

Lesson 4: Introduction to Google Forms

Overview

In this lesson, students will individually create a Google Forms survey based upon the topic they chose in the previous lesson. Students will ask questions about their topic using the various question formats provided by the tool. After creating their survey, students will embed it on the second web page of their Google Sites. Students will then send the link to their Google Sites to their peers and teachers to garner responses on their survey. Once students have collected enough responses on their survey, students can analyze the answers to their survey questions using Google Sheets.

Purpose

The purpose of this lesson is to expose students to various survey question types and spreadsheet software. This lesson serves as a fun introduction to creating surveys using Google Forms, a free service provided by Google to generate surveys. It allows students to be introduced to data collection in a fun and engaging way. Additionally, students are able to see the difference in asking questions that garner helpful responses and other questions that garner unhelpful responses. Students are also able to understand that data can serve as means of supporting their assertions and arguments.

Agenda

Warm Up (25 min)

Let's Brainstorm! Good vs. Bad Questions

Let's Read! Surveys 101

Activity (90 min)

Let's Play! Create a Survey

Wrap Up (15 min)

Let's Talk! Why Do We Care?

Objectives

Content Objectives

Students will be able to:

- Create a computational artifact for creative expression.
- Create a computational artifact using tools and techniques to solve a problem.
- Perform data collection on the Internet using Google Forms
- Use computing tools and techniques for creative expression.

Vocabulary

- [Vocabulary Guide](#)
- [Vocabulary Cards](#)
- [Vocabulary Slideshow With Audio](#)
- [Vocabulary Slideshow](#)
- [Vocabulary Word Search](#)
- [Vocabulary Crossword](#)
- [Vocabulary Word Wall](#)
- [Vocabulary Quizizz](#)

Links

For the Students:

- One copy of the [Designing A Survey - Activity Guide](#)

For the Teacher:

- [Designing A Survey Quiz](#)
- [\[01\] Designing A Logo, Banner, Website and Survey - Combined Rubric](#)
- [Answer Key: Designing A Survey - Activity Guide](#)

Grading Rubrics Footnotes:

[\[01\]](#) You will use the [Designing A Logo, Banner, Website and Survey - Combined Rubric](#) to grade the completed Google Site containing the logo, banner, website and survey by the end of *Lesson 4: Introduction to Google Forms*.

English Learner Lesson Adaptation Footnotes:

[\[1\]](#) **English Learners:** This reading could be very difficult for an English Learner student or a struggling reader. Replace reading with discussion.

[\[2\]](#) **English Learners:** English Learner version of activity guide—[Designing A Survey - Activity Guide](#)—available. In Step 2 of this activity guide, the teacher should give English Learner students a live demonstration of how to make the individual types of questions.

Teaching Guide

Warm Up (25 min)

Let's Brainstorm! Good vs. Bad Questions

Remarks

In the last class, we designed our websites. We will now create a Google Forms survey based on your topic and embed it into your website. You will then share the URL to your website with your classmates so they can take your survey and you can view the responses to your questions.

A survey will only give us good data depending on if we asked the right questions. We must keep this in mind as we create our first survey about our topic. We also should think about what we really want to know about our topic. Do we want to know how familiar our peers are with our topic? Do we want to know what our peers might think about the topic? These are questions we will need to consider when creating our survey.

It is important to note that survey questions can have good questions and bad questions. A good survey question will ask meaningful questions that can give us useful information about opinions and thoughts on our topic. A bad survey question may be confusing and unclear resulting in answers that are not useful to our topic. We should also note that we want to avoid leading questions (i.e., wording that influences the user to favor one side of an argument), loaded questions (i.e., forcing user to answer in a way that does not accurately express their opinion), double-barreled questions (i.e., forcing users to answer two questions at once), and confusing questions (i.e., technical and complicated wording without definitions and examples).

I want to brainstorm some ideas for what a good question and a bad question might look like. I will start off by asking you some questions. You will all vote on whether each question is a good question or a bad question. You will then justify your reasons for considering it a good or bad question.

Good Questions	Bad Questions	Justification
How would you describe your programming experience with Google Sites?	How beneficial was Google Sites in teaching you programming?	The word <i>beneficial</i> leads to bias as it assumes Google Sites was beneficial in teaching programming. Eliminate the bias by rewriting the question with more impartial wording.
Have you ever cheated on your quizzes?	Are you still cheating on your quizzes?	The user is forced to answer this question in a way that states they have cheated on their quizzes when they might not have. The user is unable to answer this question truthfully. We can reword this question so it does not assume the user cheats.
How much did you learn from Pixlr? How much did you learn from Google Sites?	How much did you learn from Pixlr and Google Sites?	The user is forced to answer two questions at the same time regarding how much they learned from two different lessons: Pixlr and Google Sites. It is better to break this question into two separate questions where we can measure learning in Pixlr and Google Sites separately.

