

Coursework Marking Grid – Data Visualisation – Part 1

Name Geraint Hill

Grade **63%**

QUESTION	EXCEPTIONAL 6	MERITORIOUS 5	HIGHLY COMPETENT 4	COMPETENT 3	PASS 2	FAIL 1
Description of what is right with the original poster (20%)	Provides detailed breakdown of cognition in data presentation	Identifies a wide range of good points	Explains the main good points in terms of cognitive processes	Identifies three to six good points	Identifies one or two obvious good points	Provides no ideas relating to the good points of the poster
Description of what is wrong with the original poster (20%)	Provides detailed breakdown of cognitive errors in data presentation	Identifies a wide range of problems	Explains the main problems in terms of cognitive processes	Identifies three to six problems	Identifies one or two obvious problems	Provides no reasons why the original poster was weak
Suggestion of improvements (30%)	Provides detailed breakdown of cognitive support in data presentation	Suggests a wide range of justified improvements	Justifies the main improvements in terms of cognitive processes	Suggests seven or more improvements; may justify some of them	Suggests three to six appropriate improvements	Makes few suggestions for how to improve the poster
Links to literature (10%)	All points referenced	Most points referenced	Considers cognitive issues	Considers other issues	Considers visual issues	No links to the literature
Document presentation (10%)	Reads like a technical review article	Good use of signposting; good use of English; tables of figures and tables	Clear sectioning of content; labelling of tables and figures; reasonable English	Some labelling of tables and figures; clearly needs spell- and grammar-checking	Basic use of introduction, body and conclusion; English is comprehensible.	No clear structure; incomprehensible
Referencing (10%)	>10 references AND three quarters or more of references are book/journal standard	>4 references AND three quarters or more of references are book/journal standard	<5 references AND more than half of references are book/journal standard	<5 references OR fewer than half of references are book/journal standard	<5 references AND fewer than half of references are book/journal standard	No references

Comments

Clear identification of the message. Good consideration of the problems with respect to mental processes. Good improvements, although the total on the new version should be points or horizontal lines – having a connected line suggests that the totals are related to each other in some way. Good piece of work overall – well done.

Part 2

QUESTION	EXCEPTIONAL 6	MERITORIOUS 5	HIGHLY COMPETENT 4	COMPETENT 3	PASS 2	FAIL 1
Presentation of data (35%)	All forms are highly effective	Most forms are highly effective	Some forms are highly effective; all forms work	Most forms work; none a wildly inappropriate	Some forms work, others are inappropriate	Uses totally inappropriate forms
Answers questions (15%)	Answers all questions clearly and with minimal cognitive load	Answers all questions clearly	Answers 4 questions clearly	Answers 3 questions clearly	Answers 2 questions clearly	Answers 1 or no questions clearly
Use of colour (20%)	Professional-looking design	All colours are used appropriately and allow for limits of visual system	All colours are used appropriately	Most colours are visible	Some colours are readable	Unreadable
Use of other elements (20%)	Professional-looking design	All elements are used appropriately and allow for limits of visual system	All elements are used appropriately	Text is a sensible size and well-spaced	Text is readable but in an inappropriate manner.	Unreadable
Creativity (10%)	Professional-looking design	Most graphic design elements work well	Aesthetically pleasing/elegant in its simplicity	Some graphic design elements that work well	Plain, with no attempt to add graphic design elements	Ugly

Comments

A striking poster, but there are some issues with it. Don't use 3D graphics, because by their very nature they distort things, making them more difficult to interpret. Your use of your also makes it difficult to interpret things – use colour consistently, so if green represents the total in one graph, it should represent the total in all others too.

Q1: Okay, but a line graph of patients v. month would be better, with each health board shown as a different colour line.

Q2: Does not work. Line graphs should only be used where there is an obvious connection between the elements on the x-axis, e.g. time (June->July->August or 2028->2019->2020). A stacked bar chart for each health board would be much better.

Q3: Difficult to make comparisons. A good way to do this is to do a dual axis plot showing the total number of attendances for each health board and the percentage seen within 4 hours.

Q4: A pie chart is not good for this, particularly as the numbers don't add up to 100%. Showing the percentages rather than the total number of patients would be better.

Q5: Okay. Good use of an average line, but you don't need to show the total. Just show the percentage for each hospital, with all minor hospitals to the left and all major hospitals to the right. The doughnut diagram doesn't work well, partly because you can't read all the text, but again because the numbers don't add up to 100%. Doughnuts like this are a useful way of showing a two-level pie chart, but you have to be really careful to make sure they can't confuse the viewer.