# COMPUTER-SUPPORTED COMMUNITY NETWORKS AND SOCIAL COHESION

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## **SCHEMA**

SCHEMA (Social Cohesion through Higher Education in Marginal Areas) is an Educational Multimedia Taskforce project funded by the European Commission. A major research aim of the project is to examine the extent to which the Web can support collaborative learning and the development of learning communities in marginal areas. A related goal is to investigate the use of communications and information technologies (C&IT) as a means of providing social inclusion and social support, especially in disadvantaged communities.<sup>1</sup>

The convergence of C&IT has been heralded as providing both a threat to existing forms of community and a means to providing new bases for social cohesion. Writers stressing the first point of view emphasise the potential of C&IT to extend existing divisions and to create new forms of social exclusion and marginalisation, differentiating between the information-rich and the information-poor (e.g. King & Kraemer, 1995; Schiller, 1996). Commentators stressing the second perspective concentrate on the potential of C&IT to increase social inclusion through the ability of users to link up with others regardless of the barriers of time and place (e.g. Rheingold, 1993), and to provide the basis for a recreation of civic democracy (e.g. Tsagarousianou, et al., 1998). The effect of C&IT on local communities in disadvantaged areas provides a critical area for evaluating the relative validity of the two views.

## **Computer-supported community networks**

Computer-supported community networks (CSCNs) have become relatively common in Sweden. The lead in their creation has often been taken by housing associations, which offer tenants subsidised connection to a local Intranet. The explicit goal is generally to make the area a more attractive place in which to live and work, but social aims include increasing social cohesion, inclusion and integration, especially with reference to disadvantaged groups such as

\_The project is co-ordinated by the University of Stirling in Scotland, with partners in Finland (Oulu and Lapland), Sweden (Örebro and Karlskrona-Ronneby) and Germany (Stuttgart). Further details of SCHEMA are available on the Web (http://www.stir.ac.uk/schema).

immigrants, the unemployed and single-parent families.

There have been fewer community-based developments in Britain aiming to provide access to CSCNs in people's homes. Instead, access has been provided in kiosks and/or local community centres such as libraries and the emphasis has been on information provision rather than communication. However, the recent emphasis on social inclusion has provided a stimulus for community-based schemes.

In this paper we are concentrating on CSCN schemes in two suburban housing areas, one in Sweden, one in Scotland. Each area is described as being relatively low status and has been publicly labelled as 'problematic'. In each area tenants have been offered connection to local Intranets. Both schemes have similar overall goals - increasing social cohesion and inclusion in the community. Evaluation of their effectiveness should provide valuable information on the potential of C&IT as tools for the extension of social cohesion. Data is being collected prior to the installation of the Intranets and the samples will be followed up over a two-year period.

#### Community, Social Cohesion and C&IT

Community refers to a set of social relationships based on something that the participants have in common - usually a common sense of identity or belonging. "It is generally associated with the notion of co-operation and collective contribution to a common good" (Harrison, 1999:2). Traditional statements about communities stress the active engagement of people living in the same area and a strong sense of social cohesion. In this context cohesion can be described as "the process of looking after the community, establishing support mechanisms and networks, and living and working in an environment of trust." (Australian Local Government Association, 1998). There is a consensus that changes in urban-industrial society have seriously undermined the traditional sense of social cohesion (e.g. Sennett, 1978; Foster, 1997).

The question is whether C&IT can reinforce or recreate social cohesion in the community. As Wellman and Gulia (1999) point out, there remains a paucity of reliable empirical data on the issue. The majority of commentators believe that social cohesion can be reinforced by CSCNs; some, however, suggest that the use of technology may have negative effects on cohesion.

Proponents of the critical view believe that computer-mediated communication may simply replace face-to-face contact between people and lead to further isolation, resulting in a further

atomisation of society. Stoll (1995:58) claims that "computer networks isolate us from one another, rather than bringing us together", pointing to the danger that "by logging on the networks we lose ability to enter into spontaneous interactions with real people." According to McClelland (1994:10):

"Rather than providing a replacement for the crumbling public realm, virtual communities are actually contributing to its decline. They're another thing keeping people indoors and off the streets. Just as TV produces couch potatoes, so online culture creates mouse potatoes, people who hide from real life and spend their whole life goofing off in cyberspace."

