Technique for Analysis Writing in Geography

Statistical data in Geography is usually most effectively presented as a graph. When analysing a graph it is important to start by stating exactly what the graph is showing. This enables the reader/marker to understand immediately what you are going to analyse.

*For example:*

*Graph 1 shows the sediment size of the X coast at three different survey sites.*

*The sediment size of the X coast at three different survey sites is shown in graph 1.*

It may be also be helpful to explain the axes labels.

*For example:*

*Sediment size is recorded on the vertical axis in mm.*

*The sites are recorded on the horizontal axis. Site 1 being the headland, site 2 the beach and site 3 at the spit.*

Patterns (Correlations)

Make a comment on any general patterns (correlations).

A *positive correlation* is where both variables increase.

 Wind Graph 1: A scatter graph showing the relationship km/hr between the wind and wave height

 0

 Wave height

A *negative correlation* is where one variable increases and the other deceases.

 Size Graph 2: A scatter graph showing the relationship

 of between sediment size and roundness index

 sediment

 (mm)

 0

 Increasing roundness index

*No Correlation* is where there is no pattern with the data.

You should try and give reasons for the pattern (correlation) that has been identified in your graph.

Variations

It is important to identify any extremes in the data. You could calculate the differences between the highest and lowest and also calculate the average. Again, you should comment on any variations you identify where big or small and give reasons why these might have occurred.

Anomalies

Finally, identify any anomalies (irregularities) - this is data that does not fit in with the normal pattern or theories/geographic models. These should be commented on and if possible reasons given for why they might have occurred.

*For example:*

*One sediment sample at the headland has a roundness index of \_\_\_\_\_\_. This is much higher than all the other sediment samples. This sediments roundness index is quite different to those found at the spit. I rechecked the data collected in the field and found it to be correct. However the accuracy of this data could be questioned as the headland was the first survey site and we were not entirely sure about the measuring techniques. Our recorder for that site could also have written down the measurements incorrectly. This coastal environment did have a variety of sediment types. The igneous rocks were much more resistant and tended to be angular. Whereas some of the sedimentary rocks, particularly the sandstone, tended to be rounded. It would have been helpful to also record the rock type of the sediments samples measured. This might have helped to explain this anomaly of the differences in sediment size.*

Detailed Analysis

It is helpful to try and present the data in a more detailed way. This involves manipulating the data in some way.

 *For example:*

*Work out the range and the mean for a group of data.*

*Calculate percentages within and between groups of data.*

*Calculate changes, increases, decreases, etc.*