

## Chapter 6

Real world Learning through  
geographical fieldwork

David Caton

**Before reading this chapter consider the following questions:**

- What purposes can be achieved through fieldwork?
- How can students be actively engaged in their learning?
- Should fieldwork be concerned with how students feel about the places that they visited?
- How can conceptual understanding be developed?

I would like us to begin by imagining a visit to Torcross, a small, coastal village in Start Bay, South Devon (Figure 1). This picturesque settlement spills from a hillside onto a shingle ridge running between the sea and Slapton Ley, a freshwater lake. The place is a gift for geography teachers, providing an interesting opportunity for investigating coastal management, rural settlement and ecology. The future prosperity of the village is threatened by the impact of easterly storm waves that occasionally batter seafront properties. Furthermore, the coastal road that runs along the ridge, providing a crucial link for both locals and tourists, was seriously damaged by waves in the winter of 2001. Debate currently rages over whether the road should remain open. The future management of this problem has huge implications for the village economy and community, as well as the precious ecosystem sheltering behind the shingle.

If you were leading a field visit to this site, what activities would you want your students to do? The choice of fieldwork methods for the majority of teachers would probably involve the collection of quantitative data, possibly to test a hypothesis or answer a set of questions (see also Chapters 18 and 31). It is a very fertile environment for this type of approach. Activities such as beach profiles, traffic flow counts, vegetation surveys and questionnaires could be used to develop understanding as well as practical skills. However, no matter how successfully these methods were employed, there would be aspects of this place that remained beyond the scope of such techniques. Quantitative data could at most only hint at the beauty of the landscape, the feeling of irritation at the cars that race through this tranquil scene, the strength of community spirit or the worry of a shopkeeper whose business is threatened.



Yet these emotions are at the heart of the connection that people have with their environment. If students can develop an appreciation of these more qualitative aspects of the environment, then they may begin to see the essence of a place that sets it apart from any other. Fieldwork might then become more than 'the study of *any* stream or *any* town, where the peculiarity of landscape or landscape features is subordinated to perceived generality' (Pocock, 1983, p. 319). Students may also move beyond seeing people in their stereotypical categories of 'environmentalist' or 'shopkeeper' and more as individuals.

A further justification for a qualitative approach to fieldwork is in the benefits of getting students to describe their own feelings about the place that they are visiting. When learning about Torcross, for example, students may appreciate the aesthetic qualities of the landscape, become concerned about the future of the village or feel frustration at the potential impact of the proposed coastal defences. Research by Harvey (1991) highlights how students might have strong feelings about the place that they visit, yet may find that their fieldwork activities do not embrace this type of emotional response. Might there be a case for incorporating experiential fieldwork activities into a field visit in order to encourage students to develop and express their own feelings? When fieldwork consists only of quantitative techniques there is a danger that students may leave the study area burdened with data but lacking in insight.

A variety of qualitative fieldwork activities are in use in some field centres, primary schools and university geography departments. However, their adoption by secondary school geography departments may have been more limited. Figure 2 introduces the range of approaches that might be used in the field. The main purpose of this chapter is to examine this debate over approaches to fieldwork in more detail. The starting point will be an evaluation of what the more traditional approaches have to offer, before exploring the main purposes and methods of qualitative fieldwork.

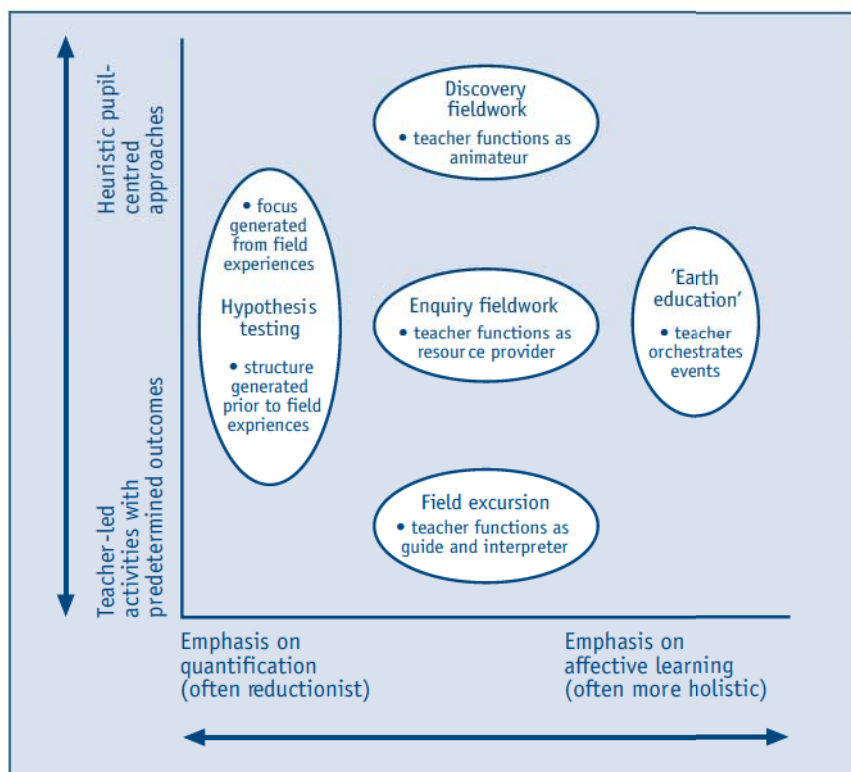
## Field research

The hypothetico-deductive approach to fieldwork (known as 'field research') entered geography departments in the 1970s, amid the quantitative revolution within the subject. This method, which has now come to a position of dominance in secondary schools, uses a scientific approach to test models or expected trends (Job *et al.*, 1999). The study is limited to a particular theme in a small area in order to make the content more manageable for both teacher and learner.

