1.3.2. Understanding the Problem and EDPL

Students will look at additional data from their client–customer satisfaction data, volunteer data, etc.–and will add and adjust their problem requirements using Part 2 of the <u>1.3.1. Identify and Define</u> <u>the Client's Problem Handout</u> that features the 4-box tool for problem specification. Students will start their EDPL for this design challenge.

Teacher Notes: Some of the client and customer notes are contradictory or give specific materials the new solutions should be made out of. Be sure to emphasize that students don't have to listen to everything that is said in all the customer quotes and notes. They should be sure to consider their comments since they are the customers and have used the food boxes for a long time, but that the students don't have to listen to everything said in the additional materials.

Engage: 5 min

View: 1.3.2. BID Ideation

- You are trying to design and make a device for observing wildlife on the savannah. Make sure your wildlife doesn't think your device is a toy!
- Name an animal you would like to observe. Where would it be best to place a device to observe that animal on the savannah?
- Class Discussion on what students brainstormed

Explain: 5 min

Surveys and interviews are important and valuable sources of customer information that help us understand our problem and write problem requirements. We are going to look at some customer survey data and customer feedback provided by EatEZ in order to make sure we understand the problem and the design challenge.

Explore: 25 min (Individual and Group)

Part 2 of 1.3.1. Worksheet

Review the additional information and materials from our client, EatEZ. This information includes survey data, an angry client letter, and feedback from clients and customers.

- 1.3.1 Volunteer Opinions
- 1.3.1 Number 1 Complaint of Volunteers
- 1.3.1 Customer Satisfaction
- <u>1.3.1 Company Customer Satisfaction Data</u>
- <u>1.3.1 Angry Customer Letter</u>

With your group, analyze each of the five additional documents and write down any notes on Part 2 of the <u>1.3.1. Identify and Define the Client's</u> <u>Problem Handout</u>. Integrate what you learned from the client memo and

Student Handouts:

N/A (use already printed 1.3.1 worksheet Part 2)

Student Materials:

1.3.1 Volunteer Opinions

1.3.1 Number 1 Complaint of Volunteers

1.3.1 Customer Satisfaction

1.3.1 Company Customer Satisfaction Data

1.3.1 Angry Customer Letter

Instructional PPT's & Materials:

1.3.2. BID Ideation

Teacher Resources:

N/A

Web Resources:

N/A

what you learned from the additional documents into the four-box organizer.	
Evaluate: 10 min (Class Discussion)	
 Class Discussion Teacher Note: Facilitate a discussion on the additional client materials. What did the students learn from the additional documents? How does this change their understanding of the problem? What is the most important information to take from the document and add to problem requirements? Why is it important to gather lots of information when defining and understanding a problem? 	
Extend: 10 min (Group)	
EDPL: You will complete Identify and Understand in the EDPL based on what you learned from the client memo and the additional materials provided by the client.	