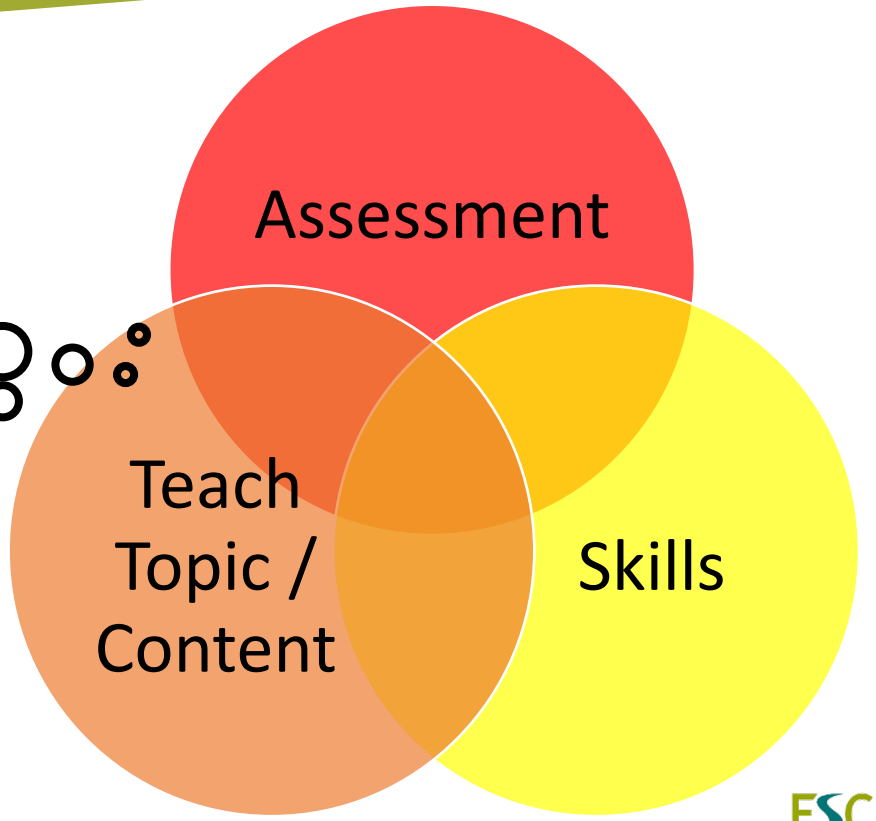
High Quality Fieldwork?

Why do Fieldwork?

Impact on Quality?



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High Quality Fieldwork? – An Enquiry Approach

Creating a need to know

Asking questions to:

Identify issues / problems

Be creative

Hypothesise

Make links w

geogra e

Using data

ing primary & secondary data

te / contextualise the enquiry

ject

Sele

Re ence

Reflecting on learning

To be critical in relati

Data sources

Techniques used strategies

Stakeholder views

How the enquiry could be improved

The value of what was learnt

Making sense

vidence to:

ationships

usions

Make decisions / solve problems

Relate findings to existing knowledge

Question
Plan
Observe
Collect
Record
Represent
Analyse
Apply
Review

(1) Identification of the question	Pre-fieldwork and planning	What are the possible fieldwork opportunities presented by the environment? Are they practical, realistic or achievable given the circumstances of the locations etc?
(2) Contextualising the fieldwork		Research into relevant background information (internet, magazines, books), i.e. secondary information and/or data. Opportunity to develop own ideas and models or use existing ones. Development of hypotheses and/or suitable key questions.
(3) Design: where and how many?	Primary field skills	Number of fieldwork sites (practically); group or individual observations. Consideration of appropriate sampling procedures (systematic vs random vs stratified) and sample size. Consideration of health and safety and undertake risk assessments.
(4) Equipment considerations; how to record. Primary data collection		Appropriate data collection methods that will help answer the questions being investigated. Appropriate equipment to ensure accuracy and reliability. Development of recording sheets for measurement and observation.
(5) Data processing and presentation	Presentation, analysis, conclusions and evaluation	Use of ICT to manage, collate and process information, e.g. shared spreadsheets and VLE/'cloud' to store for easy retrieval. Using ICT and/or hand-drawn graphical skills to present information in a suitable way.
(6) Analysis and conclusions		Describe the findings, explain possible reasons and make links. Simple statistics may be relevant, e.g. measures of central tendency, spread and cumulative frequency.
		Review information and then bring it together to form a conclusion, drawing on evidence and reasoned chains of argument.
(7) Critically reflecting on the results		A critical reflection on the fieldwork data, methods used, knowledge gained and how this could be applied to other fieldwork contexts. Reference to the accuracy, validity and reliability of the conclusions.