**Figure 1** | Torcross and Start Bay, South Devon.  
Photo: ©Simon Lewis.







**Figure 2** | Some fieldwork strategies.

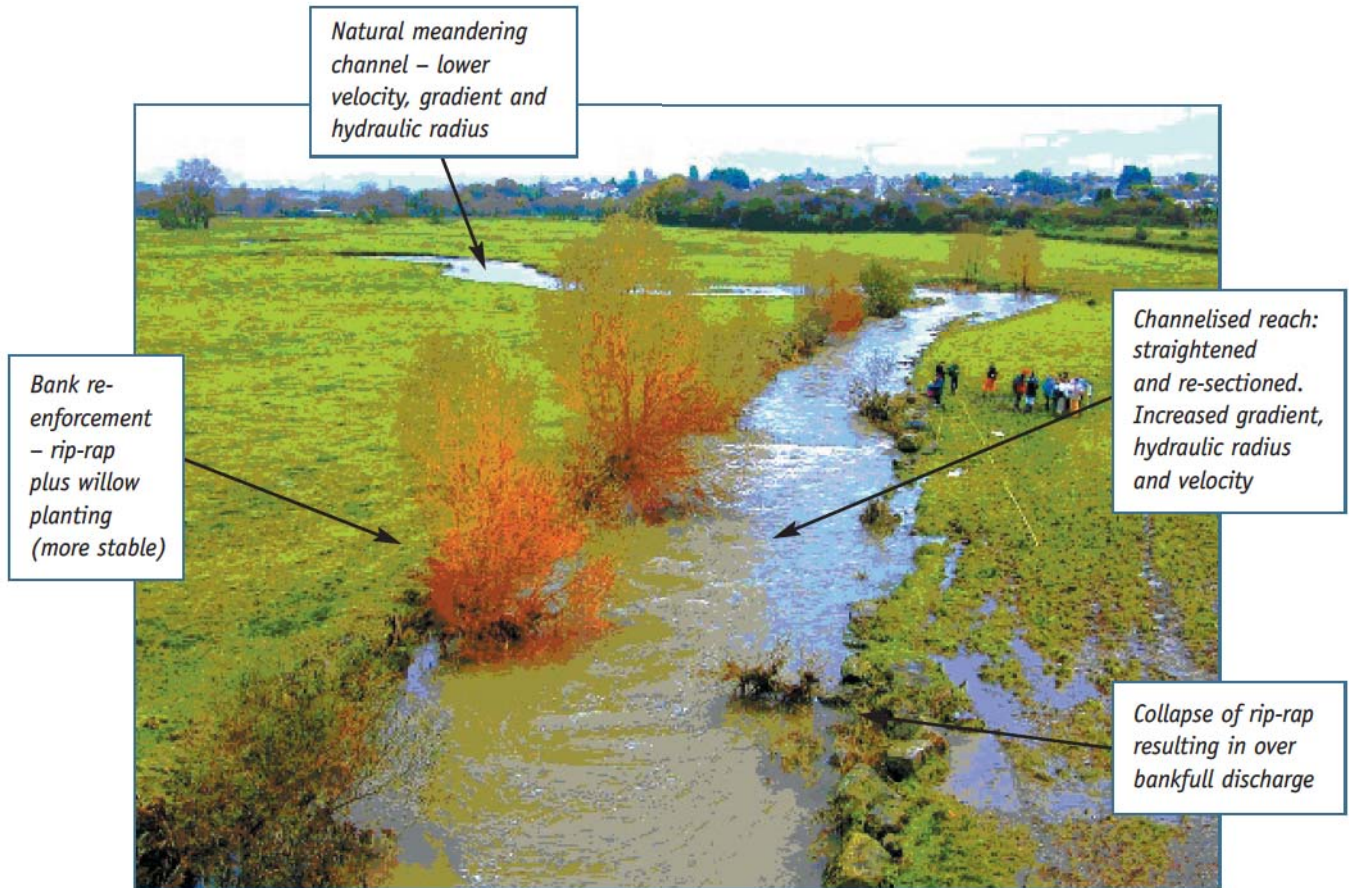
The teacher, often in collaboration with the students, sets up the study by developing hypotheses or establishing questions to be answered through the fieldwork. These provide students with a clear structure and purpose as they work through a series of stages in order to find answers (Job, 1996). Quantitative fieldwork activities are used to collect evidence in the field, with an emphasis placed upon reducing bias. The students are therefore asked to distance themselves from their feelings about the place they are visiting in order to study it objectively. Once the data are collected they are presented and analysed before conclusions are drawn relating back to the initial aims of the project. Much of the process is directed by the teacher, which can reduce the feeling of ownership that students have over their work and prevent them from pursuing issues that catch their interest (Rynne, 1998; Job, 1999).

