SAMPLE REPORT – **Grade "A"**

Polling Project Report

The USA has split into 3 major classes: The lower class, the middle class, and the upper class. These three divisions have their views on our economy in many different ways. In our own city, Louisville, the state of living is extremely different in its two hemispheres. The west side is generally home to the lower class and parts of the middle class. Whereas the east is generally home to the upper class and the other part of the middle class. Our goal of this project was to take a sample of both the western Louisville residents and the eastern Louisville residents and see how they view the state of our economy. Our define population was the residents of Louisville.

The Population was defined as the people of Louisville. We used a stratified sampling, where we divided our define population which was the residents of Louisville and divided them into strata. The strata were the residents that live in East Louisville and the residents that live in West Louisville. The neighborhoods we sampled in East Louisville was White Blossom and Lake Forest and in West Louisville, we surveyed people from Clifton Heights and Meriwether. We also used convenience sampling for White blossom and Lake Forest because it was easier to survey. Residents in West Louisville are generally perceived as lower class and parts of the middle class and the population in Clifton Heights represents how the lower class perceive the state of the economy. Residents in East Louisville are perceived as the high class and neighborhoods such as White Blossom and Lake Forest represent how the high class perceives the state of the economy. We went to the houses in each neighborhood and asked them if they could take a short survey. After that we compiled the surveys from region into two separate lists which were East and West. We randomly selected 30 residents in each sample list and came up with a new list where we analyzed the results and put them into graphs and charts.

In our survey, we chose to ask seven questions, one of the question “What do you think is the average salary of a Google employee” was asked to see how people perceive the earnings of a high paying job based on their own earnings. Another question, “How much do you think the richest 5 % of America made last year on average?” was asked because we wanted what people thought about the gap between the rich and poor and how . We also asked questions concerning the wage gap between men and women by asking “What do you think is the average income for women was last year?” and “What do you think the average income for men was last year?” but it was thrown out. Questions such as “What do you think the percent of the population of America was homeless last year?” and “What percent of the population of the USA do you think makes over 1 million dollars a year?” was to see what the lower class and high class thought about the poverty in the U.S. and the gap between the rich and the poor. We also asked questions about how much houses are sold on average comparatively to their house and how much they make per year to know the resident’s economic status and what they thought about for the cost of housing.

In East Louisville, 66.6% thought that google employees make $100,000 a year. 33.3% though that google employees make $300,000 a year. For question 2, 23.3% thought that the richest 5% of American made $350,000, 43.3% thought that the richest 5% of Americans made $800,000, 23.3% thought that the richest 5% of Americans made $1,000,000 and 10% thought that the richest 5% of Americans made $10,000,000. For question 3, 23.3% thought that the average income for women was $20,000, 33.3% thought that the average income for women was $40,000, and 43.3% thought that the average income for women was $50,000. For question 4, 10% thought that the average income for men was $60,000, 46.6% thought that the average income for women was $90,000 and 43.3% thought that the average income for women was

$100,000. For question 5, 26.6% thought the 0.5 percent of the population of America was homeless last year, 33.3% thought the 1 percent of the population of America was homeless last year, 36.6% thought the 5 percent of the population of America was homeless last year and 33.3% thought the 20 percent of the population of America was homeless last year. For question 5, 26.6% thought that the average house price sold in USA is $100,000, 60% thought that the average house price sold in USA is $300,000 and 13.3% thought that the average house price sold in USA is $500,000. For question 7, 20% thought that the 1% of the population makes over 1 million dollars a year, 40% thought that the 3% of the population makes over 1 million dollars a year, 33.3% thought that the 10% of the population makes over 1 million dollars a year and 6.6% thought that the 15% of the population makes over 1 million dollars a year.

In West Louisville, question 1, 30% thought that google employees make $100,000 a year, 43.3% though that google employees make $300,000 a year and 26.6% thought that google employees make $15,000,000 a year. For question 2, 13.3% thought that the richest 5% of Americans made $350,000, 33.3% thought that the richest 5% of Americans made $800,000, 26.6% thought that the richest 5% of Americans made $1,000,000, 26.6% thought that the richest 5% of Americans made $10,000,000. For question 3, 6.6% thought that the average income for women was $10,000, 33.3% thought that the average income for women was $20,000, 30% thought that the average income for women was $40,000 and 30% thought that the average income for women was $50,000. For question 4, 26.6% thought that the average income for men was $60,000, 23.3% thought that the average income for women was $90,000, 46.6% thought that the average income for women was $100,000, 3.3% thought that the average income for women was $300,000. For question 5, 36.6% thought the 0.5 percent of the population of America was homeless last year, 26.6% thought the 1 percent of the population of America was

homeless last year, 23.3% thought the 5 percent of the population of America was homeless last year and 13.3% thought the 20 percent of the population of America was homeless last year. For question 6, 30% thought that the average house price sold in USA is $100000, 20% thought that the average house price sold in USA is $300000, 36.6% thought that the average house price sold in USA is $500000 and 13.3% thought that the average house price sold in USA is $1,000,000. For question 7, 30% thought that the 1% of the population makes over 1 million dollars a year, 33.3% thought that the 3% of the population makes over 1 million dollars a year, 26.6% thought that the 10% of the population makes over 1 million dollars a year and 10% thought that the 15% of the population makes over 1 million dollars a year.

