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## **Learning through ICTS in the environmental justice movement: case studies from Scotland**

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Historically, social purpose adult education was linked with progressive struggles for social justice, equality and democracy, and its contribution waxed and waned depending on the vibrancy and demands of wider social forces in society. However, these forces have altered considerably over the past century. This is not the only important difference in today's context. Information and communication technologies (ICTs) are having an impact on the nature of social and political conflicts by creating new sites of struggle and new means of participation in social action. They also have a potential impact on the process of individual and social learning in movement activities. If social purpose adult education is to reassert itself as a resource for progressive social movements, it will have to reconnect with these struggles and adopt new ways of allying itself to their cause. In this paper we draw upon ongoing research into the environmental justice movement in Scotland, which focuses on the contribution of ICTs to learning and participation.

The specific objectives of our research are as follows:

1. To show how learning and action in social movements and campaigning activities are mediated by the use of ICTs.
2. To examine the contribution social learning makes to the identity of activists and how this sustains their participation and informs their actions.
3. To evaluate the role of ICTs in attracting new involvement in movement activity and in influencing the degree and quality of participation.
4. To develop a dissemination strategy to inform social movement activists, academics and policy makers.
5. To develop a conceptual and methodological framework for further studies of ICT mediated learning in social movements.

The third question, in particular, is the focus of this paper, although we start with some general issues about social movements as contexts for learning and action.

### **Social movement learning: some characteristics**

We are interested in a broad range of learning that occurs in social movements. This might be informal, formal, intended, accidental, the result of systematic study, or a combination of these. It has a social as well as individual dimension. The process of learning in movements is not linear and probably has to be understood in terms of 'leaps and bounds' accompanied by setbacks and relapses! Social movements and their campaigns are very distinctive contexts for learning. The importance of

context for the nature of the learning experience, rather than the degree of in/formality, is emphasized in recent research (see Colley, Hodkinson and Malcom 2002).

The significance of social learning is developed in Lave and Wenger's (1991) account of 'peripheral participation' through which learners acquire identities, meanings and competences by repeated interaction in a 'community of practice'. Social movements are distinctive communities of practice because they develop a common purpose, require the active participation of people, involve commitment to take collective action and may be involved in conflict of one kind or another. Moreover, learning can occur through activities which are not primarily about learning. Foley's (1999) study of an Australian environmental campaign makes the point that it was only when framed by the researcher as 'learning' that his respondents began to recognize and reflect on the knowledge and skills they had acquired. Crucial for this research is the claim made in Wildermeersch and Jansen's (1997) account of social movements in the Netherlands that their effectiveness is enhanced through social learning. They identify the following characteristics of social learning: it occurs in locations and relationships outside formal educational contexts; it has a moral component as well as being concerned with the acquisition of knowledge, skills and identities; the group is in control and has the potential to maximise its learning by collaborative and co-operative patterns of interaction and communication. It also involves internal processes of dialogue as well as public debate outside the movement. What impact ICTs may have on these characteristics is as yet unknown.

There is a dearth of relevant studies of social movement learning according to a recent international literature review (Hall et al. 2005). Learning in movements is neglected primarily because activists tend to focus on achieving their goals whereas academics have mainly researched their cultural, political and sociological dynamics. Also in the field of adult education empirical studies have focused more on formal learning contexts (Elsdon et al. 1995 is an exception). There has been some research on the use of computers and the Internet for adult self-education and informal e-learning (Selwyn et al. 2006; Cook and Smith 2004), but not in the context of social movement activity.

### **Social movements and ICTs: some issues**

Blumer (1995) defines social movements as 'collective enterprises seeking to establish a new order of life'. This task of transformation cannot be achieved, however, without learning new social and cultural practices. To achieve their long-term goals social movements need organisational resources, the capacity to sustain activists and the ability to elicit support from a wider public. They therefore need to attend to their communication strategies and to develop effective learning processes. Eyerman and Jamison (1991) argue that the distinctive feature of social movements is their 'cognitive praxis', by which they mean new knowledge, alternative world-views and technologies, as well as new institutions and organizations which movements generate. Learning takes place in the social, cultural and

cognitive spaces created by movements. The significance of ICTs is that they add a *virtual* dimension to these spaces, thus altering their temporal, geographical and dialogical attributes. The interactive capabilities of the Internet are increasing rapidly with the emergence of user-controlled communicative and networking environments. These developments have the potential to reconfigure relationships and learning due to changing patterns of authorship, production, consumption and identity formation, all of which have implications for the *qualitative* dimension of communication for learning. Web blogs, wikis and the various new forms of online social networking have far-reaching implications in structured, formal e-learning contexts (Bayne 2006). Why not for learning in social movements too?