A strength of field research is the training it provides in a range of skills of data collection, presentation and analysis. Students are required to be actively involved in collecting data, which can be beneficial for developing both motivation and social skills. While in the 1970s this provided a significant departure from the more passive field excursions that preceded this approach, this has now become the norm in school fieldwork. However, the debate has now moved on to consider just how engaged students really are. A group of students noisily wielding equipment and calling out numbers while standing in a river may at first seem active, but this may overlook the limited contribution of some of its members and the repetitive nature of the task (Figure 3).

Questions have been raised about the levels of conceptual understanding achieved through field research. Although conceptual learning will undoubtedly take place, the emphasis of this approach is very much upon the research process and the use of skills within it (Rynne, 1998). Research by Harvey (1991) indicates that the transfer of conceptual learning from quantitative fieldwork to examinations can be poor. This can in part be attributed to having the main discussion of concepts in front of a set of data back in the classroom, rather than when the students are out in the field (Harvey, 1991; Rynne, 1998). It might also result from the lengthy process of data collection and presentation causing students to lose sight of the purposes of their investigation. Harvey (1991) also suggests that by focusing on one specific human or physical theme, students can be inhibited from appreciating the links between processes as well as the wider geographical context of their investigation. If developing knowledge and understanding is a priority for fieldwork, then there may be a case for re-evaluating the approaches that we use.

Further criticisms of field research concern the type of learning outcomes that tend to be encouraged. These investigations typically focus on patterns and processes, with values and opinions often given only superficial consideration (Job, 1996). For example, a study of urban social areas may show patterns of inequality yet may fail fully to engage students in a debate about the underlying causes of deprivation or what should be done to address this. Learning is also influenced by the reliance of field research on





**Figure 3** | Students investigate channel management. Source: Job, 2001.

quantitative data. The subtleties of people and their interactions with the environment may be lost when they are reduced to numbers. While quantification can make it easier to see patterns and make comparisons, it can also oversimplify or even overlook qualities such as tension or beauty that make a place unique and interesting (Job, 1999).

### Enquiry fieldwork

An attempt to address some of the limitations of hypothesis-testing fieldwork emerged in the late 1970s in the form of the enquiry-based approach (Job 1996). This adapts the hypothesis-testing framework to focus students on a geographical question or issue. Addressing issues such as 'Where should the bypass go?' or 'Where should a wind farm be built?' encourages students to examine people's opinions and values, and to develop their own. High levels of motivation can be generated when finding out about the conflicting points of view over an issue. This approach also involves students in examining a range of geographical factors within one investigation. This encourages them to see links between different strands of the discipline and work at different spatial scales, with subsequent benefits for conceptual understanding. Since this approach also includes quantitative fieldwork techniques, students will gain experience in similar skills to those developed by field research. Moreover, this values analysis will often allow them a greater role in planning fieldwork activities and also encourages the development of decision-making skills (Job, 1996).

Job (1996, 1999) identifies a number of limitations of the enquiry-based approach. First, many enquiries are limited to considering where a development should take place, rather than going further critically to consider whether it should take place at all, and



Strategy	Purposes	Characteristic activities
<b>The traditional field excursion</b>	<ul style="list-style-type: none"> <li>■ Developing skills in geographical recording and intervention</li> <li>■ Showing relationships between physical and human landscape features</li> <li>■ Developing an appreciation of landscape and nurturing a sense of place</li> </ul>	Students guided through a landscape by teacher with local knowledge, often following a route on a large-scale map. Sites grid-referenced and sketch maps to explore the underlying geology, topographical features, the mantle of soil and vegetation and the landscape history in terms of human activity. Students listen, record and answer questions concerning possible interpretations of the landscape.
<b>Field research based on hypothesis testing</b>	<ul style="list-style-type: none"> <li>■ Applying geographical theory or generalised models to real world situations</li> <li>■ Generating and applying hypotheses based on theory to be tested through collections of appropriate field data</li> <li>■ Developing skills in analysing data using statistical methods in order to test field situations against geographical theory</li> </ul>	The conventional deductive approach involves initial consideration of geographical theory, leading to the formulation of hypotheses which are then tested against field situations through the collection of qualitative data and testing against expected patterns and relationships. More flexible variants of this approach encourage students to develop their own hypotheses based on initial field observations, thereby incorporating an inductive element.
<b>Geographical enquiry</b>	<ul style="list-style-type: none"> <li>■ Encouraging students to identify, construct and ask geographical questions</li> <li>■ Enabling students to identify and gather relevant information to answer geographical questions and offer explanations and interpretations of their findings</li> <li>■ Enabling students to apply their findings to the wider world and personal decisions</li> </ul>	A geographical question, issue or problem is identified, ideally from student's own experiences in the field. Students are then supported in the gathering of appropriate data (quantitative or qualitative) to answer their key question. Findings are evaluated and the implications applied to the wider world and personal decisions where appropriate.
<b>Discovery fieldwork</b>	<ul style="list-style-type: none"> <li>■ Allowing students to discover their own interests in a landscape (rather than through the teacher)</li> <li>■ Allowing students to develop their own focus of study and methods of investigation</li> <li>■ Encouraging self-confidence and self-motivation by putting students in control of their learning</li> </ul>	Teacher assumes the role of animateur, allowing the group to follow its own route through the landscape. When students ask questions these are countered with further questions to encourage deeper thinking. A discussion and recording session then identifies themes for further investigation in small groups. This further work has arisen from students' perceptions and preferences rather than those of teachers.
<b>Sensory fieldwork</b>	<ul style="list-style-type: none"> <li>■ Encouraging new sensitivities to environments through using all the senses</li> <li>■ Nurturing caring attitudes to nature and empathy with other people through emotional engagement</li> <li>■ Acknowledging that sensory experience is as valid as intellectual activity in understanding our surroundings</li> </ul>	Structured activities designed to stimulate the senses in order to promote awareness of environments. Sensory walks, use of blindfolds, sound maps, poetry and artwork are characteristic activities. Can be used as an introductory activity prior to more conventional investigative work or to develop a sense of place, aesthetic appreciation or critical appraisal of environmental change.

