Lesson Overview

Learning Objectives and Evidence Statements

Computing is a Creative Activity: 1.1.1, 1.1.2, 1.3.1 Data and information facilitate the creation of knowledge: 3.1.1, 3.1.2, 3.1.3 Algorithms are used to develop and express solutions to computational problems: 4.1.1, 4.2.1 Computing has global impacts: 7.2.1, 7.4.1

Prerequisite knowledge

Some programming experience to include iterations and conditionals, and an understanding of algorithms and pseudocode required.

Essential/Guiding Question(s)

- How has Facebook changed the way we socialize?
- What data is being stored through our use of Facebook?
- What possible search criteria can be used with the data being compiled by Facebook?

Lesson Summary

Visit the CNN website and as a class watch the brief video. Discuss with students the ways in which Facebook has altered the way that we socialize. Read the brief article "Your Facebook Life in 62 Seconds". Students should fill out the positive and negative impacts chart. In the chart, students should list a positive and negative impact in the categories of social, cultural, and economical. Students should work with a partner to investigate what data Facebook is storing on its users. Students should then create a list of questions and search criteria that could be used in creating the videos. Using this list of questions and search criteria, students will work together to write an algorithm that could be used to create a video based on their Facebook activity. Finally, students will create their own social media poster where they display their most popular activity on Facebook.

Outline of lesson

- Watch the CNN video on Facebook. (5 minutes)
- Classroom discussion on ways in which Facebook alters the way we socialize. (10 minutes)
- Students read article on "Your Facebook Life in 62 Seconds" and fill out the chart on the positive and negative impacts of Facebook. (15 minutes)
- Working with a partner, list data that you think Facebook is storing. Can you find any articles or research to support your thinking? (20 minutes)
- Using a think, pair, share model, students create a list of questions that could be answered using Facebook or other social networking data. (20 minutes)
- Using this information and working in pairs students will write an algorithm that could be used to create a video based on social media activity. (20 minutes)
- Students work with their partners to create their own Social Media poster. (2 class days)

Student Activities

Students will watch a video on how Facebook impacts our lives, and will read the CNN article "Your Facebook Video in 62 Seconds". Students will participate in a whole class discussion on the ways in which Facebook and social media has had a social, cultural and economic impact. Using the information from the article and the classroom discussion, students will complete a chart that reflects the impact of social media. Students will then work with another student to generate a list of data that they feel Facebook or other social media sites are collecting. Students will research to find one article that supports their list. During a think, pair, share activity students will be given 5 - 10 minutes to generate questions that they think could be answered through the data collected in social media sites. They will then work with a partner for another 10 minutes. These questions will then be compiled and discussed as a class. Students will examine each question and determine its likelihood to be answered using the data. Students will once again work with a partner to create their own Social Media Poster. This poster will display the answers to several of the questions generated as a group and include items such as most popular posts, pictures, most active friends, etc. Students will represent their data using graphs and charts.

Teaching and Learning Strategies

- Show the CNN video.
- Ask how students feel social media has had an impact both positively and negatively.
- Provide students with the chart that should be filled out after reading the CNN article "Your Life in 62 Seconds"
- Students will work with a partner to generate a list of data they believe is stored by Facebook and other social media sites. They should research an article to support what data is stored.
- Lead a think, pair, share activity. Have students brainstorm for 5 10 minutes as many questions that can be answered through the data stored by social media. Then provide another 5 10 minutes for students to work together on their list. Have each pair share their lists, and compile the questions into a master list for the class. For each question, talk about whether it is feasible to answer this question with the data and what search criteria might be necessary to discover their answer.
- Students should then work with a partner to develop an algorithm to represent the Facebook video.
- Students will then work on their final Social Media Poster project.

Appendices

Materials and Resources

http://www.cnn.com/2014/02/04/tech/social-media/facebook-look-back-video/ - "Your Facebook life in 62 seconds" CSP_Facebook_YourLifeIn62Seconds_prosandconschart.pdf CSP_Facebook_YourLifeIn62Seconds_ProjectOutlineandRubric.pdf

Supplemental Resources

http://www.cnn.com/2014/02/02/tech/social-media/facebook-words/index.html?hpt=te_t1 – "9 ways Facebook changed how we talk"

http://www.geek.com/news/facebook-stores-up-to-800-pages-of-personal-data-per-user-account-1424807/ - 2011 article on data being stored by Facebook

https://www.facebook.com/about/privacy/ - Facebook and the Privacy Policy

http://www.rsvlts.com/2013/06/17/facebook-data-center/#1 – "This is where your Facebook Data is Stored [27 Photos]"

http://techcrunch.com/2012/08/22/how-big-is-facebooks-data-2-5-billion-pieces-of-content-and-500-terabytes-ingested-every-day/ - "How Big Is Facebook's Data?"

Name: ______ CS Principles – Your Facebook Life in 62 Seconds

Positive and Negative Impact Social Media

Click on the link below on "Your Facebook life in 62 seconds" by Brandon Griggs. <u>http://www.cnn.com/2014/02/04/tech/social-media/facebook-look-back-video/</u>

List the positives and negatives of Facebook in terms of how we socialize, our culture and how we do business.

Negatives
Social
Cultural
Economic

Name: _____ CS Principles – Your Facebook Life in 62 Seconds

Social Media Poster Project

With a partner, create a poster collage which will answer some of the questions generated during our class discussion. You can choose either one of your accounts, or do a comparison of both of your data. You are welcome to use any social media site, including Facebook, Twitter, Instagram, Pinterest, etc. You poster should include the following:

Title	5 points
Your names and which social media site you choose.	5 points
At least 5 questions and answers	
Question 1	10 points
Question 2	10 points
• Question 3	10 points
Question 4	10 points
• Question 5	10 points
Chart or graph	15 points
Summary	15 points
Pictures	10 points
Total	100 points