It is important to examine the potential of social learning to foster progression from 'peripheral participation' into full membership of a 'community of practice'. Research shows that ICTs can provide an easy entry point for those new to taking social action. Brunsting and Postmes (2002) demonstrate, for example, that peripheral members of a movement are more easily persuaded to participate in online actions than offline actions. Also, in a study of trade union activism, Sawchuk et al (2002) claim that activists may be encouraged by e-learning because its pacing and anonymity can be controlled by the learner. It helped novices to develop basic skills and sensitivities at the same time as allowing mentoring into union activism. However, their study focused on formal e-learning workshops. Can ICTs mediate processes of social and individual learning in social movements?

Another issue to address is that collective trust - important for movement action - is usually associated with face-to-face contact. ICTs may widen the net of those participating in movements, but what types of common bond do they generate? Is the relative fluidity of Internet identity – and its tendency toward anonymity – reconfiguring collective action and commitments? Interestingly, Brunsting and Postmes (2002: 550) argue that online action is strongly driven by cognitive calculations and is 'especially suited to persuasive collective action rather than confrontational action'. This implies that particular types of online action are intrinsically educational and that some forms of offline action may be marginalised in the process. The role of social learning in the relationship between online and offline action is therefore important to investigate in order to understand what is happening more clearly.

Furthermore, there is a potential 'digital divide' emerging within some movements, where ICTs and digital ways of acting and learning risk alienating activists who are not in possession of these skills and the literacies required to use them. How movements respond to this problem is important. ICTs may also raise interesting and important questions about the extent to which movement activity creates the collective identity of a 'community' or, alternatively, simply generates a series of contingent alliances formed around specific and limited objectives.

**Note on 'environmental justice'**

Current thinking suggests that the traditional categorisation of environmentalism as a movement of the new middle class in the 'developed' countries needs to be corrected by recognition of a widespread environmentalism of the poor in defence of the material environment on which they depend for their livelihood and health. This environmentalism of the poor, or environmental justice movement, comprises social groups whose marginalisation corresponds with environmental degradation. The environmental justice movement has its origins in the USA in an alliance of community-based campaigns against local pollution, disproportionately affecting African-American neighbourhoods and other poor communities of colour.

In the UK environmental justice activism explicitly focuses on ecological concerns in poor and marginalised communities (Agyeman et al. 2003). In Scotland the philosophy of environmental justice explicitly informs the work of the national organisation, Friends of the Earth Scotland (FoES). It seeks to support and link local campaigns in order to develop a vibrant environmental justice movement and employs educational methods and resources to achieve this, including web-based distance learning (Scandrett et al. 2005). It also aims to connect local environmental justice struggles with the wider policy context and has had a significant impact on devolved policy development in Scotland (Agents for Environmental Justice and Scandrett 2003, Dunion 2003). In the longer term, FoES's success in developing an effective environmental justice movement will depend to some extent on the process of communication and learning that occurs between it and local campaigns.

### **The research: the role of ICTs in social movement learning**

This ERSC-funded research project began in May 2007 and is now in the final stages of data gathering and the beginnings of analysis. It involves ethnographic work focusing on two case studies of local environmental justice campaigns and a third case study primarily drawing on survey data from website questionnaires completed by FoES members.

The three case studies involve very different types of communities. The occupational community at National Semi-Conductor is largely non-unionized, female employees, based within a former shipbuilding area of the Clyde Valley. Their campaign to highlight the health risks of working in the industry is called Phase 2 after the original campaign in the USA (Phase 1) which led to action exposing the occupational health hazards in microchip processing plants. The location of the anti-salmon fish farming campaign is the Scoraig peninsula in the far north-west of Scotland where people make their living primarily as crofters. The area, which has a distinctive history, was depopulated in the early 1960s. It now has a resident community of some 60 inhabitants comprising former residents, newcomers escaping city life and second generation families who have returned to their roots. FoES, in contrast, is a largely professional organization with a national remit and membership which represents a geographically dispersed 'community of interest'.

ICTs have been used in very different ways in each of our case studies. These can be categorised as follows: non-use; minimal use but symbolically important; commonly used and facilitative; commonly used but disruptive; strategically used and transformative.

### *Non-use*

People included in our case studies are socially, culturally and economically diverse, and this has influenced how they have used ICTs in their environmental campaigns. The non-use of ICTs is not merely a technical issue. As Selwyn (2003) points out, there are different discourses of 'non-use' including 'material and cognitive deficiency', 'technophobia', 'ideological refusers' or simply lapsed users (as distinct from non-users). He is critical of the assumption that ICT use is inherently a 'good thing' and argues that it is important to see use and non-use as products of both individual agency and collective influences. These distinctions provide us with a more complex account of why ICTs may or may not be used in particular campaigns. Each community consists of heterogeneous members with different attitudes towards ICTs and different degrees of involvement and, as a consequence, their use of ICTs differs significantly.