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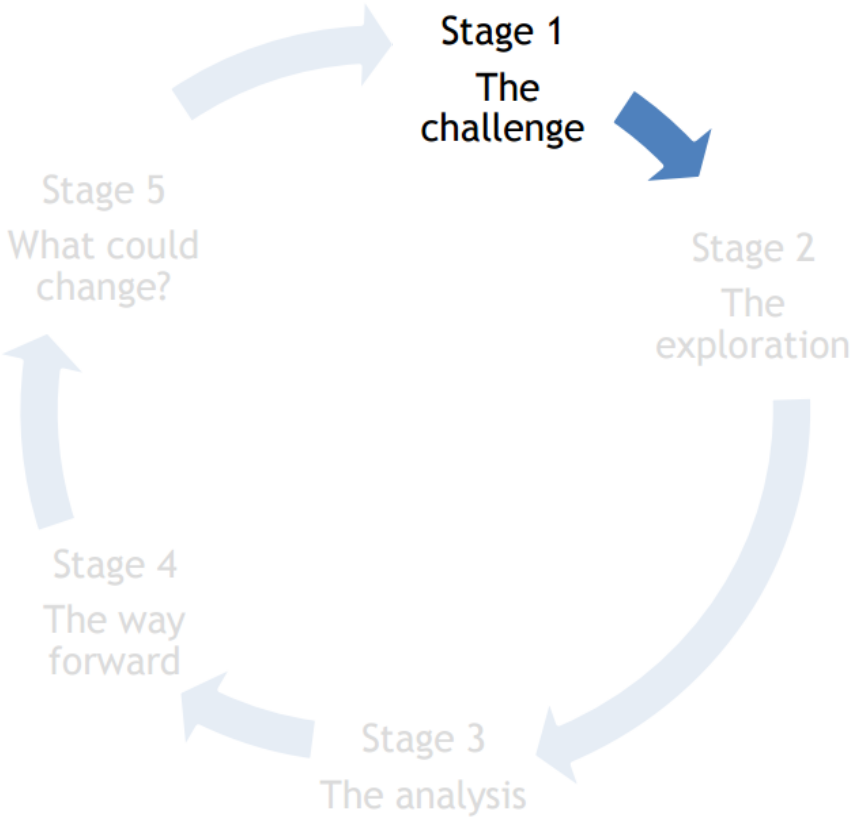
High Quality Fieldwork? - A Learning Journey

The **Challenge** stage is about presenting learners with a situation which will lead them to have some questions to answer or investigate.



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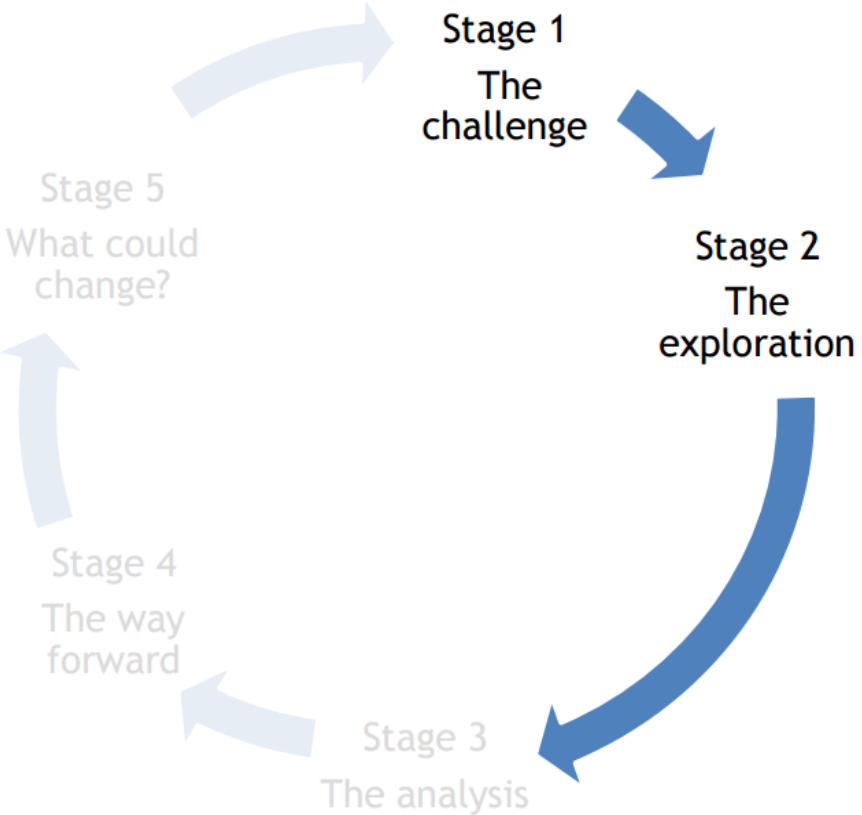
Exploring is about getting information to answer the question. So, it can involve practical work, use of secondary sources, direct instruction, collecting data, taking photographs, comparing emotional responses all focussed on the challenge identified earlier.



