

“WHAT’S FOR LUNCH?”
Instructional Plan for Computer Applications
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Stage 1 – Desired Results	
<p>Established Goals:</p> <p>National Educational Technology standards for students:</p> <p>NETS*S #2: Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.</p> <p>NETS*S #3: Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.</p> <p>NETS*S #4: Students use telecommunication to collaborate, publish and interact with peers, experts, and other audiences</p> <p>NETS*S #5: Students use technology tools to process data and report results.</p> <p>NETS*S #6: Students use technology resources for solving problems and making informed decisions.</p>	
<p>Understandings: <i>Students will understand that ...</i></p> <p>They can educate and influence other students about healthy eating and reducing lunch waste.</p> <p>Effective design can enhance a message being displayed.</p>	<p>Essential Questions:</p> <p>Are the lunches at VCS healthy, affordable and low in waste?</p> <p>Using technology, what is the best way (for you) to influence student’s attitudes towards healthy eating and reducing lunch waste?</p>
<p><i>Students will know ...</i></p> <p>Microsoft Word has many desktop publishing features (fonts effects, Word Art, Auto Shapes, borders, text boxes, shadow, 3-D)</p> <p>Microsoft Excel is used to input and analyze data, and to present information in a visual manner.</p>	<p><i>Students will be able to ...</i></p> <p>Research nutritional information (calories, fat, carbohydrates) for food items</p> <p>Add data (nutrition, cost, and waste scores) to a shared Google spreadsheet and write basic and advanced functions to analyze lunch data.</p> <p>Use desktop publishing features to create an effective poster.</p> <p>Use mail merge to send multiples copies of a letter OR use Audacity to record and edit an audio message.</p>

Stage 2 – Assessment Evidence

Performance Tasks:

1. Lunch Data Collection: Each student will take photos of 4 different lunches and enter data (nutrition, cost and waste) about those lunches onto a shared Google spreadsheet. Students will then analyze the data using basic and advanced functions.
2. Students will create a poster using desktop publishing features (Word Art, borders, text boxes, etc) to influence student's attitudes about one area.
3. Students will choose between writing a persuasive letter to a newspaper editor or publishing a podcast trying to influence people's opinions about lunch nutrition, cost or waste.

Other Evidence:

1. Rubric check for Excel spreadsheet and graph
2. Excel formula quiz
3. Rubric check for Desktop publishing
4. Word Vocabulary Quiz
5. Peer evaluation of persuasive letter or podcast

Self Assessment:

1. Self-assess the shared spreadsheet
2. Self-assess the poster
3. Blog reflections

Stage 3 – Learning Plan

Learning Activities:

1. Discussion prompt: Show to students the article from the Oregonian about how legislatures trying to ban junk food from school vending machines.
2. Discuss VCS current position on soda machines and the introduction of healthy alternatives at lunch.
3. Students will be assigned one day during the week to take photos of four different lunches of their classmates. Pass out [schedule](#) and data collection sheet.
4. Teacher will demonstrate how to log into Google shared spreadsheet http://spreadsheets.google.com/cc?key=p_VM5beL2JAqn6doweazPfw and then students will register emails for access.
5. Student will discuss the scoring methods for lunch waste and practice scoring a practice lunch to insure consistency. **Waste Rating:** No waste at all=0; Biodegradable waste=1; Recycled paper=2; 1 item waste=3; 2 item waste=4; 3+ item waste=5
6. Students will bookmark nutritional websites for data collection on the class Del.ic.ious website.
7. After the third day, students will work with a partner to begin entering nutritional data about the lunches onto the Google shared spreadsheet.
8. Students will review spreadsheet to check for consistencies among data.
9. After the last lunch period of the week, students will work again with their partners to finish entering nutritional data about lunches onto the Google shared spreadsheet.
10. Students will copy data from Google shared spreadsheet onto their own Excel spreadsheet and learn how to sort the data by day of the week.
11. Students will complete **Excel Assignment 1:**
 - a. Sort your data by a category of your choice
 - b. At the bottom of your data, add these labels in Column A: Total and Average. Next

to each of those labels, enter formulas to calculate each category. Format these results in way that makes them noticeable.

- c. Below that data, add a title named SUMMARY. Add these labels in Column A: Monday, Tuesday, Wednesday, Thursday, and Friday. The category labels for the days are: Total Items, Total Calories, Total Fats, Total Carbohydrates, Total Costs, and Total Waste. Use Advanced Functions to calculate these results. Format these results in a way that makes them noticeable.
 - d. Choose ONE of the categories to graph. Choose a graph that best represents your data and add the appropriate titles, labels, legend, etc. Place the graph on a new sheet.
 - e. Format the graph in a way that is attractive, easy to read but not overwhelming.
 - f. Print one copy of your graph and turn in.
12. The teacher will evaluate which students completed the task independently, who received help from a classmate or needed teacher instruction.
13. Students will use a rubric to evaluate their spreadsheet and graph
14. Blog Prompt: Compare your Excel skills from the beginning of the term to now.
15. Students will complete **Excel Assignment 2:**
- a. Choose one of the categories to focus on: nutritional area, cost or waste.
 - b. Look through the collected data and design a menu for one week that highlights your particular focus. For example, find 5 lunches that are low in fat.
 - c. Copy the data onto the 2nd spreadsheet.
 - d. Calculate the totals of the menu.
 - e. Add a colorful title and add the photos for the menu.
 - f. Format the spreadsheet in a way that is colorful and attractive. Use cell borders and Word Art. Make sure your data fills up the entire page.
 - g. Print one copy to turn in.
16. Student will take an Excel quiz on writing basic and advanced formulas.
17. Direct Instruction of how to customize the Desktop publishing features of Word: Word Art, Borders, Auto Shapes, Text Boxes, Shadow, 3-D, Lines, Fill Effects, Font Effects, etc.
18. Each student will design a one page poster related to the topic of nutrition, cost or waste
19. Students will use a rubric to evaluate their poster for desktop publishing features.
20. Blog prompt: Describe one classmate's poster that you thought was particularly well made. Why was it effective? Do you feel like your poster was effective?
21. Students will take a Word vocabulary quiz.
22. Discussion prompt: What is the best way to influence people's attitudes about lunch nutrition or reducing lunch waste?
23. Mini-skill lesson: Mail Merge letters
24. Mini-skill lesson: How to record and edit a podcast.
25. Students will write their first draft of their persuasive letter to a newspaper editor or podcast script trying to influence people's opinions about lunch nutrition, cost or waste.
26. Students will work with partners and use "track changes" to edit letters or scripts.
27. Students will do one of the following:
- a. Print final mail merge letter and envelopes and mail one copy of letter and turn in one copy to teacher
 - b. Students will record and edit their podcast. Teacher will post to Valiant Pride Online.
28. Peer Evaluation: Students will rate another classmate's letter or podcast.
29. Blog prompt: Do you think you influenced another's opinion with your letter or podcast?