The Phase 2 campaign started in the late 1980s and initially involved very little use of ICTs. More recently, however, they have been used by key activists to help broaden and internationalise their campaign by making links with workers employed in similar circumstances in different countries. When the Scoraig campaign began in 2000 it involved little initial use of new technologies, although a few key activists did use the Internet and email. In both cases the use of ICTs has been largely restricted to a small group of campaigners who have been able to apply them strategically to further their objectives. This is partly explained in terms of a digital divide among activists and other factors that impede the use of ICTs. For example, in Scoraig the electricity supply is provided by small windmills attached to each household. A once planned initiative to link the peninsula with broadband (a Telecottage project) never materialised, and this has left the community with a slow and not very reliable dial-up connection. For most of the respondents in both Phase 2 and Scoraig computer use was not incorporated in everyday campaigning at all.

### *Minimal use but symbolically important*

Even where ICTs don't seem to play an important role in the everyday communicative activities of a campaign their use can be symbolically important for the group because of the connections that are made with other relevant individuals, groups and allies. They can help boost the campaign and widen its relevance. ICTs can facilitate the symbolic construction of new boundaries of the community by sharing particular kinds of awareness. For example, activists in Phase 2 have used ICTs in a selective way - contacting targeted groups which have had similar concerns and developing their campaign skills and knowledge as well as extending the network to relevant experts, particularly in the USA. Similarly, key activists in Scoraig used ICTs to link up with experts like marine biologists and activists to

facilitate information flows to the other campaigners who were not using ICTs.

#### *Commonly used and facilitative*

The pattern of use of ICTs amongst members of FoES is very different because it is so widespread and habitual, particularly (and predictably) amongst our sample. Websites like that of FoES and online discussion groups can facilitate mutually supportive learning experiences. Online resources enable activists - even those who are only marginally active - to use technologies for self-directed learning. For example, some of our survey participants commented that the regular arrival of email news through mailing lists serves as a good prompt to be constantly aware of a wide range of environmental issues on a regional, national and global scale, and motivates them to do some research before taking online actions. Email remains the favourite and most effective medium for online campaigns. Hyperlinks in emails can simplify and speed up access to relevant and useful information. Some respondents showed that they engage in extensive research, accessing various sites, including companies' websites, to check the truthfulness and accuracy of the information they obtained. Emails are also important for developing action. Phase 2's key activists exchange information by email to develop campaign strategies as well as using it to deepen understanding of the issues they face by contacting other campaigners in the US.

#### *Commonly used but disruptive*

A pattern of widespread use does not mean that ICTs are always seen to be beneficial; they can be 'disruptive' for organisational goals. For example, some FoES activists pointed, amongst other things, to information overload, instantaneous actions/reactions without much consideration/reflection on issues resulting in superficial analysis, depersonalised communications which are taken less seriously by politicians, less active activists who are content to surf rather than be seen, and the tendency to read unofficial information less critically simply because it is unofficial. Although ICTs have allowed people to access a greater range of information, the quality of this information may not necessarily be high. The activists who participated in our survey generally relied more on the official websites of organisations/NGOs than other sources. Superficiality can be encouraged by easy and instant response, particularly in a context where 'fast time/speed' is seen as 'power' (Virilio 2005).

#### *Strategically used and transformative*

A number of activists use ICTs in very strategic ways, rather than being regular users of the Internet and email, and we can see that they may have a transformative effect at a political and subjective level. Politically, they can change the temporal-spatial elements of campaigns by making them relevant beyond the geographical boundaries where they originated. Both the Scoraig and Phase 2 campaigns have extended their political impact significantly by being able to internationalise their activity, widen the terms of their struggle, and extend its relevance beyond a fixed geographical space. Similarly, some FoES respondents mentioned that they have joined multiple

online environmental organisations, groups and forums to learn about and act upon a wide range of issues beyond the confines of their particular location.

ICTs can help to build up awareness of new knowledge, and this may have implications for what people think and do, particularly in relation to consumption. Our survey of FoES members shows that a substantial number of people state their consumer behaviour has significantly changed (e.g. boycotting certain products or developing a more eco-friendly lifestyle, changing patterns of travel etc) as a result of information they have obtained online. The following comment from one of our respondents endorses this:

Online activity of discussion groups, receiving updates from online websites and also petitions has encouraged me to adopt a better lifestyle that is more energy efficient, careful of resources like water, soil, plant life and also stimulated me to find work in a sector that promotes environmental protection/management and sustainability.

In addition, a sizeable minority of participants in our survey have their own blogsites or social networking sites related to environmental concerns. With such tools and resources, individual campaigners are acting as small epicentres for online environmental campaigns.

### **Conclusion**

Our evidence shows that it is not necessarily the case that ICTs simply 'hook' bystanders into a 'community of practice' so that they move from peripheral to full participation – which had been part of our original thinking. Indeed, participation in campaigns is very difficult to pin down and can involve movement in a variety of different directions, including movement out of full participation to peripheral participation or even non-involvement, as well as in the other direction. What is becoming clear from the preliminary analysis of our data is that ICT use has significant and sometimes contradictory implications for social movements, their struggles for justice and the content and process of the learning that takes place in them.

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