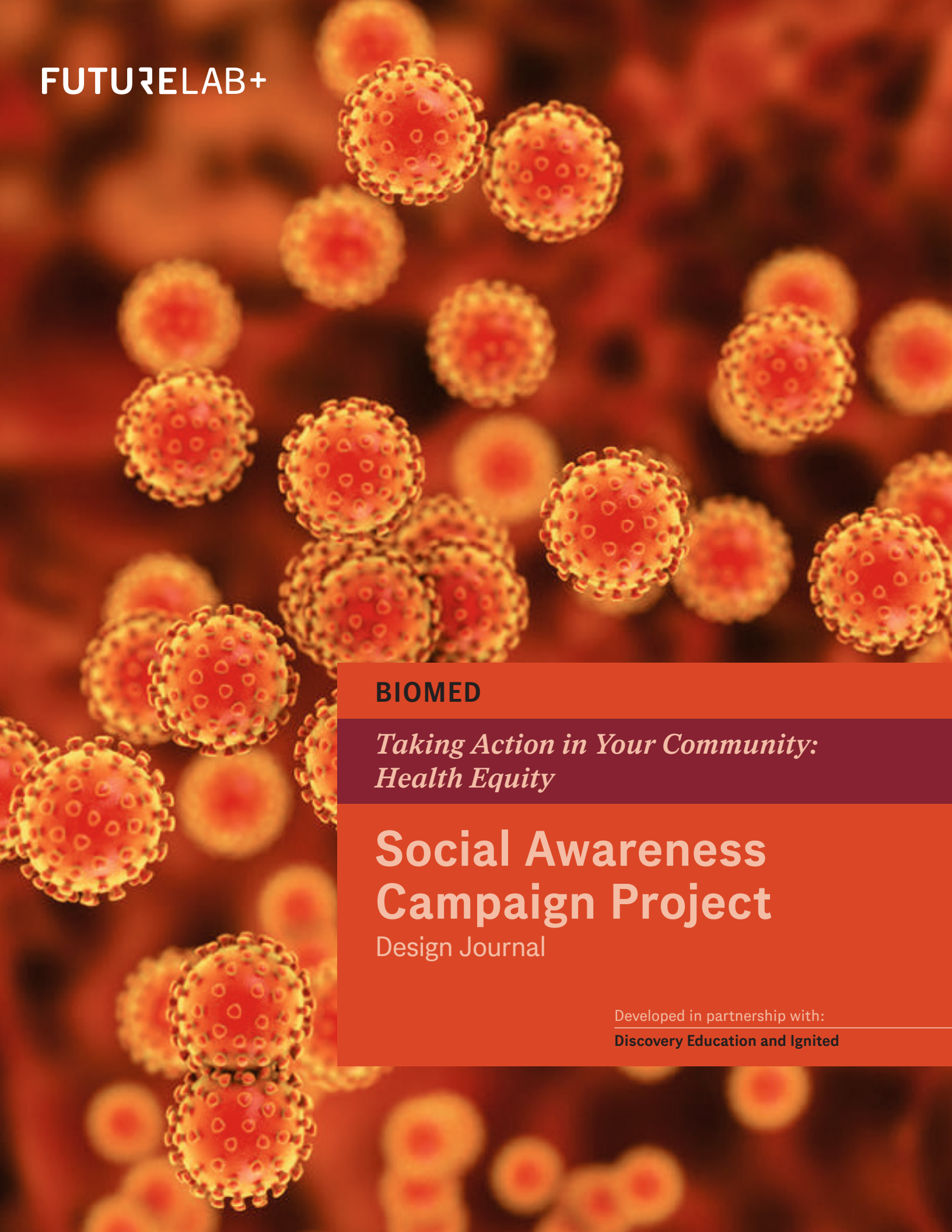

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BIOMED

Taking Action in Your Community: Health Equity

Social Awareness Campaign Project

Design Journal

Developed in partnership with:

Discovery Education and Ignited

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Social Awareness Campaign Project

BACKGROUND

Social awareness campaigns can have a powerful effect on the viewer, as they combine information and education with visual and audio elements to bring awareness and change to a community issue. The first steps in the creation of an awareness campaign are to understand the problem and identify the audience that is being impacted negatively. This project will focus on public healthcare and the inequality that some groups face when seeking medical care and finding access to information about their own health.

The term inequity means "a lack of fairness or justice." From a presence in research, to a lack of trust in medicine, to availability of vaccines and treatment, many people of color and other disadvantaged groups in the United States and globally face inequity as they seek medical treatment for disease. In this unit you will learn not only how vaccines fight disease, but also how they are developed, tested, approved, and distributed to the public. In this process, you will discover some of the inequities in the healthcare system and why there is a lack of proper medical care and support for disadvantaged people.

