Teaching Geography

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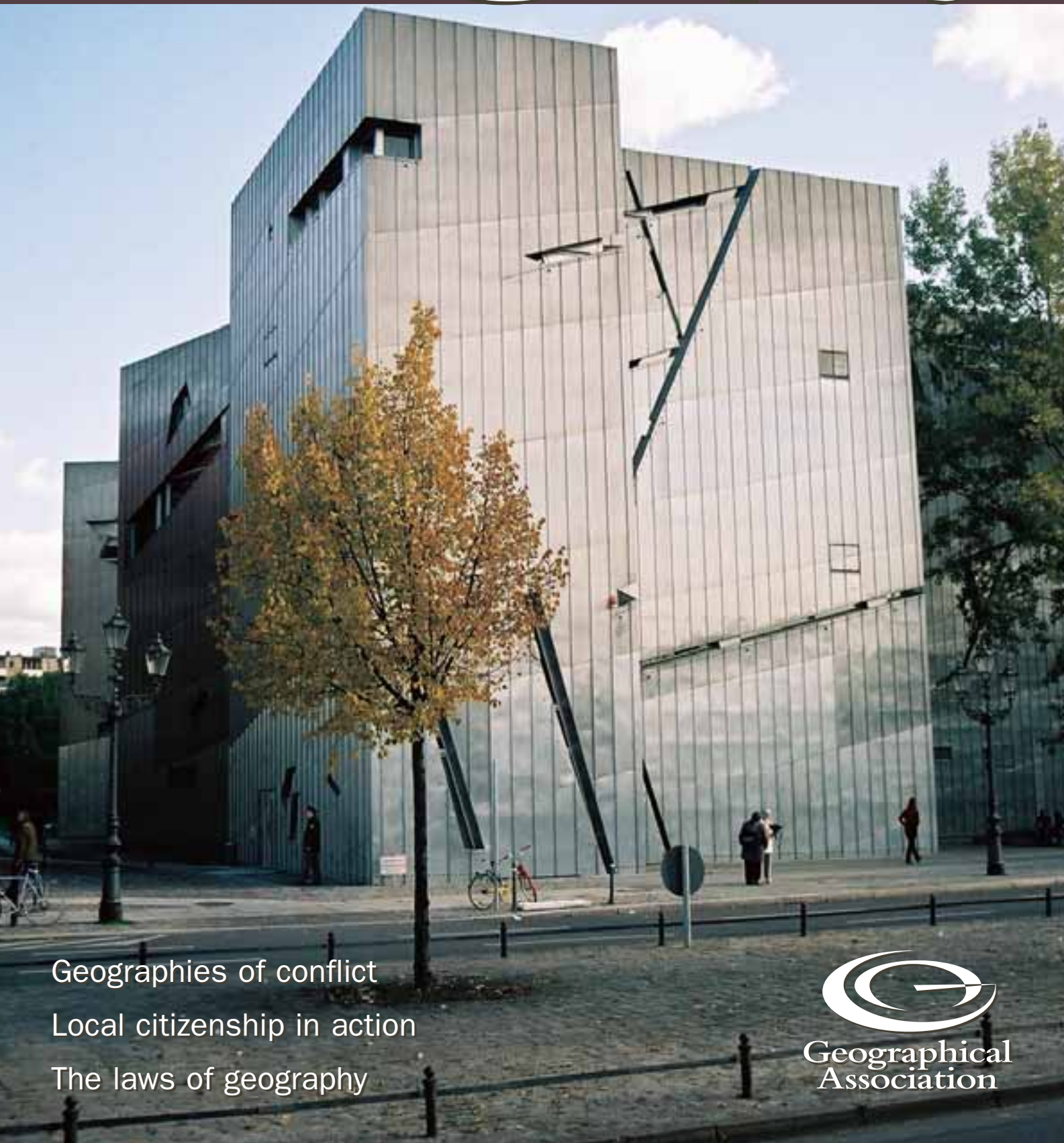

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Geography Curriculum articles discuss and exemplify particular aspects of the curriculum. **Teaching File** articles describe ideas, methods or approaches which have proved successful. **Research File** articles report and discuss geographical education research of relevance and interest to geography teachers. **Forum** contributions deal with matters of general interest. Regular features cover **Assessment Matters** and **Information and Communications Technology**. Articles submitted to *Teaching Geography* will normally be refereed.

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Reflecting on Teaching Geography

It has been my privilege to be the Honorary Editor of *Teaching Geography* for the past nine years. This has involved editing 35 issues of the journal! I would like to thank my family and the many colleagues who have supported me during my office, and also the authors, referees, reviewers and GA staff who have ensured the continuing quality of the journal. I would also like to convey a special thank you to Diane Wright, who recently left the GA and who worked alongside me as Production Editor from my very first issue in October 1996. Her support, guidance and expertise were central to maintaining the quality of every issue that we published. Thank you Diane.

I have been proud to play a part in the development of *Teaching Geography* to ensure that it has remained a valuable forum and professional resource for our readership. I have been dedicated to making current thinking, research and new ideas available to the secondary geography community. I was particularly pleased to introduce the Research File; to make current research in geographical education accessible to our readers and to provide a forum for experienced and new researchers to debate their findings.

The past nine years have seen a plethora of educational initiatives designed to improve standards, such as the National Curriculum and its various revisions, developments in the 14-19 curriculum, and the new emphasis on literacy, numeracy and ICT. Equally, there seems to have been a growing emphasis on how geography can contribute to the broader education of our students, for example, in matters to do with citizenship, the environment, sustainable futures, globalisation and the local community. The world seems to have changed considerably and become smaller too; the internet, international terrorism, migration, climate change and natural disasters are examples that reflect these changes. At the same time public opinion seems to have shifted, for example, 'inequality and poverty is unacceptable', 'children should have a voice' and 'trade should be fairer'. There is now an international agenda which recognises that we need to support young people to understand change and make their contribution to our changing world.

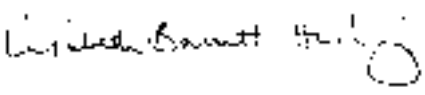
This, my last, issue of *Teaching Geography*, contributes to our understanding of how we might respond to our changing world. It is a privilege to have Giles Mohan and Colin McFarlane introduce Stephanie's award-winning essay which conveys her understanding of the issues of poverty and inequality at the global scale and what can be done. Paul Machon, David Lambert and Maurice Hopper all argue that geographers should not avoid the geography of war and conflict in their classrooms. Indeed, both of these articles show how this has a contribution to make to students' understanding of conflict and its spatial impact and human and environmental costs. Bill Pritchard suggests that students should be aware of how our coffee consumption is underpinned by economic processes that have huge implications for the livelihoods of producers and their families. Finally, citizenship in action in a school and local community is reported by Robert Barratt, William Scott and Elisabeth Barratt Hacking with colleagues from their recent research project.

Other articles set us many new challenges and present many new ideas. In his stimulating reflections on the central laws of geography Peter Smith proposes a new law of 'Glocalisation' to reflect current trends, and challenges us to propose our own new Law of Geography; while Eleanor Rawling challenges us to innovate with the key stage 3 geography curriculum. Melissa Gardner, Sally Heppenstall and Sarah Todd report on their team teaching initiative; their reflections suggest a number of benefits arising from this practice. For an insight into how one geography department strives for excellence please read the Bradfords Award winner report on Fakenham Geography Department. Finally our regular ICT and Assessment Files continue to promote good practice and share new ideas. In this issue Richard Taylor shows how ICT can provide 'virtual fieldwork' and Paul Weeden shows how we can help students to make good progress through our marking and feedback.

So what of the future of *Teaching Geography?* The new Qualification and Curriculum Authority's (QCA) curriculum futures thinking (see QCA website) includes consideration of a number of areas of change:

- changes in society and the nature of work
- the impact of technology
- new understanding about learning
- the need for greater personalisation and innovation
- increasingly international dimensions to life and work.

I wonder how far changes such as these will be reflected in future issues of our journal. Certainly, geographers have much to offer to a debate about the shape of the future curriculum. I hope that we will see a debate about how we can promote learning in the core concepts and skills of our subject, for example, how will the increasing use of satellite navigation in the everyday lives of some of our students impact on their map learning? How can we ensure that all students experience outdoor learning through geography fieldwork in a climate of concern over safety and teacher accountability? I also hope that there will be further attention not only to how the geography curriculum can be more responsive to changes in society and students' lives but also to changes in higher education geography. The new pilot GCSE looks promising in this respect (see e.g. Wood, 2004) and I look forward to hearing more about how that and other curriculum initiatives develop. I will watch with interest to see which key themes and issues dominate in *Teaching Geography* in the future. I wish my successor, Margaret Roberts, good luck as she steers the journal forward through these exciting times.



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Geography in the Holocaust: citizenship denied

Paul Machon and David Lambert make a powerful argument for teachers of geography to use opportunities to place citizenship at the centre of their work

This article seeks to demonstrate that traditionally rigid subject boundaries need to be broken through if students are not to be denied what they are entitled to: an understanding of what it is to be human.[1] It argues that geography in schools has not traditionally been seen as having much of a part to play in achieving this. By examining the **Holocaust**, perhaps the most extreme example of human brutality of the twentieth century, we make the point that all subjects have something to contribute to the wider goals of education. Until now, the Holocaust has been located in time, but not in space: this article shows how this lost dimension can be restored by focusing on the human geography of the **genocide**. Ultimately, of course, such an approach raises fundamental questions with which all teachers need to deal. What, we ask, is the purpose of teaching? When we plan lessons we have in mind the kind of individuals we are trying to nurture and develop.

We recently came across a sixth-form student who did not do A-level history because she really couldn't face 'doing the Nazis *again*'. In geography, many of us feel that 'doing rivers' has the same kind of appeal: it is sometimes done to death. With so much else to learn about, why do we resort to the same story repeatedly over the years of compulsory schooling (and beyond)? The idea of the spiral curriculum applies strongly to both history and geography, but is surely concerned with conceptual growth and development – that is, revisiting concepts rather than topics. (For the record, the student mentioned above dropped geography at 14 years largely because (to use her words) she could not 'see the point'; but she returned to it at A-level, instead of history, enjoyed it and did well.)

We wish to make the point from the start that this article is not in any sense a take-over bid. When we set about putting together our edited book on citizenship through geography, we agreed to co-write a chapter on the denial of citizenship, using the Holocaust as our case in point. We were amused to read in a review of our book that we had failed to convince that the Holocaust did not still belong to history, proving yet again how powerful is the 'hegemony' of subjects and topics. But school geography has no desire, nor any need, to steal this topic. We simply want to use it to make a number of points about the power of geography (see GA website).

Subject disciplines

In schools, geography does not have much of a reputation for tackling overtly political issues, except perhaps in partial, coded and incomplete ways, for example with environmental issues. There is a risk that as 'citizenship' is incorporated into the suite of what is normally done in geography, then it too will be emasculated and its sting drawn.

All academic disciplines intend to *describe, account for and provide a critical 'take' on* the observable world. If a discipline has developed a distinctive approach to what and how its practitioners have operated – and particularly if a shared body of understanding has been developed and is shared by those practitioners – then that discipline has acquired a stature of its own. This status has risks, particularly the extent to which prevailing paradigms or practice can exclude some substantive work because 'it's not geography' and so must 'belong' elsewhere. But the challenge that confronts any discipline is the quality with which its three tasks are discharged in relation to the biggest and most difficult questions. The Holocaust in particular puts in front of social science's constituent disciplines particularly difficult questions because of the enormity of the event. Any discipline unable to cast at least some light on such events in a convincing way is fundamentally limited both substantively and methodologically. As such it may not have much of a role to play in education. So how does geography measure up?

Geography in the Holocaust

In choosing the Holocaust, we wanted to challenge geography as a discipline. Partly, we wanted to offer a spatial interpretation of a particular and relatively familiar historic-political story, or *event*, emphasising what it reveals about citizenship – which at its heart is concerned with the relationship between individuals and the state. There are other stories or events we could have chosen, of course: the geography of the Gulag springs to mind, for example, or even more contemporary horrors such as those that have occurred in the Balkans. In relation to the latter, Ó'Tuathail has remarked that:

> *The ethnic cleansing of Srebrenica was not an unusual act of violence in the post-Cold War world. In Afghanistan, Algeria, Azerbaijan, Cambodia, Chechnya, Croatia, Rwanda, Sri Lanka and many other places political, ethnic and religious conflicts have degenerated into bloody wars of often shocking brutality ... Yet geography made the violence of Srebrenica unique* (1999, p. 120).

The geography in the Holocaust also made that a unique event. We settled on the Holocaust partly because it is more familiar, both to teachers and students, than these other examples of genocide. There is a huge and growing Holocaust literature – playing its part in the formation of preconceptions that also need to be critically examined – the serious study of which may encourage students to use geographical perspectives to help account for and understand other significant events of this nature.

But why, it might be asked, choose any such abysmal happenings? Surely we can test geography's power as a field of disciplined enquiry without turning to genocide? Well, this was to emphasise a curious gap in geography (and we mean geography, not just school geography). Conventionally, the Holocaust is perceived as history's property, although there have been notable achievements that have captured something of its spatiality like Martin Gilbert's *Atlas of the Holocaust* (1984) and a sense of place in Primo Levi's *The Truce – A Survivor's journey home from Auschwitz* (1979). But even these brilliant pieces employ space in a rather passive way, a canvas upon which this

historically contingent event occurred. More recently, that space and distance are not passive but key elements in these events themselves, is evident in Browning's brilliant account of the start of the Holocaust (2005). Yi-Fu Tuan has observed that the discipline of geography is probably to blame for this, for it seems to have had a blind spot toward questions of evil and 'the entire realm of morals and ethics'. Furthermore, he writes:

> *A deeper reason for the neglect of moral questions is the geographer's indifference to events. Events, we seem to feel, are best left to historians. The event of war is prominent in history books. In geography books it is conspicuously absent. There is of course a geography of the American Civil War, but we have not written it. We map battlefields – the cool and static aftermath of an event – rather than the clash of beliefs, alliances, and armies, in which courage, cowardice, wisdom, stupidity, good and evil are likely to be displayed* (Tuan, 1999, pp. 106-7).

The argument is that space and place, geography's focii, should more properly be seen as forming a dynamic element that structures such 'events' by offering spatially differentiated choices to agents with spatially differentiated political power. This is not to replace the 'passive canvas' with a mechanistic dualism of structure and agency, but is to argue for their co-existence in complex, messy, dialectical and iterative ways that are constantly being made and re-made. Spatially differentiated control of knowledge and action are amongst the basic elements of political power, including its legitimisation and perpetuation across whatever space is defined as the state's own, and so can begin to account for the variations in political practice that can always be found.

The Holocaust was an event in time, but it also happened in a particular space – indeed, in particular places within that space. Studying the spatiality of the Holocaust helps us understand the event.

Geopolitics and Social Darwinism

Geopolitical thinking from the early part of the last century has been enormously influential, even to this day. It was heavily influenced by Social Darwinism (see Figure 1) and it helps us understand what in a way became inevitable once the Nazis had seized power. Put simply, 'scientific' racism plus 'scientific' territorial ambition led to the state stumbling towards the Final Solution, embodied by Auschwitz.

In Britain, Halford Mackinder is the most well-known member of the geographic community whose work supported **imperialism**. In his writings he insisted that geographical education should serve an imperial purpose:

> *The ruling citizens of the world-wide Empire should be able to visualise distant geographic conditions ... [and therefore we must] ... aim to make our people think imperially ... and to this end our geographical teaching should be directed* (Mackinder, 1907).

In Germany, Friedrich Ratzel was involved in a similar imperialist discourse that privileged the struggle for survival in an explicitly Social-Darwinist fashion. In *Political Geography* (1897) he argued that superior nations had the right to expand at the expense of the inferior in order to gain additional living space – *Lebensraum* – for themselves. These sentiments were later codified into a formal branch of the discipline, geopolitics, largely through the efforts of Karl Haushofer who began the journal *Zeitschrift fur Geopolitik* in 1924.

Haushofer's close association with the emergent National Socialist (Nazi) party must not conceal that such views, with all the attendant threats of political action, were not exclusively German, but a normal part of the lexicon of all nationalist movements at that time. But neither should we overlook geopolitics' place in another broadly-based project in German academic life, *Ostforschung* or 'research on the East' (Burleigh, 1998). This inter-disciplinary research was undertaken to demonstrate on historical, sociological, racial and linguistic grounds that large areas of central and eastern Europe were part of a far older German *Heimat* (homeland) to which contemporary German expansionists could claim a right. Maps of the area settled by Germans and where their cultural influence was paramount can be found dating from 1925 (see Rössler, 1990).

Nazism incorporated Social Darwinism into its distinctive **fascist** project. It built a provenance for 'race' theory that was developed on mythology and pseudo-science. This included *Rassenhygiene* (the claimed biological foundation for what has now become known as 'ethnic cleansing') and *Lebensraum* (the natural right to territory to the east – indeed, encouraging a sense of duty in Germans to 'civilise' this space). Thus, Nazism can also be characterised as *aggressive nationalism*. That is to say that it was fundamentally and uniquely a murderous state form but one that had extremely sophisticated and explicit territorial ambitions built on nationalist geopolitical thinking. Germany was to be for the Germans (however either term was defined).

In this way Europe was transformed from a 'blank canvas' to an ideologically-charged landscape occupied by people with differentiated rights to citizenship of an exclusive sort because it was defined on racial grounds.

Social Darwinism

Darwin's account of evolution in the plant and animal kingdoms, and in particular the emphasis upon competition as a mechanism for evolutionary change, found a ready audience in much late nineteenth century social thinking. This mechanism was 'read off' into human affairs, supporting in an apparently scientific way Europe's world-wide imperialist project that was the dominant geopolitics of the time.

The concept also found resonance in the classification of 'the world's races' that acquired a hierarchical structure. In its most extreme form this theory produced the notion of an Aryan super-race and the notion of the *Untermensch* (sub-human).

Much of the language that is still employed to discuss cultural and ethnic differences as racial is uncritically drawn from this Social-Darwinist legacy.

Figure 1: Social Darwinism.

The Holocaust in space

Across Europe the curious traveller can still be surprised by the physical evidence of the period that ended in 1945. By this date, millions had been **extirpated** in the Nazi project of producing a 'citizenry' made uniform on racial grounds. The isolated names on uncomfortable gravestones in rural France give way to longer and more monumental lists in Dutch cities. The density of such encounters increases as one moves east, eventually into eastern Poland with the broad sweep of camps, from Stutthof on the Baltic to the vast industrial death camp of Auschwitz-Birkenau in the south. Further east still, the evidence is present, but the techniques of death were less formal and apart from gross horrors captured in state monuments such as those at Babi Yar and Slutsk, evidence exists in the *absence* of ethnic groups: Roman Vishniac's 'vanished worlds' (1986; see also Wiesel, 1993; Vishniac Kohn and Hartman Flacks, 1999).

This geography has an elective affinity with Nazism's belief-systems, its geopolitics and *Lebensraum*. But the argument here is that space was actively involved in these processes and it is to three brief, important illustrations of this that we now turn.

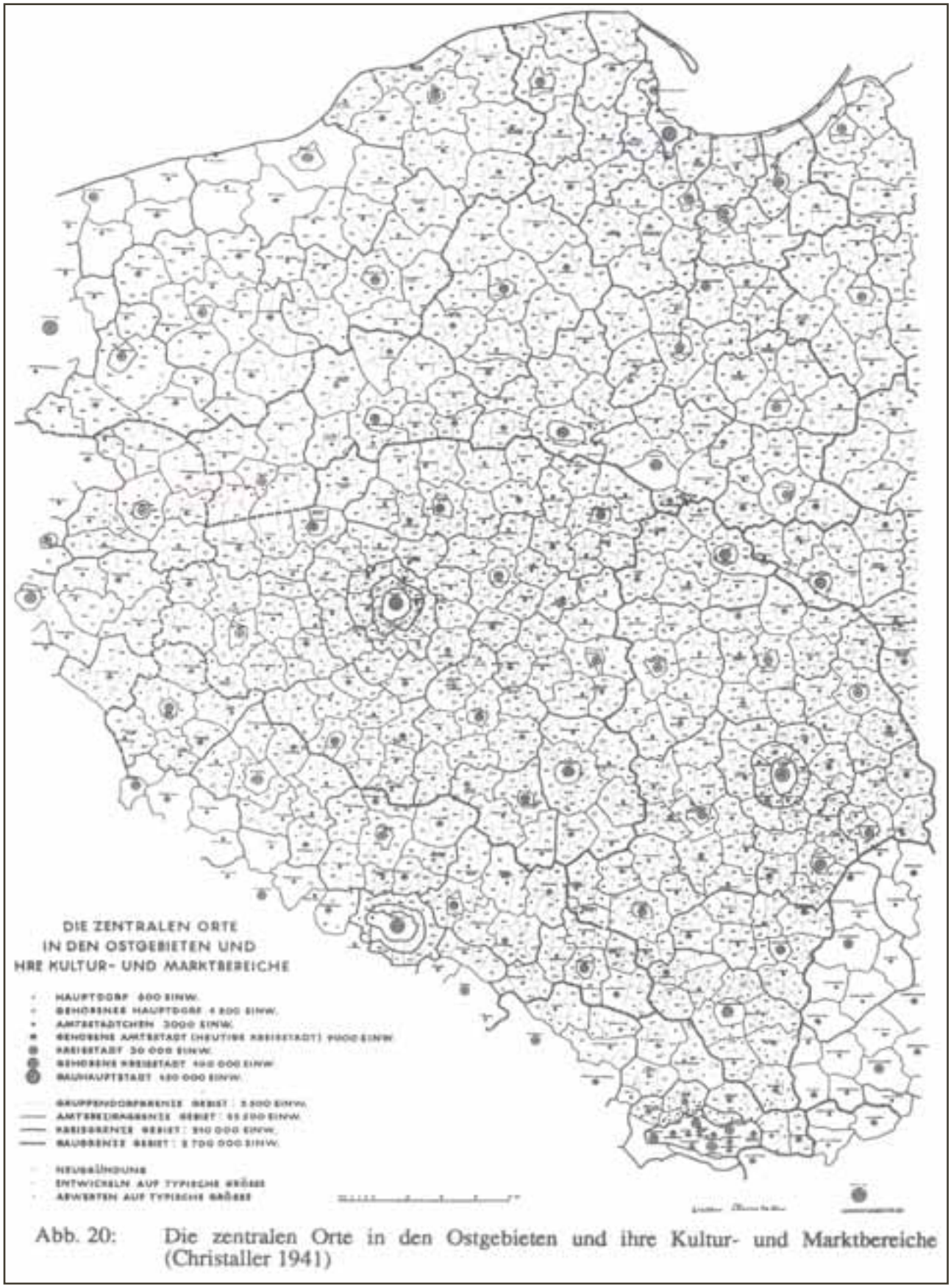

Figure 2: Plan for the 'Germanisation' of occupied Poland on 'rational' grounds, 1941. *Source*: Rössler, 1990.

1. The process of elimination of racial groups was tackled systematically and geo-strategically. This remained true throughout the development of the Holocaust mechanisms even though these evolved piecemeal, as one problem after another was resolved. What tied the evolving systems together was their increasing productivity. From the start two clear spatial patterns were established. The first was the clearance of rural areas and the decanting of those displaced into temporary zones in towns and cities – the ghettos. Flows in and out of these ghettos were regulated so that they became instruments of death, but their primary purpose remained as holding areas on the way to the death camps.

   The second was at a larger scale and broadly from west to east, from holding areas like camps near Bergarac or Nancy to the death camps on Poland's eastern borders. Only once an area was *Judenfrei* (free of Jews) were these camps and ghettos closed. Schwarz (1990) identifies hundreds of such sites,

indicating their satellite relationship to larger centres. The choice of such sites was not by chance, but guided by economically-rational decision-making processes like access to transport – particularly railways – as well their isolation and the political views of the local population (Hilberg, 1985). These last two factors contributed to the comparative invisibility of the process across space. Only in the Soviet Union did these two patterns differ. There, the rural to urban movement was present, but the west to east movement did not occur because of the incompatibility of the rail systems. In their place *Einsatzgruppen* (special action groups) exterminated Jews on the battlefield, near their homes or in the ghettos to which they had been transferred. Hundreds of thousands of people were shot dead.

2. The *Ostforschung* project was acted out in various cultural ways. Landscapes were 'germanised' by changes to the architecture; by the creation of distinctive regional governments within an expanding Reich and by the sanctification of agriculture (Adam, 1992). Academic geographers were involved in the planning and delivery of much of this work, legitimating what was being done by their scientific approach. The best known was Walther Christaller, the originator of Central Place Theory (CPT), an economically rational account of the distribution of settlements across landscapes that leant itself admirably to the germanification of landscape. Working in effect as a planning consultant for Reich agencies, Christaller's proposals for northern Poland are shown in Figure 2. Interestingly, CPT is still taught widely in British school geography, though rarely with any reference to its origins.
3. There were differences in the experience of the Holocaust state by state. This is to acknowledge that different state forms produced different views of citizenship – and its inclusivity and exclusivity. This can be glimpsed in the different survival rates state-by-state, or more properly region-by-region within states. There is no easy picture here because state fortunes changed over time and so states were exposed to a Holocaust mechanism of differing efficiency. Hungary can stand as an example here (Braham, 1994). Prior to the final reverses on the Eastern Front, Nazism's fascist allies in Hungary, the Arrow Cross, dealt with 'their' Jews without interference from outside unpleasantly enough by isolation and marginalisation. However, once the alliance disintegrated Hungary was quickly occupied and its Jewish population exposed to fully-developed and murderous Holocaust mechanisms. This is shown in Figures 3 and 4. Aided by effectively organised Arrow Cross members, often working in official capacities, rural areas were quickly emptied and a substantial ghetto was established in

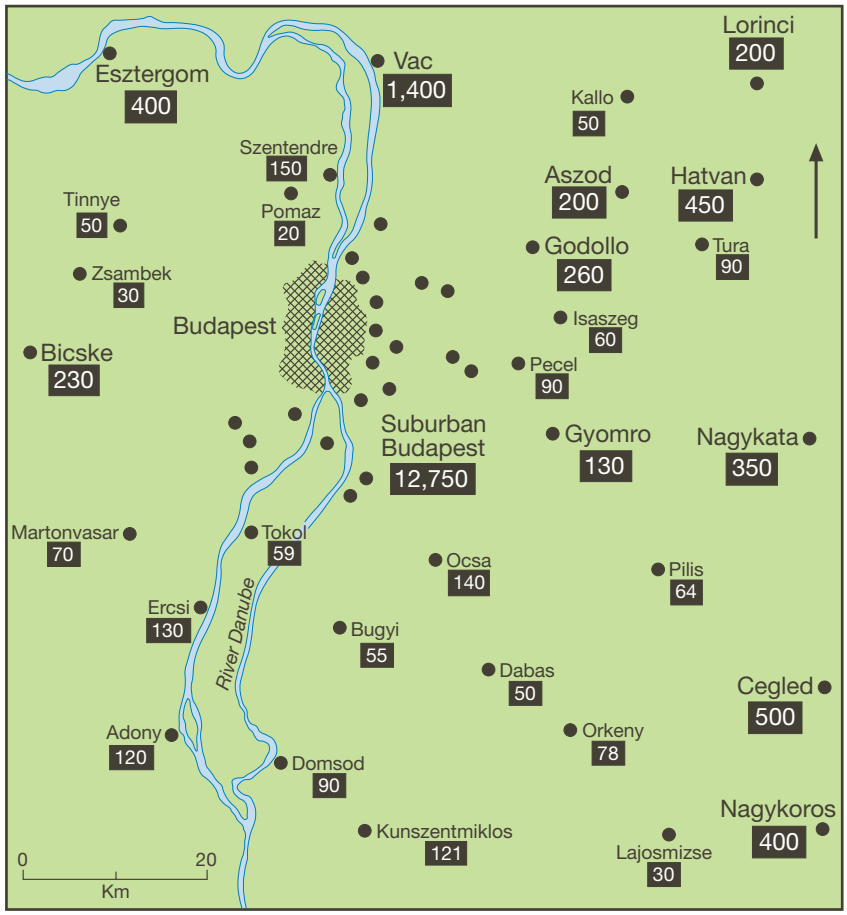

Figure 3: Deportation of Hungarian Jews from outlying districts into Budapest.
Source: Gilbert: 1984.

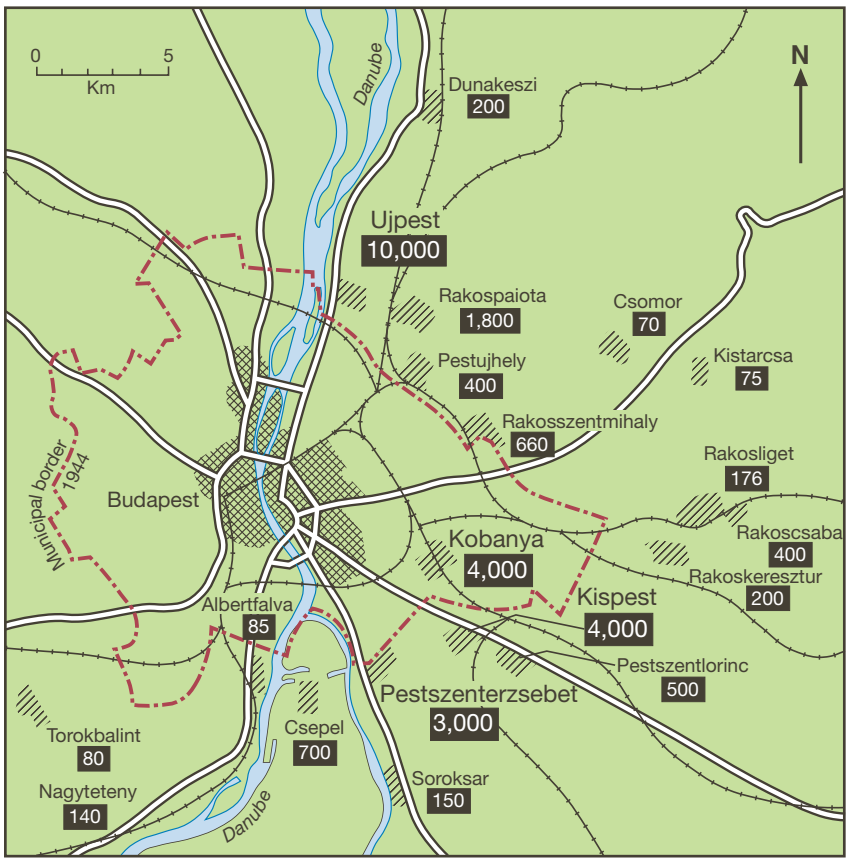

Figure 4: Deportation of Hungarian Jews from Budapest's suburbs into the city.
Source: Gilbert: 1984.

Budapest. At this stage of the war (1943-44), Auschwitz was working fully and the journey into southern Poland was short. Only the liberation of Budapest early in 1945 prevented the wholesale elimination of Hungarian Jewry (Maté, 1980).

The Holocaust did not just happen anywhere. Its spatial manifestations are interesting enough in their own right, but placed more fully in its spatial (as well as the temporal) context, the event becomes more understandable at the regional and national scale. It is even possible to understand the rightness ordinary citizens felt of their actions when their understanding of people and places (the stuff of human geography) had been shaped and distorted by the products of *Ostforschung*. The 'good citizen' in an aggressive, exclusive, nationalist state is capable of being complicit with evil.

Some conclusions

On visiting Auschwitz ... one is very much 'told a story'. The fact that 500,000 people now visit each year somehow influences the experience one will have at Auschwitz. ... You do not have to imagine the daily ritual of life that was done here; it is done for you. The way it is preserved gives us all the evidence we require to place it in our memories as a place symbolising terror. ... It is designed to shock and achieves that amply.

A trainee geography teacher wrote this following a field visit to southern Poland near the end of the PGCE year. Her point was to open up a current issue well known to many in the social sciences, namely the 'crisis of representation'. By some bizarre coincidence, half a million people per annum was about the same number as passed though Auschwitz when it was functioning as a death camp, and it is said that many, perhaps most, had little idea of what the place was, even when they had passed though the now famous gates. The geography teacher writes that it is a place of terror, forming part of Tuan's 'geography of evil'. But if that is all it is – if that is the only way in which it can be represented – then perhaps its educational power is attenuated. Worse still, on the other hand, would be the notion expressed by other geographers on the same trip, that the death camp is a prime example of Fordist economics at work and an example of a rational least-cost location.

The point we make here is that, reiterating our health warning right at the beginning, teaching the geography of the Holocaust is not something we would want to advocate. Although it has been argued that geography helps understand the Holocaust very few geography teachers are readily equipped to teach it as a topic. However, it may be refreshing for teachers and future students for all subject specialists in the humanities and social sciences to think flexibly and boldly about what their disciplines bring to serving students' educational entitlement. Let us not defend 'subjects' in a series of never-ending turf wars, but promote them as resources that can contribute to, or serve, educational goals. We may have to think hard about this – for example, in geography there is a vast range of opinion on what constitutes the subject, even in terms of its key, threshold concepts. However, Place, Space and Scale are three which would be acceptable to most and it is these that have underpinned this article, though not exclusively of course, for geography is a subject that needs to feed off concepts derived from other fields, not least (in this article) political science.

The question of educational goals is perhaps the subject of another article. But for now it is worth concluding with the probably controversial notion that what separates teachers of geography from geographers in research, planning, etc, is the centrality of the idea of citizenship in their work. Does one teach for the state, or for the benefit of the individuals whose minds one is supposed to be developing? It seems to us that when we plan lessons we have in mind the kind of individuals we are trying to nurture and develop. What we have tried to show here is that human geography (the study of people and places) has the power to contribute to ways of understanding how one of the most shocking human tragedies happened. It can help account for part of the human condition and what it means to be European. ■

Note

1. This is an edited version of an article from *Teaching History* (Lambert, 2004) based on an original chapter (Machon and Lambert, 2001). The Geographical Association is grateful to the Historical Association for permission to reproduce this text.

Glossary

Extirpated – rooted out or destroyed completely

Fascist – person holding extreme right-wing or authoritarian views

Genocide – the deliberate extermination of a people or nation

Holocaust – the mass-murder of the Jews by the Nazis, 1939-45

Imperialism – an empirical rule, extending a country's influence through trade, diplomacy, etc.

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Geography and security: citizenship denied?

Maurice Hopper describes how the Israeli Separation Barrier is changing the landscape and lives of people living in West Bank Palestine

Under the heading 'Changes in world geography', Walford and Haggett considered 'instability in major geopolitical hegemonies' (1995, p. 5). Although they discussed the collapse the former Soviet Union and the rise of China and India as major players in the world economy, their text illustrated the difficulty of predicting what issues geographers should be watching out for in the future. This article illustrates how the *geography of security* affects the geography of people's lives, an issue not raised by Walford and Haggett. It focuses on the construction of the **Separation Barrier** by **Israel** in and around **West Bank Palestine**, and how the Barrier is affecting the lives of people in rural areas. It is based on my experiences, when acting for three months as a human rights observer (on behalf of the World Council of Churches), in the Palestinian village of Jayyous and in other areas of Israel and Palestine.

Teaching and learning approaches

Although there are similarities with the construction and eventual destruction of the Berlin Wall which separated West from East Berlin from 1961 to 1989, and the partitioning of Cyprus from 1974, the situation in West Bank Palestine is also unique. Geography offers good opportunities for getting to grips with issues of this kind (see Storey, 2003).

During my time observing the situation around the Israeli Separation Barrier, I was able to make use of my neglected skills of geography fieldwork. When reflecting on how geography could assist in the interpretation of the landscape and the human responses, two questions arose:

Figure 1: The Jayyous North Gate in the Israeli Separation Barrier. *Photos:* Maurice Hopper

Glossary of terms (shown in bold)

Checkpoint: Movement control points set up by the Israeli Defence Force to enforce permits which limit Palestinian access, for example to East Jerusalem. There are also 'flying checkpoints' which can be set up any where in the West Bank.

Greater or Eretz Israel: The vision of an Israel extending from the Mediterranean Sea to the River Euphrates, as depicted on Israeli coinage and the national flag.

Green Line: The 1949 Armistice Line separating Israel from the West Bank and the basis for several UN resolutions about the conflict.

Israel: The State established in 1947.

Palestine: The pre-1947 area bordered by Lebanon, Syria, Jordan and Egypt.

Palestinian Territories/Occupied Territories: Gaza, the West Bank and East Jerusalem (i.e. modern Palestine) and the Golan Heights, which were part of Syria.

Separation Barrier: The fence or wall being built on the Green Line or inside the West Bank to provide security for Israeli (Figure 1).

Settlement: An Israeli community established within the occupied territories.

West Bank Palestine or the Palestinian West Bank or the West Bank: The area of Palestine, including East Jerusalem to the west of the River Jordan and enclosed by Israel.

- How can we interpret the landscape and geography of security?
- Do we need to see these local events as part of the bigger geopolitical situation that, nevertheless, has an impact on the lives, and indeed geographies, of individuals?

In attempting to answer these questions, I came up with a number of options. There is the *traditional approach* of recording elements of the landscape – mostly those that are different from the elements with which we are accustomed – often as sketches

rather than in writing. For example, my journal includes sketches of a share plough (designed to be pulled by a donkey) and sheep under olive trees. While this may be of interest it does not really offer ways of getting to grips with the underlying issues. A *case study* approach may be of value. For example, a comparison between a Palestinian village and an Israeli settlement would certainly indicate differences (and some similarities), but, again, such a study could be carried out with little reference to the underlying situation. A *study of social, political, agricultural and economic change* would be possible. After all, in studying changes we must consider the reasons behind them, which would widen the scope of the work. But, I suspected that this would quickly become a *study of issues*. The two major issues – land and water resources – are ones that geographers handle with confidence, but a third issue must feature: military occupation. The Israeli occupation affects every aspect of life in West Bank Palestine, thus it is impossible to discuss resource issues without reference to and an understanding of its impact. This would naturally lead to a debate centred on the development and formation of students' *values and attitudes* through a knowledge, understanding and analysis of a particular situation.

No matter how the topic of security is covered in the classroom, it is becoming an increasingly important factor in geographical understanding, which is best addressed by examination of its role in related issues. As Kobayashi and Mackenzie state:

> *Whether we consciously incorporate 'dynamism' into our framework, our work is active and dynamic, and necessarily, constantly changing. New issues, emerging forms of social organisation ... or alteration of existing ones coerce us into new ways of understanding, and we adjust our theoretical perspectives to meet the exigencies of social change*
> (1988, pp. 1-2).

This article offers material that could be used to generate further research and a geographically informed discussion based on real observations. Although there are limitations to focusing on experiences in the Palestinian West Bank, they provide a detailed snapshot of part of a bigger and more complex geopolitical situation. It indicates how one government's decision to construct a security fence around an area impacts upon the lives of others.
As well as the 'on the ground' political demarcation these include restrictions on access to land and resources (Figure 2).

Figure 2: Abu Azam is a leading farmer in Jayyous. Behind him is the Separation Barrier and beyond that the village land and 'poly-tunnels'. In the distance is the Green Line and beyond that the coastal plain of Israel. At that time Abu did not have a permit to access his farmland, nevertheless, his wish is 'to live in peace with Israeli neighbours'.

Background

The history of this area is one of changing names, changing shapes and changing places. From 1920 to 1948 Palestine was governed by Britain under the terms of a League of Nations Mandate. In 1947 the new United Nations called for the partition of Palestine – awarding 54% of the land to Israel and 46% to Palestine. In 1948, Israel, feeling threatened by its Arab neighbours, expanded its borders into Palestine by military force. These new borders, the Armistice or **Green Line**, left just 22% of the original Palestine for the Arab population (Figure 3). Furthermore, the Palestinian land lay in two separate areas: the West Bank (which became integrated with neighbouring Jordan) and Gaza (under Egyptian administration). In 1967, during the Six-day War the Israeli army over-ran the West Bank and Gaza, starting the occupation that continues today.

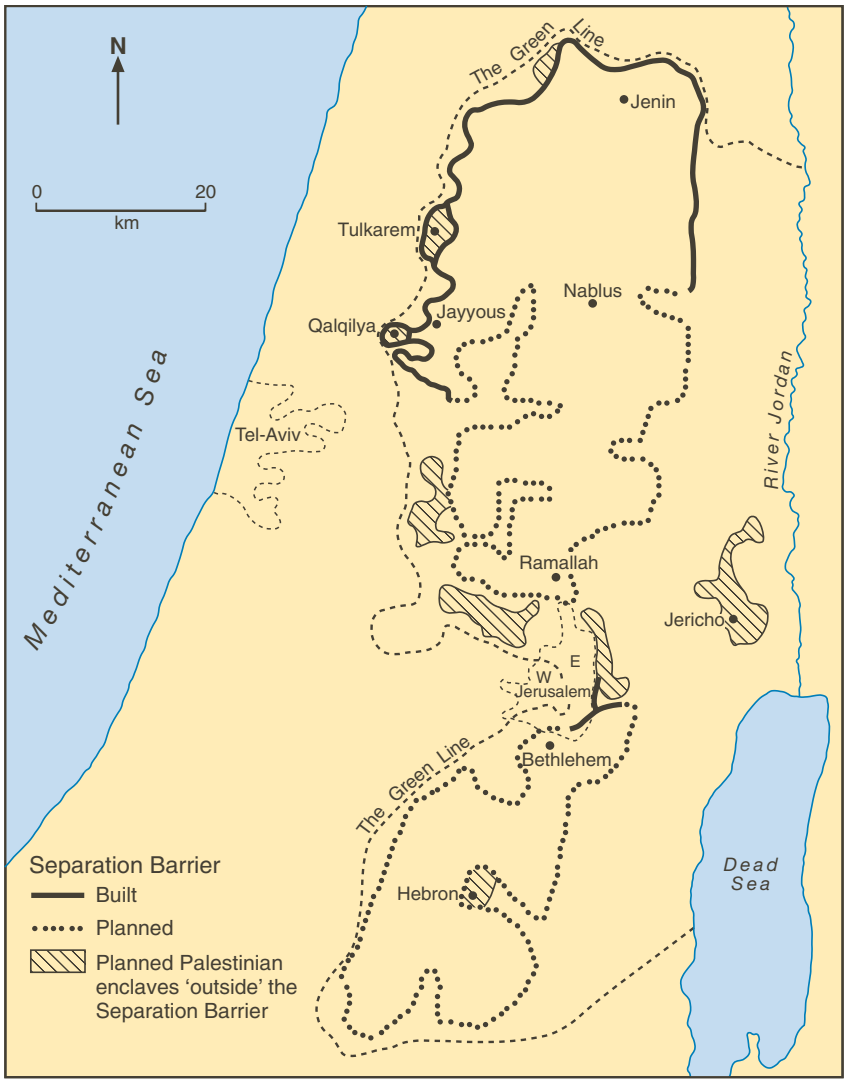


Figure 3: Israel and Palestine, showing places mentioned in the text, and the extent of the Separation Barrier.

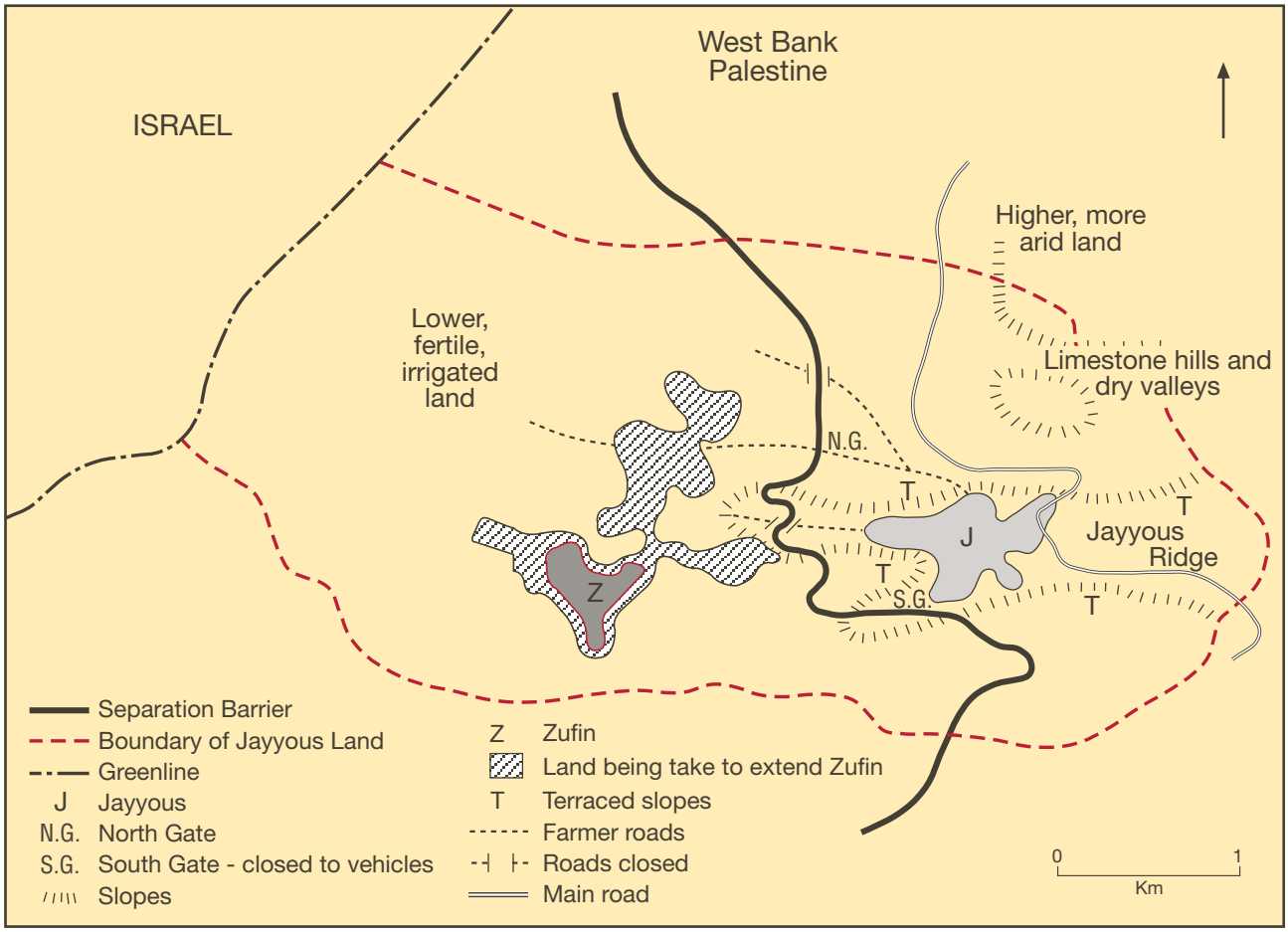


Figure 4: Jayyous – farmland and the Separation Barrier.

A separation barrier or a security fence?

The West Bank, sometimes referred to as the **Palestinian Territories** or **Occupied Territories**, is sub-divided into areas of Palestinian and Israeli control. However, in reality, Palestinian areas remain under occupation and thus have little autonomy. The Green Line is the border between Israel and the occupied West Bank Palestine, and some suggest it could act as a basis for 'borders of peace' (see Gush Shalom website). Since 1967 an increasing number of Israelis have established settlements in the West Bank on the basis that this land is part of **Greater or Eretz Israel**. In response to the second Intifada (Arabic for 'shaking off' or uprising) in 2000, the Israelis started to plan and build a security fence (called the Separation Barrier). This Barrier comprises a chain-link fence topped with barbed wire in rural areas and an 8m-high wall of concrete slabs in urban areas. In places it follows the internationally recognised 1967 United Nations 'Green Line' boundary between Israel and the Palestinian West Bank, while in others it penetrates into the West Bank. According to the Israeli government, the route of the Barrier is determined by security and is a vital element in the 'war against terrorism'.[1]

The remainder of this article focuses on the impacts of the construction of the Separation Barrier on the lives of people living in a Palestinian village.[2]

Jayyous village

The village of Jayyous, with its population of approximately 3000, is situated along the top of an east-west limestone ridge at about 200m above sea level (Figure 4). The skyline includes a few traditional domed-roofed houses, a mosque and a village water tank. However, the village itself is dominated by flat-roofed concrete buildings, many of which have steel reinforcing rods protruding skywards as most buildings are inhabited but unfinished. Like most West Bank villages, Jayyous has its roots in agriculture. It is also a nucleated settlement with the farmers living in the village and travelling to work on their farmlands surrounding the village, which may be up to several kilometres away. Most farming activities away from the village relate to fruit and vegetable production. Livestock, mostly sheep and goats, are kept in the village and taken to graze in the traditional manner, with shepherds moving animals from pasture to pasture and preventing the animals eating the unfenced crops. The land on the slopes closest to the village has been extensively terraced and large parts of the village land are dominated by ancient olive trees – some up to 500 years old.

