Bianjing (present day Kaifeng) city gate in *Along the River During the Qingming Festival*. Source: *Wikipedia* at https://tinyurl.com/ydagec5l.

The University of Tennessee at Chattanooga
Asia Program

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Editor's Message

This digital publication, available for no charge, and intended for middle, secondary school, and (in some cases) beginning college and university survey instructors and students, owes its existence to the Freeman Foundation-funded National Consortium for Teaching About Asia initiative (NCTA). NCTA is almost certainly the most effective Asian studies educational outreach program in the nation. Readers who are unfamiliar with NCTA, now twenty years old, are advised to visit http://www.nctasia.org to learn more about this national collaboration of more than 263 universities, school districts, museums, and other organizations that has, as of 2017–2018, offered 918 seminars and 838 other programs for 36,079 teachers throughout the nation, as well as 118 study tours for 2,025 teachers. The University of Tennessee at Chattanooga (UTC) Asia Program is extremely fortunate to have been an NCTA affiliate site since 1998.

The UTC Asia Program is also fortunate to have collaborated in the modules project with the Tennessee Geographic Alliance (TGA). This collaboration marks the sixth time we've partnered with TGA, who has consistently been a strong supporter of our NCTA programs.

In 2017–2018 rather than conduct an annual seminar, the UTC Asia Program sought and received permission to utilize NCTA funding to select a small group of Tennessee teachers who are in every sense of term “master teachers” to develop digital teaching modules primarily intended for middle and high school social studies classes. The seven teachers, now formally designated as UTC Asia Program NCTA Faculty Fellows, were selected through a competitive process and obligated to not simply develop teaching materials but field test modules and, in many cases, solicit student responses to modules. Each module went through three revisions based upon not only editorial feedback, but teacher and student perceptions of what worked best in the classroom.

The seven authors of The University of Tennessee at Chattanooga Asia Program 2018 NCTA Teaching Modules were also required to design the instructional materials they developed to support the new Tennessee State Social Studies Standards that will be implemented beginning in 2019–2020.

However, before this project was even approved, our intention was to create modules for teachers and students throughout the nation. Part of the reason for this decision, is that the Tennessee standards include an impressive number of content-rich topics that should appeal to history and social science teachers interested in integrating Asia into their courses.

Most recently (2017) the highly respected publication Education Next ranked Tennessee standards 11th nationally for academic rigor and coherence. The forthcoming Tennessee Social Studies Standards should do nothing to tarnish this reputation.

By now, readers have seen the table of contents of the publication, but because of the “high expectations” content and the creative and effective ways, part or all of each module can be used in classrooms, interested educators should make a point of not simply examining the modules based upon whether middle or high school teachers developed them, but see what might be
useful for their particular classrooms. Significant portions of every module are potentially helpful for teachers and students regardless of the level of the courses they teach.

Thanks are in order to a number of people including academics, students, and other educators who played valuable roles in contributing to these instructional materials. The Faculty Fellows justly deserve the most credit for their hard work in every phase of this project. Brief profiles of these exceptional teachers are available at the conclusion of this publication.

Readers may visit the following website in order to view complete modules available both individually as websites or PDFs and together in one complete PDF compilation: www.utc.edu/asia-program/modules/index.php.

Cordially,

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Where Have All the Children Gone? The Consequences of Low Fertility Rates in South Korea, Singapore, and Japan

Michael Robinson
Houston High School
Germantown, Tennessee


This module was developed for Tennessee high school world history and geography standard 78—“Explain the challenges of rapid population growth on developing countries and of population decline in developed countries and give examples of policies implemented to both slow and increase population growth.”

The content of the module can easily be adapted for high school courses everywhere that incorporate the content of aging populations and population policies in East and Southeast Asia, specifically Japan, South Korea, and Singapore.

Estimated module length: Five fifty-minute class periods (two days for South Korea, two days for Singapore, and one day for Japan).

Overview
This module’s focus in upon the section of the standard dealing with the challenges of population decline and policies being implanted to increase population growth.

South Korea, Singapore, and Japan have some of the highest average life expectancies in the world (Japan is No. 1 at 83.7, Singapore is No. 3 at 83.1, and South Korea is No. 11 at 82.3), as
well as some of the lowest fertility rates (number of live births per 1,000 women between the ages of fifteen and forty-four years) in the world (South Korea and Singapore at 1.2 and Japan at 1.5). The combination of low fertility rates and high life expectancies has created unique problems among these three highly developed countries; especially the threat to future economic growth and job growth.

The populations of both Singapore and South Korea continue to grow very slowly. However, it is the sharp decline in fertility rates that have both countries extremely concerned about future population growth and each nation has developed policies to encourage its population to have more children. The lessons on South Korea focus on the causes and the immediate and long-term effects of the low fertility rate. The Singapore lessons also concentrate upon government policies, with specific attention given to Singapore’s immigration policies to maintain a stable population.

Unlike South Korea and Singapore, Japan’s population already peaked at 127 million in 2010 and is currently at 125 million. The lesson on Japan addresses the specific issue of how the Japanese are dealing with a rural population that has disproportionate high percentage of elderly people. Most young people who grow up in rural towns move to large urban areas that provide better economic opportunities. The impact on these rural towns and villages is nationally significant and problematic for Japan.

**Objectives**
Students will:

List and explain reasons for South Korea’s and Singapore’s low fertility rates.

Create and explain population pyramids for both South Korea and Singapore.

Explain and discuss solutions to South Korea’s and Singapore’s low fertility rates.

Describe rural life in Japan and discuss the issues facing the elderly population who live in Japan’s rural areas.

**Prerequisite knowledge**
Assumptions are that students are already able to locate Japan and the Korean peninsula on a map of Asia. It is also assumed students understand the difference between the governments of North Korea (Democratic People’s Republic of Korea) and South Korea (Republic of Korea). This module focuses on South Korea.