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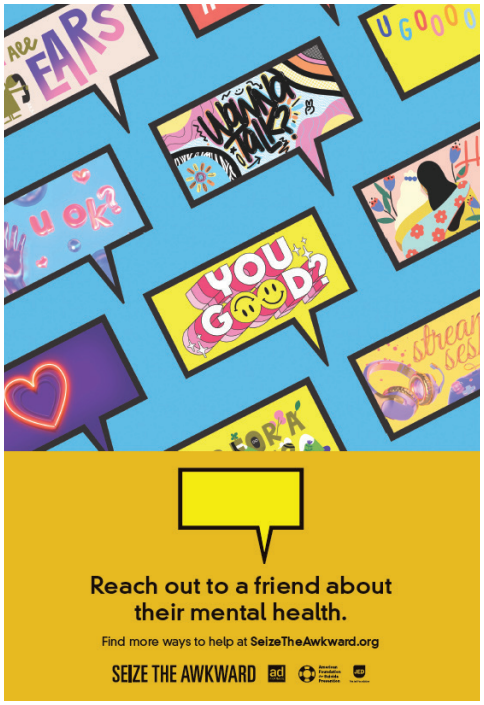
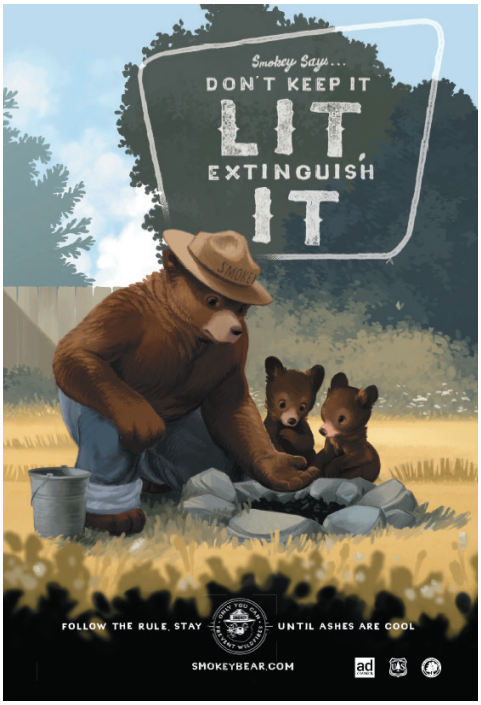
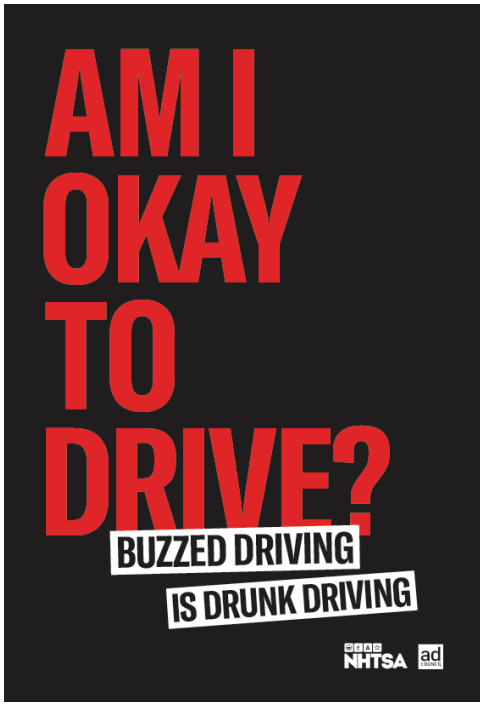
Examples of Social Awareness Campaign Artifacts

PROJECT SUMMARY

You are part of a group that is tasked with creating a social awareness campaign to inform and influence a community that struggles with equity in health care. The campaign will focus on an infectious disease facing the community. Your social awareness campaign should address issues related to disparities in healthcare and access to treatments or prevention associated with your disease. In your role as a project manager, community education specialist, web design specialist, or media specialist, you will choose a community profile. You will work with your group to research information about the challenges the community faces related to disease and health-related issues. The group will create a website that will serve as the platform for your social awareness campaign. The website will provide community members with education about infectious diseases, treatments, health care availability, and data on disparities in health care for their community. An informative ad or infographic, a PSA video calling community members to action, and a mock social media outreach for communication will be added to the campaign website.