While most of the land around the village is planted with olives or almond groves, pockets of less stony and more fertile ground are used for growing crops, and vegetables are grown in the many 'gardens' within the village. Even the smallest piece of land will be ploughed using a donkey and a share plough, which helps the penetration of the winter rains as well as weed control and preparation of the ground for planting. This cultivation has legal implications. Historically land had to be seen to be cultivated to maintain ownership during the Ottoman period up to 1917. However, the construction of the Separation Barrier has resulted in the Jayyous village land being split in two and has affected water supplies (see 'Dividing the landscape' and 'Disruption to water supplies').

Dividing the landscape

The Separation Barrier has divided the village land, with the lower and more productive land (about 70%) towards the inner edge of the coastal plain being cut off from the relatively arid high ground (about 30%) around the village. The soils in the lower land are better and the ground more level, therefore, the Jayyous villagers have invested more time and money on improving this land. This includes soil fertilisation (mostly using organic methods) and the construction of more than 120 plastic tunnel-style greenhouses (poly-tunnels) to improve crop yield and extend the growing season. This is some of the most productive land in the West Bank.

Figure 6: Typical terraced landscape in the West Bank. It is a sign of hope for the future that these terraces were being rebuilt and the ground ploughed to catch the winter rain.

The building of the Separation Barrier has also changed the landscape; it is at least 30m wide, although often twice this width, which equates to the width of a motorway, and, like a motorway, often includes extensive earthworks in the way of cuttings and embankments. Five per cent of Jayyous land was taken in its construction. In addition, the construction involved the uprooting of 2500 olive trees, approximately 10% of all the olive trees on Jayyous village land. Many villagers transported the uprooted trees back to the village because the trees are seen as part of the family. It is estimated that along the 125km-long first phase of the Separation Barrier some 100,000 olive trees were removed to allow for its construction.

Disruption to water supplies

On the farmland now separated from Jayyous village are six of the community's seven wells. The wells take water from the Western Aquifer (Figure 5). The recharge zone of the aquifer is in the high ground of the northern West Bank, the water being transferred westwards to the abstraction zone, being most accessible along the inner edge of the coastal plain. Despite increased demand, due to increased population and better farming, the water from the Jayyous wells (and other Palestinian wells) can only be drawn at the levels of abstraction decided at the beginning of the Israeli occupation in 1967.

The management of water in the West Bank in this way may be seen as contravening the international law (see Fourth Geneva Convention website) that relates to the management of resources in Occupied Territories. However, this argument is purely academic because Israel apparently pays little regard to these International Conventions. Whatever the legal position, the situation impacts on people's lives because water is in short supply in Palestinian areas relative to Israeli areas.

Jayyous villagers also collect rainwater from house roofs onto concrete aprons that drain into concrete-lined underground cisterns. It rains for only three months (November-January) of the year around Jayyous, but these tanks collect significant amounts of water. Unfortunately, the increasingly late arrival of the 'winter rain' generates difficulties because water must be found for irrigating the young vegetable plants before the rains eventually arrive (Figure 6). By November many of the cisterns are empty after nine months without rain. In a land of low and seasonal rainfall and a prolonged summer drought, the management of water is of critical importance. The water supply to Jayyous has been restricted during recent summers to as little as 25 litres per person per day to cover all water needs. (The amount recommended by the World Health Organisation is 100 litres per day for all uses.)[3]

Perhaps more importantly, the construction of the Separation Barrier has had a deleterious effect on farmers' access to their farmland.

Access to farmland

Although access to water is an important issue, access to farmland is even more critical. In order to reach their land the farmers are required to pass through a **checkpoint** – the North Gate. This Gate is positioned at a point where the Barrier intersects the main (but not the only) track from the village to the farmland; access to other tracks is entirely blocked by the Barrier. The North Gate is normally opened three times daily: in the morning, at midday and just before sunset. While there are official opening times, often they are simply not observed. Figure 7, which indicates morning opening times from mid-December 2003 to early January 2004, was compiled from direct observations.[4]

The erratic pattern of gate opening makes life very difficult for farmers trying to access their farmland, with much time being wasted simply waiting for the Gate to open. Over one year, the collective loss of work hours can be

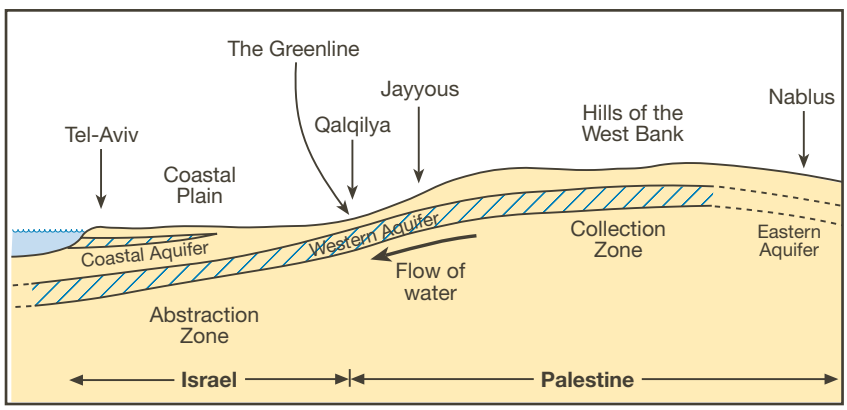
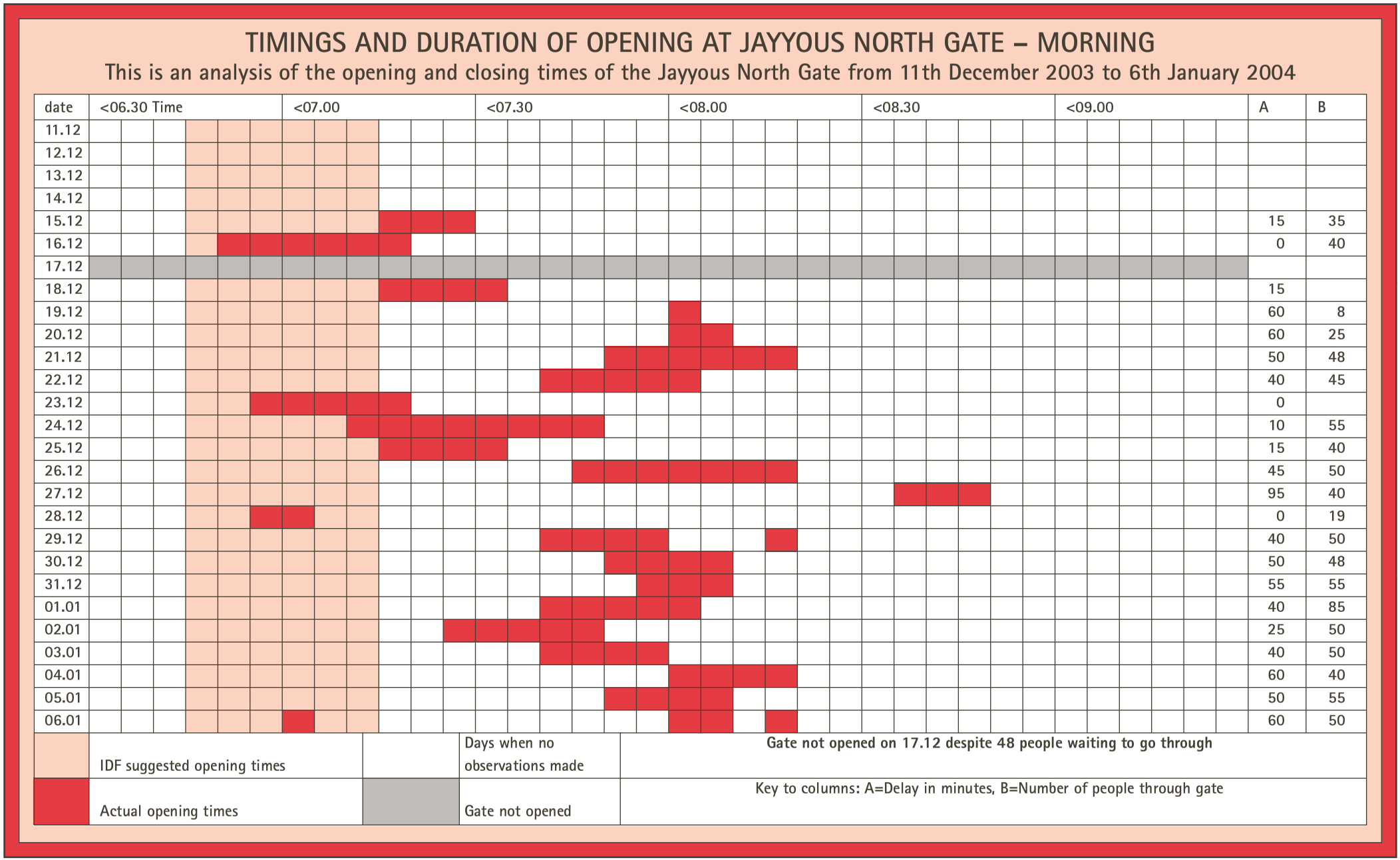


Figure 5: Cross-section of the West Bank and Israel, showing the Coastal and Western Aquifers.

Figure 7: Gate opening.



measured in the thousands. Clearly, this is an unusual and unpredictable factor controlling human behaviour in the rural landscape. It is more haphazard than the worst aspects of failing public transport, less predictable than tidal waters and with wider psychological impacts on the freedom of movement and on human rights. In terms of landscape development one community's security becomes another's burden.

To compound the situation, only 40% of farmers from Jayyous have permits to pass through the Separation Barrier to their land (Figure 8). Since mid-January 2004, permits have been re-issued only where a farmer has purchased an Israeli deed to his farmland. Farmers who hold Ottoman, British and Jordanian deeds are now required to hold an Israeli deed for land which is not, under international law, part of Israel. Farmers are placed under economic pressure to raise the fee for the Israeli deed and psychological pressure to agree to Israeli control of Palestinian land. The pressure is increased by the use of an antiquated (pre-1918) Ottoman law, which stipulates that if land has not been cultivated for three years it returns to state ownership. The 60% of farmers who, for want of permits cannot access their land, may lose it to ownership by the Israeli state.

In addition, part of the Jayyous farmland between the Separation Barrier and the Green Line has been 'developed' as a quarry for building stone and aggregates, and a small Israeli 'settlement', Zufin, has been established (see 'What's in a settlement?' below). As many people in the village are separated from their livelihood, Jayyous looks increasingly like a community cut off from its economic future. This situation will impact on the future use and ownership of the land between the Green Line and the Separation Barrier. As the 'security installation' zone is enlarged new patterns of landscape will develop which will differ from the 'dead' zones around the Berlin Wall and rural areas of the Iron Curtain across Cold War Europe, since (presently) some Palestinians can still access their land. Nevertheless, the process of separation, the control of access and resources and the associated economic and psychological pressure on the land and people around Jayyous will change its character. Evidence of change in farming practices is occurring – during 2004 some Jayyous farmers removed 'mobile' assets, e.g. poly-tunnels, and set them up on the less fertile land nearer their village.

Figure 8: The Separation Barrier in the landscape.

Figure 9: Israeli settlement in the West Bank: houses stand above Palestinian olive trees and farmland. While they cultivate the valley floor the Palestinians are not welcome on the slopes.

What's in a settlement?

Students could be encouraged to consider the seemingly innocuous term 'settlement'. It has a special meaning in Palestine. Misunderstandings can and do arise. To the people living in the West Bank 'settlements' are Israeli, thus the word has political connotations. Under international law, the Israeli 'settlements' in the West Bank and Gaza are illegal. Article 49 of the Fourth Geneva Convention states, *'The Occupying Power shall not deport or transfer parts of its own civilian population into the territory it occupies.'* Despite this, some 200 Israeli settlements have been established in the West Bank, ranging from small 'starter' settlements of just a few caravans to one with over 20,000 inhabitants (Figure 9). Israel argues that, because the area was captured in 1967 and the settlers are not forced to live in the West Bank, the Geneva Convention does not apply.

The settlements represent a major change in the population of the area, and appear closer to historical patterns and processes than those of the late twentieth and early twenty-first centuries. For example, some Israelis use similar language in describing their 'settlements' as that used by 'frontier' people of North America. Many political discussions focus on Israel's withdrawal from Gaza, but hardly ever mention Israeli

withdrawal from the West Bank. While there has been a withdrawal of 7000–8000 settlers from Gaza, the number in the West Bank has reached 200,000 and continues to grow.

Since summer 2004 one Israeli settlement, Zufin (see Figure 4), has been expanded through Israeli activity on Jayyous farmland between the Separation Barrier and the United Nations Green Line. By the end of the year land belonging to the Mayor of Jayyous – Tawfiq Salim – was at the centre of a dispute about the accuracy of maps and the legal status of claims to land as plans to extend Zufin were realised – with up to 1500 new homes to be built on the land owned by farmers from Jayyous.

Conclusion

My time in Palestine has offered an unusual opportunity to write something about the geography of an occupied country. As a life-long pacifist I cannot in any way condone those Palestinians who, because of their frustration in this situation, become suicide bombers, or indeed any of the violence found in the day-to-day lives of the people of both Israel and Palestine. I hope by reporting what I have seen in this article it will facilitate understanding and further discourse on this situation. It is only by understanding that any real solution will be achieved.

As political and security situations change, classroom geography needs to address the impact of these factors on the landscape and the lives of people living there. One way of investigating such issues in the geography classroom is through insights into the ways in which these factors affect the lives of people at a local level. One consideration is the paradox that one country's security may be another community's restriction – as the situation in West Bank Palestine illustrates. Such situations raise human rights issues covered in the citizenship curriculum, which as this case shows are effectively explored through geography. However, it also presents new factors that will need to be considered when studying the development or decline of economic activity.

The geography of security brings a completely new meaning to the traditional term 'defensive position' when considering choices of settlement sites. The challenge is for teachers to include topics like this in lessons, so that the full power and contemporary relevance of geography is understood. ■

Notes

1. In June 2004 the route of a section of the Separation Barrier was questioned by the Israeli High Court after a case brought by Palestinians living just to the north of Jerusalem. In July 2005 the International Court of Justice in The Hague ruled that the Barrier was illegal under international law, a decision that is to form the basis for a United Nations Resolution.
2. Between November 2003 and February 2004 the author was a volunteer human rights observer in West Bank Palestine with the World Council of Churches (WCC) and was involved with the WCC's programme monitoring the impact of the Separation Barrier being constructed by Israel along the western edge of the West Bank. Most of his time was spent in the 'village' of Jayyous, which is situated in the northern West Bank some 25km east-north-east of Tel Aviv.
3. Much of the information included in the water issue is from conversations with Abdul-Latif, a hydrologist with the Palestinian Hydrology Group, based in Jayyous village.
4. Some of the evidence collected by the author during his time in Palestine was presented by the Palestinian legal team to the International Court of Justice during the adjudication in The Hague.

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Listening to Children (L2C): A collaborative school-based research project

Robert Barratt, William Scott and Elisabeth Barratt Hacking with Daniel Nicholls, Kay Davies and Wayne Talbot report some of the key findings from the 'Listening to Children (L2C): Environmental Perspectives and the School Curriculum' project

L2C was a 12-month research project based at the University of Bath, England and funded by the UK Economic and Social Research Council (ESRC) from June 2004-May 2005. The research was undertaken in collaboration with Kingsfield School, Kingswood, South Gloucestershire[1]. Here, we show how students, teachers, parents, community workers and university researchers have been working together to investigate the relationship between students' local community experience and their school curriculum.

Background to L2C

In earlier articles we have reported on a pilot research project with 11-12-year-old students in an urban secondary school in central England (Barratt and Barratt Hacking, 2003; see also Barratt and Barratt Hacking, 2006, forthcoming). This research into students' local environment experiences and their views about the school curriculum suggested that there was:

1. A dissonance between students' everyday lives and the school curriculum.
2. The need for a framework for students' participation in the school curriculum, for example, through a school environment curriculum council. This would be similar to a school council but with a specific focus on the curriculum and local environment concerns.

L2C was conducted in partnership with 11-13 year old students, teachers and parents from Kingsfield School together with local community workers and university researchers. This community area exhibits the sorts of social, economic, environmental and educational challenges that many urban communities in developed economies face. The project built on the experience and findings of the pilot; our key aim was to explore opportunities for change in the school curriculum so that schools could be more sensitive to students' everyday lives and to local community development.

Students' participation in the research was central to the project, which involved researching collaboratively with students to explore the following questions:

1. How do 11-12-year-old students experience and think about their local environment?
2. How can schools make use of this new body of data in order to increase the relevance of the curriculum to students, their families and the local community?
3. How can schools make use of these emerging data in innovation related to citizenship and sustainable development?
4. How can schools provide for students, parents, community workers and teachers to participate in the curriculum development process in order to develop a curriculum that relates to students' local environment perspectives and help shape behaviour?

We believe that L2C was distinctive in that:

- Students played a leading role as researchers, for example in chairing meetings, designing research tools, gathering and analysing data, and reporting and disseminating findings nationally and internationally.
- Students played a key role in the school curriculum development process, for example in planning a conference for the whole year 7 group.

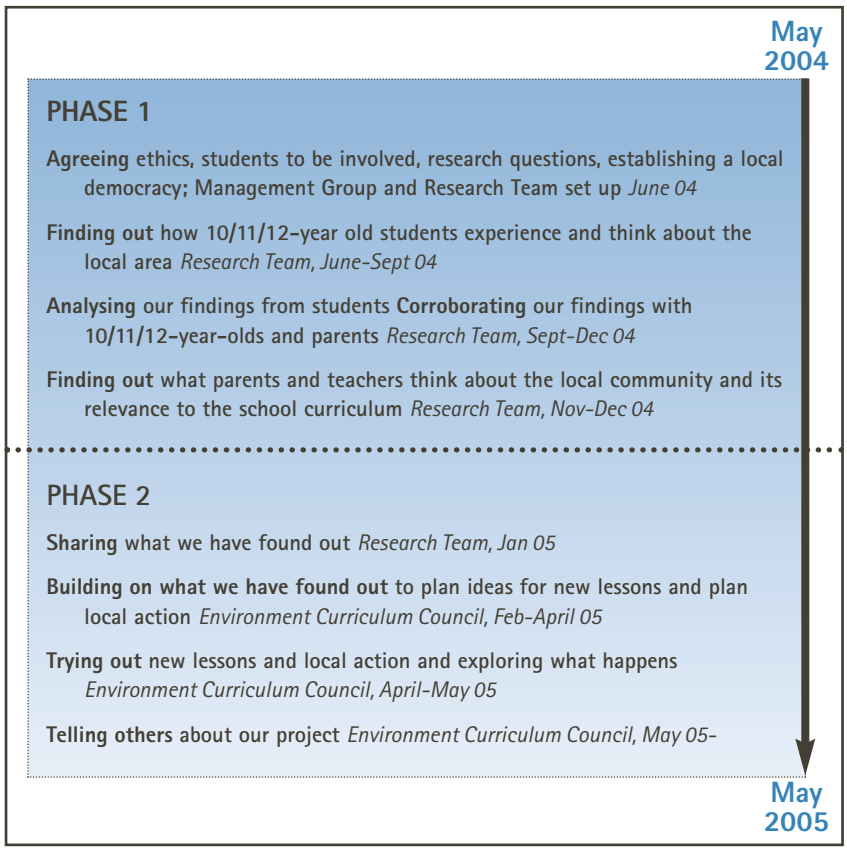

Figure 1: The L2C timeline.

Figure 2: The LC2 timeline in photos.

- Students, teachers, parents, university researchers and community workers were able to participate in a research project and the curriculum development process within the structure of the school day, in timetabled time.

What did we do?

L2C was an action-based project. All student researchers were volunteers, and there was considerable competition for involvement; the group of students most closely involved with the project represented the spectrum of ability and motivation and a balance of girls and boys. The research project was steered by a 'management' group comprising researchers, teachers, a governor, students and a parent, meeting at intervals in the school. This group attempted to represent the voices of the students and their families equally, alongside educationalists. In addition, a larger Research Team (represented by the same interest groups but with more students) was responsible for devising research instruments, leading discussions and setting its own agenda within the framework of the study. All meetings were conducted during the school day; teachers and students were released from their normal timetable to take part in the meetings. The project decision making was therefore conducted by:

- sixteen 11-13-year-old students and four 16-17-year-old students (the older students acted as 'mentors')
- two teacher researchers (The Head of Humanities and Head of Geography)
- a parent
- four university researchers.

The study had two phases (Figures 1 and 2): Phase 1 involved establishing and planning the project then gathering and analysing evidence about the nature of students' local environment experience (June-December 2004).

Phase 2 used the evidence gathered and analysed in phase 1 to develop, implement and evaluate a curriculum project (January-May 2005).

The students took a lead role in developing and implementing the research methods used in phase 1 to explore their peers' local environment experience. They were supported in this by attending a day's conference at the university; at this, with advice from experienced researchers, the students were able to consider the research tools that they would employ and develop skills in using equipment such as dictaphones and digital cameras. The selected phase 1 research methods included students mapping the locality, taking video and photographic evidence, questionnaire enquiries of year 6 pupils from a feeder primary and year 7 students from Kingsfield, group interviews (students and parents), and a curriculum audit (Figure 3).

What did we find out from phase 1?

The phase 1 data were analysed by student members of the Research Team starting with a two-day Data Analysis Conference. They were supported by four year 12 mentors who contributed their greater experience in the local community and their own research, writing and ICT skills. One of the university researchers introduced a qualitative framework for the analysis of each data set as follows:

- You will need to read, look at maps, listen to the audio tape or look at the video in order to familiarise yourself with the data. Do this on an individual or group basis, whatever seems best
- Re-look at the data, start to think about what is important about what the children are saying
- Make notes of what strikes you as important – each point should be added to a 'post it' note
- Talk to your partner and add your notes to his/her notes

Research instrument	Sample size
Students' cognitive maps with a children's questionnaire	90 year 7 students from 3 tutor groups and 20 year 6 pupils from a feeder primary school
Students' photographic diaries of their local environment experience	5 year 7 students using mobile telephones
Group interview 1: drawing and discussing a neighbourhood map (big map drawn on a very large sheet of paper by a group of students who live in the same neighbourhood)	20 year 6 pupils in two groups of ten
Group interview 2: discussing the individual cognitive maps	20 year 6 pupils in two groups of ten
Parents' group interview	1 small group interview
Curriculum audit	Total 14 audits (one for each subject leader)

Figure 3: Phase 1 methods developed and used by students to research how 11–12-year-olds in Kingswood experience and think about their local environment.

1. **Our knowledge of where we live**
   - We live near to each other; we did not necessarily know that
   - We have similar concerns and interests about the community and environment; we have put these into themes 'personal' (e.g. health, family and friends), 'safety/danger' *(e.g. people, roads, vandalism)*, 'play' and 'shopping'
   - We have detailed knowledge of the local community and environment
   - Most of us move around without adults now... on foot, bike, bus and skateboard, we know lots of routes through the area and we know how to be safe and which places to avoid
   - We have different knowledge to adults and we use our knowledge differently to them
   - The environment is important to us we want more wildlife, we want a cleaner and safer environment; we want to care for the environment
   - The local community does not provide things for us to do and places for us to be
   - We are concerned about how well the community provides for minority groups.
2. **How we use our knowledge of where we live?**
   - We have few opportunities to achieve what we want for the local area
   - Our knowledge is mostly not used or not known in school
   - We think that our school could help us be more active in improving the local area.

Figure 4: Phase 1 research findings.

- Make one set of notes for the whole group using the laptop
- Organise your notes into different groups of ideas.

