

## **9<sup>th</sup>-Grade Denton Human Geography: Create Lesson Plan**

**Lesson Title:** How Do We Synthesize Information, including Data, to Develop a Final Product to Share New Knowledge?

**Inquiry Phase:** Create

**Grade Level:** 9<sup>th</sup> Grade

### **Essential Questions:**

1. How can we use data and information to describe the human geography of Denton County, pinpoint problems, and suggest solutions?
2. How does where you live affect how you live?
3. In what ways do humans interact with one another?

**Lesson Plan Objectives:** At the end of this lesson, students will be able to:

1. Reflect on their progress toward answering their question(s).
2. Interpret and synthesize information from their notes.
3. Compose an infographic or other work product to demonstrate new knowledge.
4. Peer review and self-assess their final product with a checklist.

### **World History – Human Geography TEKS (for this inquiry unit):**

§113.43. World Geography Studies

(9) Geography. The student understands the concept of region as an area of Earth's surface with related geographic characteristics. The student is expected to:

(A) identify physical and/or human factors such as climate, vegetation, language, trade networks, political units, river systems, and religion that constitute a region.

(11) Economics. The student understands how geography influences economic activities. The student is expected to:

(C) assess how changes in climate, resources, and infrastructure (technology, transportation, and communication) affect the location and patterns of economic activities.

(D) identify points of view from the historical context surrounding an event and the frame of reference which influenced the participants.

(16) Culture. The student understands how the components of culture affect the way people live and shape the characteristics of regions. The student is expected to:

(B) describe elements of culture, including language, religion, beliefs and customs, institutions, and technologies.

### **ELA-R TEKS (for this lesson):**

**§110.32.b**

(23) Research/Organizing and Presenting Ideas. Students organize and present their ideas and information according to the purpose of the research and their audience. Students are expected to synthesize the research into a written or an oral presentation that:

(A) marshals evidence in support of a clear thesis statement and related claims;

(B) provides an analysis for the audience that reflects a logical progression of ideas and a clearly stated point of view;

(C) uses graphics and illustrations to help explain concepts where appropriate;

(D) uses a variety of evaluative tools (e.g., self-made rubrics, peer reviews, teacher and expert evaluations) to examine the quality of the research.

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**Social Studies TEKS** (for this lesson):

### **§113.43 Social Studies Skills**

(21) The student applies critical-thinking skills to organize and use information acquired through established research methodologies from a variety of valid sources, including electronic technology.

(23) The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:

(C) use problem-solving and decision-making processes to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution.

### **Standards for the 21st-Century Learner Indicators:**

2.1.1 Continue an inquiry-based research process by applying critical-thinking skills (analysis, synthesis, evaluation, organization) to information and knowledge in order to construct new understandings, draw conclusions, and create new knowledge.

2.1.6 Use the writing process, media and visual literacy, and technology skills to create products that express new understandings.

3.1.6 Use information and technology ethically and responsibly.

4.1.8 Use creative and artistic formats to express personal learning.

**Assessment Tools:** Synthesis Graphic Organizer, Synthesis Infographic Checklist, and Exit Ticket

**Resources for this Unit of Study:** <http://tinyurl.com/di4ll-9-resources>

### **Resources for this Lesson:**

Cornell Notemaking Graphic Organizer Teacher Resource (from Gather Lesson)

Additional Create Cornell Notemaking Graphic Organizer Teacher Resource

Synthesis Graphic Organizer

Synthesis Graphic Organizer Teacher Resource

Synthesis Infographic Checklist

“Don’t Put YOUR Future @ Risk” Infographic: <http://tinyurl.com/di4ll-9-infog>

Inquiry Phase Exit Ticket

**Estimated Lesson Time:** Two 50-minute Lessons or One Block Period

### **Instructional Plan Outline:**

#### **Classroom Teacher – School Librarian(s) Collaboration:**

- The classroom teacher and school librarian use think-alouds to demonstrate how to synthesize information from two notemaking graphic organizers onto the Synthesis Graphic Organizer.
- One or the other educator signs off on each student’s Synthesis Graphic Organizer.

