ALPHABET DIFFUSION

Authors: Cindy Bloom, Bev Feldkamp

Lesson Overview: Students will explore the geographical and historical development and diffusion of the Roman/Latin alphabet and the Chinese writing system.

Essential Questions:
- What is the pattern of diffusion of the Roman and Chinese writing systems?
- How are these patterns similar or different?

Objectives: The student will be able to:
- Map the locations of several Roman/Latin related alphabets and Chinese writing systems.
- Describe the patterns of diffusion of the Roman/Latin alphabet and Chinese writing systems.
- Explain the causes for the diffusion of the Roman/Latin alphabet and Chinese writing systems.
- Plot writing systems on GeoHistoGram.

Subject/Grade Level: Social Studies, 7-12

Duration: 1-2 class periods

Student Materials: (included)
Blank world political map; GeoHistoGram;
alphabet timeline; map activity directions;
GeoHistoGram activity directions; assessment
Not included: colored pencils

Teacher Materials: (included) Transparencies (You Can Read Greek; Language Pages); Teacher notes, answer keys and maps

Alphabet Diffusion PPT

Michigan Grade Level Content Expectations:
- 7-H1.4.1 - Describe and use cultural institutions to study an era and a region (political, economic, religion/belief, science/technology, written language, education, family)
- 7-W3.1.9 - Describe the significance of legal codes, belief systems, written languages and communication in the development of large regional empires.
- 7-G1.3.3 - Explain the different ways in which places are connected and those connections demonstrate interdependence and accessibility.
- 7-G4.1.1 - Identify and explain examples of cultural diffusion within the Eastern Hemisphere

National Geography Standards
- 3: How to analyze the spatial organization of people, places, and environments on earth’s surface.
- 10: The characteristics, distribution, and complexity of earth’s cultural mosaics

National World History Standards:
- Era 2: Early Civilizations and the Emergence of Pastoral Peoples, 4000-1000 BCE
- Era 3: Classical Traditions, Major Religions, Giant Empires, 1000 BCE-300 CE

ELA Common Core State Standards
- Writing in the Social Studies:, Grades 6-7: Text Types and Purposes
  1. Write arguments to support claims with clear reasons and relevant evidence.
  2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
Procedures:

1. Opening activity:  Have students guess Greek letters on overhead, PowerPoint, Smart Board etc. (Slide 3) Show various alphabets and have students look for patterns. (Slides 4-9 or Overhead, Smart Board etc.)

2. Vocabulary Development: Define writing system, alphabet and discuss concept of diffusion. (Slides 10-12)
   a. **Alphabet** - A system of characters or symbols representing a sound or series of sounds
   b. **Writing System** - Can be an alphabet or symbols/characters that represent ideas, sounds, or things
   c. **Diffusion** - the spread of cultural ideas
   d. **Hierarchical** - from the top down as dictated by the government as through war or colonialism
   e. **Contagious** - by coming into contact with another as through trade or missionary work
   f. **Relocation** - through migration and bringing culture along

3. If possible, show animation of development of Latin alphabet (Slide 13)  
   http://terpconnect.umd.edu/~rfradkin/latin.html

4. Hand out student maps, map activity directions and colored pencils. (Slide 14)  
   Have students fill in map (according to directions) while teacher tells the story of the diffusion of the Latin alphabet and Chinese writing system (complete text in notes). After filling in map, students answer questions.

5. Show completed map and discuss questions. (Slides 15-16)
   a. What patterns do you see with the diffusion of Roman related alphabets?  
      *The Roman related alphabets have traveled far from Rome in all directions.*
   b. How is the pattern of diffusion different for the Chinese scripts?  
      *The Chinese scripts remained very localized in China and East Asia*

6. Show the blank GeoHistoGram and discuss how this resource shows events and ideas over space and time and can extend beyond one area. (Slide 17)  
   Hand out time lines and blank GeoHistoGram and GeoHistoGram activity directions. Have students work in pairs and follow assignment directions. (Slides 18-19)

7. Show completed GeoHistoGram and discuss questions. (Slide20)
   a. Have the patterns of Roman and Chinese writing systems changed after we introduced time as a factor?  
      *Time helps to show how wide the spread of these languages was over time. One sees that the largest spread of Roman writing was actually a more recent phenomenon. The Latin alphabet moved from East to West. Also, the Chinese writing has remained relatively constant in its spread since its inception.*
   b. What historical events might explain the differences in diffusion/use of the Roman and Chinese writing systems?
Colonization of the new world and Africa impacted Roman writing.
World War I brought further spread of Roman alphabet.
The growth of the Roman Empire and the spread of Christianity had an impact.
The lack of writing in the early middle ages led to the development of Romance languages such as French and Spanish using a Roman alphabet.
The Chinese conquest of Japan and Korea influenced their use of the language.
Communism limits the spread of Chinese.

Assessment: (students will need another GeoHistoGram for this activity) (Slide 21)
In a well written paragraph (introduction, body, conclusion), predict what would have happened to the diffusion of writing systems if the Chinese had colonized North America and the Europeans had colonized South America. After you have completed your paragraph, fill in a blank GeoHistoGram to match your prediction. Assume that colonization happened in c. 1500 AD.

Extensions:
This lesson can be used as a model for discussing the diffusion of other cultural traits such as language, religion, and technologies.

Resources:
http://www.omniglot.com/writing
http://www.wsu.edu/~dee/ANCJAPAN/WRITING.HTM
http://www.ancientscripts.com/images/chinese.gif
New York Center for Geographic Learning
http://panmacedonian.info/Greek_Alphabet.htm
DIRECTIONS FOR MAP ACTIVITY

Materials: a blank outline world map and two different colored pencils for each student. It might be helpful for students to have an atlas for this activity.

DIRECTIONS FOR ACTIVITY:
• While discussing the history of the western alphabets (see teacher notes), have students mark each country discussed with the letter “R” in one color and each country associated with the Chinese script with the letter “C” in another color.
• Have each student shade all Roman related countries in the appropriate color and Chinese script in the other.
• Student then mark the map with an appropriate key and title.

Discussion questions:
• What patterns do you see with the diffusion of Roman related alphabets?
• How is the pattern of diffusion different for the Chinese?
### Timeline Dates

#### Chinese Writing System Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>c. 1400-1200 BC</td>
<td>Oracle bone script, China</td>
</tr>
<tr>
<td>c. 111 BC</td>
<td>China controls Vietnam and introduces Chinese writing</td>
</tr>
<tr>
<td>c. 200 AD</td>
<td>Running Script in use since Han Dynasty</td>
</tr>
<tr>
<td>c. 414 AD</td>
<td>Korea begins to use Chinese character writing</td>
</tr>
<tr>
<td>c. 500-600 AD</td>
<td>Japanese begin using Chinese character writing</td>
</tr>
<tr>
<td>c. 1913 AD</td>
<td>Zhuyin Fuhao developed and still used in Taiwan</td>
</tr>
<tr>
<td>c. 1918 AD</td>
<td>Vietnam ceases to use Chinese character writing</td>
</tr>
<tr>
<td>c. 1945 AD</td>
<td>Use of Chinese characters drastically reduced in Korea</td>
</tr>
<tr>
<td>c. 1949 AD</td>
<td>Simplified script in use in Peoples Republic of China and Singapore</td>
</tr>
<tr>
<td>c. 1958 AD</td>
<td>Hanyu pinyin used in Peoples Republic of China</td>
</tr>
</tbody>
</table>

#### Roman Writing System Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>c. 15th century BC</td>
<td>Phoenician alphabet develops at Byblos</td>
</tr>
<tr>
<td>c. 1200 BC</td>
<td>Greeks borrow and change Phoenician alphabet</td>
</tr>
<tr>
<td>c. 940 AD</td>
<td>Cyrillic alphabet adapted from Greek and others by St. Cyril</td>
</tr>
<tr>
<td>c. 1820 AD</td>
<td>Dutch Indonesia uses the Latin alphabet to write the language</td>
</tr>
<tr>
<td>c. 550 BC</td>
<td>Etruscans acquire their alphabet in Italy from Euobean Greeks</td>
</tr>
<tr>
<td>c. 1940 AD</td>
<td>Tajik uses a modified version of the Cyrillic alphabet</td>
</tr>
<tr>
<td>c. 250 BC</td>
<td>Latin alphabet slowly evolves from Etruscans to its “modern” form</td>
</tr>
<tr>
<td>c. 11th century AD</td>
<td>Spanish first appears in written form</td>
</tr>
<tr>
<td>c. 842 AD</td>
<td>French version of the alphabet fist appears in the Strasbourg oaths</td>
</tr>
<tr>
<td>c. 1837-38 AD</td>
<td>The spelling of Zulu words is written in a Latin script</td>
</tr>
<tr>
<td>c. 7th century AD</td>
<td>English adaptation of Latin alphabet introduced by Christian</td>
</tr>
<tr>
<td></td>
<td>missionaries</td>
</tr>
<tr>
<td>c. 1830-1860 AD</td>
<td>Potawatomi Indians use a Latin alphabet brought by Jesuit missionaries</td>
</tr>
<tr>
<td>c. 1918 AD</td>
<td>Vietnamese is taught with Latin characters</td>
</tr>
</tbody>
</table>
Student Activity