The key findings from the phase 1 data are summarised in Figure 4. At this age, 10-13, most of the students have started moving around the locality more independently of adults. Phase 1 data revealed that students have an intricate knowledge of their local community, can operate safely in it, and view local environmental quality as of great importance. While some of the students' concerns reflect other research findings, e.g. traffic dangers, it is clear that there are barriers preventing students from using their local knowledge and taking action to achieve what they want for the local environment (see also Spencer and Woolley, 2000; Thomas and Thompson, 2004). Despite their detailed knowledge, the students feel that they have limited access to the community and its facilities; students feel that the community serves both younger and older children and adults more effectively than it does their age group. Our findings further suggest that this knowledge is mostly unknown by the school – and hence not used. The students have a strong desire to be involved in local improvement, for example, students are concerned about environmental quality and would like to see more habitats for wildlife, feeling that the school could support their involvement.

How did we use the phase 1 findings?

In phase 2 a school Environment Curriculum Council (ECC) was formed to address the phase 1 findings (Figure 5) and build on the pilot project experience. The intentions of the ECC were to:

- break down the barriers to students' involvement in the community and
- reduce the gap between students' local knowledge and that taught in school.

The ECC was chaired by two students – one girl and one boy – each with deputies, who were elected by their peers. The ECC membership mostly replicated the membership of the year 7 Research Team. By now the original year 7 students were year 8s, and new members were elected from year 7. The community workers were from the Children's Fund[2], a national organisation with local offices. This mix of people supported the intentions to remove some of the barriers to students' community involvement and support new curriculum ideas that students regard as more relevant to their everyday lives and aspirations.

The ECC focused on ways of bringing the phase 1 findings into the life and curriculum of the school by:

- exploring how students' local knowledge can be used in school
- thinking about students' community involvement and possible action
- considering how the Phase 1 research process can be integrated into school life in order to sustain a concern for students' local community and environmental perspectives over time.

Although the work of the ECC is continuing beyond the formal timescale of the project a number of significant outcomes have been achieved already. These include the regular involvement of representatives from the Children's Fund in the school, a visit to the Houses of Parliament to meet the local MP; the production of a DVD by the students to promote and disseminate the L2C project; and a year 7 Children's Conference (Figure 6), which provided an opportunity to disseminate the project to all year 7 students, other staff in the school and community officials, and to start to get other students involved in the

L2C project. The Children's Conference gave all the year 7 students an opportunity to reflect on their school and local community experience, prepare issues and questions for community officials and take part in 'Question Time' with a panel including a police officer, Children's Fund officers, Head teacher and Deputy Head, local authority parks committee member and a university academic (who is also a school governor). As a result, the police community liaison officer and the local authority parks committee representative have agreed to return to school to listen to students' local community concerns.

In terms of the future impact on the curriculum and school decision making it seems likely that:

- the Children's Conference will be repeated annually within the year 7 PSHE curriculum
- ways of recording students' experience of the community will be used in PSHE, geography and history, for example by using technology and bringing people into the classroom
- following reflection on what has been learnt from L2C and how it was learnt, including the authenticity of students' own experiences, changes will be made to aspects of the curriculum, for example English, history and geography
- plans to develop the School Council will build on the experience of the ECC, for example meeting during the normal school timetable and including curriculum and community as core business
- the Children's Fund, Local Parks Committee and Police Liaison representatives will all continue to be involved in regular discussions with students about local community development.

Together these suggest that L2C has been successful in addressing its goals, although further time is required to see the longer-term impact on the school curriculum and school decision making processes.

What do the students think about their L2C experience?

At the end of the project, the university researchers carried out semi-structured interviews, seeking to critically appraise the project experience of those involved and the impact of the project on the school, its curriculum and those involved. The following points draw on two group interviews with ten students in total:

Figure 5: The ECC meets to discuss the phase 1 findings.

1. **The students are overwhelmingly positive about their experience of the project and its impact on them and their school experience.**
   'In lessons we're told what to do, in L2C we do the talking.' (Alicia, year 7)
   When they [the teachers] told us about it in the gym [assembly] I thought I'll have a go... I was very lucky... I had the best time of my life.' (Alex, year 8)
   'In the beginning of year 7 there was no L2C then I volunteered and it [school] changed a lot for me.' (Abi, year 7)
2. **The students welcomed the opportunity to share their views about the local community and the school curriculum.**
   'I've learnt that not everyone thinks we're being taught enough that's relevant outside school and for us later on so it's great to give our views... When I joined L2C I could have a say in what happens, we could have a future. We spoke to everyone like the MP to tell them our views... and at the conference to ask questions to the police.' (Shane, year 8)
3. **The students welcomed the opportunity to learn more about the views of others.**
   'I've learnt about other children's ideas, they think that a lot of things need to be changed in Kingswood like the parks.' (Alex, year 8)
   'Things have changed for kids in Kingswood since I was in year 7, I didn't know that, a lot of children said they were scared to go out to play... there's gangs and vandalism, it never used to happen.' (Katie, year 13)
4. **The students acknowledged change as a positive outcome of their involvement.**
   'You feel you're changing something ...I didn't think the project would go this far... its gone onto much bigger things because it helped the school, me and lots of other children.' (Abi, year 7)
   'I'm glad I came to this school because of L2C... we've done things that make a difference... we can change the world a bit more every day.' (Gemma, year 7)
5. **The L2C experience made students think more about the future and the positive contribution they could make to the community.**
   'I'd like it [L2C] to keep going... but we should try to get even more involved with our community... try to

Figure 6: The Y7 Children's Conference: Circle time with Matt from The Children's Fund.

get a new way of doing it like kids maybe building something inside the school like composting and show it to the adults... so we can bring change into the community.' (Gemma, year 7)

'I want L2C to get bigger... I want some others to join. Someone said in our DVD "we're the future". We'll be living what we've made not what they've [adults] made.' (Alex, year 7)

'L2C fuels ambition. They [year 7] can now see their future and how they can shape it...L2C makes children more independent, they can have a say in the school and more responsibility for what goes in the community.' (Katie, year 13)

What are the implications for geography/humanities teachers?

There are many overlaps between the L2C project and other areas of the school curriculum including geography, history, PSHE, citizenship and ESD. Two obvious ways in which this project can support the teaching of geography in the National Curriculum are:

1. Exploring students' geographical expertise

Where teachers live outside of the school locality it is the students who possess the local expertise. L2C has revealed that students have a rich vein of geographical expertise gained from local experience, for example detailed knowledge of routes, sense of place, environmental concerns and aspirations for community development. Equally, we found that students have enjoyed and benefited from exploring the expertise of their peers. The teachers welcomed knowing more about this; they described the best part of the project as: *'the increased connection with pupils. I've managed to speak to pupils on a personal level about things that genuinely matter'* and *'I've learnt about Kingswood and where pupils come from and what's important to them'. 'I don't know enough about our local community and the way our pupils perceive school'.* The teachers now wish to sustain the L2C approach by continuing to explore with students their local experience within the humanities curriculum.

2. Establishing the relevance of the geography National Curriculum to students' everyday lives

'We do it to them rather than let them own the curriculum and I would like to see more contextualised curriculum material and more ownership of approaches and strategies in curriculum planning' (teacher). The L2C experience suggests that the geography National Curriculum could be enriched by: providing explicit opportunities to draw on students' urban environment experience and their intricate knowledge of the locality; and involving students in discussing how the curriculum can be developed to become more sensitive to their local experience.

Final thoughts

The L2C project has shown that the relationship between students' local community experience and their school curriculum is far from being a harmonious one. Significantly, students argue the case for the school curriculum to take account of a wider range of personal and local issues and, where appropriate, to include a futures dimension. This project has been able to address these issues by developing a framework in which students were able to develop as researchers and curriculum developers inside a school. Further, for this school, the opportunity for parents and community partners to be involved in community and curriculum discussion with children and teachers was pioneering. The L2C experience has shown that the involvement of the community alongside children and teachers in curriculum development can:

- Stimulate curriculum thinking that is more relevant and meaningful to children, their families and the community for now and for the future.
- Promote environmental citizenship by 'developing [children's] capacity to play a role in improving and sustaining the quality of the local community and environment' (Barratt and Barratt Hacking, 2004).
- Enable schools and their children to take on a different community role, that is, a more active role in local community development. ■

Notes

1. The L2C Research project was based at the University of Bath Centre for Research in Education and the Environment (www.bath.ac.uk/cree). The Project was funded from May 2004-May 2005 by the UK Economic and Social Research Council (ESRC): Environment and Human Behaviour Programme [RES-221-25-0036]. It was directed by Professor William Scott and Elisabeth Barratt Hacking. The Project Team included Dr Robert Barratt, Wayne Talbot, Research Officer (University of Bath) and Dr Daniel Nicholls and Mrs Kay Davies, Teacher Researchers (Kingsfield School). Kingsfield School do *not* wish to remain anonymous in project publications. Readers can find out more about the project in Barratt Hacking *et al.* (2006).
2. The Children's Fund (www.everychildmatters.gov.uk/strategy/childrensfund) was launched in November 2000 as part of the UK Government's programme to tackle disadvantage among children and young people. The Fund operates in local authority areas, and aims to identify at an early stage children and young people at risk of social exclusion, and make sure they receive the help and support they need to achieve their potential. There were mutual benefits to the school and the Fund from being brought together through this project, and both express their determination to build on the success of this initial work together.

Acknowledgements

One year on the children of Kingsfield School are actively continuing with the development of their project and we are all very proud of them. We would like to thank Mr David Lewis, Head teacher and Mrs Pam Lang, Deputy Head teacher of Kingsfield School for hosting and supporting this project and Dr Daniel Nicholls and Mrs Kay Davies for their continued commitment and invaluable contribution to its success. Part way through the project the Children's Fund (South Gloucestershire) became involved. We would like to thank Matt and Rachel for their support including helping students to make the L2C DVD.

All photographs were taken, with the permission of students and parents, in Kingsfield School by school staff unless otherwise stated.

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Crisis in a coffee cup?

Photo: shebaduhkitty/Morguefile.

Bill Pritchard provides information and suggests activities for investigating the origins and global impacts of coffee production

Export-oriented agriculture and developing countries

For the past quarter of a century, developing countries have been encouraged to pursue export-oriented development as a strategy to generate increased living standards. Under this model, countries open their economies to international trade and investment, and expand their export industries with the goal of earning foreign exchange. These strategies have replaced earlier import-replacement models, which proposed that developing countries should protect their domestic economies by controlling external trade and investment.

In countries with robust manufacturing sectors and with opportunities to access the affluent Western markets of Europe, North America and Australia, the adoption of these strategies has seemed to provide a route to rapidly-rising living standards. The so-called 'four tiger' East Asian new industrialising countries (NICs) of Hong Kong, the Republic of Korea (South Korea), Taiwan and Singapore achieved high rates of economic growth in the 1970s and 1980s following their pursuit of export-oriented development.[1] More recently, significant improvements in per capita gross domestic product (GDP) in the 'Asian giants' of China and India have been associated with economic liberalisation and the replacement of import-replacement development models with export-oriented ones.

Yet for these successes, important qualifications remain. For countries that tend to rely on agriculture rather than manufactured exports, the adoption of export-oriented development has proved a more uncertain policy stance. Even after 25 years, there is no group of 'NACs' (new agricultural countries) to rival the NICs as a model for emulation. Although it is difficult to generalise on this complex and contested subject, there is emerging evidence that the export-oriented development model works differently for agriculture than it does for manufacturing. First, the pursuit of export-oriented development in agriculture can produce narrow and uneven economic gains, with large agribusiness corporations frequently receiving the lion's share of financial benefits. Second, large-scale monocultures for export-markets can produce significant environmental costs in sensitive ecosystems. And third, the export-oriented development model may have negative effects for the food security of rural populations in developing countries, because national food self-sufficiency is replaced by a system in which export earnings are required in order to purchase foodstuffs, which themselves, are often imported.[2]

All this is not to say that agro-exporting does not produce some benefits for developing countries. It most certainly does. However, what needs to be emphasised is that as a general strategy for national development, the existing track record of export-oriented agricultural development leaves much to be desired.

These issues are brought into focus by the recent history of the global coffee industry. Coffee beans grow on trees that thrive in altitudes of 700 to 2000m above sea level in tropical and sub-tropical climates. Most of the world's coffee is exported from tropical countries to the affluent nations of Europe, North America, Japan and Australia. Brazil is the world's largest coffee exporter, and the three largest export nations – Brazil, Vietnam and Columbia – account for over half of world coffee exports (Table 1).

At face value, coffee exporting would seem to be a tailor-made strategy for many developing countries: because of their climates, richer countries cannot grow this product competitively, but they have considerable affluence with which to purchase coffee. However, over the past 15 years, the global coffee industry has turned into a development nightmare. World prices have plummeted and, as this has occurred, the livelihoods of an estimated 20 million people have collapsed. Why has this happened, and what does this tell us about the use of export-oriented development as a national strategy?

A world in your coffee cup

During the past few years, urban areas in Australia and the UK have experienced an explosion in the number of cafés being opened. Most of these are opened independently, however some trans-national franchised chains such as Starbucks and Gloria Jean's have been part of this phenomenon. Even McDonalds has opened McCafés as a way of getting into this trend. On the basis of these developments – and the Australian and UK experiences have followed closely on North America – one could imagine that coffee sales have been booming over the past decade.

Yet the café culture's impact on the global coffee industry is deceiving. Despite the very visible increase in public coffee consumption over the past decade, overall demand for coffee has grown only slowly. Evidently, what has occurred in markets such as Australia and North America during the past few years is that the total quantity of coffee consumption has not increased significantly, but people's spending on the product has grown because of different consumption modes. For example, replacing cheaper instant coffees with roasted beans, and replacing home-prepared coffee with that purchased in cafés.

At the same time, total world production has increased. Since 1990 there has been a 15% rise in coffee produc-

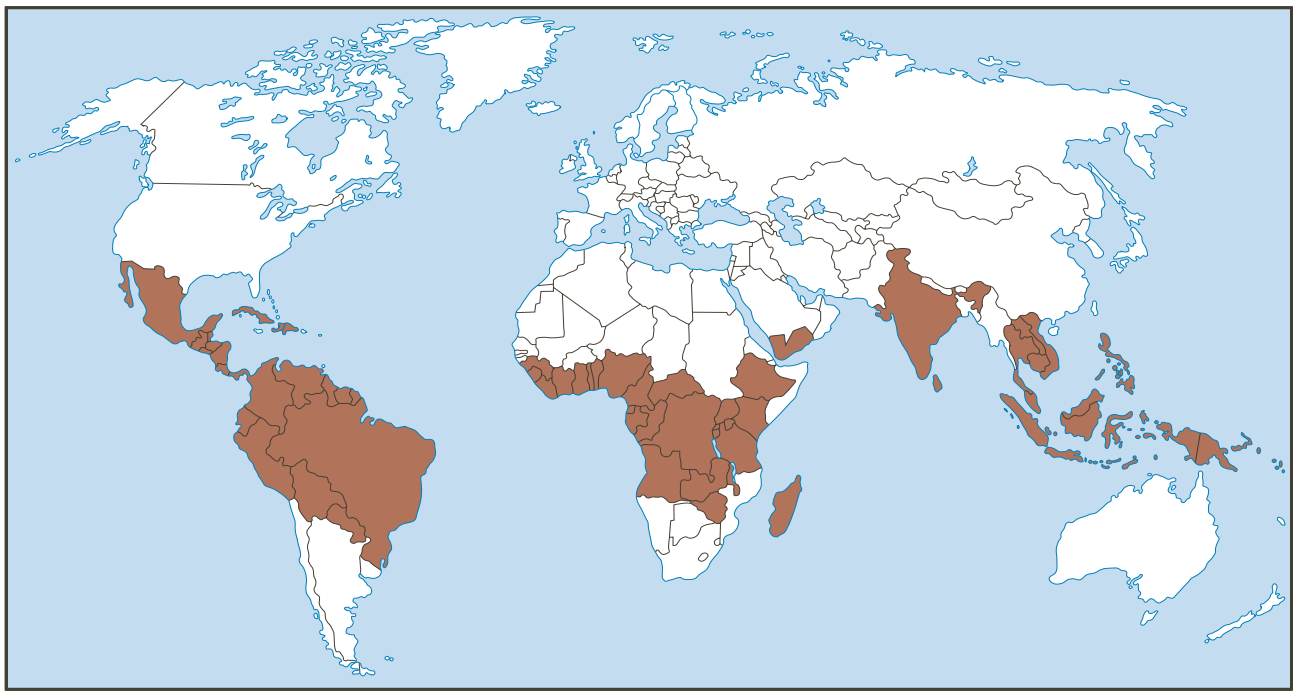

Figure 1: The world's major coffee-producing regions and countries, 2004.

tion. One of the major causes of this growth has been the rapid emergence of the Vietnamese coffee industry. Supported by development assistance and advice from international agencies such as the World Bank, the Vietnamese government energetically embraced a major push into global coffee markets. As one of the poorest countries in Asia, Vietnam saw the expansion of the coffee sector as a means to gain valuable foreign exchange. Furthermore, it provided an opportunity to promote economic development in relatively remote hill-tribe areas.

However, coffee production has increased in other countries as well. The reasons for this relate to a complex interplay of technical, economic and political factors. During the past decade the productivity of coffee trees increased because of improved agricultural practices. Moreover, in many countries, increased land has been dedicated to coffee production. The reasons for this vary from country to country, but coffee production expanded in many areas as agrarian land laws were liberalised. In some countries this facilitated estate plantations; domestic food markets were deregulated, which removed price floors for some food staples. This encouraged a general shift to export production, for example forest areas being brought into agricultural use through privatisation and/or non-regulation. These events have often been aided and abetted by international agencies promoting export-oriented agricultural development.

At a broader scale, these outcomes were preconditioned by global-scale transformations in production and trade regulation. From the early years after the Second World War until 1989, international coffee trade was orchestrated by the International Coffee Agreement (ICA), which allocated export quotas to individual countries. These arrangements established a system of managed trade whereby producer countries agreed to limit their exports of coffee in order to keep coffee prices high. As the major coffee importer country, the United States agreed to support these arrangements because they provided a tangible economic benefit to rural communities in developing countries, particularly in Latin America. This was felt to support America's Cold War political aspirations in the region. Rural discontent in Cuba led to the 1959 Revolution led by Fidel Castro, and this precedent was very much in the minds of Washington policy-makers.

With historical hindsight, it is no surprise therefore that the ICA fell apart in 1989, just as the Cold War came to an end. The United States Administration of George Bush (Senior) decided to end its support of the ICA's system of managed trade, and coffee became a more freely traded commodity.[3] The immediate effects of this decision were to cause a sustained fall in world coffee prices for the first half of the 1990s. Severe frosts in Brazil during the mid 1990s then saw a temporary rise in coffee prices, before the basic trend continued up to the present day. Between 1980 and 2000, world coffee prices fell by 64.5% (Oxfam 2002, p. 152), and by the end of 2003 they were at levels below those received 30 years previously. Moreover, the end of managed trade has meant that coffee prices have become increasingly volatile, so producers have been faced not only with falling prices, but more unpredictable ones as well.

But this story is not simply one of supply and demand. The economic character of the supply chains that connect producers with affluent markets has also changed, and with this, the distribution of economic returns among contributors to the 'coffee value chain' has been transformed. At present, coffee growers receive less than 7% of the retail price of coffee in developed world markets: the remaining 93% is allocated to importers, roasters, packing firms and retailers (Charveriat, 2001, p. 1). In part this reflects a structural imbalance of commercial power in the global coffee system, whereby six international trading companies control over half of world coffee exports. These traders sell to roasters, and just two roasting companies (Nestlé and Philip Morris) account for over half of world sales of roasted and instant coffee (Ponte, 2002). In these contexts, developing coffee growers are in a very weak bargaining position, as summarised by the aid agency Oxfam:

> *In soluble coffee [Nestlé] has a global market share of 57 per cent, three times the level of its nearest rival, and operating margins estimated at 26 per cent. In the words of one recent commercial bank review of the coffee sector: 'Nothing else in food or beverages is remotely as good' [as this profit rate]* (2002, p. 163).

The effects of the coffee crisis

When small agricultural producers are reliant on the sale of their crops for a large proportion of their incomes, falling prices have drastic repercussions for hunger and social vulnerability. In recent years, aid agencies have attempted to bring these human dimensions of the coffee crisis to the attention

of policy-makers. One example out of many that could be cited concerns a family in the village of Kishimundu in Tanzania. In 1998, villagers were being paid US$2.20/kg for green coffee beans. By 2000, they were being paid only US$0.75/kg. According to one coffee grower:

> *The price of coffee is destroying me. It is destroying this whole community. I cannot even afford to feed and clothe my children. How can I send them to school? Education is very important. It will give them a better life. But now I cannot pay for the school fees and books. Sometimes they are chased out of school because they cannot pay* (cited in Oxfam 2002, p. 156).

These human-scale dimensions of the crisis cascade into regional and national economies. For a significant number of tropical countries, especially in Africa, coffee is the major source of export-earnings. The collapse of coffee-prices, then, has undercut the viability of whole national economies. Many of these countries are also heavily in debt to international banks, and have had to renegotiate or even suspend the repayment of loans. In turn, the ensuing 'debt crisis' of developing countries is a major source of financial instability in the world economy, and a festering source of political tensions.

Conclusion

The current conditions of the world coffee industry represent a crisis of enormous human cost. The low prices being received by coffee growers not only imperil the livelihoods of people and communities, but also add significantly to widening global inequality and its related political and financial implications.

In a more abstract sense, the crisis also highlights the shortcomings of export-oriented development models in agriculture. It brings into focus what can be called the fallacy of composition; the failure to accept that what is true for components of a system may not be true for the system. When one country increases its coffee exports, it benefits. But if international development agencies such as the World Bank and International Monetary Fund give the same or similar advice to all countries, then the effects are to produce an over-supply of commodities and to cause prices to fall. The lives of smallholder peasant farmers are made vulnerable by dependence on the fickle conditions of deregulated commodity markets, which in any case are structured in ways that allocate power to a small number of trans-national corporations. Redressing the problems of global inequality and development requires an approach to agricultural markets that is more sophisticated than mere reliance on 'market solutions' as a route to prosperity. The activities that follow are intended to go some way towards introducing students to the international coffee crisis. ■

Student activities

Depending on the age and abilities of the students you are teaching and the topics being studied, you can either offer them a selection of the following activities to carry out independently or in groups, or guide students through activities as appropriate.

Activity 1: Compiling a glossary

Compile a glossary to show your understanding of the following terms and give examples where appropriate:

- Agrarian
- Commodity markets
- Developing country
- Export industry
- Export-oriented development
- Food security
- Foreign exchange
- Global inequality
- Gross domestic product
- Import-replacement development model
- Manufacturing sector
- National economy
- New agriculture countries
- Newly industrialising countries
- Regional economy
- Trans-national franchised chains

Activity 2: Understanding the text

Provide students with copies of the text of this article including the figures (a Word version of the article can be downloaded from the supplementary section of *Teaching Geography* online).

1. Name the countries that have benefited from export-oriented development.
2. Name two countries that have moved from an import-replacement development model to an export-oriented one. Explain what this means, using examples.
3. Describe how agriculture impacts on export-oriented development.
4. Outline the three disadvantages of export-oriented development based on agriculture. Do you think any of these disadvantages can be overcome by developing countries? Justify your answer.
5. What is the impact on the growing countries when world prices for coffee plummet? Give examples of the impact on growers.
6. Describe what has happened to coffee production since 1990.
7. Outline how technological, economic and political factors have resulted in an increase in coffee production.
8. Describe how regulation has affected coffee trade over time.
9. Explain how US political decisions have had an impact on the world trade in coffee.
10. Describe the structural imbalance in the global coffee system.
11. What generally happens to the price of commodities when only a few companies control exports?

Activity 3: Applying skills

1. Describe the conditions required to grow coffee beans.
2. Study Figure 1. Describe the distribution of coffee-growing areas. Read again about the physical elements required to grow coffee. Choose three different countries and use an atlas to describe where coffee might be grown in each country.
3. Continue looking at an atlas. Do you think there are any other countries that currently do not grow coffee but have the physical conditions to do so? Justify your answer.
4. Draw a generalised timeline to show the trend in coffee prices over time.
5. Draw a cup of coffee and divide it to show how the retail price of coffee is distributed. Who are the winners and the losers?
6. Study Table 1. Draw a graph to represent world coffee exports. Describe the information and pattern shown by your graph.
7. Study Figure 2:
   a. Describe the change in green bean coffee production from 1990–2003 for each country.
   b. Do the same peaks and troughs for Brazil and Columbia occur at the same time?
   c. Why is the pattern for Vietnamese coffee production different from that of Brazil and Columbia?