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Proposal Requirements

Research for the project must include:

1. Definition of an infectious disease vs. a chronic disease
2. Comparison of a bacterial (antibiotic) vs. a viral treatment (a vaccine)
3. Explanation of how vaccines work
4. Summary of the process of how medicines are made and released
5. Data on prevalence of infectious disease in your community with a separation of various ethnic or socioeconomic groups (if available)
6. Data on vaccine and treatment efficacy
7. Information, including websites, on where clinics and treatment might be available in the community

The informative ad or infographic must include:

1. A clear topic and message that is conveyed in a graphic way
2. Incorporation of data to support the topic from appropriate and credible sources
3. Pictures or graphics to support the data

The PSA video must include:

1. Background information on inequity in healthcare in disadvantaged communities that helps to explain why this is an important issue related to human health
2. A clear message for a specific target audience; it may include a slogan or catchphrase
3. An engaging and appropriate message for the target audience

The social media outreach must include:

1. A mock social media profile with all parts completed in an appropriate and relevant way
2. Informative postings, pictures, and comments that convey data and the message of the project to the target audience

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Engineering Design Process Journal

Name

Group Members

Start Date

Due Date

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Engineering Design Process Journal

Step 1:	Step 2:	Step 3:	Step 4:	Step 5:	Step 6:	Step 7:	Step 8:	Step 9:	Step 10:	Step 11:	Step 12:
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Step 1: Define the Problem

According to the information from the community profile your group has chosen, what is the problem that justifies the need for a social awareness campaign?

What evidence do you see of this problem, based on what you have learned?

Below are the four requested products. Describe what needs to be communicated in each product.

1 Website:

2 Ad or Infographic:

3 PSA Video:

4 Social Media Outreach:

How can a proposed design increase a person's ability to obtain information and access to healthcare when faced with disease?

What are the constraints for your social awareness campaign?

What critical questions need to be answered to produce these components?

1

2

3

What do you already know about these questions?

What resources will you use to find out more information about these questions?

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Engineering Design Process Journal

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Step 2: Brainstorm

Discuss initial ideas for your campaign with your group. In the space provided, create a concept map, flow chart, or other type of graphic organizer showing connections among infectious disease and issues of health care inequity in your chosen community. How will each piece of the campaign inform and inspire?

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Engineering Design Process Journal

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Step 3: Research and Generate Ideas

In the table below, record possible questions you need to answer to gather more information prior to committing to one of your ideas. What resources are available to assist you in answering your questions?

Resource List

Possible Questions Generate a list of specific questions that need to be answered.	**Research Results**	**Any Additional Design Ideas Generated During Research** Notes or sketches

Question Prompts

- What additional information might be helpful to know about your chosen community?
- Has the problem of inequity in healthcare been addressed previously? If so, what was not effective or what allows the problem to continue?
- Who is the target audience for this campaign?
- What data resources might be helpful when creating the campaign?

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Engineering Design Process Journal

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Lesson Connections

LESSON 1: Current Infectious Diseases
Use the capture sheets and information learned from this lesson to answer the following questions:

What infectious diseases has society faced or is facing currently?

What are some ways that people can prevent the spread of infectious disease? What are barriers for prevention methods?

What are some examples of inequity in communities faced with the spread of infectious disease?

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Engineering Design Process Journal

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Making Connections

What I learned from this lesson:

How this connects to the project:

Which part(s) of the project does this lesson address and how might it be used?

Research

Community Education

Community Influence

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Engineering Design Process Journal

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Lesson Connections

LESSON 2: Epidemiology
Use the capture sheets and information learned from this lesson to answer the following questions:

How do health departments identify, track, and make predictions about health outbreaks?

How does the study of epidemiology reveal racial, ethnic, economic, and social inequities?

What are the steps in an outbreak investigation?

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Lesson Connections

LESSON 3: Treating Bacterial and Viral Disease
Use the capture sheets and information learned from this lesson to answer the following questions:

How is the replication of prokaryotic and eukaryotic cells different from each other and from viral replication?

How are antibiotics and antivirals used in the treatment of infectious disease?

How are viral diseases treated and what are some of the challenges the in treatment of diseases?

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Lesson Connections

LESSON 4: New Production Methods
Use the capture sheets and information learned from this lesson to answer the following questions:

How are DNA and RNA similar? How are they different?

What role does mRNA play in a cell and how can this be used in medicine and biotechnology?

What type of genetic material do viruses contain? Are they all the same?

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Research

Community Education

Community Influence

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Engineering Design Process Journal

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Lesson Connections

LESSON 5: Manufacturing Medicine
Use the capture sheets and information learned from this lesson to answer the following questions:

What is the connection between cells and viral replication?

What is the connection between vaccines, viruses, and antigens?

How do vaccines work to prevent infectious disease?

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Community Education

Community Influence

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Lesson Connections

LESSON 6: Vaccine Production and Safety Testing
Use the capture sheets and information learned from this lesson to answer the following questions:

How are vaccines produced and tested before use by the general public?