It is assumed students have little knowledge on Singapore. Students may or may not be aware that Singapore is an independent country that is often called a city-state due to its relatively small size and the fact that all of Singapore is urban. The module will include some basic information on Singapore’s location, population, and culture.
Confucius: His Life, Times, and Legacy

Trish King
Girls Preparatory School
Chattanooga, Tennessee


This module was designed for a sixth-grade global cultures class, although it could be implemented in history or culture classes ranging from sixth to ninth grade. It is designed to teach Tennessee state social studies standards 6.34—"Identify the political and cultural problems prevalent in the time of Confucius and how the philosophy of Confucianism and *The Analects* emphasized the concepts of kinship, order, and hierarchy to address these problems," and 6.36—"Explain how the implementation of the philosophy of Confucianism led to the political success and longevity of the Han dynasty." The module also aligns with Tennessee social studies practices standards.

The content and pedagogical strategies for the module are applicable for teachers in middle schools throughout the nation whose curricula include Confucius and early Chinese history. The module may be applicable for high school teachers as well.

**Estimated module length:** Approximately three to five forty-five-minute class periods. If students have not completed background reading, it could be assigned as homework on the evening before Class No.1 or between Class Nos.1 and 2.
Overview
Confucius (551–479 BCE), a scholar and teacher, lived in a chaotic and violent time in China. He wished to see peace and harmony restored and a return to order. Confucius’s objective of social and political harmony for China rested on three major foundations: self-cultivation, respect for rituals and traditions, and the importance of human relationships. His teachings, (Analects), collected and recorded by adherents after his death, were foundational for traditional Chinese formal and informal education, and continue to influence contemporary Chinese and East Asian cultures. Traditional Confucianism stressed the importance of five human relationships in particular: parent–child, husband–wife, older sibling–younger sibling, friend–friend, and ruler–subject. Confucius viewed almost all human relationships as hierarchical and reciprocal. Educational attainment was particularly valued. Shihuangdi (259–210 BCE), the first emperor of China’s initial dynasty, the Qin, and his legalist advisers targeted Confucian scholars and books in an effort to crush opposition. Several hundred years after his death, Confucius’s teachings rose to prominence under Emperor Wudi during the Han dynasty (206 BCE–220 CE). Confucianism laid the groundwork for a central government civil service and, though not the only Chinese belief system, profoundly emphasized Chinese perceptions of ethical and unethical behavior.

Objectives
Students will:

Identify how culture and prominent actors in a given culture shape societal beliefs and laws.

Describe the ways in which Confucian ideas were used during the Han dynasty (206 BCE–220 CE) to help create order and guide individual behavior.

Understand how Confucianism spread to and influenced other East Asian cultures.

Recognize Confucian influences on young Chinese and other East Asians in the twenty-first century.

Prerequisite knowledge
This module was developed for incorporation into a broader instructional segment where students learn about the geography and culture of Asia, both past and present. The assumption is that students will have no prior knowledge of Confucius or his historical and contemporary impact. It is assumed that students can define the term “culture” and identify examples of cultural beliefs or practices found in texts, images, and primary sources (a term it is assumed they can also define). Students will also already know the five themes of geography (location, place, region, movement, and human–environment interaction).
Chinese Influences on Japan

Rebecca Byrd
New Center Elementary (Seventh Grade Teacher)
Sevierville, Tennessee

Prince Shôtoku with his two sons, Prince Eguri (left) and Prince Yamashiro (right). Source: Wikipedia at https://tinyurl.com/ycg7k95m.

This module was developed for a seventh-grade world history and geography class, specifically to address Tennessee standard 7.09—"Explain how Japanese culture changed through Chinese and Korean influences (including Buddhism and Confucianism) as shown in the Constitution of Prince Shôtoku and the adoption of the Chinese writing system."

However, part or all of the module is applicable to middle school world history and/or geography classes elsewhere if early Japanese history is part of the curriculum.
**Estimated module length:** Two ninety-minute class periods.

**Overview**
China was the first Northeast Asian culture to develop a written language, which was transmitted, along with Chinese cultural practices, to the peninsula we know today as Korea. The country that became Japan was the last large regional polity to acquire written Chinese and other aspects of Chinese culture. Although Chinese records indicated that a government mission visited what is today Japan approximately fifty-seven years before the Common Era, evidence of the Chinese writing system appearing on the Japanese archipelago dates back to sometime between the second and third centuries CE. The purpose of this module is to introduce students to significant early Chinese influences on Japan.

**Objectives**
Students will:

- Identify aspects of Japanese culture such as government, language, and religion that were influenced by contact with Korea and China.

- Explain how and why the Japanese assimilated aspects of Chinese culture.

- Explain how Japanese written language (kanji, hiragana, katakana) evolved from Chinese.

- Analyze the Constitution of Prince Shōtoku to identify Buddhist and Confucian influences and explain the constitution’s significance.

**Prerequisite knowledge**
Students will need to know the basic principles of Buddhism and Confucianism. They will also need to understand the meaning of the concept “imperial bureaucracy” in China. Finally, a familiarity with the Sui and Tang (T’ang) dynasties will help students identify Chinese influences on Japanese culture.
Overview
This module was developed and utilized in a seventh-grade world history and geography course. It is designed to address nearly all China-related Tennessee state world history and geography standards that focus upon (roughly) the seventh to mid-seventeenth centuries. Major topics include East Asia geographical features, Song developments and technology, Mongol rule of China, the Silk Road, Zheng He’s Ming dynasty voyages, and Marco Polo’s influence on trade. However, the module should easily be adapted for use in other states for middle school or possibly high school world history, world geography, or world cultures courses. Rather than attempt to encyclopedically teach over, 1,000 years of Chinese history the focus of the module is on key events and themes arranged chronologically. East Asian and Eurasian land and maritime trade routes, often beginning or ending in China, played a pivotal role in facilitating the development and dissemination of Chinese technology and goods to areas far beyond imperial China. The rise of the Mongol Empire and Mongol Rule
in China, along with later Ming contributions, further stimulated the spread of commerce and technology. An infusion of jigsaw and reciprocal teaching methods, along with complementary teacher-centered instruction in this module, will allow for more student-driven learning of content.