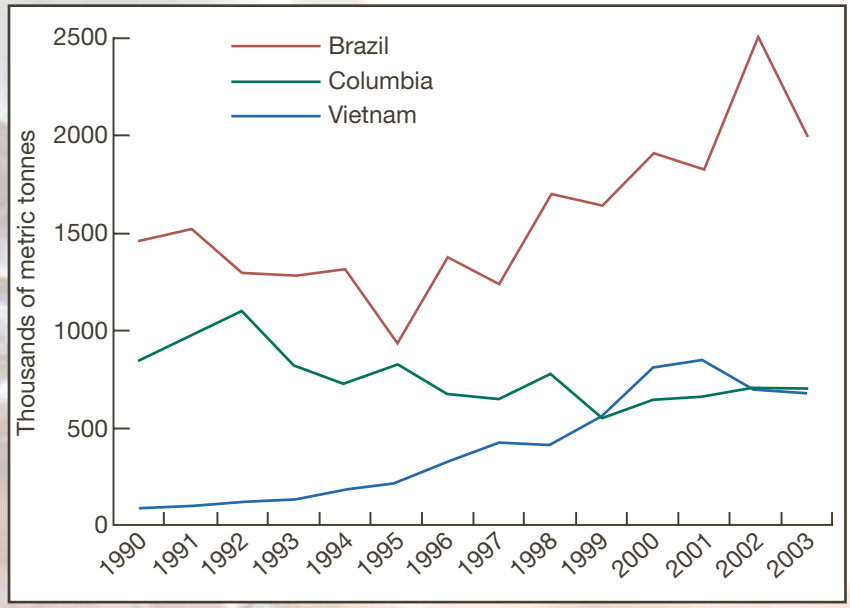

Figure 2: Green bean equivalent coffee production (thousands of metric tonnes) for Brazil, Colombia and Vietnam, 1990–2003.

Country	Tonnes exported	Percentage of world total
Brazil	1,506,289	29.71
Vietnam	699,632	13.80
Colombia	623,218	12.29
Indonesia	276,000	5.44
Guatemala	225,700	4.45
India	224,708	4.43
Mexico	158,797	3.13
Uganda	150,987	2.98
Honduras	145,939	2.88
Cote d'Ivoire	144,141	2.84
World total	5,069,174	100.00

Table 1: World coffee exports, February 2003 to January 2004. *Source*: ICO website.

Activity 4: Fairly traded coffee

Visit the websites listed below to research and read about fair trade for coffee growers. (The websites often include ideas for students.)

- Oxfam – www.oxfam.org.uk
- Global Exchange – www.globalexchange.org/campaigns/fairtrade/coffee/
- Planet Ark – www.planetark.com/dailynewsstory.cfm/newsid/17184/story.htm

Form groups of five and use the information on these and other websites to produce an awareness campaign about global coffee growing and the 'fair' alternatives.

If possible, invite guest speakers to your school to talk about coffee and other fairly traded products.

Good luck and fair trading!

Notes

1. Customarily, these are called the 'NICs' even though Hong Kong is not a country in its own right and Taiwan has a contested political status. More correctly, they should be called 'newly industrialising economies' or NIEs.
2. Mexico provides a good example of this. Since implementing export-oriented agricultural development via the North America Free Trade Agreement (NAFTA), Mexico has become reliant increasingly on corn purchased from heavily subsidised US farmers. The rapidly increasing volumes of corn imports and the liberalisation requirements for local food systems accompanying the NAFTA have resulted in the displacement of 1.75 million smallholder maize growers, many of which have migrated to urban areas (see Carlsen, 2003).
3. To some extent, the 1989 decision to abandon the ICA system has come back to haunt the US. Lower coffee prices gave encouragement to many Latin American peasant farmers to cultivate coca, in order to make up lost income. Thus, the rapid upsurge of illegal drug imports in the US during the early 1990s was connected to the post-Cold War politics of coffee. Then, in the late 1990s, the US Government provided subsidies to farmers in Bolivia and Columbia to switch from coca to coffee production, which further added to world production, over-supply, and lower prices. In another example of how the decision to abandon the ICA has come back to impact on the US, the New York Times reported that 'In Central America, the World Bank estimates that 600,000 coffee workers had recently lost full-time or temporary jobs, prompting a flight of Guatemalans and Hondurans to Mexico and a separate exodus of Mexican farmers into the US' (Smith, 2003).

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Team teaching

Melissa Gardner, Sally Heppenstall and **Sarah Todd** share their experience of team teaching in geography

Over a year ago our head teacher proposed that the geography department should consider setting up a team teaching room. This was intended to accommodate up to 60 students, two teachers and, at times, learning support assistants. We also had to allow for the fact that we are an inclusive school and sometimes we can have up to three students that are physically disabled and in wheelchairs in one class. The justification was that we had one of the largest classrooms, and as the school's population was expanding this would be the most effective use of space.

As a team of three, all geography specialists (a head of department, an advanced skills teacher and (at that time) a newly-qualified teacher) we all had our own rooms with data projectors and were relatively well resourced. The designated team teaching room was already equipped with a mobile interactive whiteboard.

Our starting point

As a department we had to consider a number of issues, predominantly how it would work in reality. Our other concern was how it would impact upon the following:

- student learning
- resources and/or equipment
- meeting national curriculum requirements
- availability of information and communications technology
- using thinking skills
- classroom management
- planning, developing and promoting motivation and learning
- staff motivation and working relationships within the department
- relationships with the students
- 'ownership' of a class
- tutor groups
- access and safety
- displays of students' work
- space.

Organisation

Initially, we made a wish list of the perfect classroom, and like all good geographers, we undertook a mini enquiry into students' opinions of the current classroom. To do this we carried out a survey of students' attitudes towards the environmental quality of the current learning space (Figure 1).

Student feedback was very interesting. As the room 'owner', Sarah thought the room was well furbished with a number of good displays. However, students made both negative and positive comments about the room.

- **Positive comments included:** 'You know this room is about places and people, lots of our work is on display'; 'The interactive board is good'; 'Colourful; carpeted'; 'Nice blue tables and chairs'; 'Lots of pictures to think about'; 'Plenty of space to move about in'.
- **Negative comments were very telling:** 'Dangling things stop me seeing the board, the board is nice – shame we cannot see it'; 'The room is too light to see the projector's pictures'; 'Paper things hit my head when I walk around'; 'It's too busy'; 'It distracts me'; 'I cannot look at it all!'; 'Hot and stuffy; horrid windows; damp walls'.

Research on emotional intelligence suggests that the correct learning environment is crucial before students can begin learning. The accelerated learning/teaching cycle begins with with *'create a supportive learning environment'* (Smith *et al.*, 2003).

Here it was clearly not quite right. It was distracting and needed to change. We had all been introduced to the importance of emotional intelligence, through the University of the First Age, which stressed BASICS, i.e. that classrooms need to inspire Belonging, Aspiration, Safety, Identity, Challenge and Success (*ibid.*). We wanted to further enhance the quality of the existing learning spaces.

	Good/Bad	Comments
Size of room		
Layout		
Display space		
Display quality/balance		
Ventilation		
Wall covering		
Windows:wall ratio		
Lighting		
Computers/ICT facilities/television		
Furniture		
Storage		
Other features (please state)		

What would your perfect classroom be like?

What could you do to improve this room? (short term)

Figure 1: Environmental quality survey used to evaluate the team teaching room.

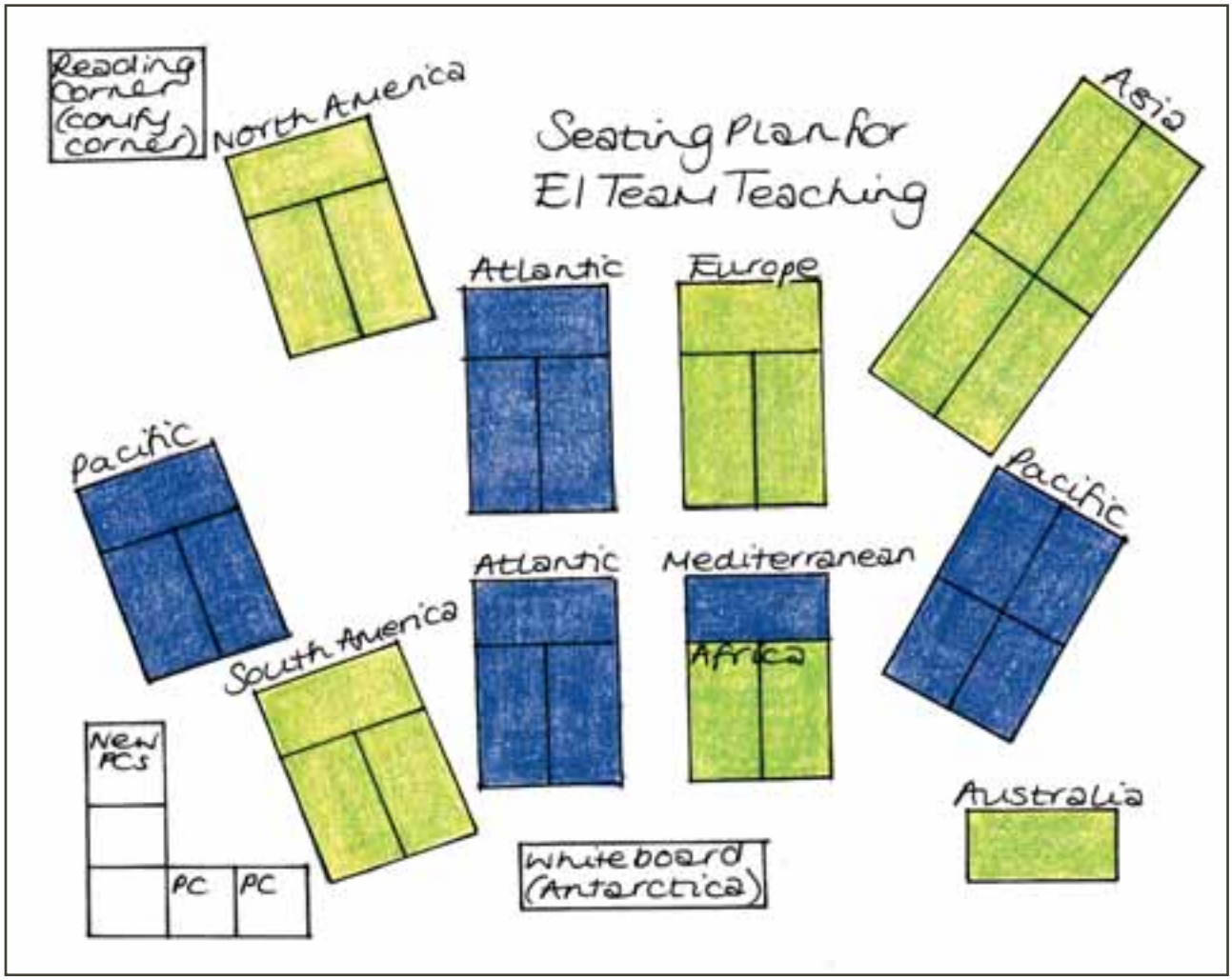

Figure 2: The new room was laid out to suggest a globe.

Achieving team teaching

Only a small budget was available to change the room so any changes had to be carefully considered. We had to plan for and implement: resourcing, new furniture, pigeon holes for class resource management, information and communications technology equipment and access within four months. We planned the layout but soon realised that the fixed units restricted the space available and would have to be removed to enable 60 students and two teachers to fit into the room. This then raised the problem of where to store all our resources. We established that we would need a separate store room/office for filing cabinets and a teacher workspace; we managed to acquire a departmental office!

With the units gone it was easier to organise the room layout. We opted for a layout with a geographical theme with blue and green desks laid out like a world map. Figure 2 shows an aerial layout of the room as a 'globe'.

In order to limit the loss of time at the start and end of lessons – with 60 students entering and leaving – we wanted quick starts. One approach was to create desktop resource boxes containing pencils, coloured pencils, scissors, glue, whiteboards, etc., to minimise disruption from disorganised students and also help in practical lessons. Each box had a checklist to ensure resources were returned.

Pilot and implementation

We wanted to see how the students and teachers would cope in the environment that we had created, so we carried out pilot studies with 60 students entering and exiting the classroom, which highlighted such issues as:

- where the bags were going to go without causing a health and safety issue
- space for the teacher to move around
- where the focus of learning should be
- the amount of space needed for the mobile interactive whiteboard and projector
- how to ventilate the room, especially in the summer.

After the pilot was complete, we re-addressed the room layout, wall-mounted the interactive board, ceiling-mounted the data projector and created formal seating plans for each team teaching group.

This phase took a considerable amount of personal time, effort and energy to get right. Fortunately, we had planned thoroughly how we would introduce the room to students. This included the entrance routine, the introduction of the resource boxes and the management of resources and homework distribution/collection.

Ensuring effective learning

To ensure effective learning we produced an introductory PowerPoint presentation for the students, which focused on expectations for the room, and published the seating plans (see http://www.geography.org.uk/journals for the PowerPoint presentation). In this type of environment it was imperative that we got to know the students early on as we had to bond and know our designated students as well as the other teacher's students.

The lessons within our current schemes of work were designed to follow a four part learning cycle (connect, activate, demonstrate and consolidate/review/reflect). Our department ethos is to empower all learners by providing a range of activities to suit different learning styles (visual, auditory and kinaesthetic). We wanted to continue with this as illustrated by the exemplar lesson (see Figure 3).

Year 10 tourism lesson: How LEDCs can benefit from tourism?

Resources: textbooks are on the table before class enters*; Lucky Dip Box with key words and concepts**; card; template for palm tree and PowerPoint, customised sticker rewards***

Lesson stages	Teacher 1 activity	Teacher 2 activity	Student activity	Learning outcomes
Entering	Switching on data projector and CD player: – Track playing is 'Thomson the Dog'	Meet and greet and ask them to listen to the music to deduce the topic today...	Enter, sit and prepare to learn	
Connect	Opens lesson with a picture of holiday destination/ video clip. This is used to support a question and answer session. Key questions: why would you visit this place? What are your holiday experiences?...	Teacher registers group silently by observation	Students look and respond to questions In their notebooks students note 5 pull factors for tourist destinations...	Ideas about what makes a good holiday destination
Activate	Using a model of palm tree the teacher discusses effects of tourism in an LEDC case study. The students are set the task of creating and completing their own palm tree for their given case study	Teacher hands out templates to less able and card to more able	Students listen to the task	Students understand the task and can complete their own case study
Demonstrate	Teacher facilitates learning Extension tasks can be offered to students to add island/cruise ship to show interdependence links... And possible future changes (e.g. sun for global warming)	Teacher facilitates learning	Independent research to complete the sections of the palm tree model and build up case study knowledge and understanding	Completed case study needed for GCSE
Consolidate	PowerPoint slide of palm tree on the board Adapted words for track onto PowerPoint... Beach Boys: 'Wouldn't it be nice' Points to lyrics	Distributes lucky dip box from the box and amend Judges palm trees and sings Hands out sticker rewards	Students remove cards from the box and amend palm trees and add on facts if they are missing Students sing, karaoke-style, and sway with palm trees	Reviewed and reflected

*This has to be done for every lesson to minimise disruption to the lesson and learning.
**Key words and concepts are on card in a box/bag, students select a card and add it to the correct place on an image.
***Customised stickers from www.superstickers.com. Our stickers read: *I helped an LEDC develop sustainably.*

Figure 3: **Year 10 team teaching lesson plan.**

Conclusion

As a department we have been constantly assessing the teaching and learning that has taken place as a result of team teaching. Figure 4 shows our most recent SWOT analysis. We have also been aware of the students' opinions of team teaching and have regularly asked for their feedback. Student thoughts from the most recent feedback of the strengths and weaknesses of team teaching at GCSE (year 11) can be seen in Figure 5.

As a team we have had a fun, yet tiring, first two years and will be continuing with team teaching for the foreseeable future. Ideas are still flowing, and through evaluation team teaching can only get better. ■

Acknowledgement

The authors would like acknowledge the support of the RGS-IBG for recognition through an 'Innovative Geography Teaching Project' grant, which helped us to set up and implement team teaching in geography at Stanchester Community School.

Reference

Smith, A., Lovatt, M. and Wise, D. (2003) *Accelerated Learning: A Users Guide Network*. Stafford: Educational Press Ltd.

Melissa Gardner is now Assistant Head at Oakgrove School, Milton Keynes (melissag30@hotmail.com); Sally Heppenstall is a geography teacher and Acting HOY7 (sallyhep@hotmail.com); and Sarah Todd is an Advanced Skills Teacher (sarahtodd.home@talk21.com) at Stanchester Community School, Stoke-sub-Hamdon, Somerset. Readers interested in further information on team teaching are welcome to contact the authors.

Strengths:

- There is a real 'team' spirit (teachers and students)
- Sharing knowledge, expertise and experience
- Two teachers are a stimulus for teaching ideas
- Takes the loneliness out of teaching
- Sharing ideas leads to more creative and innovative lessons
- Sustained high KS4 take up in the first year of team teaching
- More students means its easier to model questions and answers (specifically in KS4), using the interactive and normal whiteboard in sync
- The collaborative personalities in the classroom has enhanced the teaching environment
- Behaviour has not been any more of an issue with 60 students than it is with 30 students (due to thorough implementation and planning)
- Geo-resource boxes have proved invaluable in minimising classroom disruption
- We still effectively played the trading game – two worlds at once, which enabled a comparison
- We get to know more students in class

Weaknesses:

- Lack of space (for students and teachers to manoeuvre and to display work)
- Hard to involve drama, due to lack of space
- The rapport between teachers and individuals is weakened or lost (depending on the classes involved)
- Planning time is required for both teachers involved – there is just no time left in the teaching day and so this runs into the teachers' personal time
- Planning has to be rigorous so teachers are aware of their roles and can both be actively involved in the class
- Difficult to get all the students involved in ICT at the same time
- You can not have an 'off' day as someone else is relying on you
- Reduced spontaneity because you are not the only teacher affected
- If one teacher is missing, more is expected of the teacher left in the class as the member of staff covering can not make the same contribution
- Implementation of team teaching and the room fell mainly into teachers' personal time
- The class of 60 feel like a unit yet getting them all out on fieldwork together is problematic
- Writing reports for your designated class was more difficult as you do not deal solely with them

Opportunities:

- CPD through working so closely with excellent colleagues
- Enhance the teaching and learning experiences of all involved
- Further develop the emotional intelligence of the team teaching room
- More creative lessons due to rigorous planning
- Sharing knowledge and experience
- Given us the opportunity to pioneer team teaching on a long term basis, in geography
- Enhanced resources in geography department
- Moderate marks/levels and peer assess within a year group

Threats:

- Budget – photocopying for more classes occurring at once in some cases
- If one of the current team leaves – would it still work?
- Sustainability of team teaching, physically and emotionally
- Potential personality clashes (between all members of the classroom)
- Mismanagement of classroom could be disastrous
- Concerns about losing your identity as a teacher

Figure 4: Most recent SWOT analysis.

Strengths:

- Two lots of expertise to learn from
- Teachers can help each other
- It is good when one teacher talks and the other writes on the board
- Two teachers are better than one
- Competition between the two teaching groups in the room
- Whilst one teacher is teaching the other can be helping students
- More variety of input and responses as there are more students
- The lessons are more fun
- Everyone can help
- The teachers work well with each other

Weaknesses:

- Too many people for the space
- Hard to see the board(s) and TV due to angle and people's heads
- It is noisier because there are twice as many people and there are more distractions as there are more students in the class
- When one teacher is away supply struggles so less learning is achieved
- Harder for teachers as they can not help everyone
- The two classes are always getting compared
- Competition between the two teaching groups in the room
- No room to move
- We don't get the same amount of help as when we were two separate classes
- It is hard to understand/cope if both teachers are talking at once

Figure 5: Student thoughts on the strengths and weaknesses of team teaching.

The laws of geography

Peter Smith reflects on how he has overlooked some fundamental 'laws' underpinning geography and proposes a new one

This is a very public confession. After studying and teaching geography for some 40 years I remain humble enough to accept that there are vast areas of the subject that I am ignorant of: and that the ignorance is increasing steadily. Nonetheless, it was with something of a sense of shock that I realised that I had missed out completely on an article so basic to the subject, written originally in 1969, and never subsequently picked up by me. I immediately recognised the truth of what was written, and was devastated to realise that I had spent much of my career putting into words an already-invented wheel.

The review article, in the *Annals of the Association of American Geographers* (Miller, 2004), revealed that in all the years I had been developing a better understanding of geography, there was a 'law' postulated ('invoked' was the word used) which encapsulated the fundamentals of geography. How did I miss it? What is this 'First law of geography', invoked by an American geographer, Waldo Tobler, in 1970?:

> *'Everything is related to everything else, and near things are more related than distant things'.*

So obvious, isn't it? The very essence of geography! This is where the development of cybernetics and general systems theory had been taking us in the 1940s, 50s and 60s, its nomothetic (law-seeking) approaches in the post-Hartshorne world, its concepts, generalisations, principles, ideas (remember *The Teaching of Ideas in Geography* by HMI in 1979?), and now so simply expressed! With this first law as a guiding principle so much other geography can be better understood: it provides part of an intellectual skeleton on which to hang the flesh of what have been the overly content-led curricula which geography students have had to study at all levels. It can provide the student and teacher with a framework to which much other work at local and global scales can be related.

From Tobler's 'First law of geography' links can be made to other cognate subject areas, for example the 'First law of ecology': *'Everything is connected to everything else'*. How could I have missed reading Peter Gould's plaintiff cry in 1979 that 'if a graduate student is not aware of certain pieces of Tobler's research his/her own research abilities are jeapodised because he/she cannot gain a new and crucial perspective ... *An innocent ignorance of Tobler's work now constitutes a constraint on the geographical imagination*' [my emphasis added]. (Gould, 1979) Were you constrained? Had/have you heard of Tobler's 'law'?

In the 1980s the emphasis of the various school curriculum projects by the Schools Council, the Bristol project, the Geography for the Young School Leaver project, the textbook projects such as the Oxford Geography Project and others, offered a way of understanding many of the 'law seeking' approaches. The national curriculum for geography, from 1991 onwards in its various revisions, hardly built on these earlier approaches, and has encouraged an ad hoc way of studying geography, with an emphasis on content over an intellectual framework for understanding that content. Statements of attainment and the 'level descriptions' that replaced them are not a proper substitute for principles and generalisations to help students understand how things co- and inter-relate, and to provide them with a robust framework for analysis and understanding. The ground-breaking work of *Thinking through Geography* (Leat, 1998) and texts such as *Learning through Enquiry* (Roberts, 2004) are the beginning of the reaction to the strictures of the national curriculum as currently promulgated. They offer strategies for teaching about the complexities of a modern, rapidly changing world.

But, in the middle of the curriculum dogfighting of the 1990s, how did I miss the 'Second law of geography' proposed by Arbia *et al.* (1996), nearly 30 years after the first?

> *'Everything is related to everything else, but things observed at a coarse spatial resolution are more related than things observed at a finer resolution'.*

Of course! The smoothing effects of aggregation! This captures exactly the significance of that key geographical concept, scale, the lens through which phenomena are 'seen'. Again so simply expressed. What next? I do not want to miss the third law of geography (or have I done so already?), so I put out a challenge to readers to propose and publish this and any others they think worthy of being 'laws'. What are the 'laws' you teach to your students to provide them with their intellectual coathangers?

For my part I am hoping that there might be a law postulated concerning the way in which globalisation results from the accumulation and inter-relationship of local processes and events, and *vice versa*. There is, surely, a law of geography that captures the significance of interdependence, as invoked by those who have urged us to 'think globally and act locally' as part of a sustainable world. Could this be expressed as a 'law', using a new word to bring together the global and local, such that:

> *'Glocalisation realises the interdependence of universal global processes with local knowledge and interpretation.'*

Yes, an ugly word, 'glocalisation', but is this what you have been teaching without realising it might be a 'law'? How do *you* express it? ■

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Peter Smith was one of Her Majesty's Inspectors of Schools until recently, and was for some years the national specialist adviser for geography.

