

Health Disparities

PLANNING NOTES:

- 1) **Teams:** 4 students
- 2) **Length:** Approximately 6-8 classes
- 3) **Resources Needed:** Computers (most days), copies of student workbook & handouts, access to Microsoft Powerpoint

'Of all the forms of inequality, injustice in health care is the most shocking and inhumane.'

-Martin Luther King Jr.

OVERVIEW:

What can we do to eliminate inequality and injustice in health care? How can we ensure that future generations are not victims of the health disparities that plague our society. This challenge will put to use your skills as an investigator and advocate. You will find the most compelling health disparity and determine a key risk factor that drives that disparity. Then you will communicate your findings and advocate for solutions to bring equity and justice to health for all Americans.

GOAL:

Conduct a literature review research project on a health disparity and advocate for interventions that will help remove or reduce the disparity.

ROLE:

Since case studies from previous modules have been conducted in teams, an option for modification for this case study would be to allow students to work in pairs rather than larger groups.

You are a team of researchers who have received a multi-million dollar NIH grant to conduct research that will help reduce & eliminate health disparities.

OBJECTIVE:

Obj. 12.9: Conduct a literature review and an analysis of secondary data to answer a research question.

DELIVERABLES:

- 1) Literature Review
- 2) Research Poster

STANDARD:

NGSS (WHST.9-12.7) Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject demonstrating understanding of the subject under investigation. (HSL513)

ASSESSMENT:

Your literature review and research poster will be graded on a rubric.

TEAMWORK PREP:

Complete the table below to facilitate communication and identify different strengths & skills within the team (i.e. artistic, likes writing, speaks up, etc.).

Team Member	Contact Information	Strength

Encourage students to share their strengths from previous case studies. If students get stuck and cannot come up with something, ask them to share something they want to improve upon or work on for this team project.

Complete the table together to elaborate on & personalize the agreed upon team norms.

Team Norms Contract

For each category, establish a specific team norm that will help ensure you are applying teamwork principles to your collaborative research project.

Conflict: Ask questions to push other team members' thinking and debates issues to find the best answer

This refers to the **HEALTHY** kind of conflict. Make sure students understand that conflict can be positive and productive if it is conducted mindfully and with purpose. If students are still stuck on this, ask them: "What would happen if everyone always agreed on everything?"

Leadership: Takes a leadership role in redirecting the group to focus on the most important issues

Accountability: Bring appropriate assignments to group meetings AND encourage struggling group members

Communication: Always contributes, listens, and responds appropriately.

Planning: All responsibilities are delegated using an organizational tool. Deadlines are clearly set and met.

Case Introduction:

Despite leading the world on medical care spending, Americans have worse health and shorter lives than people in other affluent nations. Our international ranking has been slipping over time, and it is not only poor Americans who are affected. Middle-class and even wealthy Americans also are less healthy than their counterparts in other affluent countries.

- *Overcoming Obstacles to Health in 2013 & Beyond*, Robert Wood Johnson Foundation Commission to Build a Healthier America

Health disparities have a negative impact on millions of people in our nation. Any health issue or outcome could be worsened or caused by a disparity in environment, social factors, access to health care, and so many others.

Overview of Case Study Steps

1. Identify a specific health outcome or issue that is a health disparity for some populations in the U.S.
2. Choose a key factor that drives the health disparity.
3. Study the topic to determine:
 - ✓ the present status of the problem (who is affected and why?)
 - ✓ the future outlook for the problem
 - ✓ research findings regarding the problem
 - ✓ analysis of secondary data sets related to the problem
 - ✓ recommendations for individuals, health professionals, and/or policy makers to address the problem
4. Create a research poster (using PowerPoint) to present the information above in a visual format.

Tell students: This list is not comprehensive. What seems to be missing? What steps would you add? How might your path deviate or differ?

The Unnatural Causes packet can be assigned for homework. Students will already be familiar with several of the topics based on the pre-case lessons, but it will be important that each group reads about & considers each factor before deciding.

Selection of Focus Area:

For this case study, you will select ONE health issue or outcome and ONE key factor that shapes disparities. Read the lists below, then conduct initial background research so that your choices are supported by evidence. Use the Unnatural Causes packet for the Key Factors along with any other credible resources online. You need to be able to defend the issue and factor you choose with data showing that it is a serious health disparity that impacts a great number of people.

HEALTH ISSUE/OUTCOMES:	KEY FACTORS:
1. Obesity	1. Childhood/Early Life
2. Diabetes	2. Chronic Stress
3. Heart Disease	3. Education
4. Mental Health	4. Food Security
5. Infant mortality (or low birth weight)	5. Genetics
6. Lung Cancer (or smoking)	6. Housing/Neighborhoods
7. Cirrhosis (or alcoholism)	7. Income & Wealth
8. Suicide	8. Jobs & Work
9. Homicide/Violence	9. Race/Racism
10. Cancer (i.e. breast cancer)	10. Social Inclusion
11. Asthma	11. Other: _____
12. Oral Health	12. Other: _____
13. Sexually Transmitted Infections	13. Other: _____
14. Other : _____	14. Other: _____
15. Other : _____	
16. Other : _____	
17. Other : _____	

Background Research:

As a team, pair each member with ONE health outcome/issue and ONE key factor to gather background information on. Then present your findings to the team select and vote on your final outcome/issue & key factor for your research project, based on the evidence and data presented.

Health issue/outcome: _____	Key Factor: _____
<i>Evidence/data supporting this issue/ outcome as a major health disparity:</i>	<i>Evidence/data supporting this key factor as a driver of the health disparity:</i>
<div style="border: 1px solid black; background-color: #e0e0e0; padding: 10px; margin: 0 auto; width: 80%;"> <p><i>Helpful source links:</i></p> <p>Unnatural Causes: http://www.unnaturalcauses.org (links to TONS of resources and data sets for each of the 10 key factors)</p> <p>HHS Minority Health (government data): http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlID=9</p> <p>RWJF report (Overcoming Obstacles to Health...): http://www.rwjf.org/content/dam/farm/reports/reports/2013/rwjf406474</p> <p>CDC Youth / Health Disparities: http://www.cdc.gov/healthyyouth/disparities/</p> <p>Healthy People 2020: http://healthypeople.gov/2020/about/disparitiesAbout.aspx</p> </div>	

Team Research Findings:

Health issue/outcomes:	Key Factors:
1. _____ <i>Data/Evidence:</i>	A. _____ <i>Data/Evidence:</i>
2. _____ <i>Data/Evidence:</i>	B. _____ <i>Data/Evidence:</i>
3. _____ <i>Data/Evidence:</i>	C. _____ <i>Data/Evidence:</i>
4. _____ <i>Data/Evidence:</i>	D. _____ <i>Data/Evidence:</i>

FINAL TEAM SELECTION:

HEALTH ISSUE/OUTCOME: _____

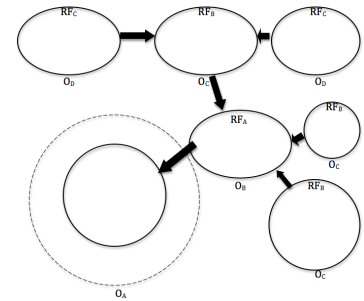
KEY FACTOR: _____

Explore the Problem:

IDENTIFYING KNOWLEDGE:

Factor Outcome Web:

A Factor-Outcome web is a tool used to show the relationship between risk or protective factors and associated outcomes, made by connecting variables with bubbles and arrows, pointed in the direction of hypothesized influence.



Create a Factor-Outcome web that connects factors and variables related to your health disparity. You may choose to organize this web in any way that makes the most sense to you; it should be a visual map to track your thinking!

If students have NOT completed Module 3 (Lesson 3.11), provide a few examples of visual brainstorming tools (also known as concept webs, mind maps, etc.), or consider skipping this step. Emphasize that there is no right or wrong, this is just a way to help brainstorm and think about a problem.

Research:

LITERATURE REVIEW:

Each team member should choose a particular aspect of the health disparity (outcome/ issue & key factor) to focus on. Locate two peer-reviewed, scholarly journal articles describing a study related to that risk factor.