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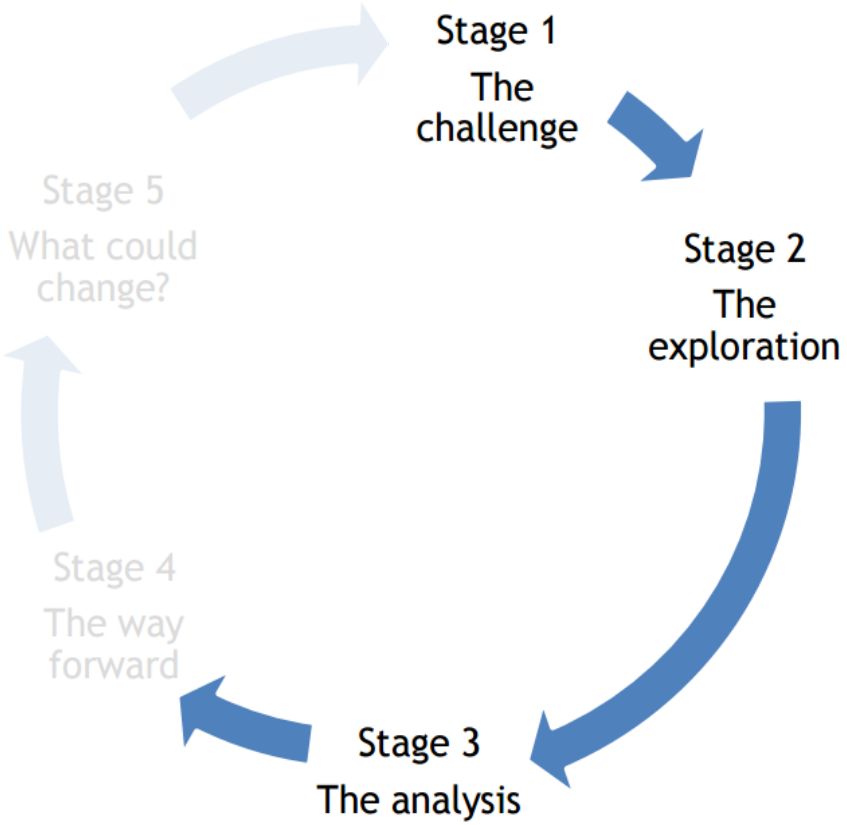
In the **Analysis** stage learners use the results of the exploration to come to some further understanding of the situation.