Go for it – innovate!

Eleanor Rawling encourages you to design a new look for key stage 3 using a radical approach

A new DfES publication has recently been published *A Condensed Key Stage 3: Supplementary Guidance – foundation subjects and religious education* (DfES, 2005). This document has arisen from pilot work on a two-year key stage 3 initially undertaken by the Key Stage 3 Strategy but now being extended. It includes guidance on planning a more flexible or condensed key stage 3 curriculum in all the foundation subjects in case schools wish to pursue this idea in some way. All the guidance is optional.

I am not advocating a move towards a two-year or condensed key stage 3. I would urge schools to continue to offer a full geography entitlement across all the years of the key stage. However, I know that some schools are having to cope with either reduced time for geography or a timetable which is arranged differently in some way – so there may be helpful ideas here. Indeed, even those with a full time allowance may benefit from seeing ways of planning the curriculum differently and over the next few years the key stage 3 review will result in some rethinking for us all.

The QCA Geography Team was asked to put together the geography section of this document and chose to do it in a way that emphasises good curriculum planning and a high-quality geography experience for 11-14 year olds. The approach taken is thus also very relevant to all schools. There are some general planning principles and approaches and then three different examples – one (A) directly planned

Content selected for in-depth study and programme of study (PoS) reference	Concepts/ideas accessed (examples)	Experience/breadth of study (examples)	Elements of PoS addressed in minor way
Year 7 **Geography as exploration** *(Aspects: places, patterns/processes)*	Image/reality, representation, identity	Film, television and travel writing, historical sources, explorers	For all topics: maps, diagrams, secondary sources including the internet
1. Exploring difficult and hazardous environments *Tectonic and geomorphic processes, weather*	Location, change, people–environment interaction, interdependence, physical processes	Mapping, use of archives and museums	For all topics: population, development, countries, settlement, environmental and resource issues, economic activity
2. Exploring our own country *Country study*	Place, identity, community, interdependence	Local fieldwork, students' experiences, diaries, literature, poetry, advertising, travel resources	
Year 8 **Geography as communication** *(Aspects: patterns/processes)*			
1. Linking places travel/transport *Economic activity*	Interdependence, location, networks, inequality, sustainability	Students' experiences of journeys, travel and holidays, global trends and patterns, links with world of work	For all topics: maps, diagrams, secondary sources including the internet
2. Exchanging ideas and messages *Development/economic Activity*	Interdependence, uneven development	Media, new technology and use of mobile phones/the internet	For all topics: economic activity, settlement, development, countries at different stages of development
Year 9 **Geography for global citizens** *(Potentially all aspects)*			
1. Geography in the news: local/global *Potentially all themes*	Globalisation, interdependence, inequality, image, representation	Topical issues, citizenship, newspapers /TV/radio, images – links with English, media studies, art/music, cultural studies	For all topics: values enquiry, use of first-hand data/experience and secondary sources
2. Geography for a sustainable future *Environmental, resource issues, development*	Cause/effect, sustainability, people–environment interaction	Environmental projects, fieldwork, internet use, simulations	For all topics: economic activity, settlement, environmental and resource issues, development

Figure 1: Example C – planning geography entitlement throughout years 7, 8 and 9.

in a traditional way from the programme of study, one (B) planned from the existing scheme of work units, and one (C – shown below) planned to be a more radical approach to using the programme of study.

Example C: Developing a scheme of work (directly from the programme of study) using a more radical approach. Going for innovation (years 7, 8 and 9)

Planning criteria:

- Start with a radical rethink of the key stage 3 curriculum, drawing on the national curriculum programme of study but not being bound by the headings and approaches.
- Bring in new developments from geography and newer resources.
- Draw on students' experiences and interests and on topical issues.
- Offer a geography entitlement for young global citizens, running throughout years 7, 8 and 9 (see Figure 1).
- Provide a more innovative course to enthuse students before they choose options.

Conclusion

I think that you will find these ideas and examples interesting, particularly the example shown here which presents a very different 'look' to key stage 3 and may give teachers an opportunity to introduce new ideas in geography, similar in some ways to the philosophy of the Pilot GCSE Geography course. If you are planning to try some new approaches, remember to think carefully about progression and continuity with students' primary experiences and with key stage 4/GCSE. Essentially, however, example C reminds us that the programme of study really is a minimal framework – you can use it creatively to develop courses that will provide the much-needed stimulation and enjoyment for key stage 3 students. Go on – innovate! ■

Reference

DfES (2005) *A Condensed Key Stage 3: Supplementary Guidance – foundation subjects and religious education*. London: DfES (Ref 1113-2005).

Eleanor Rawling was formerly QCA Subject Adviser for Geography, now Associate Consultant to QCA.

Prize-winning report

David W. Smith Memorial Prize

David Smith, who died in December 1999, had an excellent reputation as a scholar of urban South East Asia. Writing under the name of David Drakakis-Smith, he devoted much of his attention to housing problems and Third World cities. In David's memory, the Developing Areas Research Group (DARG) of the Royal Geographical Society (with IBG) decided to establish a report-writing competition for UK schools. The prize is £100-worth of book tokens from Routledge (with whom David published extensively). Reflecting David's research, we asked students to write a report to the following statement:

The leaders of the G8 are due to meet in July 2005 in the UK. Write a briefing report for them with the title: 'Life for the urban poor in low-income countries'.

The winner of the 2005 prize was Stephanie[1] from Tapton School in Sheffield. Her essay focused on South East Asia and the judging panel felt that she had addressed the theme well. Stephanie outlined the key problems clearly and illustrated them with well-chosen case studies. We were very impressed with the way she moved towards a discussion of sustainable development and provided examples of what could be done to achieve it. In addition, Stephanie's essay was very well written, but don't just take our word for it, judge for yourself: the essay is reproduced unedited here.

Report for the attention of the leaders of the 2005 G8

'Life for the urban poor in lower income countries'

Stephanie (Tapton School, Sheffield)

This report is an objective study of the life of the urban poor in Southeast Asian countries; it aims to show some of the problems faced by the people in these areas. This report also aims to show some of the possible solutions for these problems, which should the countries of the G8 wish to do so could be easily implemented using the superior technology and the capital available to them to solve some of the numerous problems faced by the urban poor.

Asia and the Pacific is a vast and diversified region with population densities varying from 700 people per sq. km. to as low as 6.5 people per sq. km. Annual population growth rates tend to be between 2 and 4 per cent, with urban population growth rates often slightly higher than the national average. Urbanization trends in the region are also quite varied. The Middle East is the most highly urbanized, with some countries having over 70 per cent of their populations located in cities. In the Southeast, levels of urbanization are between 20 and 50 per cent, while in South Asia, they are between 20 and 30 per cent.

The majority of the urban population in Southeast Asia is concentrated in its highly industrialized capitals. Some capitals have grown at a phenomenal rate: Jakarta, for example, grew to 8 million residents in the last15 years, one-tenth of the time it took New York to reach the same population. Current trends predict that urban population growth rates across Cambodia, Indonesia and the Philippines will increase by 3 percent annually from 2000-2015. During the same time period, it is indicated that rural populations will decrease slightly: -0.7 percent in Indonesia and -0.1 percent in the Philippines.

As urban populations start to exceed rural populations in this region, cities are struggling to provide basic services such as education, training and employment opportunities for their new inhabitants. Southeast Asian cities' outdated and inefficient infrastructure systems and public also have to cope with services that cannot handle the influx of migrants who depend on better access to health services, education, sanitation and housing to improve the quality of their lives.

The expansion of employment opportunities has not matched the needs of the growing population in Southeast Asia's major cities, leading to a fall in wages, and problems of unemployment, poverty and underemployment. This already desperate situation was exacerbated by the 1997 Asian financial crisis. The repercussions of this economic shock, which include increased inflation and devalued currencies severely weakened the earning capacity of the urban poor. Unemployment in these metropolitan areas is considerably higher than national levels for example 7 percent in Phnom Penh, compared to 3 percent in overall Cambodia; 17 percent and 19 percent in Jakarta and Surabaya, compared to 15 percent in Indonesia as a whole.

In the city of Balikpapan, Indonesia which has a population of 475,000 there is a severe lack of employment opportunities. According to statistics taken in 2001, only 8 per cent of the urban poor households were employed in the formal sector. Sixty-two percent worked in the informal sector, while 30 percent were unemployed. The informal sector also dominates the majority of the urban poor's job opportunities in Phnom Penh with short-term, unstable income sources from construction sites, market vendors, food peddling and domestic service.

Lower wages can have serious effects on the diet of urban residents who may not be able to supplement their diet with domestic produce in times of economic instability, as they have no access to the land or skills that are necessary to produce or gather food. This is illustrated by surveys conducted in Indonesia since the crisis, which show a lesser degradation of nutritional status amongst poor children in rural areas than those in urban areas. Increased malnutrition often leads to lower productivity rates and a drain on the already inadequate health services and thus begins a spiral that will result in escalating poverty.

An unprecedented level of urban growth, often largely generated by rural-urban migration to a primate city, has been the hallmark of urbanization

in most third world countries over the past twenty-five years. Housing conditions in the poorer countries in Southeast Asia are often characterized by sub-standard housing. Slums and squatter settlements have grown up unplanned and unregulated in many of the large cities. To combat this growing problem provision of shelter, access to land and basic infrastructure and services for low-income groups must be provided. However urban redevelopment policies must focus not only on physical aspects of neighbourhoods but also on the social aspects, including health, employment and education. In the more industrialized countries of the region, the focus is on decreasing housing shortages for both low- and middle-income groups and on improving housing standards, particularly increasing the amount of house space per capita that is available.

The ever present problem of the lack of the capital necessary to implement sustainable development schemes can be overcome, some possible solutions that should be considered by the G8 organisation are privatisation of housing-finance institutions by encouraging commercial banks and private developers to invest in low-cost but adequate housing, housing mortgages and a secondary mortgage market can be encouraged as can community-based finance systems and housing co-operatives.

Most countries in the Asia and Pacific region acknowledge the need for sustainable land-use. Those with large urban populations and mega cities propose even out population distribution and ensure the development of new areas by building small and medium-sized towns and encouraging migrants to move to these rather than to the mega cities.

The more developed countries in the region are trying to take into account environmental impacts such as energy efficiency. The need to strengthen environmental awareness and management and to ensure a more stringent enforcement of regulations is also recognised by the more economically developed countries in the region.

However whilst these are good ideas for sustainable development projects most of the countries will need international assistance which should be timely, appropriate and take into account the needs of the recipient country and the views and opinions of those who will benefit from any schemes implemented.

A good example of a working model of some of these development projects can be seen in Thailand. Since the 1970s, housing in Thailand has been constructed by the private sector, whether through individual initiative or by commercial developers. Less than 8 per cent of the housing in Bangkok is public-sector housing. By mid-1980s the higher-income housing market experienced an over-supply, and developers began to explore new markets. They started to develop lower-cost housing by experimenting with innovative technologies, building new types of houses aimed at different income groups. However, a housing finance system was necessary to match housing supply and demand. Integrating this into the existing financial system has been the key in the current success story of the housing sector in Thailand's growing cities.

Apart from creating incentives for commercial banks to provide more home loans, the Government has contributed to the improvement of the housing finance system by establishing the Government Housing Bank. Its aim is to provide financing to housing developers and homebuyers, in particular to lower-income groups. In the last decade, the Government Housing Bank, now with 101 branches all over Thailand, has become the leading housing finance institution in terms of market share and consumer recognition. Due to an increased supply of low-cost housing, an improvement in the income of the population and the availability of affordable housing loans, home owner-ship has become possible to larger sections of the population. In 1980, the cheapest new private-sector housing unit on the market was affordable to only 15 per cent of the households in Bangkok. According to recent estimates 70 to 80 per cent of the households can now afford such housing units under the new loan conditions. For the first time home ownership has become a real possibility for Bangkok's growing population. Thailand is living proof that with careful planning schemes for sustainable urban development can be implemented and can succeed. ■

Editor's note

1. In line with the policy of the GA not to reproduce students' surnames in printed matter and on its websites, Stephanie's surname has been omitted. The Editor would like to thank Stephanie for permission to reproduce her essay.

The David W. Smith Memorial Prize is co-ordinated by Giles Mohan (G.Mohan@open.ac.uk) and Colin McFarlane (C.McFarlane@open.ac.uk).

David W. Smith Memorial Prize

The Developing Areas Research Group (DARG) of the Royal Geographical Society is holding a report writing competition for UK schools in memory of David W. Smith, a Geographer who was committed to researching Third World cities.

David W. Smith, who published most of his life under the name of David Drakakis-Smith, died in late December, 1999. He had a reputation as an excellent scholar of the towns and cities of southeast Asia.

Reflecting David's research, students are asked to write an essay on the following question:

How is HIV/AIDS affecting the urban populations of the poor countries of the world?

The competition is open to school students in the UK who will be 16 years of age or over by May 1st, 2006. The winning student will receive a prize of £100 in book vouchers from Routledge and will have their essay submitted to *Teaching Geography*. Reports must be between 1000 and 1500 words in length, word processed, and submitted to the address below by May 1st, 2006.

For further details please visit the DARG website:
http://www.gg.rhul.ac.uk/DARG/finance.htm

Queries should be directed to the David W. Smith Memorial Prize Co-ordinators: Colin McFarlane: C.McFarlane@open.ac.uk and Giles Mohan: G.Mohan@open.ac.uk.

Colin McFarlane, Department of Geography, Faculty of Social Sciences, The Open University, Walton Hall, Milton Keynes, MK7 6AA.

Bradfords Award Winner 2005

Staff and students of the Geography Department, Fakenham High School and College describe why they felt they should be nominated for the Bradfords Award 2005 which they won.

The Geography Department Team at Fakenham High School, Norfolk has developed engaging, challenging and stimulating opportunities for all their students across key stages 3 to 5. A most inclusive approach: the team, of all ages and experiences have actively contributed to the developments, which include – fieldwork, investigations, 'student speak' assessments and a year 9 development day to name but a few. They have grasped change with great enthusiasm and the strategies introduced in the last two years have enhanced further the success of the subject. Ofsted's visit in February 2004 recognised the significant impact of active learning within geography and the impact across the school. The senior leadership is sharing this good practice across the school to have a strategic impact in teaching and learning. Students are highly motivated by the subject and this has encouraged splendid growth in numbers. As you can see Fakenham's geographers are leading excellent developments and I nominate them for the Bradfords Award with absolutely no hesitation. *Robert Lodge, KS3 Foundation Subjects Co-ordinator.*

The importance of teamwork in planning for change in the Geography Department at Fakenham.

The department

Fakenham High School and College is a large establishment of 1600 pupils and students set in a rural area of North Norfolk. The department consists of three full time geography teachers and two who also teach other subjects. Between us we have a wide variety of experience and specialist interests. At the heart of our ethos is a love and fascination for our subject and our main aim is to enthuse and motivate students across all phases.

Numbers of students taking the subject at GCSE have increased recently from 50 in 2004 to 71 to take the exam in 2005 and 72 in 2006. We have also experienced considerable increase in uptake and results at A-level. We believe this can be attributed to the strong teamwork that exists in the department.

The sections below explain four aspects of our development that we believe have enabled the department to move forward.

1. *A team approach amongst staff: A variety of teaching and learning styles*

The department has, for many years, had a collaborative approach to planning and over the past two years we have been working towards sustainable change: improvements that bring the study of geography up to date, that analyse real and recent events and use learning styles that can be adapted to all phases. All staff have been involved in decision making and in the various changes that we have made.

Staff regularly share resources and the monthly 'Geog News' newsletter communicates, via e-mail, the important dates, events and ideas that are going on in the school and the department. The past two years has seen the new Head of KS3 update many schemes of work and devise a more manageable format of a topic per half term with an assessment at the end. New modules have included the Geography of Crime and World Sport: football which have both been well received, especially by the sporty boys!

> *I like playing football so I like learning about it in other countries*
> **Year 7 student**

The department has shared a work folder for each year group that other staff can access and we regularly share lesson ideas informally over a cup of coffee. Last year we decided to run a programme of peer observation that ran alongside the Performance Management observations and enabled staff to access specialisms or observe alternative and/or new teaching styles which had been successful. Ofsted recognised the value in their last inspection.

> *The department work very effectively and enthusiastically together*
> **Deputy Head in charge of Humanities**

We are aware that any one strategy, however successful it is in one lesson, should not be 'done to death'. To this end we have tried to mix the new with the traditional and proved methods of teaching.

Mystery exercises, for example on climate graphs in Year 9, and investigative lessons played a large part in our planning. Similarly we encouraged students to take part in debates and be creative in their thinking: students in year 9 listened to and interpreted the sounds of the rainforest. Year 12 had to present their political strategy for coping with the problem of ageing population. AS-level students were asked to present a report which includes interactive learning, a starter and a plenary. One student set an exam question to the rest of the group as homework!

The department have all had time working on the key stage 3 Strategy and, as well as developing stimulating materials, we have streamlined our assessment programme to include active and investigative assessments as well as the traditional summative ones. Our key stage 3 results have increased considerably as a result from 62% level 5 and above in 2003 to 80% in 2004. Students have full access to level and grade descriptors throughout year 7 to year 13.

> - *Teachers use assessment very effectively to improve students' achievement*
> - *By year 9, most students achieve well in strongly consolidating their knowledge, so that several are attaining above average standards.*
>
> **Ofsted, February 2004.**

2. Teamwork between students and staff

Teamwork is extended into the relationships which we foster with students. At the annual year 9 development day, year 12 students work alongside year 9 to aid learning and understanding of issues and opinions.

Classes have a work hard ethic whilst maintaining a relaxed atmosphere. Perfect for enjoying learning. The teaching quality is high as they effectively convey their in-depth knowledge of the subject
Year 12 student

I enjoy subjects which allow you to express your opinion and I like the way that you can debate in lessons
Year 10 student

Similarly we encourage students to work together, both in differentiated groups in class and in fieldwork to improve the development of Gifted and Talented and less able students. We invariably plan mixed ability groups and seating plans are designed carefully to include LSA access to the less able or a more able student sat next to another who will benefit from ideas and help. We strongly believe that geography should be accessible and exciting to all. To this end we involve the SEN department closely in our planning and have a link LSA who has helped us to modify schemes of work and assessments.

I have always felt welcomed and valued by the geography teachers
Link Learning Support Assistant

3. Working in and alongside the outside world

Fieldwork makes a very good contribution to students' achievement
Ofsted, February 2004

One week standing in a river, walking up a hill and on some beautiful beaches
Year 13 student

The appreciation of the world around us plays a major part in the planning of fieldwork.

- This year we modernised our fieldwork theme in Norwich to look at the concept of sustainable cities. The final piece of group work enabled students to produce a critique of the sustainability of a section of housing just outside the city centre.
- The GCSE coastal fieldtrip has a focus on costs and benefits of renewing sea defences. Students benefit from an introduction from a member of staff who previously worked for the Coastal Department of North Norfolk Council.
- In the 6th Form the fieldwork experience is broadened to include not only guest speakers and visits to local farms but also a week in the Gower Peninsula. Students and staff find this week extremely enjoyable both in terms of investigating geography in the open air and spending time outdoors with like-minded people and we aim to broaden their experience and appreciation of the world around them.
- Environmental science A-level students benefit from the enthusiasm and knowledge of a local professor who has led us on day trips, particularly studying a local soil catena.
- We have also just taken part in a day long conference where A-level students worked alongside professionals from the building trade in a decision-making exercise on the supply of new homes. Both staff and students thoroughly enjoy the other link we have with industry when we spend a day with the Holt Farmers association and receive a glimpse of farming practices and political implications of change in the farming community.

The subject is dynamic, about recent events and sustainability for the future
Year 12 student

4. Geography in a whole school context

One of our targets this year is to expand our use of ICT.

- Our recently acquired laptop trolley is proving useful in making written tasks more accessible to the less able students.
- A recent lesson focus was to devise an earthquake drill on a PowerPoint presentation. We have arranged for these to be shown on the school television information service, although we hope that it will be a source of interest and not reference information!
- We have plans this year to participate in a virtual fieldtrip with year 8.
- We use the school's Simple Click network to ensure that students, particularly for their GCSE coursework, have access to fieldwork results and all help material offered to them on paper.

  The department also clearly has much to offer the citizenship curriculum and it is not by chance that the teacher co-ordinating with school citizenship is a geographer.
- Our year 9 development day hinges on taking the whole year group into the College environment and participating in a series of workshops with staff from NEAD (Norfolk Education and Action for Development), the local authority and the Advisory Service. This year we aim to expand to include a wider range of activities and guests.
- The previously mentioned A-level conference also raised awareness of citizenship issues as will our forthcoming trip to Happisburgh to meet a member of the Local Residents Association to discuss political interest groups at work.

This year the department have also chosen to work with two other schools in our 'Federation' to produce an accessible and interactive resource on sustainability for GCSE which can be accessed by over 2000 students to enhance their learning.

Good opportunities have been provided to learn citizenship in the context of geography
Ofsted, February 2004.

In summary

We are a happy, successful department who are constantly reviewing our success and are keen to plan for the next generation of geographers. We annually set ourselves goals and this year's development plan contains targets such as:

- To improve provision for the Gifted and Talented students
- To utilise the vast array of professional knowledge in our local area by encouraging industrialists and professionals to visit the school and provide information to students
- To plan and trial a virtual fieldtrip with year 8 students.

And ultimately:

- To enthuse all students, regardless of previous experience, race, ability or age, to ask questions of, enjoy and marvel at the world around them.

The best lessons are characterised by highly imaginative and engaging activities and detailed planning which involve students of all abilities.
Ofsted, February 2004

Further details and entry form for the 2006 Bradfords Award are available on the GA website. Visit: www.geography.org.uk/bradfordsaward

It's virtually fieldwork!

Richard Taylor describes the results of a Best Practice Research Studentship (BPRS) project on virtual fieldwork and describes ways in which teachers can make use of such materials with students

The response to the question 'When is fieldwork not fieldwork?' could be 'when it is done in a computer room via the internet!'. Although this is probably not the right answer, the increase in access to and use of the internet in schools has opened up a wealth of material that can be of real use to geography teachers and students. This article first describes research into the use of virtual fieldwork across the eastern region and then goes on to explain how virtual fieldwork websites can be utilised to full advantage to gain useful, up-to-date case study material.

What is 'virtual fieldwork'?

As the whole concept of virtual fieldwork is new there is no universal definition. However, virtual fieldwork can be seen as a representation of a specific geographical area using digital images and/or photographs/video. These may include:

- a number of digital photos of an area with no accompanying notes
- a series of digital photos with some accompanying notes
- a selection of digital photos and/or videos with specific guided tasks.

Moreover, websites not specifically geographical can also be utilised in virtual fieldwork. Tourist information websites for cities, for example, often contain a large amount of appropriate information and images, which will be of use to the geographer.

Why use virtual fieldwork?

There are a number of reasons for using virtual fieldwork with students, these include:

- **Enrichment –** A virtual field trip enables students to visit a site prior to a 'real' field trip. Students should therefore be familiar with the site and can possibly be taught fieldwork techniques before going into the 'field'. This ensures that time out of school is used to maximum effect.
- **Substitution –** Virtual fieldwork may enable students to experience an environment that might otherwise be too difficult or dangerous to visit. For instance, what geography teacher is going to take 30 year 9 students up an active volcano or to a dangerous country or region? It also has an impact for disabled students for whom the facilities may not allow a direct experience fieldwork. Virtual field trips also have ecological implications; sites such as SSSI's and areas of outstanding natural beauty can be 'visited' with no impact on their ecology or environment. What geography teacher would feel 'comfortable' taking 100 students trampling over a world-renowned wetland?
- **Extension –** Virtual fieldwork will allow students to experience environments that are much more 3-dimensional than the representations in a textbook. For instance, you may be able to look 'around the corner' of an area whereas in a textbook you are confined to the pictures presented on the page.
- **Interaction –** Virtual fieldwork allows students to alter factors within an environment. It could be possible to remove the vegetation from the landscape and see the soils, and to remove that to see the geology. It may be possible to accelerate time, for instance to observe the changes in coastal landscapes due to weathering and erosion.
- **Time –** Virtual fieldwork also allows students to make good use of their time. Students can visit many diverse places from the comfort of their own computer room/bedroom. There is no time lost in travelling to and from fieldwork sites.