**Figure 4** | *Fieldwork strategies and purposes, Source: Job et al., 1999.*

what alternatives there might be. Job also points out that fieldwork enquiries often require students to predict the outcomes of decisions, which can be difficult to do with any accuracy. Finally, he argues that since the questions on which enquiries are based rarely develop from the issues that concern individual students, they may not feel personally involved in their research. This may inhibit students from developing their own opinions and makes it less likely that they will be motivated enough to become actively involved with the issue that they have studied.

## Purposes of fieldwork

By learning at first hand in the field, students will benefit in a wide variety of ways, but the choice of fieldwork approach will undoubtedly channel learning in a particular direction. For example, if field research is used it can be expected that the main outcomes will include learning how to use research procedures and developing skills of data collection and analysis. Similarly, enquiry fieldwork is likely to develop decision-making skills and help students to form geographical questions (Job *et al.*, 1999) (Figure 4 provides more details of the purposes of different approaches to fieldwork). The key question that teachers need to ask themselves when planning fieldwork is 'What direction do you want to take your students in?' As the discussion so far has shown, critics of field research and enquiry-based learning have identified purposes and outcomes that are neglected to a greater or lesser extent by these methods. This concern has led to the development of a variety of alternative, more qualitative fieldwork approaches. These attempt to redress this perceived imbalance by encouraging outcomes such as:

- respect for nature
- aesthetic appreciation
- intimacy with the surroundings
- awe and wonder
- active participation
- getting into other people's shoes
- caring about a place and the people who live there
- having an encounter with a place
- improvement in literacy
- engagement with social, environmental and political issues
- developing practical skills
- challenging personal lifestyle decisions
- understanding how to have a more sustainable lifestyle
- seeing familiar places in a new way.

Inevitably each qualitative technique has slightly different aims, but an examination of their methods and purposes reveals recurring themes. Their methodology is characterised by a student-centred approach to learning. Students are encouraged to adopt a receptive, reflective manner in order to discover things for themselves. An affective response to the environment is encouraged, in which the emotions are engaged and feelings expressed. Learning is therefore opened up to become holistic, in which all aspects of a place are felt to be equally worthy of attention (Job, 1999).

The purposes of qualitative fieldwork methods fall into two, closely related camps. A first group of activities arose from the work of Steve Van Matre and others in the earth education strand of the environmental movement. Their aim is to develop love and respect for nature, in the hope that this might motivate students to care for their world more actively (Van Matre, 1979). A second group, largely focused upon urban environments, aim to develop a sense of place. This is driven by a desire to counter the growth of placelessness in the way that we perceive and learn about places (Goodey, 1982). Many of



the activities across both of these genres have an underlying purpose that students might develop a greater understanding of their own perceptions, opinions and values.

