

Bloom's Digital Taxonomy

Data Analysis Rubric

Bloom's Taxonomic Level: Analysing

Key Terms - Analysing:

Comparing, organising, deconstructing, Attributing, outlining, finding, structuring, integrating, Mashing, linking, reverse-engineering, cracking, mind-mapping.

Introduction:

This is a rubric for data processing, manipulation, presentation and analysis. The rubric is designed for students taking raw data and suitably entering this into a spreadsheet (data processing). The processed data is then manipulated to add value using features like sort, filter, formula and equations. The manipulated data is presented in a suitable format or formats to enable analysis. Students are able to select suitable charts for the data types and suitably label tables, titles, axes, labels and keys. Students can then make accurate analysis of the data and trends, with an awareness of errors and inaccuracies.

	Data processing, manipulation, presentation and analysis				
1	Students attempt to arrange data into fields. Most Fields are named. Data entered has some inaccuracies. Students show little understanding of data types. Students make no attempt to manipulate data or manipulation is fundamentally flawed. Students inconsistently and inappropriately make use labels, highlights, font weight and underline. Students select inappropriate visual methods of presenting data. Students make no attempt to analyse data or draw conclusions or the analysis is fundamentally flawed. Students are unaware of errors or inaccuracies. Students make no attempt to links to prior knowledge.				
2	Students arrange data into fields. Fields are named. Data entered has some inaccuracies. Students have some understanding data types – continuous and discontinuous. Students can manipulate data with use of formula or equations or sort or filter. Some errors are present in data manipulation. Students use labels, highlights, font weight and underline. Students select visual methods of presenting data. Some presentation methods are suitable for the type of data and purpose of presentation and audience. Students attempts to identify trends to draw conclusions from the data. There are inaccuracies in analysis. Students have little awareness of errors or inaccuracies. Students attempt to make some links to prior knowledge.				
3	Students arrange data into fields. Fields are appropriately named. Data entered is mostly accurately. Students recognise data types – continuous and discontinuous – most of the time. Students can manipulate data using formula or equations. Students can use the filter and sort features. The data manipulation makes analysis possible . Some errors are present in data manipulation. Students appropriately use labels, highlights, font weight and underline. Students select visual methods of presenting data. The presentation methods are mostly suitable for the type of data and purpose of presentation and audience. The presentation shows trends. Students identify trends and are able to draw conclusions from the data. There are few inaccuracies in analysis. Students can recognise some errors and inaccuracies in the processed, manipulated and presented data. Students are able to make some links to prior knowledge.				
4	Students arrange data into suitable fields. Fields are appropriately named. Data is entered accurately. Students recognise data types – continuous and discontinuous. Students can appropriately manipulate data using suitable formula or equations. Students can appropriately use the filter and sort features. The data manipulation makes analysis possible. Students appropriately and consistently use labels, highlights, font weight and underline. Students can select suitable visual methods of presenting data. The presentation methods are suitable for the type of data and purpose of presentation and audience. The presentation suitably and accurately shows trends. Students can recognise errors and inaccuracies in the processed, manipulated and presented data and their analysis. Students are able to relate presented data to other knowledge.				

	Data Processing	Data manipulation	Data Presentation	Data Analysis
1	Students attempt to arrange data into fields. Most Fields are named. Data entered has some inaccuracies. Students show little understanding of data types.	Students make no attempt to manipulate data or manipulation is fundamentally flawed.	Students inconsistently and inappropriately make use labels, highlights, font weight and underline. Students select inappropriate visual methods of presenting data.	Students make no attempt to analyse data or draw conclusions or the analysis is fundamentally flawed. Students make no attempt to links to prior knowledge.
2	Students arrange data into fields. Fields are named. Data entered has some inaccuracies Students have some understanding data types – continuous and discontinuous.	Students can manipulate data with use of formula or equations or sort or filter. Some errors are present in data manipulation	Students use labels, highlights, font weight and underline. Students select visual methods of presenting data. Some presentation methods are suitable for the type of data and purpose of presentation and audience.	Students attempts to identify trends to draw conclusions from the data. There are inaccuracies in analysis Students attempt to make some links to prior knowledge.
3	Students arrange data into fields. Fields are appropriately named. Data entered is mostly accurately. Students recognise data types – continuous and discontinuous – most of the time.	Students can manipulate data using formula or equations. Students can use the filter and sort features. The data manipulation makes analysis possible . Some errors are present in data manipulation.	Students appropriately use labels, highlights, font weight and underline. Students select visual methods of presenting data. The presentation methods are mostly suitable for the type of data and purpose of presentation and audience. The presentation shows trends.	Students identify trends and are able to draw conclusions from the data. There are few inaccuracies in analysis. Students can recognise some errors and inaccuracies in the processed, manipulated and presented data. Students are able to make some links to prior knowledge.
4	Students arrange data into suitable fields. Fields are appropriately named. Data is entered accurately. Students recognise data types – continuous and discontinuous	Students can appropriately manipulate data using suitable formula or equations. Students can appropriately use the filter and sort features. The data manipulation makes analysis possible	Students appropriately and consistently use labels, highlights, font weight and underline. Students can select suitable visual methods of presenting data. The presentation methods are suitable for the type of data and purpose of presentation and audience. The presentation suitably and accurately shows trends.	Students correctly identify trends and is able to draw suitable accurate conclusions from the data. Students can recognise errors and inaccuracies in the processed, manipulated and presented data and their analysis. Students are able to relate presented data to other knowledge.