Scholarly Source #1:

Info Type:	Information:	
Source <i>(title, author, name of site, date, and URL below)</i>		All sources should be credible, scholarly sources (unless students do not have enough background, instruction, or experience for that requirement). This will still be a challenge for upper-level high school students, but one that is important to practice in order to be college-ready.
Variables of Interest		Google Scholar can be used and some articles can be found full-text for free, while others will just allow students to see the Abstract, which on it's own can provide some baseline information. Lesson 10.10 (Module 10) - "Searching Google Scholar" is an essential primer for this, unless students already have experience/practice in this skill.
Purpose of Study		
Methods		
Results		
Conclusions		

Scholarly Source #2:

Info Type:	Information:
<p>Source <i>(title, author, name of site, date, and URL below)</i></p>	
<p>Variables of Interest</p>	
<p>Purpose of Study</p>	
<p>Methods</p>	
<p>Results</p>	
<p>Conclusions</p>	

IDENTIFY PRIORITIES:

What were the major findings from your literature review? Share your findings and record the key conclusions in the table below.

Major Research Findings:

Focus	Literature Review Findings

Identify Solutions:

Review all of your notes and research findings about the health disparity. Discuss the information you gathered and select a focus area (one specific factor to address).

Now you will propose a SMART intervention, aligned to your factor.

Use the space below to brainstorm your intervention, then fill out the Intervention Proposal on the next page.

BRAINSTORM SPACE:

Intervention Proposal:

Risk/Protective Factor:

Name of Intervention:

Description:

How is this intervention SMART?

Specific:

Measurable:

Achievable (yet Ambitious!):


Relevant:

Time-bound:

How would your intervention be evaluated in order to determine how it worked and whether it was successful or not?

Research Poster:

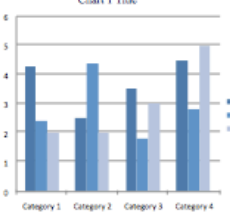
Examine the poster template Powerpoint file (image appears below). Organize your research into the following sections to place on your research poster.



Project Title

Name #1, Name #2, Name #3, Name #3

School Name & Address

<p style="text-align: center;">Abstract</p> <p>Concisely summarize:</p> <ul style="list-style-type: none"> • Purpose: State why your study is important and your research question • Methods: State your population, type of study, RI/outcome that was measured • Conclusion: State the answer to your research question with claim-evidence warrant, and your proposed intervention or prevention. 	<p style="text-align: center;">Data Analysis</p> <p>This will be the largest section of your poster. Use online databases (secondary data) to find and organize relevant evidence to support your aim and conclusion. Arrange your results in a logical order according to the points you want to get across. Use tables, graphs, and charts to illustrate findings. All charts and graphs need a title.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Chart 1 Title</p>  <p>Category 1 Category 2 Category 3 Category 4</p> </div> <div style="text-align: center;"> <p>Chart 2 Title</p> <table border="1" style="margin: 0 auto;"> <thead> <tr> <th colspan="3">Table 1</th> </tr> <tr> <th>Example 1</th> <th>Example 2</th> <th>Example 3</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> </div> </div> <p>Under your charts write about any results you made through calculations. You do not need to include how results were calculated.</p>	Table 1			Example 1	Example 2	Example 3							<p style="text-align: center;">Conclusion</p> <ul style="list-style-type: none"> • Explain the strengths and limitations of your study • Explain how your conclusions could lead to future research • Propose an intervention based on the DATA you collected in your study. <ul style="list-style-type: none"> • Your intervention should be proposed in a Claim-Evidence-Warrant format. • Your intervention should be a clear proposal for what should be done to address the disparities of your population and should be able to be carried out from reading your description.
Table 1														
Example 1	Example 2	Example 3												
<p style="text-align: center;">Aim</p> <p>Communicates the purpose of the study through:</p> <ul style="list-style-type: none"> • Context • Background Information • Intended Outcomes • Research Question 	<p style="text-align: center;">Discussion</p> <ul style="list-style-type: none"> • Clearly state answer to your research question based on DATA! • Clearly answer all questions presented in your Aim as intended outcomes supported by data. • Discussion clearly aligns to the purpose of the study in the AIM. 	<p style="text-align: center;">Works Cited</p> <p>Use MLA formatting to cite your sources.</p>												
<p style="text-align: center;">Literature Review</p> <p>Reviews key research findings from other scholarly texts:</p> <ul style="list-style-type: none"> • Purpose of each study • Description of basic study methods for each study • Overview of key results and conclusions for each study 														

Consider designating a day for a “Research Forum”/Research Poster Session (a common event at conferences and universities) as an authentic forum for presenting students work. If posters cannot be printed (this kind of large-scale printing is usually expensive) consider having students print out sections and neatly attach to Posterboard OR If laptops are available, each group could open their Powerpoint poster slide and put it into full screen and stand behind a table displaying it. If this works out, invite other classes, teachers, admin, & community members.