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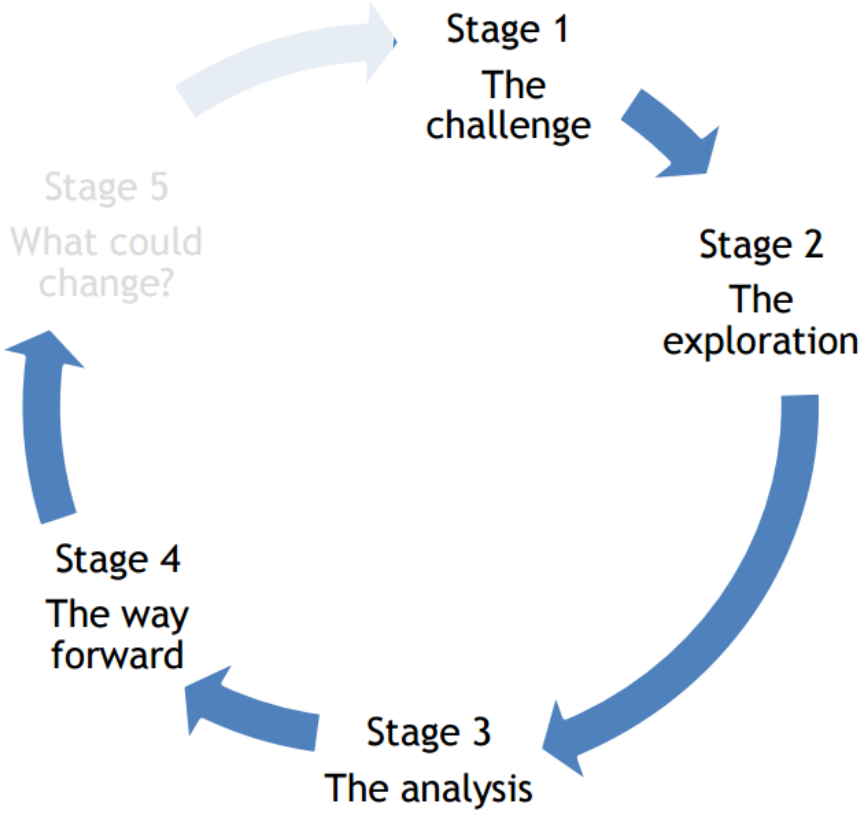
In the **Way Forward** learners revise and test their new view of the initial situation. They should also assess how confident they can be in their new understanding.



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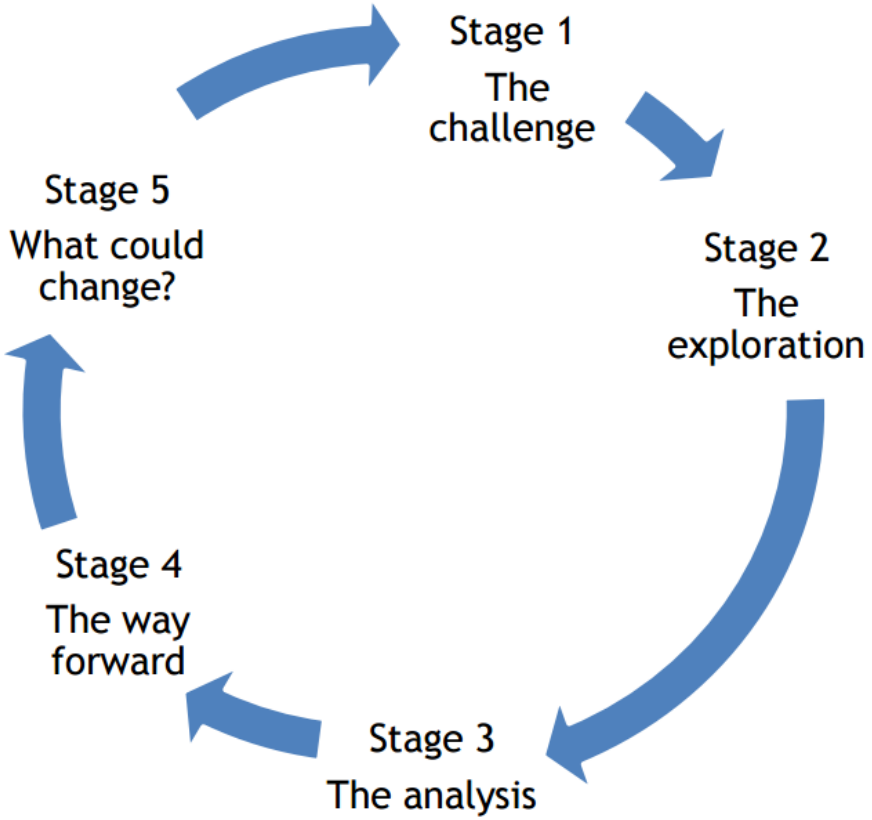
High Quality Fieldwork? - A Learning Journey

What Could Change asks the learners to consider how the context for their solution could be different over time, in different places, for different people or as the learners change… it may raise a series of new questions which lead onto the next challenge stage and so the journey continues at a new level