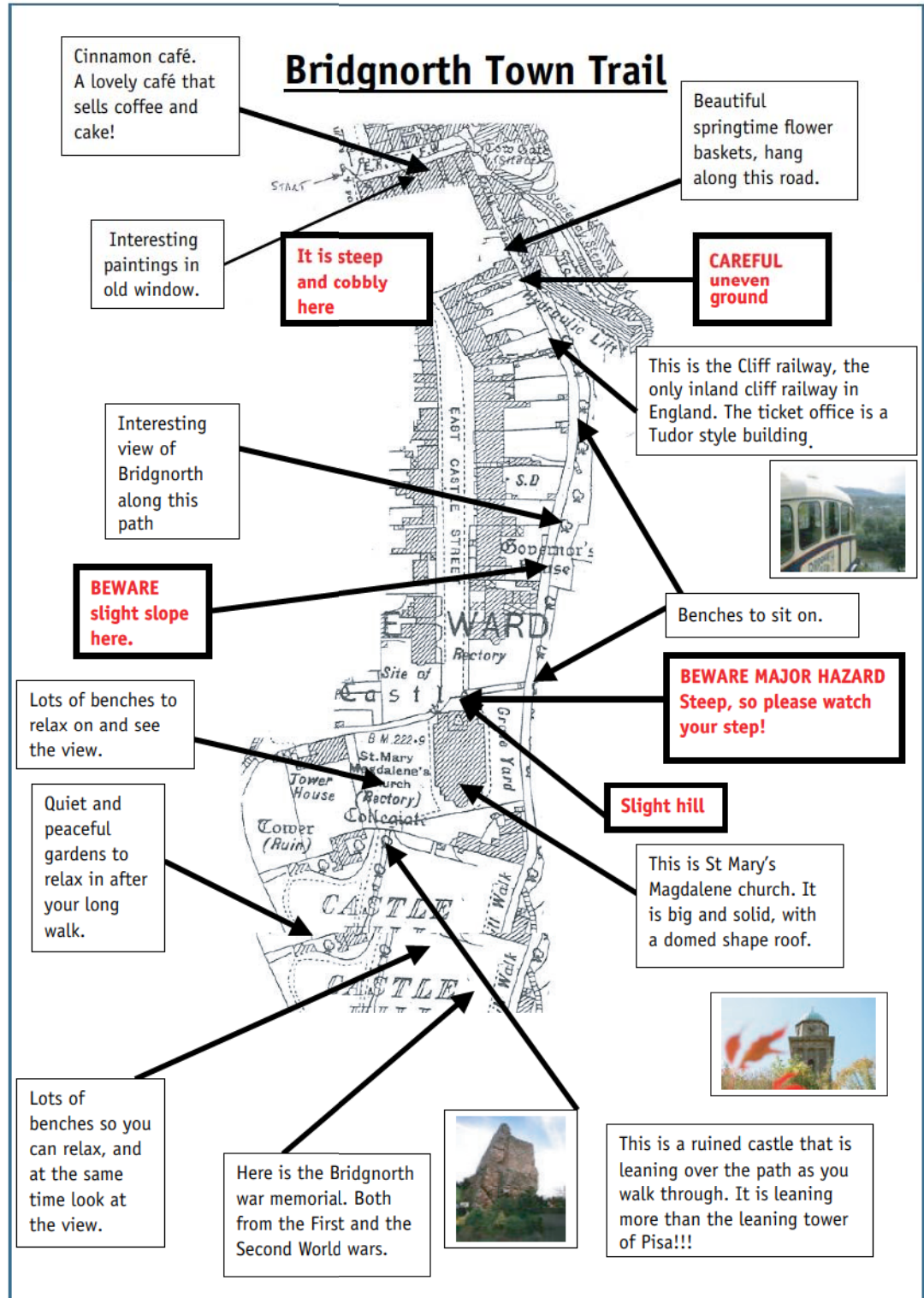
While these methods resist being placed into neat categories, four groups can loosely be identified: sensory fieldwork, trails and expeditions, discovery and fieldwork for sustainable development.

### **Sensory fieldwork**

Our reliance on sight leaves other senses underused, which can cause us to overlook many of the features that give a place its unique character (Pocock, 1983). Fieldwork methods that get students to close their eyes, use a blindfold or just listen carefully, can develop a sense of place by alerting them to aspects of an environment that they might otherwise have overlooked (Rogers, 2005; Figure 5). One effective technique is to use a sound map, where lines are made from a central point in the direction of any noise that is heard. At the end of the line, a note can be made as to what made the sound and whether it adds to or detracts from the environment. Sense of place might also be developed by activities such as feeling artefacts and surfaces, or smelling a baker's shop, factory or forest floor (Pocock, 1983; Job, 1999).

### **Trails and expeditions**

In these related approaches, a variety of activities is used to encourage students to look closely and experience the place that they are visiting. The teacher facilitates this, but will step back as much as possible and allow the students to ask questions, follow their own impulses and find out for themselves. Activities are varied, but typically might include sketching, observing, describing and discussing (see, for example, Ward and Fyson, 1973; Goodey, 1982; Cosgrove and Daniels, 1989; Burgess and Jackson, 1992). One effective development of this method is for students to devise a trail for users with



**Figure 6** | Town trail for elderly visitors to Bridgnorth. Source: Caton, 2001. Photos: ©David Caton.

special needs (Dove, 1997). Figure 6 shows an annotated map that visitors with special needs could use to find a route through a town. Groups of year 7 students were first asked to decide what type of visitor they were aiming their map at (e.g. someone with a visual impairment, an elderly person with mobility impairment); and then to consider factors such as the hazards that particular visitors will encounter, what their needs might be and



what features may be of interest to them. This encouraged the students to look closely at their surroundings and empathise with other people. Figure 6 shows the resulting town trail for elderly visitors to Bridgnorth.