**Estimated module length:** Approximately six or seven fifty-minute class periods, depending on familiarity with jigsaw and reciprocal teaching methods and the incorporation of extensions provided.

**Objectives**
Students will:

- Identify and locate geographical features of East Asia relevant to technology and trade.
- Understand how Chinese technology and trade, especially in the Song dynasty influenced the empire and eventually much of the world.
- Learn about and evaluate the effects of Mongol expansion and Marco Polo influences on the spread of Chinese technology along trade routes, specifically the Silk Road.
- Identify the significance of Zheng He’s voyages during the Ming dynasty.
- Compare and contrast trade routes from the past, specifically the Silk Road and maritime routes plotted by Zheng He, and linking past to present, familiarize students with China’s newly proposed Silk Road.
- Create a digital advertisement detailing a chosen Chinese development or technological advancement and its significance. (See Project extension: Chinese technological and commercial innovations during Class No. 3)
- Assess the significance and legacy of Chinese developments and technological advancements in the contemporary world.
- Evaluate the importance of Chinese developments and technological advancements on the rest of the world.

**Prerequisite knowledge**
The assumption is that students will have gained prior knowledge of several East Asia geographical features, the Silk Road, and ancient Chinese developments and technologies in preceding grade levels and should be somewhat familiar with them. Prior to module employment, students are not required to know exact locations of East Asia geographical features, specific Song dynasty developments and advanced technologies, Silk Road trade route locations, Mongol expansion, or Zheng He sea routes and voyage details. Depending on educator preference, this module may either be used to introduce or provide a more in-depth learning experience regarding these topics if extensions are utilized.
The Song Dynasty: Technology, Commerce, and Prosperity

Jane Hill
Ooltewah Middle School
Ooltewah, Tennessee


This module was developed and utilized for a seventh-grade world history and geography class. It is designed to teach the Tennessee state social studies standard 7.03—"Summarize agricultural, commercial, and technological developments during the Song dynasties, and describe the role of Confucianism during the Song.” However, the module is suitable elsewhere for a variety of social studies classes (grades sixth through ninth) that include Chinese history.

Estimated module length: Approximately three fifty-five-minute classes.

Overview
The reorganization of China under the Song dynasty (960–1279 CE) set the stage for economic growth that propelled Song China into becoming the richest country in the world during the early part of the eleventh century. Despite the fact that the dynasty lost northern China to non-Chinese invaders, prosperity continued during the Southern Song dynasty (1127–1279 CE). Technological advancements were significant and helped change China and the world. Just a few of these advancements included improvements in agriculture, development of moveable type, uses for gunpowder, invention of a mechanical clock, superior shipbuilding, the use of paper money, compass navigation, and porcelain production. Technological advancements, domestic
and international trade, and effective government influenced and advanced Chinese society, resulting in a population explosion during the Song dynasty.

This module is designed to be implemented during the teaching of an imperial China or East Asia unit.

**Objectives**

Students will:

- Develop contextual understanding of the Song dynasty through contrasting the Song with the Tang, another earlier great earlier dynasty.
- Demonstrate an understanding of the influences of Song dynasty technologies, commerce, and trade on Chinese and world history in the tenth through thirteenth centuries.
- Investigate individual technological innovations during the Song dynasty.
- Design and present multimedia presentations describing the influence and importance of technologies created during the Song dynasty.
- Interpret and explain the cumulative effects and influences Song dynasty advancements made on China and the world we live in today.

**Prerequisite knowledge**

Before beginning this module, students should be able to locate China on a map and know the two major rivers (the Yellow River in northern China and the Yangtze in the south), along with the location of the Grand Canal. They should be able to define the following terms: emperor, dynasty, technology, and commerce. Because Confucius’s ideas were particularly important in Song government, an understanding of some of Confucius’s ideas would be helpful, but are not required.
Marco Polo’s World

Brian Smith
Jefferson Middle School, Oak Ridge City Schools
Oak Ridge, Tennessee


This module was developed for a seventh-grade world history and geography course in Tennessee. It is particularly applicable to Tennessee standard 7:06—"Summarize the effects of the Mongolian empires on the Silk Roads, including the importance of Marco Polo’s travels on the spread of Chinese technology and Eurasian trade"—and to other Tennessee state seventh-grade history and geography standards as well.

However, the content and pedagogical activities in the module are applicable to middle school teachers throughout the nation who are responsible for instructional activities encompassing thirteenth-century China, the Mongols, and Eurasian and global trade. The module is “high expectations” and may also be applicable to high school instructors and students.

**Estimated module length:** two hours and forty minutes.

**Overview**

Global connections during the thirteenth-century featured both continuity and significant changes. Marco Polo’s world intersected with several cultures during the Middle Ages. In the
1200s, the Mongol presence was dominant on the Eurasian continent. The fall of Baghdad, considered the academic center of the Muslim world, came at the hands of Mongols and is often viewed as the start of the decline of the Golden Age of Islam. In western Africa, Sundiata Kieta formed the Malian Empire in 1235 and eventually brought the rule of Mansa Musa. Several Christian crusades to reclaim Jerusalem took place prior to and during the time of the Mongol Khans. During this time, Europeans’ increased contacts with other cultures resulted in increased demand for East Asian goods and technology. Marco Polo’s travels, and especially his time in China, are a vivid individual illustration of the cross-cultural contacts that helped spread information and change world history.

