

GCSE Geography Fieldwork

Strand 6

Evaluation of geographical enquiry

There are **four** separate sections within this strand and it is the links between two or more of these sections that would be assessed within high tariff questions in the examinations. Candidates often need a lot of support with this aspect of their enquiries otherwise responses to examination questions will be superficial and generic.

1. Identification of problems of data collection methods.
2. Identification of limitations of data collected.
3. Suggestions for other data that might be useful.
4. Extent to which conclusions were reliable.

1. Identification of problems of data collection methods.

This strand requires candidates to understand that their data collection methods are unlikely to be perfect. Critical appraisal of the methods used must be undertaken rather than a more hypothetical appraisal where issues that **could have** arisen are discussed. This appraisal may best be carried out in the field whilst the data are being collected. Discussing issues with candidates whilst they are undertaking their enquiries may be more meaningful, and memorable, than doing so in the classroom later.

The sorts of problems that might be considered include:

- Sampling method(s) used – did this affect the nature of the sample selected and measured?
- Sample sizes – were these large enough for the candidate to have confidence in the results obtained?
- Timings – did the time of day or duration of data collection have an impact on the results collected?

- Method structures – did the questions on the questionnaires work? Were the criteria on the EQS appropriate?
- Impacts of day, month, timings, weather conditions – did any of these impact on the results collected in any way?
- Issues on the day e.g. river flow, tides/waves – did anything occur on the day that may have impacted upon the data collection methods?
- Issues associated with equipment – did all equipment function properly and/or was the equipment used correctly?

2. Identification of limitations of data collected.

As a progression from the first part of this strand, candidates should be aware that the data collected for their enquiries will have limitations. Limitations can be related to accuracy and to scale. Data collection methods may not have been carried out sufficiently carefully that the data can be viewed as being accurate, e.g. possible miscounting of pedestrians or traffic. The scale of the data collection may be so small that any conclusions would be tentative at best, e.g. only asking ten people to respond to a questionnaire in a CBD will provide a limited set of responses.

3. Suggestions for other data that might be useful.

The fieldwork enquiries should be concise, precise and focused upon a specific part of the specification. As a result, candidates will have identified a limited range of data that required addressing their key question or hypothesis and, therefore, they would have used a small number of data collection methods for each task. This means that, inevitably, there are additional data sets and associated data collection methods that could have contributed to the enquiries that were discarded from the process at an early stage. When reflecting on their enquiries, candidates must consider other data that could have been collected to make the outcomes of these enquiries more secure.

4. Extent to which conclusions were reliable.

At the end of their enquiries candidates would have reached a conclusion or conclusions about their original key question or hypothesis. Any errors occurring within any stage of the enquiry process could impact upon the reliability of these conclusions.

- Measurements or sampling errors whilst collecting data would compromise the accuracy of the results
- Interpretations of inaccurate results could lead to conclusions that lacked reliability.

Candidates need to take all aspects of the enquiry process into account when deciding whether the reliability of their conclusions is low or weak, or if the reliability of their conclusions is high or strong.

Examination questions regarding evaluation often reference three specific terms, accuracy, reliability and validity.

Accuracy relates to the degree of error(s) in the collection of data.

- What errors occurred that might impact upon results?
- To what extent were results accurate? (Try putting a % on this eg *I think my results were 80% accurate*).
- What improvements to accuracy can be made?

Reliability relates to the consistency of results and conclusions (over time).

- How reliable were the results? (Try putting a % on this).
- What improvements to reliability can be made?

Validity relates to how far any measurements/results did what they were supposed to do *and* therefore provide evidence suitable for reaching true or trustworthy conclusions.

- How far can the conclusion(s) be trusted? (Try putting a % on this).

- What improvements to validity can be made?

There is only one section within this strand, and this must be considered from the point of view of the teachers and the candidates.

- Draw evidenced conclusions in relation to the original aims of the enquiry.

The enquiries carried out by candidates will have been based on a question or a hypothesis so that a clear focus for the task was determined from the outset. The evidence collected through fieldwork should allow candidates to answer their question or to accept or reject their hypothesis.

A series of 'mini conclusions' may lead candidates towards an overall conclusion but wherever possible reference to evidence must be provided.

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