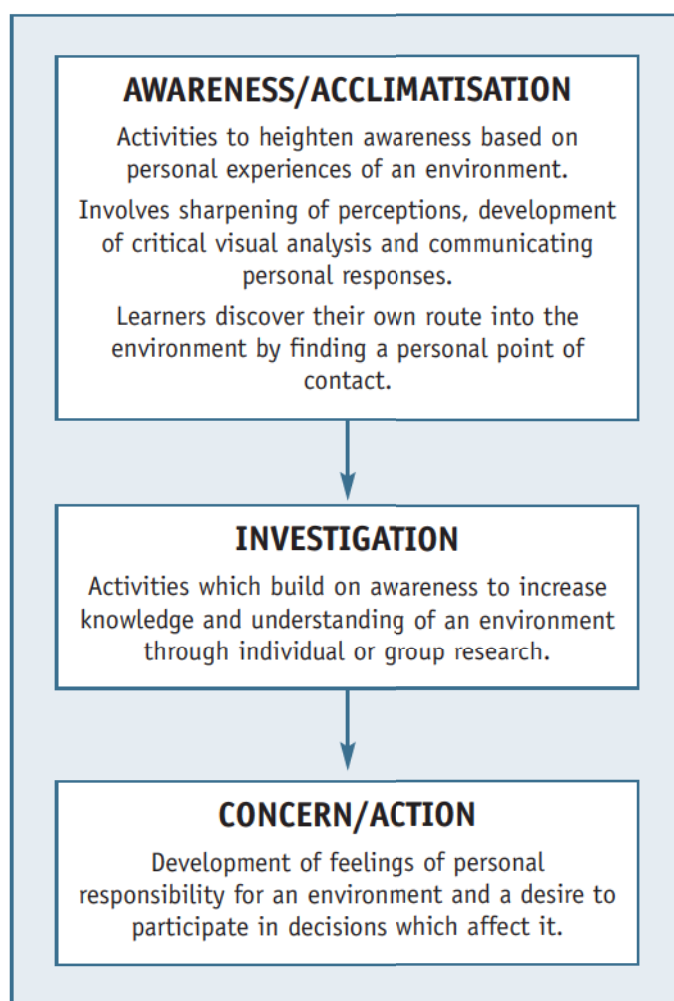
### Discovery

This approach, described by Hawkins (1987) and Job (1999), provides a framework for using experiential methods alongside quantitative techniques (Figure 7). The fieldwork starts with student-centred acclimatisation activities. These aim to get students to become more aware of their surroundings. Job's (1999) detailed account of discovery in Start Bay describes how students get to know the area by using drama, old photographs, chatting to locals and making landscape models with pebbles. Stimulating questions are written on 'Discovery cards', which are introduced as a further tool for acclimatisation. A discussion follows this initial stage, in which memorable experiences are shared. From these, issues and questions for a more conventional field study emerge. By doing fieldwork that arises out of the experiences and questions of the students, it is hoped that they might feel some attachment to the place they are learning about. This may make them feel more strongly about the issues that they have studied there and perhaps even encourage them to participate in improving things (Hawkins, 1987).

### Fieldwork for sustainable development

A natural extension of this discovery approach is to place political awareness and action at the heart of the fieldwork. Since fieldwork will very often reveal a problem that may

need resolving, this approach suggests continuing beyond the conclusion stage and taking practical action to make things better. Job (2001) illustrates this approach with a river study, in which quantitative fieldwork, combined with discussion within the group and with local people, leads to the students stabilising an eroding bank using traditional materials and techniques. A related approach is the demonstration of sustainable living through the hidden curriculum of fieldwork, such as by getting students to compost their waste, travel to their fieldwork site on a public service bus or learn about (and use!) composting toilets. One model of this approach is to use gardening as a way to learn about seasons, soil, plants and, more fundamentally, where our food comes from (Hutchinson, 1998).



**Figure 7** | A teaching-learning model for outdoor experience.  
After: Hawkins, 1987; Job, 1999.



**Figure 8** | 'We wondered what the dock workers would make of today's quiet, gentrified scene.' Photo: David Caton.

## Using qualitative fieldwork methods

The following case studies – 'London Docklands' and 'Investigating rural settlements' illustrate some qualitative methods.

### Case study 1: London Docklands

We enter the area travelling on the Docklands Light Railway. This offers us a chance to gaze at the mix of new and old, tidy and untidy outside the carriage, while rubbing shoulders with the office workers and local residents within. Travel around the study area is on foot, at a leisurely pace, occasionally taking a detour to answer questions such as 'What is through there?' or 'What is making that noise?' Stopping at some graffiti leads to discussion about whom it might have been written by, why they wrote it and what it might mean. A burned-out car provokes a similar debate.

In Wapping, old photographs showing hoards of men queuing for work at the very spot where we are standing lead us to think about what happened to people like these when the Docks closed. We wonder what they would make of today's quiet, gentrified scene (Figure 8). This theme is developed as we walk among the grand, confident architecture of an office development and its associated sculptures. Students who are studying for a GCSE in art enjoy the challenge of exploring their meanings. Some draw upon their previous geography lessons and begin to see how these rather plush modern buildings reflect the brash approach to redevelopment of the 1980s. Finally, the group is led towards the Cable Street Mural, where they reflect upon issues of race and conflict in East London's past and present.