Instructors should keep in mind that Marco Polo’s story is a versatile one that can be inserted at different points in the study of history and geography during the school year. For example, it can be incorporated in the following units of study:

China: Marco Polo can be used as a means to teach the achievements of the Yuan dynasty and the Mongols’ impact on world history.

The Crusades: Marco Polo’s routes were altered due to cities and regions being controlled by Muslims. He interacts with Muslims a multitude of times.

Medieval Europe: Marco Polo’s story takes place within the late Medieval period, when the merchant class expanded and Asian goods were becoming more in demand.

Age of Exploration: Europeans longed for East Asian goods and had to seek new routes and improvements in shipbuilding and cartography to obtain them.

This document-based approach to teaching the story of Marco Polo is also versatile. Although a teacher could assign this Document Based Question (DBQ) module in its entirety, it can be divided into parts, each with its own focus in classrooms that utilize learning centers. Each part features related primary source excerpts and questions. The level of direct teaching involved with these parts will depend upon the characteristics of your particular students.

Objectives:
Students will:

Learn about Marco Polo’s life, travels, and adventures through biography.

Understand the role and impact of Venetian and other Italian city-states in international trade and intercultural contacts, particularly with non-Western regions.

Analyze the impact of physical geography, existing trade routes, and intercultural interactions on Marco Polo’s trade routes.

Realize the significance of the Mongols in Chinese history and world commerce through learning about Polo’s relations with the great Kublai Khan and his travels on the Silk Roads.
Prerequisite knowledge
Students should be able to identify and locate various locations and physical features in Europe, Southwest Asia, and East Asia that are pertinent to this topic, specifically the Arabian Peninsula, Arabian Sea, Baghdad, Black Sea, Caspian Sea, China, Constantinople, Gobi Desert, Himalayan Mountains, Italy, Jerusalem, Mediterranean Sea, Pacific Ocean, Persian Gulf, and Venice. Many (but not all) of these locations and physical features are embedded in sixth-grade standards in Tennessee. Additionally, students should already know about Eurasian connections regarding trade on the Silk Road.

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Identity and the Rise of Nationalism in Prewar Japan

Aaron Pickering
Oak Ridge High School
Oak Ridge, Tennessee


Estimated module length: Three hours.

Overview
This module is designed for an AP world history course, although it could also be used in a standard high school world history course. It primarily addresses Advanced Placement world history standard 6.2.IV.B— "The sources of global conflict in the first half of the century varied and included imperialist expansion by European powers and Japan, competition for resources, the economic crisis engendered by the Great Depression, and the rise of fascist and totalitarian regimes to positions of power." This module also aligns with the new Tennessee high school world history and geography standards that will be fully operational in fall 2019, particularly standards W.26— "Analyze Japan’s abandonment of isolationism, its embrace of technological and political changes, and its consequent rise as an imperial power in the late 19th century.", W.43—"Analyze the role of geographic features and natural resources in increasing tensions
prior to and during World War II,” and W.44—“Compare the Italian, German, and Japanese efforts to expand their empires in the 1930s, including: the invasion of Ethiopia, German militarism, and atrocities in China.”

However, the content and pedagogical strategies for the module are applicable for any high school teachers whose curricula include the development of East Asian states in the pre-World War II era or the development of extreme nationalism and the rise of authoritarian regimes.

Japan’s selective embrace of Westernization during and following the Meiji Restoration set the stage for its emergence as the great independent power in East Asia during the late nineteenth and early twentieth centuries. This module traces this transformation from its origins in the Meiji reforms to Japan’s invasion of China in 1937. Japanese national identity amid the rapid economic and social changes of the Meiji period was frequently torn between traditional Japanese and East Asian ideas and those of the Western powers. Despite Japan’s adoption of many Western concepts, its attempts to find a place among equals with the Western powers were occasionally rewarded, but repeatedly frustrated. The product of this dynamic was a nationalism that emphasized Japanese exceptionalism among the peoples of Asia and a desire among many to build an empire in East Asia along the lines of the Western powers’ empires elsewhere in Asia, Africa, and the Mideast. Late nineteenth- and early twentieth-century victories in the Ryūkyūs and other islands, along with the acquisition of Formosa (now Taiwan) in the Sino–Japanese War and Korea in the Russo–Japanese War, shaped the public’s willingness to embrace Japan’s growing militarism. The treaties ending both these wars, as well as World War I, left many Japanese frustrated and angry, as they saw many of the spoils of war taken from them by the Western powers. Once the economic difficulties of the Great Depression struck, uncertainty and insecurity on the home front were destabilizing. The civilian government’s inability to offer meaningful solutions mirrored the difficulties faced by civilian governments in the Western democracies as well. The stage was set for the turn to authoritarianism, and the military, particularly the army, was in the best position to offer security and hope. The invasion of Manchuria and associated campaigns emboldened the leadership and provided the resources necessary to move the nation in what appeared to be a positive direction to a hopeful public.

**Objectives**

Students will:

- Evaluate the attitude of Fukuzawa Yukichi and other Meiji reformers toward Western imperial powers and methods, and ascertain the place they envisioned for Japan among world powers at the conclusion of the nineteenth century.

- Understand the reasons for Japanese resentment against Western powers that increased following World War I.

- Analyze the concept of *Kokutai*, or “national essence,” and characterize the state of Japanese national identity on the eve of World War II.
Summarize the characteristics of Japanese nationalism in the late nineteenth and early twentieth centuries, and the events that contributed to the development of this national identity.

**Prerequisite knowledge**
Students should be contextually familiar with various Western interventions in Asia during the early and mid-nineteenth century, particularly the British and Chinese relationship surrounding the Opium Wars and the “American ‘opening’” of Japan during the latter Tokugawa period. The events that led to the downfall of the Tokugawa, the success of the Meiji Restoration, and the moves toward Westernization presented by the Meiji reformers (eg, the Iwakura Mission) set the stage for this module. Familiarity with the process of industrialization and the urbanization and modernization that accompany it will help students understand the context of the rise of militarism in Japan. Familiarity with the features of imperialism of the Western powers and their similarity to Japanese imperialism in this period, particularly the occupation of and abuses in Korea, contextualizes the Japanese development of national character.