The results for question 1 might be due to people in the east having a better understanding of job wage in higher paying jobs because they occupy these jobs as well. The result for Questions 2 and 7 might be due to both the east and west not knowing how much "rich" people and how many people make a large number of money. Question 5 was answered by both east and west with higher percentages than an equal probability(25%) but the west did better most likey to the increased interactions with homeless people. Question 6 was answered better than an equal probability but the west did better by approximately 3% which is very close. This may be due to a small sample.

Nonresponse bias was experienced. Some of the houses we chose to survey didn't answer their doors and some people refused to take the survey. There were also confounding variables that affected our results which were the number of people in the household and the ages of people that were taking our survey. These confounding variable could have affected our data because people that have more household members might perceive the economy in more of a negative way. Age of the people that are taking the survey could also affect our results because a

college student or a young adult might not be as experienced enough to understand the cost of houses and the amount of money each person makes versus a 40-year-old adult we have the experience and the knowledge of the economy.

AP Statistics
Mr. Lowber
19 November 2017

In our polling project, we decided to survey residents in Louisville. In Louisville, the rich and higher class typically live in the east and the lower class residents typically west. We wanted to take a sample of residents from the east and west of Louisville and see how they viewed the state of the economy. First, we divided our define population(residents in Louisville) into strata which were the east and west. After, we choose to survey two neighborhoods from East Louisville and two neighborhood West Louisville which were White blossom and Lake forest for the east and Clifton Heights and Meriwether for the west. We used convenience sampling for the Eastern neighborhoods because the neighborhoods we lived in were in the East and it was convenient to survey and get data. We decided to survey houses from each neighborhood and asked them questions about how they viewed the economy and made the samples into a list. In the list we randomly chose 30 samples and made it into a new list (Both East and West).

The results for question 1 show that more residents in Eastern Louisville got the question right. I feel like this is expected because most people in the eastern neighborhoods have high paying jobs and are more knowledgeable in those areas. Both residents in the east and west didn't know how much rich people made for questions 2 and 7. I feel like this surprised me because people in the east are rich and higher class and would know more about average income for rich people and the residents in the west did better than residents in the east which was more surprising. Question 5 was answered by both east and west with higher percentages but the west did better most likely to their knowledge of homeless people. For the questions we took out which was question 3 and 4 about wage gap between men and women, residents in the Eastern Louisville were more knowledgeable about the wage gap between men and women than the people in Western Louisville. Even though the question was thrown out, it was interesting seeing

how knowledgeable residents in the East and West thought about the wage gap between men and women.Nonresponse bias occurred in this survey which was some of the houses we surveyed didn't answer their door or refused to do the survey. There was also confounding variables that occurred in the survey which was the number of people in the household and the ages of people we surveyed could have affected the results of the data. The number of household is important because families that have more household members might perceive the economy in more of a negative way and have to spend more money on average for the multiple family members. Age of the residents is also an important factor because a college student or a young adult might not be as experienced enough to understand the cost of houses and the amount of money each person makes versus a 40-year-old adult we have the experience and the knowledge of the economy. This survey helped us understand how people with high income and low income might perceive the economy and the differences in knowledge of the economy between high income and low income residents.

AP Statistics

Lowber

November 19, 2017 - Reflection

This polling project was done to analyze the knowledge of people on money based on their household income. The decision of the group was to survey residents of Louisville due a wide range of income and this city being convenient for the group. The two groups that Louisville was separated into the East and West. In Louisville, the West or downtown is known to have lower income households. The East is known to hold households that have higher incomes. In the West the group surveyed were the two neighborhoods of Clifton Heights and Meriwether. In the East, White Blossom and Lake Forest were surveyed. The households that were chosen to be surveyed were ones that people were or people were thought to be there. This resulted in a larger sample to be taken from each neighborhood. Some houses had people who were elderly or had trouble to read, so the questions and answers were read to them. This sampling design resulted in having people the group ahold of to actually take the survey. After all of the surveys were given, a simple random sample was made for both East and West with 30 entries each. This was done to prevent errors made in surveying.

The results for the survey found for question 1 which was that the East part of Louisville would do better helped previous assumptions that the East would know these high paying jobs due people actually occupying them. Question 2 was also believed that the East would do better on due to having a higher household income on average. Though this may be true, the East did not perform as well as expected while the West performed performed worse than if there was an equal chance for every question. Question 3 and 4 were both thrown out as they also included due to more homeless people on the street. What was surprising was that the East is almost as gender as a factor of income which is why that data was not included. The results for question 5

also came as expected with the comparison between the East and West and the West doing better well as the West. In Louisville, many companies have their buildings in the West or downtown so this interaction of people of the east commuting to the West to work might result in this trend. Question 6 was answered better than an equal probability but with the values between so close between the East and the West, no conclusion could be made. The results for question 7 were surprising as the West did better on the percentage of people who made more than 1 million per year. This result was not able to explained and causes of this occurrence were not able to be found. This event might of happened by chance.

A bias that occurred in the sampling of people was nonresponse bias. Many people were not will or did not have time to spare to take the eight multiple choice survey. Confounding variables were the number of people in the household and the age of the people in the house. The number of people increases the household income as more people are needed to be supported and more people are able to work. Usually people of younger age have a lower income which may have resulted in an overestimation of some of these questions. Also with age comes experience; a older person might have more experience in buying houses and might know more about the cost of a house.

Overall, the survey helped to create evidence on the relationship between the household income and the ability to answer correctly values pertaining to money about the US; People of higher household income have more knowledge on economic numbers about the US population.

Appendix A – Survey Questions

Appendix B – Participants Responses

Appendix C – Charts and graphical display

(NOTE: The appendices are NOT INCLUDED in this web document)