The advantages and disadvantages to virtual fieldwork are summarised in Figure 1.

How was the research conducted?

The research was carried out as a Best Practice Research Studentship funded by the DfES. Its main goal was 'to investigate the effectiveness of specific virtual fieldwork in terms of raising understanding of geographical areas/issues' (see TeacherNet website for full report). This key question was centred around the original premise that various pieces of geographical research suggest that within geography, students who themselves see a named real-life place have a better understanding of the issues involved in that area. For example, students who can actually visit a specific coastal area and see the coastal defence engineering there will, it is believed, recall much more about the issues involved in the complex

Advantages	Disadvantages
No Health and Safety issues	Confined to specific location
No minibus/equipment problems	May not give an accurate picture of an area
Can be done in limited curriculum time	Possible technology issues
No expense to students/parents	The social aspect is lacking
The weather!	

Figure 1: The advantages and disadvantages of virtual fieldwork.

problem of coastal management. Traditionally, investigations have been carried out on actual fieldwork where a group will go to a specific place and investigate various issues at that location. However, with the advent of the internet as a teaching tool, could the same place be as successfully visited virtually? This sub-question is pertinent with the increasing complexity of the Health and Safely legislations for school visits as well as the time-consuming nature of risk assessments. Thus, virtual fieldwork certainly appears to open up more areas than would be accessible to actually physically carrying out fieldwork first-hand.

The research had two main aims.

1. To see how widespread the use of 'virtual fieldwork' is, and
2. To see how students respond to the use of this 'virtual fieldwork'.

Virtual fieldwork is such a new concept that very little has actually been written about how effective it is as a teaching and learning tool. My question then was – if there is so little literature about virtual fieldwork in general, are geography teachers actually aware of its existence? And, if they are, is anyone using it with students in a classroom situation? In order to discover the extent of the use of virtual fieldwork, I sent out questionnaires via PGCE mentors to schools mainly in the eastern region. These questionnaires were aimed at geography teachers as I wanted to find out if virtual fieldwork was being used and if so how and with which students. Response rates were good with the majority of teachers filling in the questionnaire (see Figure 2).

The second aim of the research was undertaken using 30 students, chosen carefully using three specific criteria:

- They were in year 9
- They had chosen geography as one of their GCSE option choices.
- They represented a mixed ability (i.e. ranging from students who were expected to gain end of key stage 3 level 7 to those who could expect level 4)

Students took part in one day of traditional fieldwork at the coast, which included tasks such as note taking, measuring variables and a decision-making activity. On the second day the students were given a number of pre-selected websites to investigate, with different tasks associated with each site, including well-known activities used in the field, e.g. field sketching, note taking. The websites included a river investigation, a coastal investigation and a volcano 'walk'. The first two were specifically selected because it would be possible to actually carry out these tasks during 'real' fieldwork. The final website was chosen because it is unlikely that any school trip would visit an active volcano. After completing the tasks related to each website, the students were asked to complete a questionnaire about how they found the virtual fieldwork. The main factor of interest was how good was the website at giving the students a 'feel' for the place, so questions were focused towards the quality and relevance of the images on the site. Students were asked to rate the images very good, good, OK or poor in terms of them understanding what the place felt like to live/be in.

Virtual Fieldwork Questionnaire

Completing this questionnaire should take you no more than 3–4 minutes. If you would like more information on the research or wouldn't mind giving more in-depth answers please contact me:

1. Have you used 'virtual fieldwork' with students?
   YES – go to question 2 NO – go to question 3
2. If so, which key stage do you mainly use it with? KS3 KS4 KS5
3. If you have not used it, why is this?
   - Don't see the relevance of it
   - Technological constraints
   - Curriculum time constraints
   - Access to computers is difficult at school
4. How did you use the virtual fieldwork site?
   - An 'enquiry' based approach
   - Following a 'walk'
   - Explaining techniques
   - A general 'look and see'
5. How useful did you think the site was for you/your students to 'get a feel' for the place?
   - **Very good.** It was like being there.
   - **Good.** It gives an idea of the general place.
   - **Okay.** It gives some idea of the place.
   - **Poor.** It gives very little idea of the place.
6. Do you feel 'real' and/or 'virtual' fieldwork increases your students' interest in geography?
   - Real
   - Virtual
   - Both

   Reason: _____
7. What part if any do you feel virtual fieldwork (or computer-based simulations) has in the study of geography?
8. If you could design your own 'virtual' fieldwork what would it be?
   - Physical geography
   - Human geography

   Please expand on the above

If you have any extra comments/suggestions please feel free to add these here:

Thank you for sparing the time to fill in this questionnaire.

Figure 2: Teacher questionnaire on virtual fieldwork.

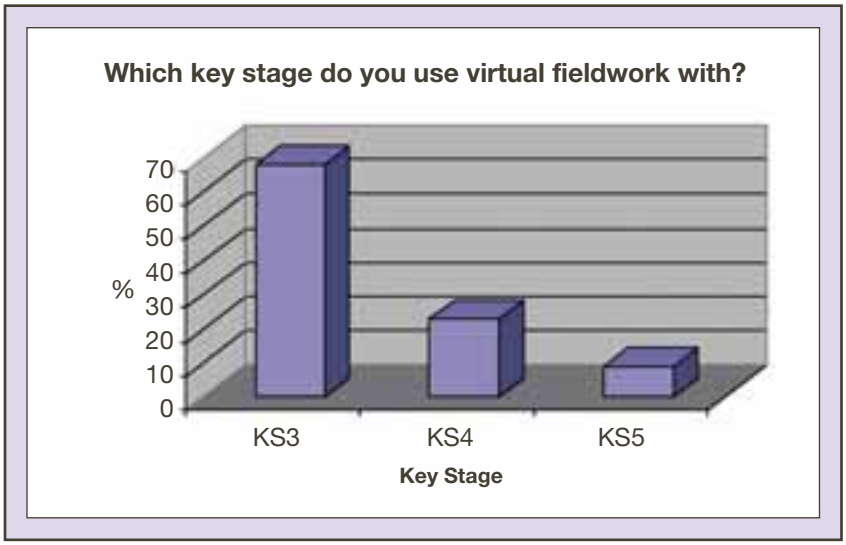

Figure 3: Responses to the question 'Which key stage do you use virtual fieldwork with?' by key stage.

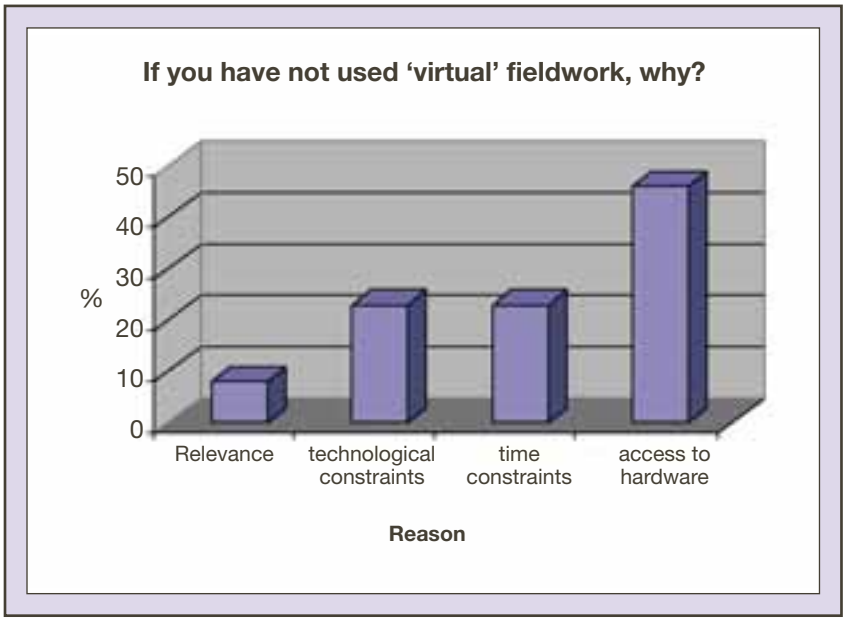

Figure 4: Teacher's responses to the question 'If you have not used 'virtual' fieldwork, why?'

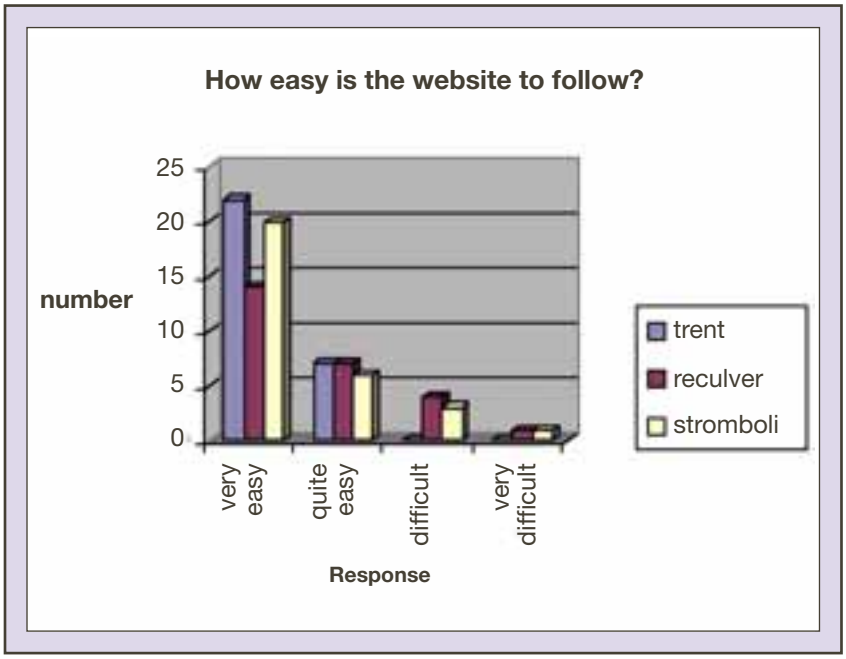

Figure 5: Students' responses to the question 'How easy is the website to follow?

What did the research discover?

Results of teacher questionnaire

Once all the questionnaires were returned it appeared from the results that only 40% of geography teachers said they had used virtual fieldwork, and the majority who had, had done so with key stage 3 students (Figure 3). The reason given for this was that most teachers felt that within key stage 3 there was perhaps more curriculum time to experiment, without the pressure of finishing examination specifications. It is disappointing to discover that key stage 4 and key stage 5 students possibly miss out due to this perceived or actual lack of time to teach geography at GCSE and A-level.

The reasons teachers gave for not using virtual fieldwork varied from constraints on the curriculum timetable to lack of access to computers at school. This was another disappointing result, especially in cases where geographers are not using the materials available due to lack of hardware (or time to familiarise themselves with this hardware) within schools (Figure 4).

Some interesting comments came out of the questions asking respondents what they would like to see in terms of virtual fieldwork. Most felt that physical geography would benefit most from this new medium of virtual fieldwork. As one colleague put it, 'Physical geography can sometimes be quite "dry" in terms of lessons. It [virtual fieldwork] will allow students to visualise landforms and processes they are unfamiliar with more easily'. Also, as a number of physical geography areas tend to be geographically 'remote', virtual fieldwork 'Has the ability to allow students, especially those in urban areas, access to features such as glaciated valleys or river courses'. Finally one respondent felt a good use of virtual fieldwork was to: 'Allow Norfolk students to experience different physical environments to compare them with the relatively "flat" Norfolk area'.

Results from students

Obviously the ease with which students could access and use the specific websites was of paramount importance. In response to the question 'How easy is the website to follow?' most students rated all three sites 'very easy' (Figure 5). However, this may be because the majority of these (mixed ability) students appeared very confident in terms of accessing and utilising websites in general. This bears out the finding from the day itself when the students appeared to be very confident with websites, allowing the teacher to be much more of a 'facilitator' asking higher order questions as he/she moved around the room.

Most students rated the websites as 'good', indicating strongly that they felt that they were better than textbooks. However, it became clear, as the day progressed, that students felt that using the internet was good but not as good as being in that place or carrying out the fieldwork in 'real' life. Most responses from students to this question fell in to two camps. Firstly it was indicated that being there was best; as one student commented, 'You get the whole picture, the sights, sounds and smells'. As another student commented 'You can actually feel the waves breaking on the sea wall'. Obviously the above cannot be replicated virtually. Secondly a number of students commented on the 'social' aspect of the real life visit – as one female student put it: 'It gives you a chance to work with people you don't normally work with'. Linked with this is the time when students are involved in informal discussions and not necessarily doing the 'set' activities. This allows a broader educational experience.

Students were also asked to rate the usefulness of the activities on the websites (Figure 6). Students were not as keen on websites that merely showed a selection of photographs but scored those virtual fieldwork sites which used a more enquiry-based approach more highly.

Conclusion

The findings suggest that virtual fieldwork is not commonly used by geographers in schools due to a number of issues related to time constraints and hardware. On the student front this type of fieldwork was popular, although not as popular as first-hand fieldwork. There is certainly much scope for extending virtual fieldwork in school, not least for the ability to set it for homework.

Ways forward

Although real fieldwork was still the most popular approach with students who took part in the research the question arises 'Is there a place for virtual fieldwork within the geography curriculum in the twenty-first century?' I would wholeheartedly say 'yes'. However, in order for geography teachers to take advantage of the virtual fieldwork opportunities available to their students, a number of issues need to be addressed. These relate to accessibility of hardware as well as teacher and student use and web design, for example:

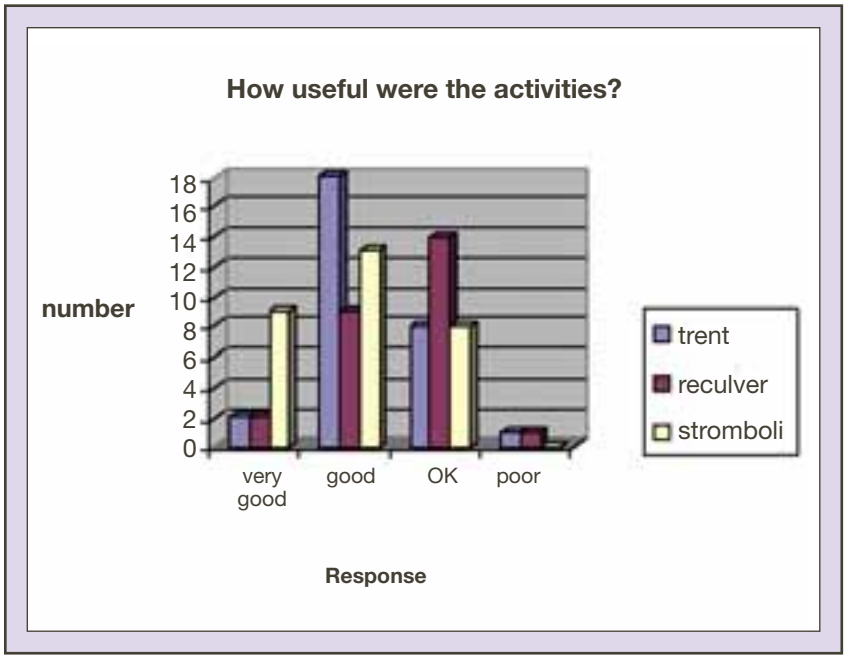

Figure 6: Student responses to the question 'How useful were the activities?'.

- Generally, access to computers within schools/geography departments needs to increase for virtual fieldwork to be taken up more widely
- Geography staff need to become more confident with the use of virtual fieldwork sites
- Students need to be encouraged to investigate virtual fieldwork websites on their own to back up classroom learning
- The individuals and organisations involved in constructing these websites need to ensure that their portals are constantly improved, with, the addition of new or improved facilities and materials, for example, the use of real-time video via webcams.

Finally, virtual fieldwork should not be seen as replacing first-hand fieldwork but become part of the delivery of fieldwork within the geography curriculum, allowing students to appreciate localities in various differing ways. I feel as sites get better and virtual fieldwork becomes more prevalent it will become more popular.

And for students...

How to use virtual fieldwork to gain up-to-the-minute case studies

One of the real pluses for this type of information (i.e. gathered via the internet) is that it has the chance to be up-to-date. Outlined below is a suggested way that students could use websites (including virtual fieldwork ones) to gain case studies of areas around the globe. An extremely useful way to sift through the information on the site is to follow the enquiry approach (The 5 W's). Here students can exploit the site by asking themselves a simple set of questions, Where? What? When? Why? and Who?.

Happy surfing! ■

Acknowledgements

I would like to thank Rob Lodge of the Norfolk Advisory Service for all his help throughout the BPRS project and also the geography teachers and students of Thorpe St Andrew School, without whose help and enthusiasm the research would never have taken place.

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Feedback in the Geography Classroom: Developing the use of assessment for learning

Paul Weeden

> *If improvement in work is to take place, learners must first know the purpose of the task, then how far this has been achieved and finally be given help to know how to close any gap there is between their current attainment and where they want to be* (Sadler, 1989).

Feedback from teachers is an essential part of assessment for learning. It has been demonstrated in a number of research projects that effective feedback is one of the most helpful methods for helping students learn, but many teachers have found it difficult to change their approaches to teaching and marking. This article describes some ways that feedback can be used to promote learning.

Marking

Marking is probably the most common form of feedback used by teachers. Marks are used to sum up students' work. They are a quick recording device for the teacher, often simply meaning 'has done the work asked and got most of it correct'. There is no sense here that learning is involved. Some reasons for not using marks are that:

- students rarely read comments, preferring to compare marks with peers;
- teachers rarely give students time in class to read comments that are written on work and probably few, if any, students return to consider these at home;
- often the comments are brief and do not give suggestions about how to improve work;
- the same written comments frequently recur in a student's book, implying that students do not take note of or act on the comments.

These reasons suggest that much of the time teachers spend marking is wasted because it has little impact on learning. Experience has also shown that in many schools the marking culture is difficult to change.

> *The majority of teachers mark extremely conscientiously. However many schools need to review why and how they mark work to ensure that the significant amount of time teachers devote to it is more effectively used* (Suffolk Advisory Service, 2002, quoted in Depper, 2004).

Dylan Wiliam has commented that:

> *At present a teacher will typically spend more time marking a student's work than the student will spend following it up – which suggests that the teacher's work is less valuable!* (Wiliam, 2002).

Written comments

Written comments are the most common way for the teacher to have a dialogue with everyone in the class, but most comments are either unhelpful or not used by students. This is the central dilemma in changing practice. Teachers therefore have to develop strategies that make comments more effective in developing students' learning and find ways to engage the students in the dialogue.

Comments take a long time to write and for some activities are of little use. If the task is to draw and label a diagram of the structure of the rainforest, then there is little to comment on. Such tasks simply need checking to ensure learners have transferred the information from their textbook or the board into their own books. Checking does not usually need teacher expertise and so for this type of task it is possible to use self-checking, peer-assessment, or sample checking by the teacher of perhaps a third of the books each week. Finding the right balance between comment-marking and checking work not only provides the time for devising useful comments, it begins to move the responsibility for involvement in assessment onto the shoulders of the learners. This is an important step towards the development and encouragement of self-assessment.

Useful comments, written every two to three weeks, are more helpful than a mark on every piece of work. Some activities are easier to comment on than others, particularly those that are challenging and require reasoning rather than simple recall. Teachers can manage the process by reassessing their schemes of work to ensure that there are enough of these types of activity reasonably spaced throughout the topic. This makes the marking load more manageable for the teachers, provides regular guidance to the students, and at the same time provides students with the opportunity to work on improvement before the next detailed feedback.

Feedback can be given most usefully on tasks that require more extended writing. This is because these tasks provide the teacher with a richer source of evidence about the learning of individual students so more focused advice on their work can be given. Examples of appropriate tasks might be:

- Why are floodplains poor locations for housing?
- Why is the human cost of a disaster greater in LEDCs, while the economic cost is higher in MEDCs?
- Where would you be most likely to experience a multi-cultural environment? Where might you encounter mono-cultures?

While initially there might be some resistance to the increase in writing, experience has shown that students quickly come to realise that these types of activity provide the starting point for the teacher to coach them towards higher attainment.

Effective comments

Questions are useful ways of framing comments. Compare these two comments:

1. Add notes on the pattern of population density.
2. Where are the most crowded and least crowded places? Can you suggest why some places are more crowded (densely populated) than others?

Whereas the first comment gives the student a task to perform to improve his or her work, the second comment initiates thinking immediately. This enables the learner to discuss his or her thoughts either with the teacher or a peer and its questioning nature encourages the student to initiate improvement.

Targets are another effective way of giving feedback and the more focused the target the better. Try to avoid

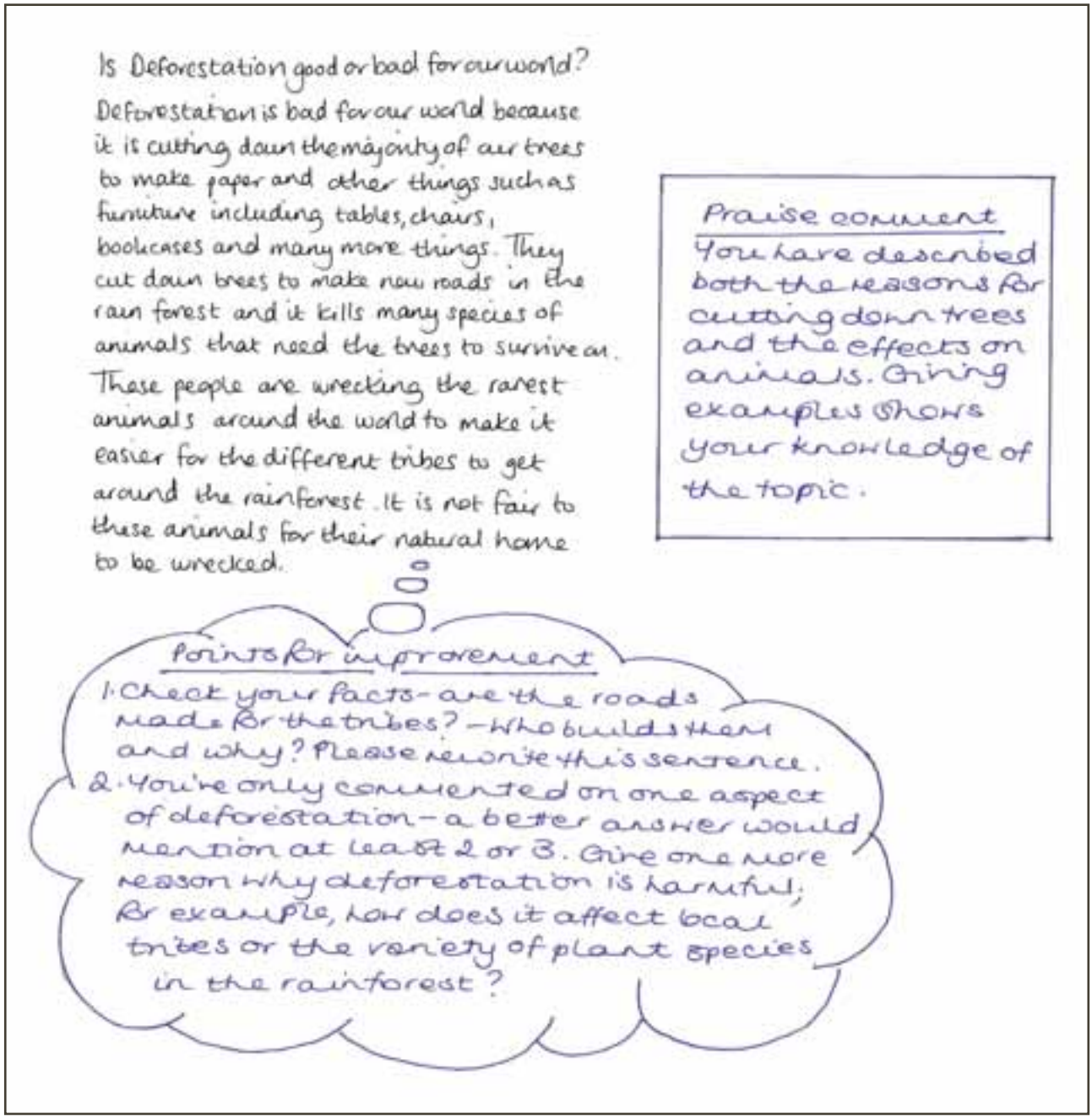

Figure 1: Annotations of a student's work using effective comments.

general statements as in the first example above. Points that need to be considered next time may be useful but comments that prompt immediate action, such as those below, are better.