East Asia: Twenty-first Century Educational Practices and STEM Education

Maranda Wilkinson
Franklin County School District
Franklin County, Tennessee

Slide 6 from the “East Asia: Twenty-first Century Educational Practices and STEM Education”
Sources available on slide and in PowerPoint.

East Asian countries such as China, South Korea, Japan, Taiwan, and Singapore have excelled in the fields of science and math education. Technological advancements developed and produced in these countries have positioned them to be highly competitive in the global economy. These nations are highly interested in STEM education and systematically examine the strengths and weaknesses of their programs in a seemingly never-ending quest for global competitiveness. It addresses East Asian educational practices and curriculum—with special attention to STEM subjects—that have and may continue to produce high test scores, technologically advanced societies, economic development, and effectively address future 21st century skills demands.

A major goal of the module is to stimulate discussions concerning the applicability (or lack thereof) and possible modification of East Asian STEM educational practices to American educational institutions.

The major instructional component is a thirty-seven minute, thirty-second audiovisual PowerPoint presentation. It was first developed and field tested to serve as a resource for STEM educators and related stakeholders such as school administrators, board members, and parents. However, the module is also an excellent pedagogical resource for high school and even college-
level instructors and students in a variety of courses. The module can be utilized in American high school STEM classes to provide students with an international context illustrating the importance of the mathematics, science, and technical subjects they are studying. Because of a focus upon human capital development and economic development, the module is applicable to high school economics courses or any course that includes content on contemporary East Asia including AP Human Geography, World History, and Comparative Politics.

“At its core, it’s about aligning education to the needs of the future economy. That’s always what education has been about…preparing people for the world they are in.”

-James Brown, Executive Director of the STEM Education Coalition

Slide 3 from the “East Asia: Twenty-first Century Educational Practices and STEM Education” Sources available on slide and in PowerPoint.

**Estimated module length:** Approximately one and half to three hours (including preparatory reading, presentation, and discussion).

**Objectives:**

**Identify** the relationship between Post World War II East Asian economic growth and educational policies and practices.

**Understand** East Asian STEM educational practices policies including teacher development, supplemental education, curricula, and testing and assessment tools.

**Compare and contrast** East Asian Science and Mathematics educational policies and practices with those of the U.S.

**Investigate** policy alternatives that might include adoption or modification of East Asian STEM educational practices and policies that might improve STEM education in U.S. schools.
Prerequisite knowledge:
Although prior knowledge about East Asia and in particular, Confucian traditional and contemporary impact on education is helpful, the module can be utilized for educators or students who do not have this background knowledge.

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The Legacy of Zheng He and the Ming Dynasty Sea Voyages

Jane Hill
Ooltewah Middle School
Ooltewah, Tennessee


This module was developed and utilized for a seventh-grade world history and geography class. It is designed to teach the Tennessee state social studies standard 7.07—“Analyze the achievements of the Ming Dynasty and reasons for its isolationism, including building projects (e.g., the Forbidden City and reconstruction of the Great Wall) and Zheng He’s sea voyages.” The module is suitable for a variety of social studies classes (grades six through nine) that include early Chinese history.

Estimated module length: Approximately three fifty-five-minute classes.

Overview
During the early years of the Ming dynasty, a young Chinese Muslim boy by the name of Ma He (1371–1433) was captured by the Chinese army, along with other children. At the young age of thirteen, Ma was castrated and made a servant to one of the emperor’s sons. Ma grew into a strong warrior and favorite officer of the prince. With the help of Ma, Prince Zhu Di, fought and took the throne from his nephew to become the new emperor in 1402. Zhu Di who assumed the title of Chengzu and became the third Ming emperor (reign name Yongle), rewarded his faithful
servant by giving him the new surname Zheng. It was alleged in official records that Zheng He was an imposing figure, standing seven feet tall. As was the case with many eunuchs, he served the emperor in numerous high-ranking positions in his government. His most famous role would be as commander/admiral of China’s treasure ship fleet. The primary role of the Ming dynasty’s treasure fleet was to display the power and majesty of the dynasty while collecting tributes. Zheng He organized and supervised seven sea voyages (1405-1433) where Zheng He and the fleet traveled through the South China Sea, Indian Ocean, the Arabian Sea, The Red Sea, and the East coast of Africa. During this famous period in China’s maritime history, many scholars think the larger expeditions included at least 200-300 ships and 28,000-30,000 ships. The treasure ships, which were alleged to be 400 feet in length (this is a disputed estimation but the ships were enormous), were the pride of the fleet.

Students will be asked to investigate and report (as if they were journalists) on the life and legacy of Admiral Zheng He and his seven sea voyages. They will also be asked to analyze the reasoning behind the Ming dynasty’s ending of the sea voyages and the policies that resulted in their retreat into a period of isolationism. They will also reflect on how these isolationistic policies influenced future world events.

This module is designed to be implemented during the teaching of an imperial China or East Asia unit.

Objectives
Students will:
Investigate China’s great sea voyages made by the Ming dynasty during the fifteenth century.

Research and investigate the life of Zheng He and his role in the Ming dynasty’s treasure fleet sea voyages.

Design and create short film productions reporting on the events and influences the seven treasure fleet sea voyages had on China and the countries to which they sailed.

Interpret and explain the events that led to China’s government ending the famous Ming voyages.

Analyze how China entering into a period of isolationism influenced and potentially changed world history events.

Prerequisite knowledge
Before the beginning of this module, students should be able to locate China on a map and know where the general location of the South China Sea and Indian Ocean, along with Southeast Asia, the Indian subcontinent, and Africa. They should be able to define the following terms: emperor, dynasty, eunuch, tribute, fleet, voyage, and isolationism. Because Confucian-trained bureaucrats influenced changes in Ming government policies, an understanding of some of Confucian’s ideas would be helpful but is not required.
The Economic and Cultural Emergence of South Korea

Michael Robinson
Houston High School
Germantown, Tennessee

Seoul’s Myeongdong District. Source: Photo courtesy of the author.

This module was developed for the Tennessee high school world history and geography standard No. 85—“Analyze the causes and effects of an increased role of South and East Asian countries in the global economy.”

The content of the module can easily be adapted for high school courses everywhere that incorporate content on post-World War II economic and cultural developments in South Korea, and was field-tested in an AP human geography class of ninth- and tenth-graders.

Estimated module length: Three to five fifty-minute class periods.

Overview
South Korea (the Republic of Korea/ROK) is currently (2018) the seventh-largest export economy and the eleventh-largest economy overall among all the world’s countries. South Korea’s amazing economic success was anything but certain when it was recovering from a brutal
war with North Korea in the early 1950s, and its economic success is widely described as a “miracle.”

This module explores how the ROK has moved from a country dependent on foreign aid and low profit exports to a global leader with exports reaching most parts of the world. Along with its economic success, South Korea has in the last two decades benefited from the increasing popularity of its cultural exports: music, movies, television, and most recently beauty products. South Korea is now an economic power and exerts cultural influence not only in Asia, but in Europe, North America, and elsewhere. As South Korea continues to grow in influence around the world, both economically and culturally, it is essential that students understand the impact South Korea’s success has on the rest of the world, including the United States.

Objectives
Students will:

Explain and discuss how the economy of South Korea has changed since the late twentieth century and explain how South Korea was able to become the world’s eleventh-largest economy.

Discuss and describe how South Korea’s exports changed from 1962 to 2016 and explain how these exports have impacted the United States.

Define, describe, and explain the Korean Wave, its global impact, and its specific influence in the United States.

Prerequisite knowledge
Assumptions are that students are already able to locate the Korean peninsula on a map of Asia and understand that two nations now exist on the peninsula. It is also assumed that students understand the difference between the governments of North Korea and South Korea. This module focuses exclusively on South Korea.
Post-War Development of the Two Koreas

Aaron Pickering
Oak Ridge High School
Oak Ridge, Tennessee


This module is designed for a standard high school world history course, although it could also be used in an AP world history, contemporary issues, or economics course. It primarily addresses Tennessee state social studies standard W.85—"Analyze the causes and effects of an increased role of South and East Asian countries in the global economy." This module also aligns with several other Tennessee standards and advanced placement world history standards. However, the content and pedagogical strategies for the module are applicable for any high school teachers whose curricula include the development of East Asian states in the post-World War II era.

Estimated module length: Approximately three fifty-minute or two ninety-minute classes.
Overview
South Korea (The Republic of Korea) and North Korea (The Democratic People’s Republic of Korea) provide the clearest and most compelling example for students to understand the stark contrasts between a largely free market economy and democratic nation, and that of a command economy dominated by Communists. Japan’s colonial occupation of the Korean peninsula for nearly four decades laid the foundation for industrialization, but it also failed to produce meaningful economic or political gains for the Korean people. Foreign rivalries also fueled the war that divided the peninsula and established two different ideologies for North and South. South Korea experienced widespread government corruption and limited growth from the end of the 1950–1953 Korean Conflict until the early 1960s, despite massive U.S. aid. The South then experienced a military coup and decades of political suppression but increasing economic freedom before it became the success story of recent decades. North Korea had numerous economic advantages over the South in the early postwar days. Its embrace of Communism and a strict command economy, however, produced an unsustainable model. In 2017, South Korea’s GDP (adjusted for purchasing power parity) ranked fourteenth in the world. North Korea’s regime leaves the majority of its people in poverty and darkness.

Objectives
Students will:

- Recognize the conditions and events leading to the split and war between North Korea and South Korea.
- Analyze economic and demographic data to illustrate the contrasting Korean economies over time.
- Compare the political and economic systems of South Korea, differentiating among the Rhee regime, the Park regime, and subsequent governments.
- Explain the rationales behind North Korea’s policies of self-reliance (Juche) and militarization, as well as the resulting standard of living.
- Create a summary document illustrating the political and economic contrasts between North Korea and South Korea.

Prerequisite knowledge
Students should have a basic understanding of the contrasts between democratic and Communist political systems, as well as the contrasts between market and command economies. Basic background knowledge about the U.S.–USSR Cold War rivalry, especially in Asia, and the concepts of containment and proxy wars is also helpful. Students are not expected to have basic knowledge of the Korean peninsula’s history.
Religion and Aesthetics in Japan

Rebecca Byrd
New Center Elementary School (Seventh Grade Teacher)
Sevierville, Tennessee

This module was developed and utilized for a seventh-grade world history and geography class. It is designed to teach the Tennessee state social studies standards 7.08—"Describe the origins and central features of Shintōism,” and 7.10—"Describe how the Heian aristocracy contributed to the development of a Japanese national culture.” However, the module could easily be adapted for use in other states in middle school or possibly high school world history, world geography, or world cultures courses.

Estimated module length: Two ninety-minute class periods.

Overview
This module is designed to introduce students to Shintō (“The Way of the Kami or Gods”), Japan’s only major indigenous belief system, and to the Shintō- and especially Buddhist-influenced aesthetic concepts of mono no aware and wabi-sabi. Most students have little, if any, exposure to Shintō prior to seventh grade. Additionally, students often have difficulty understanding Shintō because it is vastly different from other religious traditions they have studied. Shintō is an integral part of the geography of Japan because numerous Shintō shrines of varying sizes constitute sacred spaces throughout the nation. Because many shrines were intentionally constructed in beautiful places, studying Shintō offers students an opportunity to understand the relationship between the physical and human characteristics of a place.