GeoHistoGram Activity

You will need:
1. Map from alphabet/writing system map activity
2. Copy of GeoHistoGram
3. Timeline for Roman alphabet and Chinese Character writing.
4. Two colored pencils (same as used for map activity)

Directions for Activity—work in pairs
1. Get out the timeline and map for Chinese writing.
2. Draw a point at the first evidence of Chinese writing at the approximate time and region of the world (use same colored pencil as in the map activity).
3. Continue the dates toward present, shading in the GeoHistoGram.
4. As more countries adopt the Chinese form of writing, the width of the GeoHistoGram line should thicken, likewise, as countries decrease the use of Chinese writing, the line should decrease in width.
5. Continue shading to present.
6. Repeat the procedure for the Roman alphabet (using same color as the map activity). [Note – Chinese writing never left Asia; Roman alphabet will cross many different regional boundaries at different points in time.]
7. Title your GeoHistoGram.

Answer the following questions after finishing your GeoHistoGram.

- Have the patterns of Roman and Chinese writing systems changed after we introduced time as a factor?

- What historical events might explain the differences in diffusion/use of the Roman and Chinese writing systems?
World GeoHistogram

<table>
<thead>
<tr>
<th>WEST</th>
<th>EAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 CE</td>
<td>Americas</td>
</tr>
<tr>
<td>1500 CE</td>
<td></td>
</tr>
<tr>
<td>1000 CE</td>
<td></td>
</tr>
<tr>
<td>500 CE</td>
<td></td>
</tr>
<tr>
<td>CE</td>
<td></td>
</tr>
<tr>
<td>BCE</td>
<td></td>
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<tr>
<td>1000 BCE</td>
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<td>2000 BCE</td>
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<td>6000 BCE</td>
<td></td>
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<tr>
<td>7000 BCE</td>
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</tr>
</tbody>
</table>

Student Assessment
Assessment Directions: (you will need another GeoHistoGram for this activity)

In a well written paragraph (introduction, body, conclusion), predict what would have happened to the diffusion of writing systems if the Chinese had colonized North America and the Europeans had colonized South America. After you have completed your paragraph, fill in a blank GeoHistoGram to match your prediction. Assume that colonization happened in c. 1500 AD.
YOU CAN READ GREEK!

Α Β Γ Δ Ε Ζ Η Ι Κ Λ Μ Ν Ξ Ο Π Σ Τ Φ Χ Ψ Ω

Answers: (Α Β Γ Δ Ε Ζ Η Ι Κ Λ Μ Ν Ξ Ο Π Σ Τ Φ Χ Ψ Ω)
### GREEK

<table>
<thead>
<tr>
<th>Alpha (A)</th>
<th>Beta (B)</th>
<th>Gamma (Γ)</th>
<th>Delta (Δ)</th>
<th>Epsilon (Ε)</th>
<th>Zeta (Ζ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eta (Η)</td>
<td>Theta (Θ)</td>
<td>Iota (Ι)</td>
<td>Kappa (Κ)</td>
<td>Lambda (Λ)</td>
<td>Mu (Μ)</td>
</tr>
<tr>
<td>Nu (Ν)</td>
<td>Xi (Ξ)</td>
<td>Omicron (Ο)</td>
<td>Pi (Π)</td>
<td>Rho (Ρ)</td>
<td>Sigma (Σ)</td>
</tr>
<tr>
<td>Tau (Τ)</td>
<td>Upsilon (Υ)</td>
<td>Phi (Φ)</td>
<td>Chi (Χ)</td>
<td>Psi (Ψ)</td>
<td>Omega (Ω)</td>
</tr>
</tbody>
</table>

http://deanofstudents.utexas.edu/gle/greek_dict.php

### ROMAN/LATIN

A B C D E F G H I K L M N O P Q R S T V X Y Z

### CYRILLIC

http://www.dkimages.com/discover/Home/Geography/Europe/Russia

### TAJIK

http://www.dkimages.com/discover/Home/Geography/Europe/Russia/Unassigned/General-03.html