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High Quality Fieldwork? - A Learning Journey

Field

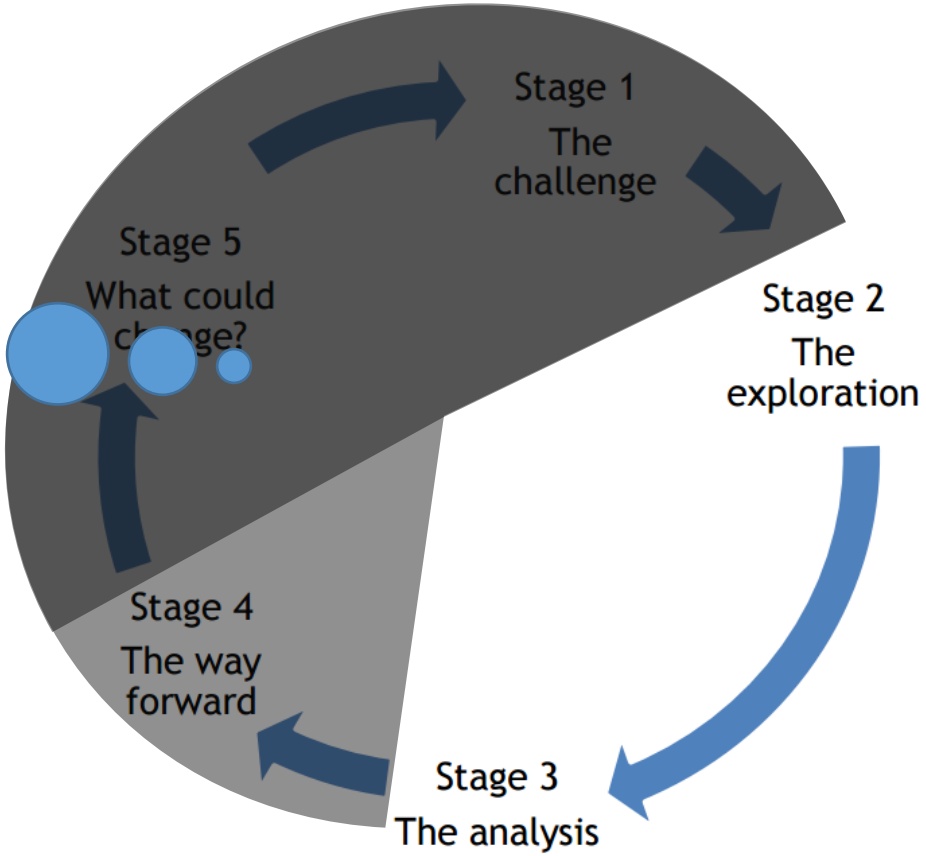
A

Think back to the example of fieldwork you talked about at the start….

What aspects of this model did that fieldwork do well?

How might you change the experience to better cover these stages?

In mar time is spent on the remaining stages.



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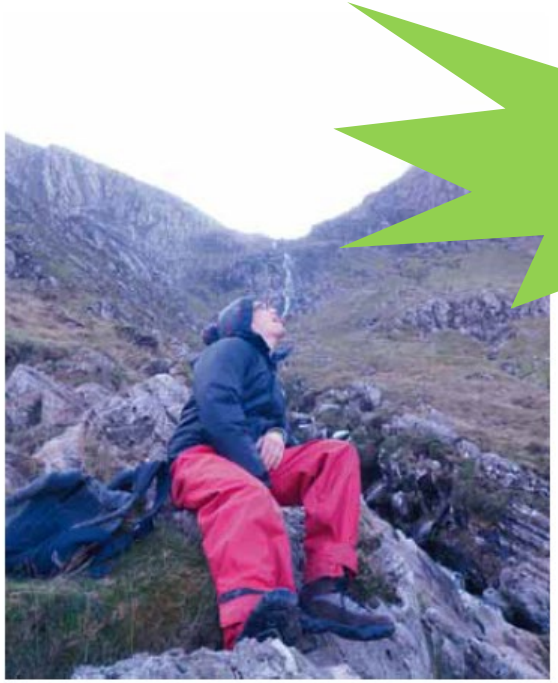

RISKY FIELDWORK?

Teaching Geography – Summer 2012

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Bridging the gap…….