The sceptics are in a minority and most writers see the use of C&IT as providing additional opportunities for interaction (e.g. Schuler, 1996; Wellman, 1997). They argue that C&IT offers the possibility for the creation of new social relationships; providing new grounds for the development of social networks based on choice and shared interest (Wellman, 1997). Wellman and Gulia point out (1999:365):

"even as the Net might accelarate the trend to moving community interaction out of public spaces, it may also integrate society... cyberlinks between people become social links between groups that otherwise would be socially and physically dispersed."

A number of researchers (e.g. Beamish, 1995; Hamman, 1998) report that C&IT can complement face-to-face interaction, rather than substituting for it. Participation in discussions taking place via Intranets and the Internet can lead to new contacts, electronic as well as 'real'. If residents have the opportunity to know their neighbours better through the use of C&IT the assumption is that this will give rise to more face-to-face contact and to an increase in community participation (Beamish, 1995; Åström, 1998).

The effect will be an increase in what Putnam (1995a & b) terms "social capital": the stocks of social trust, norms and networks that people can draw upon to solve common problems. Networks of civic engagement, such as sports leagues, women's groups, study circles and parent-teaching associations, are important components of social capital: the denser these networks, the more likely that members of a community will co-operate for mutual benefit (London, 1997). Blanchard and Horan (1998) suggest that the combination of locality- and interest-based communities provides one of the most effective foundations for the development and maintenance of social capital.

For those with access, C&IT has the potential to increase the range of personal networks, allowing individuals to make more contacts, whether to maintain a single specialised interest, or to meet others with whom they can build multiple ties (Constant et al., 1997; Wellman, 1997). Coate (1998) points out that participating in an online community is one of the easiest ways to meet new people. Community-supported community networks give people the ability to search for others in the community who share specific interests (e.g. educational or parenting matters). By linking virtual communities of interest to physical communities, new public spaces are created, where people can interact with their physical (and virtual) neighbours.

Access is a vital condition. If computer-supported community networks are to play a significant role in social cohesion it is important to include all groups in the society. In the absence of universal access, the use of C&IT may increase the division between the connected and the disconnected (Luke, 1993). In these circumstances CSCNs may disenfranchise parts of the population even further.

In a market economy, people in deprived communities are less likely to have access to C&IT than those in more affluent areas. Lack of access may lead to cumulative disadvantage:

"For children, not having access to computers at home or in the community may make it hard to keep up at school. For adults, computer literacy can be important in re-entering the labour market" (Phipps, 1999: 4).

The Internet provides links to other people and to a range of services, including education. Those who can access it have many opportunities for learning skills relevant for work in the Information Society. This is especially important in neighbourhoods where unemployment is high and educational level low. For the community, better access to C&IT can improve the quality of services and also make it easier to access opportunities in other areas (Phipps, 1999).

Many supporters of the development of local community Intranets make the optimistic assertion that the networks can be used to bring fractured communities together (e.g. Morino, 1994), suggesting that they provide a base for the re-creation of a sense of local identity and cohesion. Both local communities being studied by SCHEMA are said to suffer from fragmentation and a lack of solidarity. The question to be examined is whether the CSCNs being installed in each area provide a way of dealing with the perceived lack of social cohesion.

Although recent surveys of users in North America have suggested a widening of the

constituency over time (Bikson and Panis, 1997), the majority of computer users still appear to be male, well educated, relatively rich and relatively young. The housing areas being examined by SCHEMA have a high proportion of unemployed people and single-mothers, categories that have been identified as being at high risk of social exclusion. Part of the justification for the development of the CSCNs in each area is that connection to the local Intranet will enable these groups to participate more fully in the life of the community. Initial analysis of a questionnaire administered in the Swedish area suggests that the majority of its inhabitants feel excluded, but are optimistic about the impact of the local Intranet (see Appendix).