How can scientists discover if vaccines have harmful side effects?

What determines if the reward of a vaccine outweighs the risks for a person's health?

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Community Education

Community Influence

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Engineering Design Process Journal

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Lesson Connections

LESSON 7: Public Health Agencies
Use the capture sheets and information learned from this lesson to answer the following questions:

Which government agencies are responsible for testing and approving vaccines?

What are some instances that require people to be vaccinated?

What are some of the dangers for people when politics and special interest groups have influence on vaccine development and policy?

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Engineering Design Process Journal

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Step 4: Identify Criteria and Specify Constraints

What are specific criteria and constraints for your chosen innovation challenge?

Criteria

Constraints

Potential Materials Needed

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Step 5: Explore Possibilities

Review your ideas from Steps 2 and 3 of the design process. Explore some of your ideas in more detail. Record your results in the space provided. Possible results can reflect testing, experiments, simulations, peer review, etc. Be sure to include any data collected or group discussion and feedback.

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Engineering Design Process Journal

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Step 6: Select an Approach

Use the following decision matrix to assist in selecting one of your ideas for further development. To use the tool, complete the following steps:

1 Enter the criteria and constraints of the project in the first column.
2 Use a numeric value to rate each solution against the criteria or constraint. (2 = totally meets the requirement, 1 = somewhat meets the requirement, 0 = does not meet the requirement)
3 Total the columns and circle the highest score.

Criteria or Constraint	Sketch/Idea 1	Sketch/Idea 2	Sketch/Idea 3

Other criteria: A single rating for your own "nice-to-have" desirable criteria and universal design criteria (such as *Robustness, Aesthetics, Skill Required, Safety):*

Total			

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Engineering Design Process Journal

Step 1: Define the Problem	Step 2: Brainstorm	Step 3: Research and Generate Ideas	Step 4: Identify Criteria and Specify Constraints	Step 5: Explore Possibilities	Step 6: Select an Approach	Step 7: Develop the Design Proposal	Step 8: Make a Model or Prototype	Step 9: Test and Evaluate Design Using Specifications	Step 10: Refine the Design	Step 11: Modify and Present for Market	Step 12: Communicate Processes and Results

Step 7: Develop the Design Proposal

Now that your group has decided on the best solution, you need to develop a plan to create your social awareness campaign. Some of these components will come in at different points during the unit. Your solution proposal must include the following components:

1 Background information on your chosen community, including inequity in healthcare.
2 Statistics and data showing the prevalence of disparities related to information, treatment, and access to healthcare, as well as case studies illustrating how information can address these disparities.
3 A graphic organizer showing how you will connect research, data, and campaign components to influence and educate your chosen community.
4 Information explaining why the community faces inequity.

Your written solution proposal may be attached to this Design Journal, inserted into the space provided, or submitted digitally according to the teacher's direction.

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Engineering Design Process Journal

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Step 8: Make a Model or Prototype

In the space below, insert your sketch of your website sitemap and the storyboard of the PSA video (from Lesson 8—the social awareness campaign project).

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Engineering Design Process Journal

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Step 9: Test and Evaluate Design Using Specifications

Evaluate your social awareness campaign design using information from testing your ideas and obtaining feedback.

What are you most interested in learning about your design from your testing and feedback?

In the space below, document the type of test you conducted and the results. Testing can be for such components as word choice, image use, colors, etc.

Description of Test Performed

Test Results

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Step 10: Refine the Design

After reviewing the Test and Evaluate Design Using Specifications results in the previous step, record any new ideas to refine your design here.

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Step 11: Modify and Present for Market

What changes (if any) did you make to your product after considering data and feedback in the Test and Evaluate Design Using Specifications and Refine the Design steps of this project?

Presentation of the Product

The social awareness campaign platform (website) must include:

1. An education section that will inform community members about the science of treatment for infectious diseases, the production of vaccines, and data on the inequity the community faces.
2. An ad or infographic that will inform the community about the problem with inequity in medicine.
3. A PSA video with a call to action for equity and equality in community healthcare.
4. A mock social media profile that can show outreach and a method for engaging with the community.
5. Features that are targeted to your specific audience. (For example, if your target audience is non-English speaking, it may be helpful to add pages that are translated in that language or record a second PSA video with a voiceover in the native language of that group.)

If this were an actual social awareness campaign, what additional work would be needed to prepare the campaign for implementation in the community? Record your answer in the space below.

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Step 12: Communicate Processes and Results

In addition to your presentation format outlined in the guidelines in the journal, answer the following questions about your solution.

1 What were the best elements of your campaign?

2 What were the weaknesses of your campaign?

3 How would your campaign change if you were to share it with a different community from the community profile choices?

Explain the reasoning behind any changes or improvements you would make.