### VIETNAMESE

A Ă Ą Ą B C D D E Ė G H I Ė K L M N O Ô O Ơ P Q R S T U U V X

http://www.buf.kristianstad.se/inv_undervisning/hoa2/vietnamesiska.htm
### Chinese Writing over time

<table>
<thead>
<tr>
<th>Character</th>
<th>Oracle Bone</th>
<th>Greater Seal</th>
<th>Lesser Seal</th>
<th>Clerkly Script</th>
<th>Standard Script</th>
<th>Running Script</th>
<th>Cursive Script</th>
<th>Modern Simplified</th>
<th>Jiàn tì</th>
<th>Jiànguìn</th>
<th>Xíngshù</th>
<th>Càoshū</th>
</tr>
</thead>
<tbody>
<tr>
<td>人 (*nin)</td>
<td>人</td>
<td>人</td>
<td>人</td>
<td>人</td>
<td>人</td>
<td>人</td>
<td>人</td>
<td>人</td>
<td>人</td>
<td>人</td>
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<tr>
<td>女 (*nra?)</td>
<td>女</td>
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<tr>
<td>耳 (*nha?)</td>
<td>耳</td>
<td>耳</td>
<td>耳</td>
<td>耳</td>
<td>耳</td>
<td>耳</td>
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<td>耳</td>
<td>耳</td>
</tr>
<tr>
<td>骏 (*mrā?)</td>
<td>骏</td>
<td>骏</td>
<td>骏</td>
<td>马</td>
<td>马</td>
<td>马</td>
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<td>鱼 (*ŋha)</td>
<td>鯀</td>
<td>魚</td>
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<td>山 (*srān)</td>
<td>山</td>
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<td>日 (*nli)</td>
<td>日</td>
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<td>日</td>
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<td>日</td>
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<td>日</td>
<td>日</td>
<td>日</td>
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<tr>
<td>月 (*ŋot)</td>
<td>月</td>
<td>月</td>
<td>月</td>
<td>月</td>
<td>月</td>
<td>月</td>
<td>月</td>
<td>月</td>
<td>月</td>
<td>月</td>
<td>月</td>
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<tr>
<td>雨 (*waʔ?)</td>
<td>雨</td>
<td>雨</td>
<td>雨</td>
<td>雨</td>
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<td>雨</td>
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<tr>
<td>云 (*wan)</td>
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</tbody>
</table>

Teacher related notes and answer keys:

MAP ACTIVITY:

Discussion questions:

- What patterns do you see with the diffusion of Roman related alphabets?
  The Roman related alphabets have traveled far from Rome in all directions.
- How is the pattern of diffusion different for the Chinese scripts?
  The Chinese scripts remained very localized in Chine and East Asia.

Geohistogram Activity

Answer the following questions after finishing your geohistogram.

- Have the patterns of Roman and Chinese writing systems changed after we introduced time as a factor?
  Time helps to show how wide the spread of these languages was over time. One sees that the largest spread of Roman writing was actually a more recent phenomenon. The Latin alphabet moved from East to West. Also, the Chinese writing has remained relatively constant in its spread since its inception.

- What historical events might explain the differences in diffusion/use of the Roman and Chinese writing systems?
  Colonialization of the new world and African impacted Roman writing.
  World War I brought further spread of Roman alphabet.
  The growth of the Roman Empire and the spread of Christianity had an impact.
  The lack of writing in the early middle ages led to the development of Romance languages such as French and Spanish using a Roman alphabet.

  The Chinese conquest of Japan and Korea influenced their use of the language.
  Communism limits the spread of Chinese.
Red = Roman
Green=Chinese
SCRIPT FOR TEACHERS AS STUDENTS MARK LATIN ALPHABET ON THE MAP