In order to provide access to the network, connection must be as cheap and easy as possible. Initially the organisations involved in the two test areas are providing free or subsidised local connection to the network; the cost of connection in later phases is currently under negotiation. In each case use is being made of Network Computers (NCs) or set-top boxes, designed to be transparent additions to TV. The belief, shared by SCHEMA, is that the NC is so simple to use that a minimum of training is required: all the user has to do is plug in, turn on, insert a smart card and start browsing.<sup>2</sup>

Individuals may be well integrated into their local community and yet isolated from the wider society. Social cohesion requires that participation extend across the confines of local communities, knitting them together into a wider whole. People in localities with bad reputations may feel discriminated and excluded from the wider society and may, in turn, disengage (Suttles, 1975; Foundations, 1999).

One way to include local groups in the wider society is to work together to build interlocking networks that can help address problems that transcend local boundaries. Morris and Hess (1975) refer to the "outward movement", which is about interconnecting communities throughout the world. For these community networks to succeed, it is important to identify common issues and build common agendas (Schuler, 1996). A way of tackling these concerns may be through the development of online learning communities, based on the principle of collaboration.

## Learning Communities and Social Inclusion

\_2 As detailed in SCHEMA deliverable 2.2, the NC is designed to be simple to use and maintain, which makes it particularly appropriate for networks in which many users have little or no previous experience of computers (Booth, 1998).

Policy makers and forecasters variously describe the emerging post-modern society as the "Knowledge Society", the "Learning Society" or the "Information Society" (Webster, 1997). In each case it is clear that an intimate connection is being claimed between education and the potential for social inclusion and continued prosperity. David Blunkett, UK Secretary of State for Education, has stated that "Knowledge and skills are now the most precious resource we have to secure future prosperity and social cohesion" (Blunkett, 1998; Phipps, 1999:7). As education moves from being a preserve of schools which occupy a set proportion of people's lives, to one of flexible life-long learning, so the potential of learning as a basis for the development of community increases.

The sponsoring organisations involved in the two areas being studied see the provision of continuing education programmes as an important feature of the local nets. Among the courses to be offered are ones providing some of the basic skills required to take part in the mainstream society: e.g. literacy and basic computing. Participation in courses such as these also provides an opportunity to meet new people. An extension of this argument is to develop courses specifically designed to encourage collaboration between and within communities. This is part of the philosophy behind Community Portraits, a course developed within SCHEMA and originally designed to contribute to the continuing professional development of health and welfare workers.

Community Portraits is taught within an on-line learning environment developed at the University of Oulu; the teaching method is collaborative and the course topic is the community. The underlying educational model is described by Timms (1999a):

"The course requires participants to work collaboratively in small groups to produce 'portraits' of the communities in which they work. Ideally groups of three participants, each of whom works in a different country, work together to produce a comparative portrait of their three communities. Participants are expected to use their cultural and individual differences to sharpen each other's awareness of their own community. This collaborative process is also expected to enhance the participants' awareness of their own, as well as each other's, perceptual frameworks. This should encourage them to recognise the advantages of collaboration for extending ways of gathering and interpreting information, deepening understandings and developing ideas and innovations".

Although initially intended as part of continuing professional education (for an analysis of the initial course see Timms, 1999b) there seems no reason why the approach used in Community

Portraits should not be extended to the general populace, engaging members of local communities in developing their own views of their local areas and comparing them with others. Initial efforts will be made to engage equivalent groups in each community, e.g. lone parents and senior secondary school pupils. Social inclusion and local identity can become the topic around which learning communities develop, building and strengthening the social capital already present. It is suggested that this may be as effective an approach to the regeneration of disadvantaged communities as traditional approaches which concentrate on "bricks and mortar" or organisation-building approaches.

