

## TPSP Summer Work

### Assignment 1: Interest Inventory

The goal of this assignment is to brainstorm ideas for your TPSP project. Because you will spend almost two semesters working on it, it should be about a topic that you are interested in. Complete the interest inventory before continuing. If you have decided on a topic, then you can skip ahead to Assignment 2, but know that you will need two topic ideas for the rest of the assignments.

To help you with this activity, you will need to read chapters 3-6 of the following text:

<http://course.sdu.edu.cn/G2S/eWebEditor/uploadfile/20140306165625006.pdf>

If at any time the link stops working for you, please reach out to me at [hhill4@houstonis.org](mailto:hhill4@houstonis.org) so I can help you.

**The expectation is that you will be done with this handout and the reading by the first day of class.**

*FIRST do a little research on NPR, JStor Daily, Inspire, another reliable database, or consider topics you learned about in your other classes. Your answers can be bullet-pointed phrases.*

Question	Answer
Look up topics related to art or culture (music, literature, film, theater, etc.). What interests you?	
Look up topics related to the economy – U.S. or another country. What interests you?	
Look up topics related to the business world. What interests you?	
What are some current political issues in the U.S.?	
What are some current political issues globally?	
What are some historical topics that interest you?	
What historical topics relate to a current issue today?	

What are some health/medical related topics that interest you?	
Which kind of science most interests you? What are some topics in that field?	
What are some current ideas/issues happening in the world of technology?	
What place interests you?	
What is your favorite book? Movie? Why?	
What career are you considering pursuing?	
In what ways do people surprise you?	
What are some current issues in education?	
Spend one day observing as you go about your day (brush your teeth, drive around, walk, shop, interact, travel, etc.) What are some interesting things you notice? What do you wonder? What surprises you?	

*Part II: Just answer the questions. These can come from you or from your topic exploration in Part I, but they don't have to.*

<b>Question</b>	<b>Answer</b>
What fascinates you?	
What is something you are curious about?	
What is a problem you would like to see solved?	
What is a topic you are passionate about?	
What prediction can you make about the future?	
What is something you would like to create?	
What is something you don't understand but would you like explained?	

**Assignment 2: Finding a Problem**

1. Use Activity 1 to brainstorm 2 possible topics to investigate for your research project.

Topic 1: \_\_\_\_\_

Topic 2: \_\_\_\_\_

2. Now find 3-5 sources about each of these topics.
3. After reading these sources, identify specific problems that you could potentially build a product to help solve? Fill out the chart:

Topic 1 Problem:	Topic 1 possible products to solve problem:
Topic 2 Problem:	Topic 2 possible products to solve problem:

How does the product idea(s) solve the problem identified for topic 1?

How does the product idea(s) solve the problem identified for topic 2?

Part II: Research questions

1. Use activities 1 and 2 to write *three* research questions for *each* topic. Use the research question workshop sheet as a guide. (See the last page for the Workshop)

Topic 1: \_\_\_\_\_

Question 1	
Question 2	
Question 3	

Topic 2: \_\_\_\_\_

Question 1	
Question 2	
Question 3	

Part III: Research methods brainstorm

For each research question, write what you would need to know to answer the question and whether that involves quantitative or qualitative data or both. Methods mean the procedure you would follow to collect necessary data to build and test your product.

Topic 1: \_\_\_\_\_

	What You Need to Know	Quantitative/Qualitative/Both
Question 1		
Question 2		
Question 3		

Topic 2: \_\_\_\_\_

	What You Need to Know	Quantitative/Qualitative/Both
Question 1		
Question 2		
Question 3		

## Research Question Workshop

The point of this is to help you develop your six research questions for assignment 3. You should complete this workshop for EACH question to make sure your questions have all the criteria needed for an effective research question.

*Section A: Write a research question in 1. Evaluate and revise using questions 2-4.*

1. Write your research question:

--

2. Go through the following criteria of an effective research question. Take notes over each.

Is this something you are interested in?	
Context? Is it a real-world issue/problem? What is it?	
What type of information is needed to address the question? Is it researchable?	
Is it too broad or too narrow?	

3. Revise your question based on your above notes:

--

4. Go through the criteria of an effective research question again. Revise again as necessary or try a new topic/question.