For most Geography departments a fully student led field trip at GCSE is not practical…….

…… But students can be involved in the decision making processes, planning and given some freedom to do individual work……

… the more ownership they have, the better the experience will be ….

More ownership, more engagement, more enquiry = Better Outcomes

(…….Especially in 2 years time if they do A Level Geography!)

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Stage 1

The challenge

(1) Identification of the question

nd planning

What are the possible fieldwork opportunities presented by the environment? Are they practical, realistic or achievable given the circumstances of the locations etc?

- We are going on a field trip to -2.755710, 52.707541
- What Geography can I find there? General topics / themes for enquiry?

- How could students find out?

Google Maps Scribble Maps ArcGIS Online

Where's the Path

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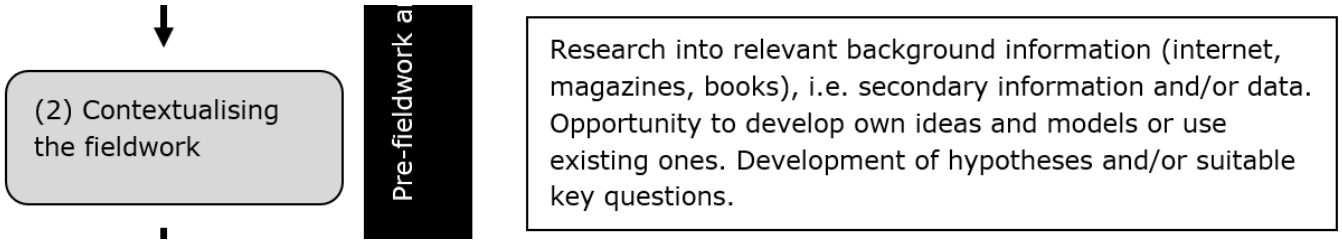

- Once general topic chosen background research, both topic and location. "Contextualising Research"

ONS Interactive NRFA BGS Mapviewer /iGeology Old Maps

Check My Flood Risk/EA Flood Risk Map IMD Data Mapper

- Preparing ourselves with enough information to be able to ask sensible questions and make reasonable hypotheses, grounded in geographical theory and context of place.

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Stage 2
The exploration

(3) Design: where and how many?

eld skills

Number of fieldwork sites (practically); group or individual observations. Consideration of appropriate sampling procedures (systematic vs random vs stratified) and sample size. Consideration of health and safety and undertake risk assessments.

Hypothesis / Questions decided upon – allowing scope for students to ask individual questions in addition to group decisions.

- Contextualising research informs planning for fieldwork – identifying and justifying sampling sites, sampling strategies, categories, design methods.
- Students able to make assessment of possible risks.
- Allow opportunities for students to customise, adapt or invent own methods to answer class or their own questions.

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Stage 2
The exploration

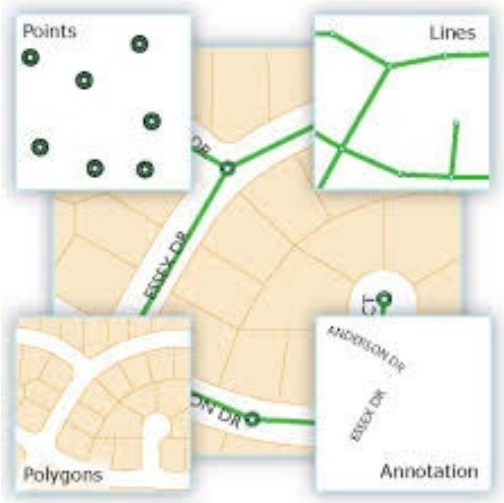
Using a knowledge of GIS to support data collection

- All GIS are based on two things

Places & Information About Places
in GIS Speak: Locations and Attributes

Attributes *tell us all about the location in planning your data collection we decide what the attributes are, and how we will collect them.*

Locations



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Stage 2
The exploration

(4) Equipment considerations; how to record. Primary data collection

Primar

Appropriate data collection methods that will help answer the questions being investigated. Appropriate equipment to ensure accuracy and reliability. Development of recording sheets for measurement and observation.

