Geography PGCE  
Post -16 Fieldwork Planning

**Fieldwork Planning 2007**  | **Group Members:** Sarah Jones, Esther Harrison, Kate Horn, Richard Garrood.  | **Location:** Lake District  | **Target Audience:** AS/A2 Advanced Vocational  
---|---|---|---  
**Rationale:** a short explanation of the aims and objectives of the fieldwork  
The aim of this fieldwork is to draw on the ideas of river and water management and to study how a reservoir has impacted on the physical and human environment. The students will explore the landscape first hand through a mystery activity. They will then be able to draw on their prior knowledge along with secondary resource material to complete a decision making exercise whereby they evaluate a valley’s potential as a dam. This experience will involve students considering the demand for water management as well as the effects, through a first hand emotional experience.

**Setting the scene:** description of the geographical contexts and locations  
The Lake District was chosen as an area of natural beauty where this fieldwork will investigate how water management has altered the landscape. Thirlmere is a large reservoir (est. 1896) which supplies the Manchester area and relates to local and global water demands. Wythburn is a town which disappeared with the creation of the reservoir and provides an ideal subject for a mystery, to understand the physical and human implications of damming a **river**. The Lake District provides a range of different sites to be studied within an accessible area, so that students can make comparisons.

**Assessment/specification context:** Specification requirements and framework. How does the approach/philosophy and content (generalisations/knowledge/understanding/skills/values and assessment requirements) of the specification influence the design of the fieldwork?

**Edexcel A:**  
Building on **1.2 Fluvial Environments –1.2.3 The need for, and methods of, managing river processes**  
**Synoptic Link: The hydrological cycle is used and managed ( on a regional/local scale)**  
→ The reasons for and methods of groundwater and river management in countries in different states of development  
→ Decision-making issues related to management of the hydrological cycle.

**Geographical Objectives:** the knowledge, understanding, skills and values that will be developed by the students  

**Aim:** To understand how water is managed in the Lake District  
**Objectives:**  
- To understand and describe physical and human impacts of reservoirs  
- To understand the need for hard engineering (i.e. reservoirs)  
- To know what happened to Wythburn - using OS map and enquiry skills  
- To investigate new locations for a reservoir – using OS map and different field techniques  
- To link water management in the Lake District and UK with other countries  

**Important background information:** what do students need to know before the trip, also give links to other useful references and sources of information  
- Students need to have covered unit 1.2 Fluvial environments and to understand river processes and formations. They need to have thought about how humans manage the environment and the physical and human implications.  
- It would be useful if they had already discussed case studies about water demands in the UK and drought scenarios, as well as having looked at the issues of the 3 Gorges Dam in China and it’s impact on development  
- They need some understanding of the Lake District (i.e. location, function, etc.)
### Suggested itinerary/timetable:

Provide detailed information about the timing of activities (including travel times) and clear maps showing the location of sites.

<table>
<thead>
<tr>
<th>Approximate Timing</th>
<th>Activity</th>
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| **08.00** | Breakfast  
Introduction and briefing  
Hand out resources for morning activity – highlight study area on OS maps (locate Thirlmere)  
Reinforce Risk Assessment |
| **09.00** | Leave Hostel – drive to Thirlmere |
| **09.45** | Arrive at Steel End car park  
Introduce mystery activity (10mins)  
Begin mystery activity – walk and complete part 1 of mystery sheet (35mins)  
Draw annotated field sketch (15mins)  
Break for 15mins |
| **11.00** | Drive to dam (15mins)  
- View monument  
- Complete questions by walking to Bridge End farm campsite  
Drive to church (45mins)  
- Finish mystery  
- Complete sentence finishing plenary and discussion of activity to finish morning activities |
| **12.00** | Lunch – picnic at Steel End  
- Hand out materials for afternoon session  
- Read through resources  
- Discuss landscape evaluation and cost – benefit analysis |
| **1.00** | Drive to Troutbeck |
| **1.45** | Arrive at Troutbeck  
- Complete landscape evaluation, walk down valley (30mins)  
- Complete cost – benefit analysis (15mins)  
- To dam or not to dam? Plenary activity (15mins)  
- Discuss who is for and against dam construction = complete conflict matrix (15mins) |
| **2.30 – 3.30** | Leave Troutbeck and drive back to youth hostel via ‘the struggle’ to help to consolidate day’s work (30mins)  
- Students have afternoon to consolidate days activities and put together presentation for/against building a reservoir at Troutbeck |
| **18.00** | Dinner |
| **19.00-20.00** | Plenary: Students presentation cost/benefit analysis  
Link to other case studies; broader discussion. |
### Teaching strategies:

<table>
<thead>
<tr>
<th>Content of the student briefing</th>
<th>Learning activities:</th>
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</thead>
<tbody>
<tr>
<td><strong>School:</strong></td>
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</tr>
<tr>
<td>3 Gorges Dam</td>
<td>Will have attended the lesson focusing on 3 Gorges Dam, water management and the impact of reservoirs in both human and physical terms and Britain’s demand and supply of water on local and national scales, relating to climate change. Will be familiar with exam specification and analysis technique (will have completed annotated sketch maps, figures, and conflict matrices)</td>
</tr>
<tr>
<td>Water management and the impact of reservoirs in both human and physical terms</td>
<td></td>
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<tr>
<td>Britain’s Demand and Supply of water on local and national scales, relating to climate change</td>
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<tr>
<td>Ensure students are aware of exam specification and synoptic content including specific techniques (e.g. cost/benefit analysis, annotating photographs and maps, conflict matrices)</td>
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</table>