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- Depending on students' needs, educators offer additional mini-lessons on using Piktochart.com or other infographic creation tool.
- Educators co-monitor the students' guided practice as they synthesize notes on the graphic organizer, develop their infographics, and conduct a peer review and self-assessment of their infographics.

**Measurable Outcome or Final Product:** Individual students synthesize information in notemaking format and use a checklist to create a final product.

### **Preparation**

- The educators make one copy of the Synthesis Graphic Organizer and Synthesis Infographic Checklist for each student or provide the graphic organizer electronically.
- The educators prepare to provide one example of a synthesis graphic organizer (see the teacher resources) and review the infographic checklist.
- Integrate academic vocabulary into think-alouds: notemaking, slogan, data, interpret, summarize, cite, and bibliographic information.
- Integrate discipline-specific vocabulary into the lesson: human geography, assets, needs, demographic indicators, economic activities and development, and human factors.

### **Day 1 or Part 1**

#### **Motivation**

1. Discuss the first audience for their final product, their classmates. How can they develop a catchy slogan to hook their peers? How can they convey data and information to make their classmates care about the issue and take action?
2. Discuss academic vocabulary and give examples of each: evidence, data, synthesize, and interpretation.
3. Information + Interpretation = Synthesis (Note that "information" must include cited data from the texts explored.)
4. Educators post the lesson objectives and let students know they are to synthesize their findings, interpret the information they found, and use the infographic checklist to guide their presentation of new knowledge.

#### **Presentation**

5. Educators project the Synthesis Graphic Organizer. Discuss ways to use this tool to prepare to synthesize new learning.
6. Educators discuss the sample inquiry question and use think-alouds to consider possible main ideas for an infographic.
7. Project each Cornell Notemaking Graphic Organizer Teacher Resource (2) and add to the Synthesis Graphic Organizer. Note: The teacher resource shows a completed graphic organizer.
8. Students will self-assess their progress. If they cannot complete the graphic organizer, they will need to do more gathering.

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9. Let students know that when they complete their Synthesis Graphic Organizer, they must have it checked and initialed by one of the teachers before they begin creating their infographic.

### **Student Participation**

10. Invite students to suggest notes for the Synthesis Graphic Organizer.

### **Guided Practice**

11. Educators monitor as students complete their graphic organizers
12. Educators sign off on each student's graphic organizer before they begin producing their infographics.

### **Closure**

13. Students complete and turn in the Create Phase Exit Ticket.
14. Students can be assigned the task of completing the Synthesis Graphic Organizer and/or gathering more data and information for homework.

## **Day 2 or Part 2 (2nd-half of Block Period)**

### **Presentation:**

15. Project and review the criteria on the Synthesis Infographic Checklist. Use it to assess the sample infographic: <http://tinyurl.com/di4ll-9-infog>
16. Educators model providing peer review and feedback.

### **Student Participation**

17. Invite students to suggest how the infographic met or did not meet the checklist criteria.
18. Discuss the "Persuasion Score" with students. Remind students that their final products for this inquiry unit are to be designed to help get their high school classmates become more involved in shaping the Denton community.

### **Guided Practice**

19. Educators monitor as students develop their infographics, peer review, and self-assess their final products.

### **Closure**

20. Educators partner students to conduct peer reviews as they complete their infographics.
21. Students complete and turn in the Create Phase Exit Ticket.
22. Students can be assigned the task of completing the infographic for homework.

### **Reflection**

23. How do you interpret information from multiple sources?
24. How can you use data to justify your interpretations?

### **Assessment**

25. Educators review students' Create Synthesis Graphic Organizers and the Create Infographic Checklists to assess students' final products.

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26. Educators review students' Exit Tickets.

### **Follow-up**

27. Provide students with sufficient time to complete their infographics, conduct the peer review process, and make revisions as need.