Studying the aesthetic concepts of mono no aware and wabi-sabi will also help students grasp the profound influence that not only Shintō but Buddhist thought had on Japanese society, particularly in the Heian period (794-1185 CE) poetic form of waka. It is impossible to appreciate much of Japanese traditional visual arts and poetry without an understanding of mono no aware and wabi-sabi.
Objectives
Students will:

Explore the basic beliefs and practices of Shintō, including the connection between Shintō beliefs and practices and the locations of major shrines.

Define the concepts of mono no aware and wabi-sabi, and explore their connection to Buddhist thought.

Create a poem using the waka form that demonstrates understanding of the concepts of mono no aware and wabi-sabi.

Prerequisite knowledge
Knowledge of Shintō and familiarity with Japanese culture will be helpful for students but is not required. Students will need knowledge of the basic beliefs of Buddhism, including the Four Noble Truths and the Eightfold Path. Familiarity with other forms of syllable-based poetry such as haiku is useful, but not required.

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Kamakura: The Home of the Samurai

Brian Smith
Jefferson Middle School
Oak Ridge, Tennessee


This module is designed for a seventh-grade Tennessee world history and geography course. It is particularly applicable to Tennessee standard 7.11: “Analyze the rise of a military society in the late twelfth century and the role of the shogun and samurai in Japanese society.”

The content and pedagogical activities in the module can be utilized in any middle school social studies class that includes history and geography content on medieval Japan.

**Estimated module length:** Two hours, fifty-five minutes, plus homework.
Overview
By the beginning of the Kamakura period (1185–1333), Japan had established a military
government controlled by the shogun and supported by the samurai class. The samurai were
warriors whose education required them to “master the bow and the horse, as well as the brush
and the word.” The creation of a military-controlled government located in Kamakura was both
a geographic and cultural shift from the aristocratic rule and court life that were prevalent during
the Heian period.

Objectives
Students will:

Analyze the rise of a military society during the Kamakura period.
Comprehend the role of the shogun and samurai during the Kamakura period.

Prerequisite knowledge
This module most is most effective after students learn prior information about East Asia,
including introductory knowledge of China and its influence on Japan (written characters,
Confucianism, and Buddhism) during the Heian period. Students should be able to identify and
locate various locations and physical features related to Japan. Students should have already been
taught the basic tenets of Shintoism. Students should also be familiar with traditional social
hierarchy structures prevalent in the ancient and medieval worlds.

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How Might We Compare and Contrast Three Early Civilizations?

Trish King
Girls Preparatory School
Chattanooga, TN


Estimated module length: Four to six class periods of approximately an hour each.

Overview
This module was designed for a sixth grade Global Cultures class although it could be implemented in classes ranging from sixth through ninth grade studying history, geography, and culture. The module is utilized in a private school, but also includes content that address relevant Tennessee middle school state World History and Geography Standards. Examples include 6.32—“Analyze the influence of geographic features on the origins of ancient Chinese civilization in the Yellow River Valley, and explain how China’s geography helped create a unique yet diverse cultural identity that was isolated from the rest of the world,” 6.35—“Explain the significance of the unification of ancient China into the first Chinese empire by Qin Shi Huangdi, beginning the Qin Dynasty,” 6.25—“Identify and locate geographical features of ancient India including the Ganges river, Himalayan mountains, indian ocean, indus river, monsoon winds, and the subcontinent of India,” 6.26—“Explain the emergence of the Harappan civilization in the Indus River Valley as an early agricultural civilization, and describe its achievements including architecture built with bricks, arranging roads into a series of grid systems, and sanitation and sewer systems,” 6.55—“Describe the characteristics of Julius Caesar’s
rule including: leadership in the military, popularity among plebians, role as dictator for life, and assassination,” and 6.56—“Analyze the influence of Augustus Caesar, including the establishment of the Roman Empire and its political, geographic, and economic expansion during the Pax Romana.”

**Historical context**
Rather than studying each civilization in isolation, this module enables students to evaluate civilizations comparatively in their own times and in terms of their legacy. In “Teaching Early China and Ancient Rome Comparatively,” Berea College China specialist Jeffrey Richey (in reference to studying Ancient China and Rome) argues that to study these cultures is to examine how human beings in widely separated geographical areas coped with similar challenges and circumstances.” This module will provide an opportunity to compare geography, writing systems, government, infrastructure, defense, as well as innovations and contributions.

**Objectives**
Students will be able to:

- Locate, label, and describe the physical features of the early empires in China and India, as well as the Roman Empire.

- Identify and describe the impact of significant accomplishments, developments and innovations from India, China, and Rome.

- Consider the type of conclusions that can be drawn and the questions that arise when one examines ancient artifacts.

- Examine historical maps from different times and places to compare them to modern maps and analyze the differences between them and the possible reasons for such differences.

- Compare and contrast early civilizations using maps, primary sources, and a mini-research assignment.

This module can be used to implement a thematic approach to teaching India, Rome, and China, with the teacher augmenting inquiry-oriented activities with teacher-centered instruction and other strategies to provide varied content coverage. The module could also be split into parts, with the brainstorming and geography activities used before teachers introduce the student to each civilization. With this approach, the comparative research component occurs at the end of the module and both assists students in more broadly understanding civilizational similarities and differences and potentially can serve as a teacher assessment tool.