**At Youth Hostel:**

<table>
<thead>
<tr>
<th>Briefly explain the day’s activities and approximate timings</th>
<th>Listen to instructions</th>
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<tbody>
<tr>
<td>Review field sketching techniques, road safety and behaviour expectations</td>
<td>Consult OS maps and contribute to discussion about the different areas that are visiting. Ask questions.</td>
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<tr>
<td>Consult OS maps and have pre – discussion about the areas that they will be visiting.</td>
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### Learning activities:

#### Preparation activities

**School:**

- Drive to Thirlmere, one teacher to accompany from Steel End to toilets.
- One teacher to drive to toilets and meet others.
- Drive to Dam and support activity.
- Drive to Wythburn church, support activity and facilitate plenary activities.
- Drive back to Steel End car park for Lunch and hand out information sheets.
- Drive to Troutbeck, one teacher to accompany walk along transect to Limefitt park, one teacher to drive to Limefitt park and meet the group there.
- Drive along valley to cross roads at ‘the struggle’, one teacher to be pointing out features of the valley, e.g. quarry and facilitate any photographic activities.
- Drive back to Ambleside Youth Hostel.
- Distribute secondary resources to assist PowerPoint presentation preparation, explain task and be available to support students during their preparation.
- Drive students to Brockhole to present their presentations.

**Details of fieldwork activities**

**Why is Manchester’s water full of ghosts? Mystery activity**

- from Steel End car park, walk to toilets completing the appropriate boxes on the worksheet through observation.
- Complete annotated field sketch car park next to toilets.
- At dam read signs and look at monuments to complete questions on the worksheet.
- Walk to campsite and answer the relating question on the worksheet.
- At Wythburn search to evidence in graveyard and church in order to solve the mystery.
- Students are given sentence starter cards in order to sum up what has been learnt during the mystery activity.

**Lunch – students read information sheets – “Reservoir dogs future water**
| Hand out peer assessment sheets and facilitate presentations. Facilitate discussion to sum up what has been learnt during the day. | supply” and “Water how we compare table”

Troutbeck
- complete landscape evaluation for area at present and as a proposed reservoir site.
  - record all types of land use land use from carpark at Troutbeck to Limefitt park and take photos.
  - Complete cost – benefit analysis.
  - Complete to dam or not to dam worksheet summarising who would be affected by the creation of a dam.
  - Complete conflict matrix and discuss issues arising from reservoir

Drive to Ambleside via ‘the struggle’
- Listen to the teacher and observe the landscape
- Take photographs of the landscape.

Evening Activity preparation
- students are divided into 2 groups and use primary and secondary sources of evidence to build an argument either for(group1) or against (group 2) damming Troutbeck

Presentations and plenary
- students present back their case for and against damming Troutbeck using ICT
- during the presentations the other group peer assess the presenting group
- students contribute to final summary discussion
# Geography PGCE
## Post -16 Fieldwork Planning

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<tr>
<th>Debriefing focus</th>
<th>Follow-up activities (data processing, presentation and analysis)</th>
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<tbody>
<tr>
<td>Ideal site for a reservoir</td>
<td>Summary of Cost/Benefits</td>
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<tr>
<td>Impact of a reservoir</td>
<td>- Presenting findings, views and opinions</td>
</tr>
<tr>
<td>Cost/benefit (scale) of building a reservoir</td>
<td>- Follow up homework to produce case study of region</td>
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<tr>
<td>Who is agreement and who is in conflict?</td>
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<tr>
<td>Link to wider regional issues</td>
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<td>Comparison with other countries (China – 3 Gorges)</td>
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## Resources and equipment needed:

To be used through out the whole day:
- Paper and pencils
- OS Maps
- Clipboards
- Digital Cameras
- Mobile Phones

Morning:
- Mystery Worksheets
- Field Sketch Sheets
- Sentence Starter cards

Lunch – Reservoir dogs for the future water supply and water how we compare table information sheets

Afternoon:
- Cost/Benefit worksheets
- Landscape Evaluation Sheets

Laptops & memory sticks
- Secondary Materials – Thirlmere United Utilities information, Wythburn historical photographs on Wythburn

## Health and Safety issues: highlight specific risk assessment information for each site

- Driving – seat belts, speed limits
- Walking (around Thirlmere and Troutbeck)
- Sensible shoes
- Waterproofs
- High visibility vests
- Water
- Weather
- Sun cream
- Hats

Mobile phones
- Medical information and contact details for each student
- First Aid Kit
<table>
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<tr>
<th>Evaluation: How will the learning outcomes be assessed?</th>
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<tr>
<td>Suggestions for further development</td>
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**Assessed through:**
- answers to the Mystery
- sentence starter card answers
- detail of annotated field sketch and collection of photographs as evidence
- questions and answers
- student discussion
- recording of land uses
- landscape evaluation
- ability to recognize and complete cost/benefit analysis for Troutbeck
- recognizing and highlighting different groups of people who would be affected by damming Troutbeck shown through completion of worksheet “To dam or not to dam?” and the conflict matrix
- evaluating the site and bringing together the prior work in the classroom with the fieldwork and the established reservoir and the proposed sites through presentations
- write up of fieldwork experience into full case study

**Further development:**
- Issues of water management (supply and demand)
- Link to other MEDC and LEDC water management strategies
- Affect of climate change on the region