Well done John, you've chosen an appropriate graph to present the results.

Now can you refer to the graph when describing the pattern?

Can you make your description more precise by including percentages?

In many cases, an effective comment relates back to the success criteria or descriptions of quality that have been shared with or devised by the students before they attempt a task. In this way, students work towards success or quality by considering the criteria as their work progresses. The feedback is then the teacher's judgement which can be matched against the student's own judgement of quality. For example, suppose a student is asked:

How does globalisation in the fashion industry affect people at a local level? What happens if the chain is broken?

What is needed is:

- A comparison of your experiences of the global fashion industry with that of the factory workers at the start of the chain: the advantages and disadvantages of globalisation for consumers and producers.
- A description of how a break in the chain will affect different people's lives.
- An explanation of the interdependence between global and local effects.

Effective comments that relate to these criteria might be:

You have described the different experiences of the consumer and producer. You have listed some advantages and disadvantages. Now you need to write a paragraph that summarises these and includes the terms globalisation, producer and consumer.

What might happen if people in Britain chose only to buy clothes produced in Britain?

Sometimes directing students where to go for help and what to do to improve can be effective:

Look back at the map and use the atlas to give the names of countries where there are car factories

Go back to the picture and look for three more features that you can describe. For each one suggest why it is like that or ask a geographical question about it.

'You are mixing up the terms primary, secondary and tertiary industry. First check your glossary for explanations of these terms, then see if you can rewrite this paragraph using the terms correctly.

Some good points made about interdependence. Now you need to give more precise examples. Take a look at how Anil has done this and ask him to help you improve this piece.

Creating the improving classroom

The opportunity to react to and act on comments is essential, particularly when formative ideas are being introduced to classes. The learners need to see that the teacher really does want a piece of work improved and that improvement is being monitored. This means providing an opportunity in lesson time for students to read comments on their work and to discuss with their teacher or their peers which specific improvements are needed. In some instances, it is also useful to allow time for the improvements to be made in class.

The ultimate user of assessment information is the learner and the culture needed in the classroom to support and encourage the learner is one of success, backed by a belief that all can achieve. While this can help all students, it gives particularly good results with low attainers, where it concentrates on specific problems with their work. One method of finding the correct balance and tone to encourage redrafting and further improvement is 'two stars and a wish'. For example:

This work shows you have good locational knowledge and can draw neat accurate maps. Now you need to describe the pattern that the map shows using geographical terms such as north, south, clustered and dispersed.

Figure 1 gives a second example of an effective comment. In this case there is one praise comment and two suggestions for improvements.

A third example involves reading all of the student's written work through very carefully before making any annotation. Next highlight three places in the writing where the student best met the learning intention(s) of the activity. Then indicate with a star where an improvement can be made to the original work. Draw an arrow to a suitable space near the star and write a 'close the gap' prompt to support the student in making an improvement to their work. These prompts can be provided in a variety of forms:

Reminder Prompt

Most suitable for higher attaining students, for example:

- Say more about ... (why a rain shadow occurs).

Scaffold Prompt

Suitable for most students as it provides more structure to improve the work, for example:

- A question – Can you explain why it rains over mountains?
- A directive – Describe why the West of Great Britain is wetter than the East
- An unfinished sentence – Wales is wetter than East Anglia because...

Example Prompt

Particularly supportive of lower attaining students, for example:

- Choose one of these statements and/or create your own...

Mountains are wetter because when air is forced to rise over them it cools and the water vapour in it condenses into water droplets.

or

More rain falls on mountains near the sea because air blowing from the sea contains more moisture.

The final part of the process involves the students' engaging with the comment. Ensure that you provide time in class to enable students to read and respond to the 'close the gap' comment. This time could also be used to follow up individual needs with specific students face-to-face. Finally, remember to comment upon their improvement at the first available opportunity (adapted from Clarke, 2005). ■

References and further reading

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THE NEW INSPECTION SYSTEM

From September 2005 there will be a very different 'light touch' inspection regime, with two main types of inspection:

- **School inspections** will focus on schools' own self-evaluations. They will be conducted at very short notice and last no more than two days. There will be little time for inspectors to observe or evaluate individual subjects in detail, so Ofsted will make additional subject inspections.
- **Subject inspections** will focus on individual subjects and curriculum areas from the Foundation Stage through to post-16. Schools and colleges will be sampled: some will be chosen because of their reputation for good practice. Subjects will be inspected on a rolling programme, so a secondary school might expect to have an inspection in one subject every three years.
- Geography will be inspected in at least 30 primary and 30 secondary schools each year. The aim is to obtain quality evidence linked to issues and then consider how the development of geography can be supported. There will be a full report on each subject every three years, with the first geography report in 2006.
- Subject inspections will include lesson observations, looking at pupils' work, discussions with staff and pupils and a discussion of the school's self-evaluation. There will be little or no notice for these inspections, which will be conducted by HMI and subject experts: primary inspections will take one day, and secondary inspections two days.

In addition, Ofsted will conduct national thematic surveys, for example on the National Strategies.
Source: http://www.ofsted.gov.uk/ofsteddirect/
2005 Inspection Framework (draft):
http://www.ofsted.gov.uk/publications/index.cfm?fuseaction=pubs.summary&id=3861

BETT Show

11-14 January 2006 **Olympia, London**

In a move to enhance the educational experience for delegates, the GA, along with other subject associations, is working with the BETT organisers to present more subject-specific content for the 2006 BETT show.

As well as the traditional seminars there will be a new Subject Specialist Advice Centre with geography education specialists available to advise delegates as follows:

Weds 11 January
David Mitchell, **GA ICT Projects Leader**

Thurs 12 January
Dr David Lambert, **GA Chief Executive**

Fri 13 January
Di Swift, **GA CPD Projects Leader**
Di will also offer a short presentation on 'curriculum-led professional development' using exemplars from the GA website.

Sat 14 January
Wendy North and Denise Evans, **GA ICT Working Group**
Denise and Wendy will also lead a geography seminar on 'geography starters and research frames' at 10.30am on 14 January.

GA Staff will be on hand throughout the show to advise delegates on membership services, resources and forthcoming GA events.

For further information visit www.bettshow.co.uk

New resources

Teachers who would like to review resources for *Teaching Geography* are invited to write to **Ian Selmes** at GA headquarters

BOOKS

Geography: The Global Dimension Key Stage 3 – Learning Skills for a Global Society

David Lambert, Alun Morgan, Diane Swift and Ali Brownlie
London: DEA, 2004
32pp, 21 x 30cm
Pb: £7.99, ISBN 1 900109 15 8

At various times any serious academic department of geography needs to take stock of its provision of the contemporary issues it delivers. This 32-page book provides such an opportunity for reflection, evaluation and possible evolution. Written to help teachers develop key stage 3 schemes of work incorporating global and international development issues and perspectives, it delivers its brief well in a splash of colour and sound educational rhetoric.

Why and how we teach the global dimension is central to this book. The development of key learning activities such as developing talk, maps, sustainable futures, empathy and understanding, interpretations and partnerships are all explored following the teaching and learning sequence of 'initial stimulus – mediation of geographical understanding – making sense of the matter – refining thinking – reflection'. *Global Dimension* includes lots of useful websites, addresses and alternative literature are included at the back of the booklet for further help and guidance.

The book does challenge your current practice with regards the global dimension and at £7.99 (retail), every geography department in the country should have a copy (alternatively, the document and further associated resources may be downloaded from www.geography.org.uk/global – so there really is no excuse!).

You may not necessarily agree with all of its contents in terms of applicability to your own school or with some of the examples given but it will certainly stimulate discussion at departmental meetings and promote the importance and understanding of being global citizens.

Paul Angel
The King's School, Tynemouth

Learning Through Enquiry: Making sense of geography in the key stage 3 classroom

Margaret Roberts
Sheffield: Geographical Association, 2003
212pp, 19 x 24cm
Pb: £24.99, ISBN 1 84377 095 4

Wanting to read a truly inspirational book to inform and improve your teaching?, then *Learning Through Enquiry* is the book for you. While it is aimed at key stage 3, the concepts and the theory of enquiry-based student-led learning can be applied to all levels.

The book is separated into two main parts. The first details the theoretical pedagogy on which enquiry-based learning is based. It refers to what enquiry-related learning means, why it is so integral to the geography curriculum, the framework for conducting an enquiry and the importance of literacy (incorporating reading, writing, speaking and listening) and numeracy to an enquiry approach.
The book starts by stating the historical and theoretical context of enquiry-based learning, enabling the reader to appreciate the way in which it has developed through time and the reason why it features heavily in a number of different subjects at key stage 3. It then states the need to develop the role of language and the need for students to understand what they read and be able to reconstruct it as their own. The author discusses strategies such as using directed activities related to text, using research data, ensuring purposeful writing strategies in the form of writing frames and encouraging student reflection on their own learning. An interesting chapter on managing discussion work follows and it is concluded by the role of numbers in an enquiry. A particularly interesting idea is introduced on how to make numbers 'real' and intelligently 'guessing' numbers, which are particularly applicable to development statistics.

The second part of the book demonstrates and gives practical advice on how to do focused enquiries using the different categories of geographical enquiry such as describing, explaining, values, surveying and futures. This section is particularly informative on how to sequence an enquiry and is linked to Bloom's thinking hierarchy. The examples clearly demonstrate how to manage, sequence and evaluate students' learning. An interesting part of enquiry-related learning is using students' prior knowledge of locations and a number of suggested activities use mapping skills, marketing a place and forecasting the future as purposeful activities to consider representations of places.

Finally, the reference section is both comprehensive and informative – it clearly references those websites mentioned in the text.

In conclusion, this textbook is both inspirational and a necessity for all geography departments. It outlines the way in which geography needs to be learnt and how students can be given the skills to really understand the world today. While the format of the book is not readily enticing to read, the way in which exemplar material is displayed in grey boxes easily highlights those strategies that you can adapt and use with your students. The considerable price is fair for the content. All geography departments should invest in a copy and student teachers must be encouraged to read it on PGCE courses. As the author states in her preface 'the frameworks are presented to stimulate thinking and curriculum development' and this is why this book is so valuable.

Rachel Heard
St Peter's Catholic School, Guildford

Badger Key Stage 3: Geography starters book 3

Fred Martin, Lisa Mitchell, Charlotte Togni and Gary Dawson
Stevenage: Badger Publishing, 2004
88pp, 21 x 30cm
Pb: £25.00, ISBN 1 84424 140 8

The use of starters in geography lessons is now seen as being integral to teaching as part of the Key Stage 3 Strategy. *Geography starters book 3* contains a range of resources for short starter activities for year 9; other books in the series cover years 7 and 8.

The spiral-bound book contains 30 activities on the topics of development, landscapes, tourism, crime, environmental issues and globalisation, amongst others. Each activity contains a brief outline of how it should be taught, highlighting new terminology and suggested ways in which the activity can be extended to challenge the more able.

A 'Take it forward' section in each activity provides a suggestion to make the starter the basis of an entire lesson. Some

of the ideas (such as bingo, card sorting activities, odd-one-outs, most likely to) will be familiar to teachers who use the *Thinking Through Geography* books, but many of the activities contain interesting, up-to-date, original and well laid out ideas. The activities are planned to last around 10 minutes, but may last longer, when for example, students are asked to verify statements as being true or false by checking a table of socio-economic data. In addition, the activities can be easily adapted to suit an individual group's needs. The resource pages are clear and well presented, although some of those based on the colour photographs may lose impact in black and white copying.

For the price, this is a good value and useful resource to help in planning starters to specific lessons, and perhaps more importantly it also serves to provide a range of ideas which can be adapted and transferred to other topics across the whole of key stage 3 and beyond.

Robert McGeorge
Hampstead School, London

VIDEO/DVD

The Student, The Nun and The Amazon

James Newton and Sam Clements, 2005
30-minute VHS video or DVD, £12.99
Contact Sam Clements on 07869 145971
(e-mail: sam_orang_utan@hotmail.com)
Website: www.studentnunamazon.com

Follow Sam Clements ('the student'), on his travels from Manaus to meet Dorothy Stang ('the nun') in the depths of Amazonia's tropical rainforest. Together they seek to show the problems created by large-scale illegal deforestation and how a small-scale project (organised by Dorothy) has persuaded local 'slash and burn' farmers to become sedentary in sustainable villages as a means of stopping this destructive practice.

The video meets its aim and has so many other applications. For example, the excellent and varied cinematography (including some exquisite aerial footage), coupled with the enthusiastic and deeply descriptive manner of the presenter, makes this video an excellent way of introducing tropical rainforest and the tropical climate. Additionally, careful resourcing will render the video useful for investigations of the varying levels of development within Brazil, sustainable development, self-help schemes and regeneration of the tropical rainforest.

Presented in a diary format and taking an enquiry approach, the occasional naivety of the presenter may rankle older viewers (i.e. teachers), but will probably appeal massively to a younger audience. There is a great sense of intrigue and adventure that pervades the whole piece, grabbing the viewers' interest and maintaining it throughout.

Definitely suitable for key stage 3 and above, younger students may struggle with parts of the video. For example, an interview conducted with Dorothy is captivating but suffers as it is grammatically heavy and rather jumps around the issues involved – younger viewers would certainly require support. This video is by no means an 'off the peg' resource for teaching one part of a curriculum and does not come with additional resources. While some may view this as a problem, the need to create resources means that the adaptable video can be tailored to suit the level and pedagogical requirements of any cohort, therefore rendering the video useful in some way for all key stages.

This inspiring yet ultimately sad adventure (in the sense that Dorothy Stang was martyred for her beliefs in February 2005) will appeal to students of all ages and levels of ability. The flexible nature of the resource coupled with the range of contemporary issues covered in the piece mean that it will have many uses within the curriculum of geography, education for sustainable development, citizenship and science.

Emlyn Wright
Verdin High School, Cheshire

OTHER MEDIA

Hog Cards: Geog Hog

John Griffiths
Carmarthen: Crown House Publishing Ltd, 2004
54 cards, 7.5 x 11cm
Price: £12.99, ISBN 1904424333

Geog Hog cards tackle the issues of statistics, numeracy and motivation in geography head on. They incorporate relevant and accurate facts on the physical, social and economic factors of world nations, all of which are presented in a clear and manageable format. Students can use the facts to rank nations, improve their spatial awareness by replicating world maps and even play rummy (using the continents or first letters of nations). All have a common thread of improving spatial awareness and will appeal to students of all ages, although students in key stage 3 enjoyed the content and learning styles of the cards most. These *Hog Cards* are a breath of fresh air and it is nice for students to be exposed to the geographies of more unfamiliar nations included in this pack, such as Kiribati and Eritrea.

I would like to see a few 'world map' cards provided in the pack so that every student who is participating can have their own copy. This would make the resources easier to use in settings other than the classroom.

At £12.99 for the amount of resources contained on the *Hog Cards* and the enjoyment my students experienced using them the price is very reasonable. However, the cards can be used only with groups of five students, six packs would be needed to engage an average sized class in the activities; therefore, some may consider £77.94 too expensive.

Hog Cards may be a small pack, but they are packed full of geography and enjoyment. Geography teachers should be looking to incorporate these as a fun, rewarding or motivational aspect of their lessons, encouraging an intrinsic interest in the subject and buzz in their classrooms.

Nathan Morland
PGCE Student, University of Nottingham

H₂kn0w

Christian Aid
London: Christian Aid, 2005
Four themed inserts each containing A3 poster and 8 postcards, 21 x 30cm
Free from www.christian-aid.org

H₂kn0w is a water activity pack for schools. It contains four sections: Floods and droughts, Things water brings, Water and health, and Access to water. The content and language are most appropriate for key stage 3, but are also suitable for key stage 4.

The core of the pack is the 32 tear-off postcards. Some have photos and water facts (e.g. 'Around 6000 children die every day from drinking unsafe water'), while others describe specific aid projects. Topics range from latrines in Nairobi to arsenicosis in Bangladesh and water pipes in Afghanistan.

The most engaging cards are those quoting local people: 'Our domestic water is often not running,' explains Shawki, a Palestinian farmer who lives near Ramallah in the West Bank. 'So we sometimes have very little water to drink. Over the road we see the sprinklers on the lawns of the Israeli settlers'.

A useful starter is provided by a water quiz and 'calculators' to estimate students' water consumption. The pack also contains four A3 posters and has a link to further activities online.

The pack is a helpful aid in teaching students to value people in distant places. The quality of research and presentation are excellent, and year 8 students found the examples stimulating. The material would also provide excellent stimulus for a water-related assembly. It also contains imaginative fundraising ideas, although some might find its advice to 'Give, act, pray' a step too far! I thought the cover graffito said 'Divine'; in fact, it reads 'Dive in'.

Chris Pyle
The Perse School, Cambridge

RESOURCE PACKS

Look At This (secondary pack)

Stuart Thompson
Cambridge: Chris Kington Publishing, 2005
Pack contains: 4 photographic books (31 x 38cm), 12 A5 picture cards, two posters (60 x 80cm) and a 28-page teachers book (21 x 30cm).
Price: £47.50, ISBN 1 899857 70 2

Look At This is an ambitious classroom resource. The teachers' booklet provides a geographical pathway into four high-

quality books of coastal photographs. These are not coffee table commentaries; the authors have worked hard to develop focused lesson ideas. Their broader aim is to develop students' skills of observation and analysis, to open eyes to see landscapes anew.

Each colour page of the photographic books is nearly A3, and image quality is impressive (low resolution previews can be found on: www.saltwater.co.uk).

Burn follows a Norfolk river to the sea; *Strand* exposes the ripples of Hebridean beaches; *Flora* looks at coastal vegetation; and *Chipshop* takes in the tacky minutiae of a beach café. You can taste the vinegar!

The secondary teacher's book is perhaps more ambitious in scope than the primary one (available separately). It is structured by learning activity, under headings of literacy, labels and frames, and art and drama. Activities such as 'Beyond the frame' and 'Scribble' ('a form of academic graffiti') are both entertaining and closely harnessed to student learning.

In the age of the disposable digital image, *Look At This* is swimming against the tide. It is a striking and memorable quality resource for the classroom.

Chris Pyle
The Perse School

Geography 360° Interactive Presentations 1

Catherine Graley
Oxford: Heinemann, 2004
112pp, 21 x 30cm Teacher's guide (plus 23 x 31cm ring binder and interactive CD-Rom)
Hb: £210.00, ISBN 0 435 35651 8 (CD-Rom), ISBN 0 435 35652 6 (Teacher's guide)

This is designed to support the *Geography 360°* textbook and comprises two CD-Roms of interactive presentations and an accompanying file of teachers resources to be used alongside the CD-Rom.

This is a costly product, but the price does include a full network licence. The software took approximately 10 minutes to load on to a single machine but was relatively straightforward. So what do you get for your money?

The CD-Rom comprises a series of presentations, most of about three or four slides, on topics found within the textbook. These can be used either as a whole-class activity led by the teacher or used by individuals at a computer and this flexibility makes it suitable for those with limited PC access. The software also links to most interactive whiteboards. The presentations are interactive with a range of extra information accessed through clicking on the slide, but do not provide any question and answer type activities. The teacher's resources file does offer some lesson plan ideas for using the presentations which are helpful for non-specialists. There are some excellent up-to-date images and animations which support areas in the textbook, making access for less able students easier. However, the presentations do not match exactly with the textbook or student workbooks and this is a shame as there are limited follow up activities provided. It is a key stage 3 resource but there are elements which can be used at key stage 4 (the investigation section is particularly useful for any age). Not all the interactive elements of the slides are very clear about how they should be used which is a challenge for those who are not ICT literate, but as most of them follow the same format it does not take long for them to get the hang of it.

Overall a fairly expensive but useful resource, which is worth getting if you have some spare money in your budget.

Alex Moody
Hampton School, London

Geography in Action

Thorpe Park
Chertsey: Thorpe Park, 2004
Eight information cards/reference sheets and a poster, 21 x 30cm
Pb: Free to schools booking a visit to the Park

This is the latest resource from Thorpe Park, produced in conjunction with teachers and is designed to provide activities to complete before, during and after a visit. The pack is sent free to all schools booking a visit to Thorpe Park with additional sheets supporting the resource available online (see website: www.thorpepark.com).

The pack itself consists of reference sheets, maps and aerial photographs concerning site location/history, as well as statistics (about such things as visitor numbers). One information sheet contains a table allowing teachers to relate activities to the national curriculum. Finally there are a number of student activity sheets, which can be used within lessons.

All the sheets (except the A3 map) are supplied in a black and white format, which allows photocopying. The reference sheets are written in 'student friendly' language and contain useful information on why the area was chosen and how the park has developed. The statistics sheet contains valuable information; the only drawback is that this is up to 2000 only. The maps/photographs are good quality and can easily be used to develop map/aerial photography interpretation skills. The student activity sheets contain good information on how the development of the theme park affected the area in terms of social, environmental and economic impacts.

Overall the resources appear to be very well thought out and could easily be used by both geography (key stage 3 and 4) and leisure and tourism courses (key stage 4), whether or not a visit was planned to the park.

Richard Taylor
Thorpe St Andrew School, Norwich

Ian Selmes is Head of Geography, Oakham School, Rutland.

Author index

Subject index

Each subject is immediately followed by the authors or publishers name, which are classified under that subject. For the titles of articles or reviews, refer to the author index above.

Secondary Geography Handbook

Edited by David Balderstone

Geographical Association

Section A

Geography matters

Includes chapters on:

- What's the point of teaching and learning geography
- Geography – a dynamic subject?
- The geographical mind
- Looking at landscapes
- Changing the subject

Section B

Teaching and learning geography

The most substantial section includes chapters on:

- Learning through geographical enquiry
- Teaching and learning with maps
- Language and literacy
- Developing numeracy skills
- Using textbooks
- Strategies for values education
- Promoting thinking skills
- Using ICT to enhance learning
- Media literacy
- Homework
- Let's get physical!
- Learning together

Section C

Geography for all

Includes chapters on:

- Inclusive geography
- Gifted young geographers
- Gender issues, and Geography and race
- Tackling disaffection and underachievement

Section D

Assessment for learning

Chapters in this section cover:

- Target setting
- Teacher assessment
- Developing transferable skills
- Preparing students for GCSE and A-level geography

Section E

Developing as a geography teacher

Although the whole book is underpinned by continuing professional development, this section includes chapters on:

- Learning geography in primary schools
- Supporting non-specialists and
- Research in geography education

References and index

Coming 2006

Professional Development Unit

Managing Fieldwork
Thursday 30 March 2006
Preston Montford FSC Centre, Shropshire
Saturday 1 April 2006
Brockhole FSC Centre, Lake District

Overview

Organised jointly with the FSC, this full-day unit is designed to support teachers in taking pupils outdoors. It is aimed at teachers and heads of geography responsible for geography fieldwork, and will be of particular interest to Educational Visits Co-ordinators.

Aims and outcomes

Participants will gain confidence and knowledge about preparing and organising out-of-school visits, and understand how to carry out a suitable risk assessment for school visits. The unit will cover:

- Fieldwork's contribution to geography
- School and LEA guidelines
- Planning and preparation
- Risk assessment
- Hazard identification
- Different approaches to teaching and learning outdoors
- First Aid

As well as the course and supporting materials, each delegate will receive a copy of Managing Safe and Successful Fieldwork, newly published by the GA/FSC.

Course presenters

Tony Thomas is Chief Executive of the Field Studies Council. Nick Lapthorn is Head of Centre at Juniper Hall Field Studies Centre. Andrew Turney is a member of the FSC Advisory Team for Health and Safety. Paula Richardson is a qualified First Aid trainer with many years' experience running health and safety courses for local authorities. All presenters are members of the GA Field Studies Working Group.

Price £250.00 (GA members), £350 (non-members) includes refreshments, lunch and all course materials.

Further details are available from Lucy Oxley (loxley@geography.org.uk).

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