SOFTWARE LESSON PLAN

I. Lesson Number, Grade Levels, Title, and Duration:

Lesson Number 5, Grades 11-12, Software, 2 class periods

II. Lesson Rationale:

The students will learn about infographics and how to use them. Infographics are visuals that help audiences make sense of data and to better retain that information.

Designers are increasingly tasked with incorporating data into the media experience. Data has emerged as such a critical part of modern life that it has entered into the realm of art, where data-driven visual experiences challenge viewers to find personal meaning from a sea of information, a task that is increasingly present in every aspect of our information-infused lives. (PBSoffbook, 2013, para 1)

This unit of study is significant because it will help students examine how data can become art and forms of communication and visual exploration. The unit website provides resources and links for three free online software programs, each of which can be used for data visualization and that students may want to explore to see what may best suit their artistic and conceptual needs, particularly in regards to the implementation of these technologies in the next lesson.

However, for this lesson, we will only focus on the one program that is primarily dedicated to the creation of infographics: **Piktochart**.

III. Key Concepts:

Infographics, data visualization

IV. Essential Question:

How do infographics convey meaning to audiences?

How can data be visualized in a compelling manner to elicit an emotional response from viewers?

V. Lesson Objectives:

The students will be able to

Learn about infographics and data visualization by viewing videos that explain the purposes and uses of these concepts and analyzing an example infographic (See *Resources & Materials for Teacher* below, embedded videos and worksheet on website, under heading "Software").

Describe traditional and nontraditional visual data displays by comparing and contrasting

VI. Specific Art Content:

Composition, color, typography

VII. Resources & Materials for Teacher:

Computer, Internet access, demo image file downloads, class screen, speakers

http://analogdigitalart.weebly.com/lesson-5-software.html Piktochart free infographic creator https://piktochart.com/

Animated Infographics, Explainer Video, Animated Videos, Video Explainers, Video Marketing. (2016 March 4). What is infographics? Infographics is data visualization [Video file]. Retrieved from https://www.youtube.com/watch?v=T96x1-WN9J4

Piktochart Video. (2014 June 30). How to create a Piktochart infographic easily [Video file]. Retrieved from https://www.youtube.com/watch?v=SzI9RzvnwZA

Trans Student Educational Resources (TSER). (n.d.) Support for trans youth [Digital Image]. Retrieved from http://www.transstudent.org/youthsupport

Wiley. (2014 April 7). Cool infographics: Effective communication with data visualization and design [Video file]. Retrieved from https://www.youtube.com/watch?v=zc6BFtCAh-M

Recommended Resources (see Reference list in XII below).

VIII. Resources & Materials for Students:

Computer, Internet access, headphones, Creative Commons image file downloads, electronic storage Vocabulary: infographic, data visualization, pulp fiction, composition, layout, typography, font

Piktochart free infographic creator https://piktochart.com/

Canva free poster-making software https://www.canva.com/

Pulp-O-Mizer free retro vintage book/magazine cover maker http://thrilling-tales.webomator.com/derange-o-lab/pulp-o-mizer.html

Video tutorial playlists available through http://analogdigitalart.weebly.com/lesson-5-software.html

IX. Instruction and Its Sequencing:

1st Day of the Lesson

Introduction/Motivation:

The teacher will introduce students to infographics and data visualization. They will view videos that explain the purposes and uses of these concepts and analyzing an example infographic (Animated Infographics, 2016; Wiley, 2014; TSER; see References and website under heading "Software").

The teacher will ask students to provide data related to the information learned thus far about the LGBTQ community and write their answers on the board.

Guided Practice

The teacher will give a brief introduction to Piktochart by showing the class the "How to create a Piktochart infographic easily" video (see Reference list and website under heading "Piktochart").

S/he will guide the class through the sign-up process and setting the parameters for the infographic template the students will use—"Create your own" is recommended. S/he will demonstrate uploading user images and a few basic features of the software program, including the data input area in Tools/Charts and how to choose various graphical outputs for the data.

Independent Practice

Students will work independently exploring the features of the Piktochart program in the creation of a simple infographic poster, with regard to composition, color scheme (learned in previous lessons), use of software-provided and user-provided images, and input of data from the list on the board.

Students should be encouraged to view introductory materials for the other two programs, Canva and Pulp-O-Mizer, to see options for their infographic creations.

Formative Evaluation

The teacher will monitor the development and implementation of the assignment and provide information about how best to revise and modify for improvement.

Classroom Management Procedures

The teacher will establish clear classroom routines and procedures.

Closure

The teacher will give an overview of data visualization, return to some of the examples shown in the tutorial and discuss the importance of formal qualities and exploring program options for visualization for conveying meaning.

2nd Day of the Lesson

Introduction/Motivation:

The teacher will review the various styles of visualizations available through the software programs by showing examples (see website under Public Service Announcement/Student PSAs).

Guided Practice n/a

Independent Practice

Students will continue their infographic designs.

Formative Evaluation

The teacher will monitor the development and implementation of the assignment and provide information about how best to revise and modify for improvement.

Classroom Management Procedures

The teacher will establish clear classroom routines and procedures.

Closure

Given the opportunity to work in groups of 3-4, the students will view each other's infographics online and reflect on the process of creating the infographics through discussion. The teacher will facilitate and monitor the discussion. Toward the end of class, the teacher will inform students that the next lesson will use these software programs.

X. Summative Assessment and Evaluation:

n/a

This mini-lesson familiarizes students with the software programs and content, compositional, and creative possibilities to be applied in Lesson 6.

XI. Interdisciplinary Connections:

Technology

XII. References & Resources:

Piktochart free infographic creator https://piktochart.com/

Canva free poster-making software https://www.canva.com/

Pulp-O-Mizer free retro vintage book/magazine cover maker

http://thrilling-tales.webomator.com/derange-o-lab/pulp-o-mizer/pulp-o-mizer.html

Animated Infographics, Explainer Video, Animated Videos, Video Explainers, Video Marketing. (2016 March 4). What is infographics? Infographics is data visualization [Video file]. Retrieved from https://www.youtube.com/watch?v=T96x1-WN9J4

Canva. (2013 November 10). A simple video guide to Canva [Video file]. Retrieved from https://www.youtube.com/watch?v=XqYti78riU8

- Lisa Irby. (2015 January 24). How to create infographics in minutes (Canva) [Video file]. Retrieved from https://www.youtube.com/watch?v=W1v3ILOnfGs
- Kimberly Ann Jimenez. (2015 June 16). How to create an infographic in minutes (updated) [Video file]. Retrieved from https://www.youtube.com/watch?v=XW33k8j4n0M
- PBSoffbook. (2013 May 9). The art of data visualization—Off book—PBS digital studios [Video file]. Retrieved from https://www.youtube.com/watch?v=AdSZJzb-aX8
- Piktochart Video. (2014 June 24). 1: Editing blocks/arranging content on Piktochart infographics editor [Video file]. Retrieved from https://www.youtube.com/watch?v=8dXOm6IIJI0
- Piktochart Video. (2014 June 24). 2. How to add items (icons, images, text) to your infographic in Piktochart [Video file]. Retrieved from https://www.youtube.com/watch?v=iBZwPyaG37Y
- Piktochart Video. (2014 June 24). 3. Customizing charts and data visualization on Piktochart infographic editor [Video file]. Retrieved from https://www.youtube.com/watch?v=oLzLDcUmgoU
- Piktochart Video. (2014 June 30). How to create a Piktochart infographic easily [Video file]. Retrieved from https://www.youtube.com/watch?v=SzI9RzvnwZA
- Trans Student Educational Resources. (n.d.) Support for trans youth [Digital Image]. Retrieved from http://www.transstudent.org/youthsupport
- Trissha Taylor Creative. (2015 January 22). Canva tutorial: Create a poster or flyer with Canva [Video file]. Retrieved from https://www.youtube.com/watch?v=R4n3A6ZTZsM
- Wiley. (2014 April 7). Cool infographics: Effective communication with data visualization and design [Video file]. Retrieved from https://www.youtube.com/watch?v=zc6BFtCAh-M
- Youa Thao. (2016 March 24). Pulp-o-mizer [Video file]. Retrieved from https://www.youtube.com/watch?v=4I5NWWtYULE
- XIII. Art TEKS covered in this lesson, indicated in * bold

http://ritter.tea.state.tx.us/rules/tac/chapter117/ch117c.html

§117.304. Art, Level III §117.305. Art, Level IV

- (c) Knowledge and skills covered in this lesson, indicated in * bold
 - (1) Foundations: observation and perception. The student develops and expands visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. The student uses what the student sees, knows, and has experienced as sources for examining, understanding, and creating original artwork.
 - (2) **Creative expression**. The student communicates ideas through original artwork using a variety of media with appropriate skills. The student expresses thoughts and ideas creatively while challenging the imagination, fostering reflective thinking, and developing disciplined effort and progressive problemsolving skills.

- (3) Historical and cultural relevance. The student demonstrates an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures. The student develops global awareness and respect for the traditions and contributions of diverse cultures.
- (4) Critical evaluation and response. The student responds to and analyzes the artworks of self and others, contributing to the development of the lifelong skills of making informed judgments and reasoned evaluations.

XIV. National Art Standards

Anchor Standard 1: Generate and conceptualize artistic ideas and work. Anchor Standard 2: Organize and develop artistic ideas and work.

*see PDF at

 $\frac{http://www.nationalartsstandards.org/sites/default/files/Visual\%20Arts\%20at\%20a\%20Glance\%20-\%20new\%20copyright\%20info.pdf$