- Smartphone GPS to collect location of measurements/observations.
- Geolocated photos via smartphone camera
- Data collection – may use GIS during data collection – ESRI Collector App, Web Apps or GeoForms Add some data @ [bit.ly/**FSC-EdexcelGRTT**](bit.ly/FSC-EdexcelGRTT)

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Integrating GIS into Better Fieldwork Teaching

Stage 3
The analysis

(5) Data processing and presentation

sions and

Use of ICT to manage, collate and process information, e.g. shared spreadsheets and VLE/'cloud' to store for easy retrieval. Using ICT and/or hand-drawn graphical skills to present information in a suitable way.

- Using GIS to display and present data
  - ArcGIS Online – Drag and Drop .csv file

Data in .csv file

www.arcgis.com

- Data Collected in Collector App/Web Apps – Immediately available in GIS

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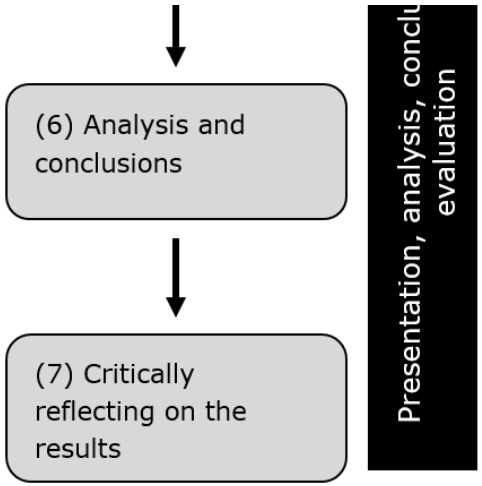
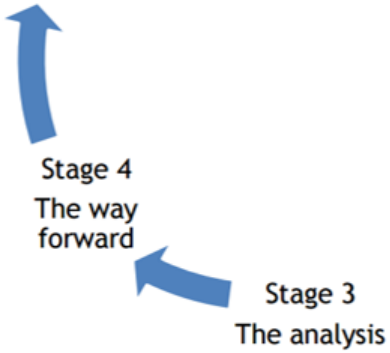


Describe the findings, explain possible reasons and make links. Simple statistics may be relevant, e.g. measures of central tendency, spread and cumulative frequency.

Review information and then bring it together to form a conclusion, drawing on evidence and reasoned chains of argument.

A critical reflection on the fieldwork data, methods used, knowledge gained and how this could be applied to other fieldwork contexts. Reference to the accuracy, validity and reliability of the conclusions.



- Using GIS to view multiple pieces of primary and secondary data together and allow conclusions to be drawn more easily and based on a wealth of evidence.

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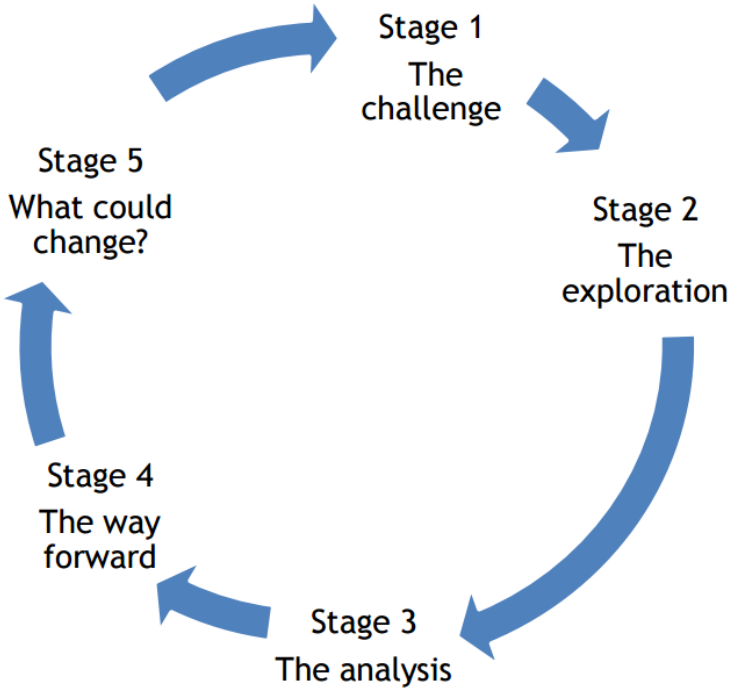
Creating the Spiral

Delegate ACTIVITY 9

How are you going to take what you have learnt in this session forward into your teaching?

What will be different about your next fieldwork visit compared to your last?



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