The 'What makes a good educational experience' approach to planning fieldwork Thinking through the fieldwork strategies that are most likely to inform and inspire

A group of Canadian science teachers and geoscience educators began a geological field visit near the town of Whitehorse at this overlook view of the Yukon River.



Overlook of Miles Canyon on the Yukon River near Whitehorse, Yukon. (Chris King.)

As an introduction to the field visit, they were asked '*What is it that makes a good educational experience?*' They responded with:

- Positive energy enthusiasm from students and lecturer.
- Encouraging students to ask questions.
- Are there 'lightbulb' moments?
- If they remember the experience.
- Do they make connections to things they have done?
- Sharing experiences teaching and communicating with one another.
- Going to the higher levels of Bloom's Taxonomy (see below), generating understanding, working out process through analysis, connecting to somewhere else in synthesis.
- Generating and enhancing thinking skills.
- Gaining perspective changing perceptions.

The conclusion was that, if the field visit is to be a good educational experience, it should be evaluated against these points.

Another group of geoscience teachers in Anglesey in the UK was asked the same question as preparation for a professional development course in geoscience fieldwork.



One of the Anglesey field sites. (Pete Loader).

They responded as below:

- Memorable.
- Enjoyable.
- New concepts learnt/ new experiences/ new skills.
- Opportunity to share ideas.
- Bonding as a group/ team work.
- Peer to peer learning.
- Meshing into the bigger picture/ not merely an isolated experience.
- Application and development of what is learnt in the classroom.
- Challenge preconceived ideas.
- Personal development.
- Building confidence/ not being afraid to ask pertinent questions.
- Learning to describe what is being seen.
- Knowledge building.
- Don't forget the 'awe and wonder'.

So, if you want your fieldwork to be a good educational experience for your students, first generate a list of the factors like these that you consider contribute to a 'good educational experience' and then ensure the fieldwork you lead as good as the list suggests.

The back up

Title: The 'What makes a good educational experience' approach to planning fieldwork

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Subtitle: Thinking through the fieldwork strategies that are most likely to inform and inspire

Topic: Asking, *What is it that makes a good educational experience?* as a means of generating a checklist to evaluate pupil fieldwork experiences.

Age range of pupils: 5 years upwards

Time needed to complete activity: 10 minutes

Pupil learning outcomes: Pupils can:

• respond to the checklist questions positively.

Context:

It has been commented that, 'many teachers do not consider why they are taking the field trip other than to demonstrate 'real' features' – but fieldwork

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experiences have much greater potential than this. A good way to realise this potential is to use the question of '*What is it that makes a good educational experience?*' to generate a checklist of experiences that fieldwork could and should involve.

Bloom's taxonomy was mentioned in one of the responses. This taxonomy, otherwise called a classification of learning objectives, is given below as it was originally presented by Bloom in order of increasing level of difficulty:



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Bloom's original taxonomy has been revised recently by Anderson and Krathwohl, through changing the nouns into verbs and altering the order of the top two objectives to give:

- Create
- Evaluate
- Analyse
- Apply
- Understand
- Remember

Following up the activity:

Use your checklist to evaluate educational fieldwork that you lead.

Underlying principles:

 Field experiences have potential to educate participants at a range of levels – but these will only be realised if leaders have awareness of the wide range of possibilities.

Thinking skill development:

Bloom realised that educational learning objectives could cover the cognitive domain (as exemplified by his triangle opposite), the affective domain (involving emotion and attitude) and the psychomotor domain (involving the development of new manipulative skills). All these areas can be developed by well-planned fieldwork.

Resource list:

• none

Useful links:

Use a search engine like Google to follow up on the work by Bloom and Anderson and Krathwohl.

Source: Devised by Chris King of the ELI Team, using notes kindly recorded by Beth McLarty Halfkenny in the Yukon, Canada, and by Jane Mead in Anglesey, UK, with thanks to all the teachers and educators involved.

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