### Case Study 2: Investigating rural settlements

This trip involves visits to Craven Arms and Alveley, two small towns of similar size,



<p>Craven Arms</p> <p>Shops and a car park People chat, lorries roar past. A place to pass through.</p>	<p>Alveley</p> <p>Historic stone church Empty houses, open space. Where is everyone?</p>
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**Figure 9** | Students' haikus about the settlements of Craven Arms and Alveley in Shropshire

located in different parts of Shropshire. A combination of qualitative and quantitative techniques is used to find out how and why these places are different from each other. An important sub-aim is to discover how much the pull of people to the West Midlands conurbation for jobs and services has influenced these settlements.

Initial quantitative surveys of services, the age of buildings, and traffic, as well as Census data and questionnaires, provide plenty of information about Craven Arms, the first place that we visit. Yet, there remains a feeling that we have ghosted through the settlement, collecting numbers as we go, without really pausing to reflect upon what this place is really like. A number of questions remain unanswered and my students are not as engaged as we would like. I wonder how much they would remember about this place in their far-off examination if we were to leave here without any further activities.

Qualitative techniques are employed in order to address these issues. We begin by listing the things that we observe people doing, however mundane they may appear. Later on, the bustling community in the centre of Craven Arms will be contrasted with the rather car-centred emptiness of Alveley, the dormitory settlement that we visit after lunch. I ask the students to write words that describe their perceptions of this place. After a minute, we begin to call out the words that best describe the town, so that we can hear what other people are thinking. I ask the students to use the words to write a haiku. These poems follow a strict structure of three lines, with five, seven, then five syllables (Figure 9).

They continue to develop and record their perceptions of Craven Arms by choosing one object that epitomises the place. Finally, we ask some local people to choose five words to describe the town. The words they use will later be sorted on a spreadsheet into 'positive', 'negative' and 'neutral'. This allows a quantitative comparison of perceptions of the settlement to be made, while phrases such as 'gossipy', 'a place you pass through' and 'one-horse border town' add greater depth of understanding and provoke discussion.

## Ways forward

For some geography teachers, the approach described above will be novel. It might be helpful therefore to consider some of the other constraints that limit the use of qualitative fieldwork.

A crucial factor working against the use of qualitative methods with the 14-19 age group is the expectation of the awarding bodies that students will use either field research or enquiry for their coursework assignments. Teachers are understandably reluctant to risk their students' results by using alternative methods. Perhaps the most significant role for qualitative methods in this context could be to use them alongside traditional approaches in order to develop conceptual understanding and acclimatisation. Research by MacKenzie and White (1982) shows that fieldwork based upon memorable experiences and use of the senses is more beneficial for cognitive learning than a more

passive, teacher-led approach. Slater (1994) and Reid (1986) develop this point by arguing that engaging feelings and emotions can help students to develop their objective understanding of concepts, as well as giving them a more rounded educational experience. By giving students greater awareness of the qualities of a place, qualitative fieldwork can provide a context for ideas, which is invaluable for linking thought and feeling and thus developing conceptual understanding (Slater, 1994).

Experiential methods might also have a role in GCSE and A-level coursework if they can be adapted to provide more objective forms of information. The use of sound maps in conjunction with a decibel meter and the aforementioned counting of positive and negative descriptive words provide two such examples. Furthermore, while quantitative techniques are likely to dominate at GCSE and A-level, there is a good deal more freedom to use qualitative approaches at key stage 3. Indeed, the focus that certain qualitative methods place upon themes such as sustainability, values and knowledge of places meets with some important priorities of the national curriculum. Moreover, certain activities might be used as a means to develop literacy skills and those involving practical activities might be incorporated into a citizenship programme (Job, 2001).

A further issue is that since qualitative techniques offer different ways of teaching and learning to field research and enquiry, they create new challenges for teachers. With such a student-centred approach, skilful management is required in order to guide the content gently towards worthwhile outcomes. It is also not uncommon for students to work at a fairly superficial, descriptive level when using these techniques. In their defence, it could be argued that the student who is writing good quality description, showing insight, empathy and well-developed literacy skills, may actually be working at quite a high level. Nevertheless, when leading qualitative fieldwork, the teacher should be mindful of the need to encourage explanation, perhaps with the use of questioning and thinking skills (Caton, forthcoming).

The future for geography fieldwork in secondary schools does not need exclusively to follow the well-trodden quantitative path. With a little imagination, geography departments can sometimes choose to take their students in a different direction. While the outcomes of these alternative methods are likely to be very different from those of field research and enquiry, they are nonetheless worthwhile, and they also complement these traditional approaches. It might be worthwhile for geography departments to take some time to discuss the approaches that they use in the field. Where quantitative methods are employed, a good deal of useful learning undoubtedly takes place. But it is also worth considering what can be offered by qualitative methods. If these can also be employed they may serve to heighten awareness, engage feelings and provoke questions, resulting in a richer, more varied educational experience.




**Related publications from the Geographical Association:**

- Job *et al.*, 1999 (see below)
- Holmes, D. and Farbrother, D. (2000) *A-Z Advancing Geography: Fieldwork*.
- GA/FSC (2005) *Fieldwork File: Managing safe, successful fieldwork*.
- *Teaching Geography* (2000) 'Focus on fieldwork', 25, 2, 52pp.

