential lesson clusters over the academic year of Advanced Placement World History. Lesson Group One will be the introduction to both Tokugawa Shogunate Japan and Environmental Sustainability. Lesson Group Two will be about the specifics of the challenges of sustainability in Tokugawa Japan and the essential factors in maintaining sustainability. Lesson Group Three will commence after the AP Exam in May and serve as the starting point point for a whole curriculum unit (later parts are still being developed about Climate Change and the Future.*

Lesson Group One: Two class blocks used for a Visit to the actual exhibit at the Peabody (there until January 3, 2015), and the Video Presentation of the middle segment of the PBS Video. After that, the students will be asked to make as many observations as they can about what they saw about Life in Tokugawa Japan. First in pairs and then small groups they will work together to identify the impacts from a prolonged period of peace and what that society did to sustain itself successfully and what adaptive adjustments they had to make over time as population grew and natural resources were depleted. Each small group of four will then make their own list of the impacts and adaptations and it will be saved. Individual students will offer their own written

explanations for why they chose what they did for their group lists and the group lists themselves will be the basis for assessment.

Lesson Group Two: Two full class blocks will be used to learn more specifics about the historical context of environmental and social adaptations in Tokugawa Japan and then it will be determined what are the essential lessons learned from Tokugawa Japan in the past and how they might be helpful in establishing sustainable societies in the future. Readings before and during the lesson, in addition to the textbook materials will be the Preface and Introduction from Just Enough; Chapter 7, Early Modern Japan from The Concise History of Japan; and Chapter 5, Ecological Strategies in Tokugawa Japan in The Unending Frontier. Each group of four will then edit their original list, adding content information and then integrating that information into the specifics of various factors in the determination of ecological sustainability. The revised lists and individual formative and quiz like summative assessments will be the basis of assessment.

Lesson Group Three: Will occur in the time period from mid May until mid June and will commence with a revisiting of the lessons learned from the Tokugawa Shogunate, the revised group lists and other historical ecological adjustments learned during the academic year. The initial emphasis will be on what was learned from the past, what worked and didn't work and then the rest of the time left will be in learning more about the science of climate change and integrating what occurred in the past with the challenges man faces in adapting to climate change in the present and more importantly, the future. The final assessment will be a three-page paper by each student on the application of one key element in a society adapting to climate change.

Students Needing Differentiated Instruction: *For students that need more time to prepare for a lesson and are not as accomplished readers of complex materials I will provide outlines and explanations of more complex theories. For students that may require or request more enriched materials to further their understanding of any number of interest they may develop. During the Climate Change and Food Security Pier Institute there were a myriad of materials and links presented as well as TED talks identified to enrich understanding of climate change, food security, agriculture, aquaculture, deforestation water use and desertification.*