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 **Discuss:** Allow students an opportunity to share their responses with the class.

Remarks

We have a better idea of what good and bad questions look like. I want you to keep these characteristics of good and bad questions in mind as you begin to create your own surveys. More importantly, I would like you to consider the following questions as you create questions for your survey:

 **Let's Think!** What does a bad question look like? What would a good question look like?

We will now move on to reading an article that teaches us about the different types of questions we can ask when designing our surveys.

Let's Read! Surveys 101

Remarks

I would now like us to read an article that discusses the different question formats we can use in our surveys as well as when it is appropriate to use these formats. The reading will also discuss the best practices to use when designing questions for our surveys and avoid characteristics that can lead to bad questions.

 **Read:** As a class, read [Surveys 101: A Simple Guide to Asking Effective Questions](#) [10 min].

Remarks

We learned a lot from this reading but I would like to discuss the most important points regarding the types of questions. In our surveys, we must use short answers, multiple choice, drop-down, and linear scale questions.

Our short answer question will be similar to the textbox question mentioned in the reading. In this type of question, the person responding to our question will type their answer in a textbox for us. Short answer questions must be written explicitly to avoid different interpretations of the questions that can make our collected data useless. We will also be using multiple choice questions where the person responding can only pick one answer from the choice we give them. Multiple choice questions can provide us with structure in the responses we collect but limits the user to a predetermined list of answers. We will also use drop-down and linear scale questions in our surveys. The drop-down menu is similar to the multiple choice questions where the person taking our survey will select one answer from several available ones in the menu. Linear scale questions will provide a range (usually 1 to 5) in which the person taking our survey rates something on a numbered scale. The linear scale questions are useful when we want to measure opinions of our users on a particular topic. We will be using each of these types of questions at least once in our surveys.

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We will now begin to design our surveys using Google Forms, a free service provided by Google to generate surveys. These surveys will ask questions relevant to our topic that we have used to create our banner and website.

Activity (90 min)

Let's Play! Create a Survey

Remarks

We can begin working on our Google Forms activity. In this activity, you will create a simple survey using Google Forms with questions about your topic. You will use certain types of question formats to collect data about your topic. It is important to note that we will be generating original data about our topic by collecting responses from our peers. We will learn more about this in a future lesson regarding obtaining data.

Once you finish creating your survey, you will embed it onto your website. This means that anyone with access to your website can take your survey and help you collect responses to your questions. You will be directing your peers to this website to collect responses on your survey. Once you have collected enough responses, you will then view them in Google Sheets, a free spreadsheet service provided by Google. You can determine if the questions you asked garnered the responses you expected as you review them in Google Sheets. At the end of this activity, you will submit your completed activity guide to me. Let's get started!

Distribute: One copy of the following to each student:

- ^[2] [Designing A Survey - Activity Guide](#) [90 min]

As a class, review the overview of the activities as well as the expectations and necessary submissions for the activities as discussed in the **Remarks** above.

Support: Allow students time to work on the activity. As you circulate the classroom, assist any students that may have questions or issues that need to be resolved as they work through the activity.

Transition: As the class time comes to an end, try to bring students attention back to you to have a final discussion about Google Forms.

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Wrap Up (10 min)

Let's Talk! Why Do We Care?

Remarks

I hope you all had fun making Google Forms in this activity. I would like to have a quick discussion on good and bad survey questions.

Discussion Questions: The following can be used as potential discussion questions during your wrap-up with students:

- What did our surveys collect from its respondents (i.e., data)? What type of data did we collect? Why is it important to collect data?
- What are characteristics of good questions? What are characteristics of bad questions? Give some examples.
- Why is it important to consider the wording of our survey questions? What are we trying to avoid?
- Who did we collect data from (i.e., students, teachers, friends, family)? Is the data we collected reliable? Why? Why not?
- What were some of the different question formats in Google Forms (i.e., short answer, multiple-choice, linear scale, etc.)? Explain why you might use one question format over another.

 **Discuss:** Allow students an opportunity to share their responses with the class.

Remarks

Great responses! We learned a lot about Google Forms today. In the next class, we will continue to explore web programming with HTML and CSS. I will explain more of this in the next class. Make sure you have submitted your completed activity guide to me before you leave class. I will see you all in the next class where we will begin working with data!

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