1. **Phoenician** *(15th century BC)* at Byblos developed a very early alphabet
2. **Greeks** assimilated and borrowed from the Phoenicians. Ionians around the Med sea borrowed from the Phoenician traders
3. Linear B *1200 BC* early **Greek** writing used at the time of Homer
4. **Etruscans** acquired alphabet from Euboean Greeks. The earliest known Etruscan inscription dates from the middle of the *6th century BC*
5. Latin— Slowly the Latin alphabet became increasingly standardized. Writing direction settled on left-to-right toward the *5th or 4th century BCE*, and letter shapes became more or less the same in Latium. By Rome’s Republican period (*3rd century BC*), the Latin alphabet has evolved to the "modern" form. Think of the huge extent of the Roman Empire to be touched by this alphabet.
6. **English** -- The Latin alphabet, introduced by Christian missionaries, began to replace the Anglo-Saxon from about the *7th century on.*
7. **French** -- The French language is descended from Latin and first appeared in writing in *842 AD* when it was used in the Strasbourg Oaths.
8. **Cyrillic** -- St Cyril *@940 AD* used a modified Greek/Roman alphabet to bring the Gospel to Russia
9. **Spanish** -- Spanish first started to appear in writing in the form of notes and glosses in Latin religious texts, the *Glosas Emilianenses*, dating from the *11th century.*
10. *1492* and the New World. Don’t forget about the story of colonialism and the new world
11. During the *17th century*, Roman Catholic missionaries introduced a Latin-based orthography for Vietnamese, *Quốc Ngữ* (national language), which has been used ever since. Until the early 20th century, *Quốc Ngữ* was used in parallel with *Chữ nôm*. Since 1918 only *Quốc Ngữ* (Latin characters) has been used.
12. *1820 AD* During the time **Indonesia** was a Dutch colony, the Latin alphabet was introduced to write Indonesian and a number of Dutch spellings were used. This alphabet was called *ejaan lama* (Old Script) in Indonesian.
13. Between 1830 and 1860 two Jesuit missionaries, Fr. Christian Hoecken and Fr. Maurice Gailland, developed a spelling system for the *Potawatomi* using the Latin alphabet.
14. **Zulu** -- During the *early 19th century* Christian missionaries, including J W Colenso, S B Stone, H Callaway and Lewis Grant devised a way to write Zulu. The first Zulu Christian booklet was written between 1837-8 and explained the spelling of Zulu words and the history of the Old Testament.
15. **Tajik**--. Before *1928*, Tajik was written with a version of the Perso-Arabic script, then with the Latin alphabet between 1928 to 1940, then with a modified version of the Cyrillic alphabet
Chinese Writing System Dates

c. 1400-1200 BC  Oracle bone script, China: Shang Dynasty, characters written on bone or turtle shell and used for divination.
c. 111 BC  China controls Vietnam and introduces Chinese writing: Northern and Central Vietnam become prefectures of the Han Dynasty and the Chinese script was needed for administrative purposes.
c. 200 AD  Running Script in use since Han Dynasty: used for handwritten Chinese

c. 414 AD  Korea begins to use Chinese character writing: Introduced during the Chinese occupation leading to the creation of three different Korean systems based on Chinese characters, Hyangchal, Gukyeol, and Idu.
c. 500-600 AD  Japanese begin using Chinese character writing: Japanese scholar visits Japan and brings books by Confucius. He becomes the teacher of the Japanese Prince.
c. 1913 AD  Zhuyin Fuhao developed and still used in Taiwan: teaching system used to teach Mandarin Chinese to new learners, especially children in Taiwan. The system phonetically reproduces all sounds in the Mandarin Language.
c. 1918 AD  Vietnam ceases to use Chinese character writing: In 17th century, Roman Catholic missionaries introduced a Latin based system, Quốc Ngữ. Used with the Chinese system until 1918, then Quốc Ngữ used exclusively.
c. 1945 AD  Use of Chinese characters drastically reduced in Korea: Most people use the Korean alphabet created in 1444 CE (called Hanguel). The Hanguel is a true alphabet.
c. 1958 AD  Hanyu pinyin used in Peoples Republic of China: uses Roman style letters to produce a more phonetic system.

WEB SITES FOR FURTHER BACKGROUND INFORMATION

CHINESE:
http://www.historyworld.net/wrldhis/PlainTextHistories.asp?groupid=1589&HistoryID=ab33
GREEK:
ETRUSCAN:
http://www.spelwerx.com/etruscan.html
LATIN:
http://www.indopedia.org/Roman_alphabet.html#Spread_of_the_Latin_alphabet
http://www.omniglot.com/writing/languages.htm#cyrillic

Great animation showing the development of the Latin alphabet
http://terpconnect.umd.edu/~rfradkin/latin.html
Interactive student lesson plan on alphabet development
http://edsitement.neh.gov/view_lesson_plan.asp?id=517