Unit 2 One Variable Statistics Project GUIDELINES (170 Points)

Each poster must include ALL of the following DUE MONDAY, October 19, 2015:

**Section 1: (Label this section “Why is literacy important”)**

Think about it! WRITE and ANSWER this question in complete sentence(s): Why is literacy important? Why would it be important to know a country or continent’s literacy rate? (at least 3-5 sentences)

**Section 2:** **NORTH AMERICA (label this section “North America”)**

1. Have pictures of North America - this includes a map, pictures of people, etc…
2. Create a FREQUENCY TABLE with the frequency AND Relative Frequency
3. Next write and find the following statistics of the data (you may do this by hand or use your calculator) of North America:

mean, median, range, IQR, standard deviation, and calculating if there are outliers using the 1.5(IQR) rule

1. Create a GRAPH (either a Histogram or BoxPlot) – be sure to label your axes!

**Section 3: The other CONTINENT -your choice! (label this section the name of your continent)**

1. Have pictures of the other continent - this includes a map, pictures of people, etc…
2. Create a FREQUENCY TABLE with the frequency AND Relative Frequency
3. Next write and find the following statistics of the data (you may do this by hand or use your calculator) of this continent:

mean, median, range, IQR, standard deviation, and calculating if there are outliers using the 1.5(IQR) rule

1. Create a GRAPH (either a Histogram or BoxPlot) – be sure to label your axes

**Section 4: Compare the statistics North America and the other continent (label this section “Comparison”). Each part should have 3-5 sentences.**

1. Look at the statistics you found in Section 2 and 3– compare the centers (mean and median) of the two continents. Also compare the spread (range, IQR, and standard deviation) of the two continents. Note: you are finding how they are similar and how they are different. WRITE IN COMPLETE SENTENCES.
2. If you removed the outlier (or if there isn’t one, suppose you remove the highest or lowest data value), would that significantly affect the statistics? How would the center or spread significantly change? What would stay about the same?
3. **Finally, make a conclusion about the continents’ literacy rates.** Which continent overall has better literacy? Use statistics and math words to support your answer.

**You’re done! BE SURE YOUR NAME IS ON THE PROJECT BEFORE TURNING IT IN.**

**Project Rubric – How is this being graded?**

**Grading rubric**

**5 (100% A+)** – Student demonstrates a superior understanding of the task at hand. Work is detailed and communicated clearly .

**4 (90% A)** – Student demonstrates a solid understanding of the task at hand, but is lacking in detail.

**3 (80% B)** – Student demonstrates a proficient understanding of the task at hand, but there have been some minor mistake or omission made.

**2 (70% C)** – Student demonstrates sufficient understanding of the task at hand, but cannot do so consistently.

**1 (60% D)** – Student demonstrates partial understanding. Multiple mistakes have been made.

**0 (50% F)** – Student demonstrates very limited understanding, but has relevant work .

Ø **(0% F)** – Student makes no attempt at the task OR shows no understanding by providing irrelevant work.

**Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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|  | **Rubric Grade** | **Points Earned** | **Points Possible** |
| Importance of Literacy Response (Section 1):  Response is complete |  |  | **10** |
| North America  Skill 5: I can represent one-variable statistics. (Section 2) |  |  | **50** |
| Other Continent  Skill 5: I can represent one-variable statistics. (Section 3) |  |  | **50** |
| Skill 6: I can compare one variable-statistical data. (Section 4a and c) |  |  | **25** |
| Skill 7: I can interpret one variable-statistical data.  (Section 4b and c) |  |  | **25** |
| Creativity/Neatness:  Project is neat, has color/pictures, organized |  |  | **10** |
| Deductions (late) |  |  | * **5 pts each day late** |
| Total |  |  | **/170 points** |

Comments:

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