Another great way to build engagement, excitement, & authenticity into the project in order to motivate students is by telling students you will select one poster from each class (or fewer/more--whatever number is feasible) to actually PRINT and hang in the school for all future “scholars” to see. This large scale printing can be done at copy shops or University printing centers and typically costs \$25-50 per poster. Discounts may be available if you ask!

Poster Section	
Abstract	
Aim	

Poster Section	Information
Literature Review	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>See the Powerpoint file for more information on guidance for what should be included in each section.</p> </div>
Data Analysis	
Discussion	
Conclusions	<div style="border: 1px solid black; padding: 5px;"> <p>Remind students that they should think about the Claim-Evidence-Reasoning framework for their conclusions.</p> <p>Claim: “Results suggest that may....”</p> <p>Evidence: The specific data results!</p> <p>Reasoning: The why, or the logic that explains the claim.</p> <p>(Note: <i>Reasoning</i> is also often referred to as the <i>Warrant</i> in the classic Claim-Evidence-</p> </div>
Works Cited	

The rubric can be modified and tailored as needed to individual instructor needs and grading policies/criteria.

Rubric:

You will be evaluated using the rubric below:

Obj. 12.9: Conduct a literature review and an analysis of secondary data to answer a research question.

	Needs Improvement	Emerging Mastery	Partial Mastery	Mastery
LITERATURE REVIEW & ANALYSIS OF DATA	Achieved 3 of 3 factors: 1) Comprehensive, clear, and articulate overview of the scholarly literature presented; 2) Clear, compelling & accurate presentation of secondary data set analysis; 3) At least 4 aligned studies in lit review	Achieved 1 of 3 factors: 1) Comprehensive, clear, and articulate overview of the scholarly literature presented; 2) Clear, compelling & accurate presentation of secondary data set analysis; 3) At least 4 aligned studies in lit review	Achieved 2 of 3 factors: 1) Comprehensive, clear, and articulate overview of the scholarly literature presented; 2) Clear, compelling & accurate presentation of secondary data set analysis; 3) At least 4 aligned studies in lit review	Achieved 3 of 3 factors: 1) Comprehensive, clear, and articulate overview of the scholarly literature presented; 2) Clear, compelling & accurate presentation of secondary data set analysis; 3) At least 4 aligned studies in lit review
QUALITY OF CONCLUSION (Follows C-E-R format)	Achieved 0 of 3 factors	Achieved 1 of 3 factors: 1) Clear and thorough Claim 2) Accurate and aligned Evidence ; 3) Logical & useful Warrant	Achieved 2 of 3 factors: 1) Clear and thorough Claim 2) Accurate and aligned Evidence ; 3) Logical & useful Warrant	Achieved 3 of 3 factors: 1) Clear and thorough Claim 2) Accurate and aligned Evidence ; 3) Logical & useful Warrant
ACCESSIBILITY OF INFORMATION	Achieved 0 of 3 factors: 1) Clear and easy to understand information 2) User-friendly; 3) Neat and professional	Achieved 1 of 3 factors: 1) Clear and easy to understand information 2) User-friendly; 3) Neat and professional	Achieved 2 of 3 factors: 1) Clear and easy to understand information 2) User-friendly 3) Neat and professional	Achieved 3 of 3 factors: 1) Clear and easy to understand information 2) User-friendly; 3) Neat and professional
WRITING	Many spelling, grammar, and vocabulary errors.	Some spelling, grammar, & vocabulary errors.	Very few spelling, grammar, and vocabulary errors.	Easily read & understood; almost perfect grammar, spelling & vocabulary

Remind students that they should use the rubric to self-evaluate their work as well. This is a best practice that will help them manage their quality of work and have a clear sense of the expectations and grading criteria.