**Prerequisite knowledge:**
Students should have experience in using maps, an atlas, and websites to label and add features to maps. They should be familiar with key vocabulary: civilization, legacy, innovation, and empire. It would be helpful if students are experienced with reading and interpreting primary source documents, though it is not assumed that they will be.
Rebecca Byrd is a middle school teacher at New Center Elementary in Sevier County. She teaches 8th grade U.S. History, 7th grade World History and serves as sponsor for National History Day. Byrd holds a B.A. in History, M.S. in Education and Ed.S. from the University of Tennessee at Knoxville. Byrd serves as “Teacher in Residence” at the East Tennessee Historical Society. She also serves on the Tennessee State Library and Archives Educator Working group and recently served as lead teacher on the *Tennessee Blue Book: A History of Tennessee Student Edition*. In 2010, Byrd traveled to China as part of a NCTA Study Tour. She received the 2018 Tennessee History Day: Educator of the Year, Junior Division Award. Byrd and a student were also selected for the 2018 Normandy: Sacrifice for Freedom Albert H. Small Student & Teacher Institute. The pair undertook an extensive study of the Normandy campaign and researched the life and service of a Tennessean who they honored at Normandy American Cemetery during their study tour of France.

Jane Hill is a Social Studies Department Chair, a team leader, and teaches 7th grade World History at Ooltewah Middle School. Previously, she has taught science and reading at East Ridge Middle School, Girl’s Preparatory School, and Hixson Middle School. She holds a B.S. in Education and Sports Medicine from East Tennessee State University and an M.Ed. from the University of Tennessee at Chattanooga. Prior to receiving her master’s degree in education, she was a graduate assistant at Temple University in Philadelphia, Pennsylvania, at Temple University Hospital. Before beginning her teaching career, she worked as a part-time instructor at East Tennessee State University and was the Coordinator for Sports Medicine at the Center for Sports Medicine & Orthopedics. She has 19 years of experience as an educator. Most recently, she created 7th grade world history lesson plans for the Tennessee Geographical Association, NCTA, and the UTC Asia Program professional development program in 2017.

Patricia King is a middle school teacher at the Girls Preparatory School in the History and Social Sciences Department, having previously taught in international schools in Latin and South America. She holds a B.A. in History and an M.A.T., both from Simmons College in Boston. At GPS, she teaches the sixth grade Global Cultures course and has developed a cross-disciplinary extension to her curriculum that merges Global Cultures with 6th grade science to form a series of “Global Science” activities across the year. She also teaches 7th grade Ancient History. In addition to her teaching role, King is also the coordinator of the school’s Partnerships in the Community program. She tweets @trishking6
Aaron Pickering has been a member of the Social Studies Department at Oak Ridge High School in Oak Ridge, Tennessee for 17 years. Pickering teaches Combined Studies AP World History, World History and Geography, AP European History, and Economics. He sponsors the Philosophy Club and Ethics Bowl team and serves on the faculty council of The National Honor Society. Mr. Pickering received his B.A. from Berry College and M.S. and Ed.S. from The University of Tennessee, Knoxville. Mr. Pickering is a world travel enthusiast and participated in a foreign study program at The University of Wales, Swansea. In addition to personal travel and leading student educational tours, he has been a Fulbright Memorial Fund Scholar in Japan, an Atlantik-Brücke Foundation Fellow in Germany, and a Korea Foundation visiting scholar at Yonsei University in Seoul, South Korea.

Michael Robinson is Social Studies Department Chair at Houston High School in Germantown, Tennessee where he teaches AP Human Geography, AP Research, and Honors “Facing History and Ourselves.” He holds a B.A. in Geography and an M.S. in Curriculum and Instruction: Social Studies, from the University of Tennessee at Knoxville. Michael was the 2010 National Council for the Social Studies High School Teacher of the Year. He was the 2018 recipient of the Brunn Creativity Award for Outstanding Teaching of Geography from the National Council for Geographic Education. The Department of Theory and Practice in Teacher Education at the University of Tennessee, Knoxville, selected Michael to receive the 2018 TPTE Outstanding Alumnus Award, an award given to alumni who have made outstanding contributions to the field of education. Michael was selected as the 2018-19 Tennessee Teacher of the Year for the Shelby/Municipal Core Region and then as Tennessee Teacher of the Year for the West Grand Division.

Brian Smith is a 7th grade social studies teacher at Jefferson Middle School in Oak Ridge where he teaches World History and Geography. He holds a B.A. in Social Studies Education from Purdue University, a M.S. in Social Studies Education from the University of Tennessee-Knoxville, and is a National Geographic Geo-Inquiry Ambassador. He has led numerous professional development workshops for the Tennessee Geographic Alliance (TGA) and Oak Ridge Schools on recent changes in the social studies standards and practices. Most recently, Brian received a Qatar Foundation International Teacher Professional Development Grant to study the Art of Islamic Pattern in Granada, Spain. Additionally, this trip connects with a Humanities Tennessee Partnership for Public Humanities (PPH) Grant Award for creating The Golden Age of Islam: a Geography & Geometry teacher workshop that will be coordinated with the TGA. Brian also led the Google Geo Teacher Institute Professional Development held at Oak Ridge Associated University and Esri ConnectED workshops to teach an Introduction to using ArcGIS Online.
Maranda Wilkinson is a former middle school Social Studies teacher and Curriculum and Instruction Coach and now serves as the Franklin County Tennessee’s School District’s STEM Curriculum Specialist. She holds a B.S. in Social Science from Athens State University and a M.S. in Instructional Media from Wilkes University. She was selected as a Russian/American Educators’ Exchange Program participant in 2015, An NCTA participant in 2017, a 2017-2018 Tennessee STEM Innovation Network Innovative Leaders Institute participant, a 2017-2018 Tennessee STEM Innovation Network Rural STEM Collaborative participant, a Korean War Legacy Foundation UN Peace Camp participant in 2018, and a Korean War Legacy Foundation Fellow in 2018. In addition, she currently serves as a board member at her local Hands-On Science Center and is an affiliated consultant for EF Education First, co-facilitating training sessions for educators planning to travel abroad on study tours with their students.

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