## Conclusion

The use of C&IT for social networking is a recent, but rapidly growing phenomenon. It can be used either as a force for further social differentiation and fragmentation or as a force for social inclusion. Through an emphasis on the ability of computer supported community networks to enhance collaboration within and between local populations it is believed that the rift between the connected and the disconnected can be bridged. The benefits are likely to be especially pronounced in areas that have been marginalised. Examination of local efforts to connect residents to local Intranets and to engage them in on-line civic activities will provide a measure of the potential impact of C&IT on social capital in the Information Society. The experience of the two communities studied by SCHEMA over the next two years should provide a good test of the impact of C&IT on the exclusion of marginalised communities.

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### APPENDIX

#### **Summary of Initial Survey Data**

Fieldwork in the Swedish and Scottish housing areas began in summer 1999. To date, data has only been analysed for the Stockholm sample. The sample consists of 65 respondents, none of them yet connected to the local Intranet. Slightly more than half the respondents (55 percent) are female; the average age is 45 years and many respondents are single parents. Almost 30 percent in the sample are immigrants. In these characteristics the respondents are representative of the area.

Initial analysis has been of a descriptive nature. The results nonetheless illustrate a general lack of social cohesion and social capital. More than three-quarters (78 percent) of respondents state that they experience difficulties in participating in the community (43 percent often and 35 percent sometimes). With the important exception of sports activities and, to a lesser extent, the local library, participation in local organisations is low. Many respondents (45 percent) do not think there are enough meeting-places for the residents, though nearly half have visited the 'Culture house' on more than 5 occasions during the year. Contrary to expectations the claimed level of voter turnout is high, with 84 percent saying that they voted in the last local election.

Using a scale/ranking from 0 (no identity) to 10 (very high identity), which has been used in earlier studies of Swedish communities, the results show a low level of local identity in the area, with no increase in the sense of identity since an earlier study in 1989 [by the Swedish Research and Statistic Institute]. Less than a quarter of respondents think that there is a strong sense of community in the area. Conversely, most believe there is a lot of tension between different groups. The main tensions are said to be between Swedish-born and immigrants and between different immigrant groups. Almost half the sample (44 percent) believes they have little or nothing in common with other residents in the community.

Questions were also asked about information and communication in the community today. Almost all respondents (90 percent) believe they get enough information concerning events in the community. On the other hand, most believe contacts with local politicians and officials are very poor.

Most respondents (71 percent) are satisfied with the social support they get and the number of friends they have (57 percent). However, most residents seem to have more friends and to get

much of their support outside the local community. It is more common to receive support from family/relatives than from friends (although this seems to be rather common as well). In contrast to these relatively positive views, half of the respondents feel lonely often or sometimes.

There is a relatively high degree of anomia in the community. Most residents express a lack faith in the future, have little trust and believe they have little influence on decision-making. Two-thirds of the sample feel they do not know whom to trust and 57 percent think there is no point in writing to officials since they are rarely interested in the problems of the average person.

Given the socio-economic characteristics of the area, the level of computer usage is relatively high. Almost 40 percent of the respondents have used a computer for 5 years or longer and feel confident about using a computer. In contrast to this group, a quarter of respondents have never used a computer. Most people who use computers use them at home and mainly for word processing. Surfing the Internet and using email are also common activities.

When asked what they would like to see on the local Intranet, the three most popular choices are information from the housing company, community information and contacts with different service agents. Access to the Internet is also seen as being desirable. Booking and shopping facilities in the local area appear to be less attractive services.

Respondents have a positive attitude and high expectations of the local Intranet: 70 percent of them say they are very or pretty positive and nobody is very negative. There is no difference between men and women nor between Swedish-born and immigrant residents in relation to their expectations of the Intranet. Respondents with more computer experience tend to be more positive.

The majority in the Stockholm sample believes that the local Intranet will lead to an increase in contacts between the residents and with local politicians and that it will improve the flow of community information. Most respondents think that the use of C&IT will strengthen the sense of community and make the housing area more attractive. Opinions about the relationship between online and offline interaction are mixed: a third believe that the Intranet will lead to less face-to-face contact. Nevertheless, most respondents do not think it will lead to less participation in the community or to an increase in social isolation. More than half of the respondents also believes that the use of C&IT could be a way of increasing a sense of local identity.