**References**

- Burgess, J. and Jackson, P. (1992) 'Streetwork: an encounter with place', *Journal of Geography in Higher Education*, 16, 2, pp. 151-7.
- Caton, D. (2001) 'An encounter with nature', *Teaching Geography*, 26, 3, pp. 139-41.
- Caton, D. (forthcoming) *Theory into Practice: Reflections on fieldwork*. Sheffield: Geographical Association.
- Cosgrove, D. and Daniels, S. (1989) 'Fieldwork as theatre: a week's performance in Venice and its region', *Journal of Geography in Higher Education*, 13, 2, pp. 169-83.
- Dove, J. (1997) 'Perceptual geography through urban trails', *Journal of Geography in Higher Education*, 21, 1, pp. 79-88.
- Goodey, B. (1982) 'Values in place: interpretations and implications from Bedford' in Gold, J. and Burgess, J. (eds) *Valued Environments*. London: Allen and Unwin, pp. 10-34.
- GTIP webpages – [www.geography.org.uk/gtip](http://www.geography.org.uk/gtip)
- Job, D. (1996) 'Geography and environmental education: an exploration of perspectives and strategies' in Kent, A., Lambert, D., Naish, M. and Slater, F. (eds) *Geography in Education: Viewpoints on teaching and learning*. Cambridge: Cambridge University Press, pp. 22-49.
- Job, D. (1999) *New Directions in Geographical Fieldwork*. Cambridge: Cambridge University Press/Queen Mary Westfield College.
- Job, D. (2001) 'Fieldwork for a change', *Teaching Geography*, 26, 2, pp. 67-71.
- Job, D., Day, C. and Smyth, T. (1999) *Beyond the Bikesheds: Fresh approaches to fieldwork in the school locality*. Sheffield: Geographical Association.
- Harvey, P.K. (1991) *The Role and Value of A Level Geography Fieldwork: A case study*. Unpublished PhD thesis, University of Durham.
- Hawkins, G. (1987) 'From awareness to participation: new directions in the outdoor experience', *Geography*, 72, 1, pp. 217-22.
- Hutchison, D. (1998) *Growing Up Green: Education for ecological renewal*. London: Teachers College Press.
- MacKenzie, A.A. and White, R.T. (1982) 'Fieldwork in geography and long term memory structure', *American Education Research Journal*, 19, 4, pp. 623-32.
- Pocock, D. (1983) 'Geographical fieldwork: an experiential perspective', *Geography*, 68, 4, pp. 319-25.
- Reid, L.A. (1986) *Ways of Understanding and Education*. Oxford: Heinemann.
- Rogers, J. (2005) 'Sensing places', *Teaching Geography*, 30, 1, pp. 38-9.
- Rynne, E. (1998) 'Utilitarian approaches to fieldwork', *Geography*, 83, 3, pp. 205-13.
- Slater, F. (1994) 'Education through geography: knowledge, understanding, values and culture', *Geography*, 79, 2, pp. 147-63.
- Van Matre, S. (1979) *Sunship Earth: An acclimatisation programme for outdoor learning*. Martinsville IN: American Camping Association.
- Ward, C. and Fyson, A. (1973) *Streetwork: The exploding school*. London: Routledge.



## Implications for practice

- (a) There are a variety of ways of learning in the field, each has value but with different purposes and outcomes.**


Field research using quantitative techniques provides, among other things, experience in using research procedure. Enquiry is particularly helpful for developing values and decision-making skills. Qualitative methods can lead to a variety of outcomes, including developing a sense of place and care for the environment. Each method also has its limitations. To take account of this a department could usefully discuss the purposes that they have for a field visit prior to planning the trip. Very often a combination of approaches will ensure a more varied and fulfilling educational experience.

- (b) Qualitative fieldwork techniques can be used to enhance fieldwork in GCSE and A-level coursework.**

Acclimatisation activities can be used at the start of a coursework assignment to generate interest and awareness. If the aims of an investigation are developed from the student's own experience they may begin to care more about the place and issues that they are studying. Qualitative activities can also be used alongside quantitative fieldwork as a means of enhancing levels of conceptual understanding. Finally, some qualitative activities can be adapted to provide information that can be used as data in a conventional research project. Collaboration with other subject specialists can help geography teachers to develop their confidence and expertise in using qualitative approaches.

- (c) Teachers and students who are unfamiliar with qualitative fieldwork will benefit from finding ways to develop their experience of this approach.**

One way forward towards overcoming this is to work alongside specialist teachers from other subjects. For example, asking an English specialist to lead activities such as haiku poetry on a field visit can be a useful way to learn new teaching strategies while increasing awareness of the school's literacy objectives. Experience can also be gained for both teachers and students by adapting qualitative fieldwork activities for use within the classroom. Examples could include using poetry to describe the stages of a river or choosing an epitome of a place using photographs. Students learn what our subject involves from the content of their geography lessons. Teachers can engender in their students the belief that learning in geography involves emotions as well as objective understanding.





## Acknowledgements

Source: Caton, D. (2006). Real world learning through geographical fieldwork. In David Balderston (ed) *Secondary Geography Handbook*, Sheffield: Geographical Association. © Geography Association, 2006. Further material and International Associate Memberships are available from the Geographical Association website <http://www.geography.org.uk/>