



Baltimore Data Jam Competition – High School Judging Rubric 2020

Screening questions: Does the project include...

1) A written scientific report? Yes No

2) An interpretive creative component? Yes No

If you answered “no” to either of these questions, please inform the contest administrators and do not continue scoring the project.

Report Content & Organization - 10 points					
	Outstanding	Above Average	Average	Below Average	Poor
Report is typed in a readable font, easy to read and understand, neat, and free from spelling and grammatical errors.	10	8	6	4	2

The table below is for student reference, only. Judges will skip this part.

Check Mark	Report Components
	1. Title --- with student names, grades, and school
	2. Introduction – background, question and claim about the data
	3. Dataset(s) description – description of variables and methods used, data source
	4. Data representation(s) – graphs, charts, or other type of data summary
	5. Data trend(s) or comparison(s) – described, referring to representation(s)
	6. Explanation of <i>why</i> data trends occurred
	7. New questions and hypotheses
	8. Explanation of creative project
	9. Reflection on Data Jam experience
	10. Reference List – include at least 2 references, properly cited

Scientific Merit of the Written Report - 50 points						
	Outstanding	Above Average	Average	Below Average	Poor	No Evidence
NOTE: Each category corresponds to a section of the DJ Report. Each section should be a paragraph of text (2-7 sentences).						
1. Title Project includes a clear and engaging title, names of all student authors, grade(s) and school name(s).	1					0
2. Introduction a. Includes background information needed by someone unfamiliar with the science topic to understand the project. b. Research question and null and alternative hypotheses are clearly stated c. Identifies the variables in the dataset(s)	5	4	3	2	1	0
3. Dataset(s) Description a. Dataset(s) are described accurately and clearly including: <ul style="list-style-type: none"> • Methods used to collect the data • Who collected the data, • Where and when data were collected, • Source of data (ex: NOAA, HRECOS, Cary Institute). b. Variables are identified accurately and explained clearly. Ex: The independent variable measured in this experiment was time and the dependent variable was blue crab density.	10	8	6	4	2	0
4. Data Representation(s) Graph(s), table(s) or other type of summary includes: <ul style="list-style-type: none"> • Clearly displayed data (points, bars, etc.) • Labeled axes 	8	7	5	3	1	0
5. Data Trends or Comparisons a. Trend(s) or comparison(s) are described accurately, using basic descriptive statistics (ex: mean, standard deviation). Ex: The average annual blue crab population increased over time from 158 to 2703 crabs/m ² . b. If two or more datasets were used, students describe how data are similar and different	10	8	6	4	2	0
6. Explanation (Data Interpretation) a. Uses reasoning to explain the trend or comparison discovered b. Discusses why the trend or comparison is interesting c. Uses basic descriptive statistics (mean, standard deviation, t-test, etc.) to describe variability d. Explains potential sources of variability	10	8	6	4	2	0
7. New Hypotheses & Questions Includes at least two additional ideas for future scientific research.	2		1			0
8. Explanation of Creative Project Explains why students chose a particular medium and what message they hope audience will learn from their creative project.	1					0
9. Reflection Student reflects on their personal Data Jam experience.	1					0
10. Reference List Project clearly and accurately cites 2 outside sources besides the dataset and metadata.	2		1			0

Creativity In Communicating Data		40 points				
	Outstanding	Above Average	Average	Below Average	Poor	No Evidence
Creativity Project idea (ex: poem, skit, video) is creative and original.	10	8	6	4	2	0
Message Project has a message that is easily understandable for a non-scientist audience.	10	8	6	4	2	0
Craftsmanship Materials, media or resources are used skillfully and effectively to create an appealing project.	10	8	6	4	2	0
Data Incorporation The creative product accurately portrays the trend(s) in the data.	10	8	6	4	2	0

Judge's Comments: