Can the participatory evaluation of new communication technology initiatives assist in building sustainable and inclusive rural communities?

June Lennie, Lyn Simpson and Greg Hearn Oueensland University of Technology, Brisbane

Roundtable presentation to the Australasian Evaluation Society's International Evaluation Conference, Wollongong, New South Wales, 30 October - 1 November 2002

Introduction

This presentation outlines the Learning, Evaluation, Action & Reflection for New technologies, Empowerment & Rural Sustainability (LEARNERS) process. This process aims to empower community members to conduct participatory evaluations of community development initiatives that use new communication and information technologies (C&ITs). The LEARNERS process is being trialed as part of an action research project that we are conducting in collaboration with people in two Queensland rural communities and five industry partners (see http://www.learners.bus.qut.edu.au).

Our presentation begins with a brief discussion of the following topics:

The role of C&ITs in building sustainable and inclusive rural communities.

Factors in community adoption and use of C&IT initiatives.

The role of participatory planning and evaluation in making C&IT initiatives more sustainable and successful.

The strengths and limitations of participatory evaluation methodology.

Following an overview of the LEARNERS process, we present short case studies of the two communities involved in the project. We conclude by suggesting that despite the limitations of participatory evaluation, this process could be effective in contributing to building more sustainable and inclusive rural communities.

The role of C&ITs in building sustainable and inclusive rural communities

Effective use of C&ITs such as the Internet for sustainable economic and community development is becoming increasingly important (Mansell and Wehn, 1998; Richardson, 1996). This is particularly so in rural communities in Australia which are often disadvantaged in terms of access to new technologies. Initiatives such as electronic community networks, community portals, and telecentres have been established in many rural and regional communities around Australia in recent times. Research has shown that such initiatives can help rural communities to survive and prosper and to address the increasing 'digital divide' (Simpson, 2001; Simpson et al, 2001).

However, rural communities often face several challenges in relation to C&IT initiatives. These include:

facilitating access to and adoption of new and rapidly evolving C&ITs by all sectors of a community;

identifying the diverse access and training needs of community members related to C&ITs:

securing ongoing funding and resources for initiatives;

planning, developing and managing projects and initiatives; and

evaluating the impacts of what are often quite complex projects and initiatives that use new communication technologies. Our research suggests that developing

effective strategies for access, participation and inclusion that take differences in needs and local social, economic, cultural and technological factors into account can provide more equitable access to C&ITs and increase the overall sustainability and success of such initiatives (Simpson et al, 2001; The Rural Women and ICTs Research Team, 1999).

Factors in community adoption and use of C&IT initiatives

A complex range of social, economic, cultural and technological factors affect the adoption and effective use of C&ITs in rural and regional areas. These include:

access to high quality interconnections, hardware, software and computer and telecommunications services;

the level of awareness and knowledge of the potential of C&ITs to enhance personal, community and economic development in creative and innovative ways; access to training and support services that increase community literacy, competence and confidence in using new C&ITs and effectively meets the diverse needs of community members;

the existence of social infrastructure such as strong local networks that foster the diffusion of new C&ITs;

the development of relevant community level applications and uses of C&ITs; and the need to address local cultural factors related to the use of new C&ITs, and to understand their relationship to traditional media use (Oakley and Campbell, 2002).

The greater the level of adoption and use of C&ITs in rural areas, the greater the benefits and opportunities they can provide for everyone. This means that planning, implementation and evaluation of C&IT initiatives that is attuned to the diverse needs of the local community is essential. The use of participatory and empowering methods to make the best use of the opportunities these technologies offer rural communities can assist in:

recognising the 'deep culture' nature of demand and use, which is not supply driven but grows opportunities from within the community over time;

learning from global experiences while building on local strengths and assets; seeding and generating creativity, new learning and employment opportunities, and more effective communication and networking throughout the local community; building 'learning communities' that encourage lifelong learning - both formal and informal - which contributes to sustainable community and economic development; facilitating greater inclusion of diverse community groups in planning, using and evaluating new C&IT initiatives;

helping communities migrate from mainly using old media and communication technologies toward using a mixture of old and new media and C&ITs; and leveraging micro-business enterprise development off government funded technical and human infrastructure provision.

The role of participatory planning and evaluation in making C&IT initiatives more sustainable and successful

The long-term sustainability and success of C&IT initiatives is often a key issue for rural communities, due to factors such as limited funding and resources. Enthusiastic 'champions' and volunteers are often relied on to successfully maintain these new initiatives.

Our research suggests that:

there is a significant need for more effective planning and coordination of C&IT initiatives and better cooperation among community groups to enable better use of funding, resources, local knowledge, skills and capacities (Lennie, Lundin and Simpson, 2000);

there is a need to build the capacities of community members and service providers in undertaking planning and evaluations of community development initiatives;

an ongoing process of planning and evaluating community development initiatives can help to achieve long-term sustainability; and

participatory evaluation methodologies can help to enhance the long term sustainability and success of programs through building community capacity and the inclusion of diverse stakeholders in decision making.

Strengths and limitations of participatory evaluation methodologies

Participatory evaluation and 'empowerment evaluation' methodologies have been successfully used in many rural and urban community development projects around the world. Three main reasons have been proposed for increasing the involvement of participants and stakeholders in evaluations: '(1) to increase utilisation of evaluation results; (2) to represent the values and concerns of the multiple groups involved in decision-making; (3) to promote the empowerment of disenfranchised stakeholder groups previously left out of the process' (Papineau and Kiely, 1996: 81). However, while these methodologies have many strengths, they also have certain limitations that need to be taken into account, including:

those involved require a strong commitment to a participatory approach - some people may legitimately choose not to participate;

participatory processes require more time and energy than some other research and evaluation approaches;

participatory research requires a high degree of trust between those involved that can take some time to develop;

conflicting perspectives and agendas may arise more in participatory evaluations; participatory research is seen by some as less 'objective' than traditional 'scientific' forms of research; and

political and institutional barriers that can prevent the development of effective community-based projects.

Aims of the LEARNERS project

The LEARNERS project began in October 2001 and will be completed in October 2004. It involves working in partnership with people in the Stanthorpe and Tara Shires in Queensland, where the process is being trialed. The project aims to:

build community capacities in using the LEARNERS process; periodically redesign the process so that it better meets community needs;

undertake an ongoing evaluation of the project activities, using participatory methods;

assess the impacts and effects of the project, taking gender, age and other differences into account; and

assess the value of the LEARNERS process for improving the sustainability and success of C&IT initiatives. In the long-term, the project aims to enable other rural communities in Australia to access and use this process.

Overview of the LEARNERS process

The LEARNERS process was developed as part of an earlier research project that involved collecting feedback on the process from people in several rural and regional communities in Queensland (Lennie, Lundin and Simpson, 2000). The process was subsequently refined as part of our current research project and will undergo ongoing revisions during the project, based on feedback from community participants.

Key goals

The key goals of the process are:

Long-term sustainability of C&IT initiatives.

Increased collaboration and cooperation between people and organisations from various sectors in rural communities.

Enhanced community capacity in using participatory planning and evaluation methods.

Increased community participation and inclusion in planning and evaluation processes.

The development of learning communities.

Giving value to empowering forms of leadership based on collaboration, sharing information, networking, encouraging participation, and supporting people.

Methods and approaches to participation and inclusion

The LEARNERS process involves using a range of participatory and systems-based methods that include:

identifying and building on existing community strengths, assets and resources; continuous participatory action research cycles of planning, action, observing and reflecting;

a participatory approach to evaluation that enables ongoing learning and constant improvement of initiatives;

a 'whole of community' approach to participation and assessment; and analysis of differences such as gender, age, ethnicity and levels of ability.

Participatory action research

Participatory action research methodologies have been successfully used in community development projects around the world for over 30 years. This methodology:

seeks equal partnerships and ongoing communication and collaboration between the people involved;

incorporates local knowledge and ideas;

aims to identify community needs and generate action leading to desirable change; and

involves continuous, flexible cycles or spirals of planning the action together, putting the plan into action, observing and documenting the effects of the action, and reflecting on the action, both individually and as a group.

Participatory evaluation

Participatory and 'empowerment' evaluation methodologies are particularly useful for assessing complex community-based projects such as those involving the use of new and evolving C&ITs. They have been found to enhance the long term sustainability and success of programs through building community capacities in undertaking evaluations, and including a diversity of community members and other stakeholders in planning and decision making. These methods can therefore produce community and individual empowerment (Brunner and Guzman, 1989; Fetterman et al, 1996; Papineau and Kiely, 1996). Evaluation is seen as ongoing learning and as an everyday activity that anyone with appropriate training can do, not just the 'experts'.

Participatory evaluation can be effective in building trust between the people involved in the evaluation and helping to increase people's sense of ownership of community initiatives. The method includes:

community participation in designing and conducting evaluations; using a range of methods, as appropriate, such as observations, interviews and feedback questionnaires; and

reflecting the diverse perspectives of those involved in or affected by the initiative when reporting evaluation learnings and results.

A 'whole of community' approach

Research suggests that taking a 'whole of community' approach is important to sustainable community and economic development. This approach often considers the linkages between the social, economic and environmental systems in a community ('the triple bottom line'). In the LEARNERS process this involves:

including a broad diversity of people from different sectors of the community in planning and evaluating initiatives and ensuring their voices are listened to and heard;

encouraging collaboration and cooperation between community groups and organisations from a diversity of sectors; and

assessing the direct and more indirect impacts of communication technology initiatives on different groups and sectors of the community, using a systems approach to analysis.

This approach highlights the interconnectedness of the social, cultural, economic, political, environmental and technological systems and the complexity of these systems within a community.

Analysing gender and other differences

The equitable and inclusive participation of people in planning, evaluation and decision making is vital to sustainable community development. Differences between people therefore need to be taken into account, including those related to gender, age, ethnicity, and levels of ability and access.

Our recent research indicates that women's role as 'new pioneers' in using the Internet could be a significant factor in the uptake of this technology in rural communities (The Rural Women and ICTs Research Team, 1999). This suggests that gender analysis should be an important focus of the evaluation of C&IT projects. However, gender-related issues are often marginalised or neglected in the evaluation, planning and implementation of C&IT initiatives, and in some rural community development research. The LEARNERS process aims to counter this neglect.

Possible LEARNERS process cycles and steps

The LEARNERS process is very flexible and can be used in a variety of ways that meet community goals and needs. The following are some of the possible ongoing cycles and steps involved in using the process. Each of these cycles would include cycles of planning, action, observing and reflecting.

Identify and involve key people such as community leaders and 'champions' and other interested people in the community, then form an action research and evaluation group.

Undertake an assessment of:

- existing community resources such as computers with public access to the Internet and information about community skills and needs;
- ➤ the community's learning needs in relation to the LEARNERS process and in relation to using new communication technologies.

Begin learning activities to effectively use the LEARNERS process and to increase awareness of the benefits of new communication technologies.

Collaboratively design the evaluation of the C&IT initiatives then implement the evaluation as a continuous activity. This could include assessing the impacts of the initiatives on various sectors of the community.

Share learnings of success factors and evaluation results with others in the community.

Based on the learnings from the evaluation, conduct a review of the initiatives and redesign them to better match community needs.

These cycles would be constantly repeated and overlapping. This ongoing process would involve working on different cycles in various sequences, as appropriate, as new learnings emerge, new needs and issues are identified, and new initiatives are implemented.

Community case studies

Short case studies of the Tara and Stanthorpe Shires, the two Queensland communities currently involved in trialing the LEARNERS process, are now presented.

Tara Shire

Tara Shire is located in 'prime hard wheat country' 330 kilometres south west of Brisbane. It covers an area of just over 11,000 square kilometres and has a population of 4,200 people and nine townships and settlements. A high percentage of people in the area live on rural residential subdivisions with little services and facilities. The Shire

has been identified as being in the top ten most disadvantaged communities in Queensland. The area currently has some major communication problems. There is a lack of effective mobile phone coverage, no local newspaper and no local radio station.

In recent years, some pro-active people in the community have successfully initiated a range of new community and economic development initiatives in the Shire, several of which involve the use of C&ITs. Meetings and workshops with community members and visits to the area identified the following C&IT initiatives:

The Tara Shire Community website (http://www.tarashire.org) which is sponsored by the Tara Shire Council.

Public Internet access at the Tara Library.

A Learning Network Queensland Centre that provides access to a range of C&ITs and offers support for students undertaking external studies.

Videoconferencing facilities that enable access to legal advice and information.

Computer and Internet training courses and support services.

The 'Cyberflora' project which involved developing a website

(http://www.gag.org.au) and email network to facilitate the creation of a mural in a botanic garden.

The Westmar State School website (http://www.westmarss.qld.edu.au), created by children from this small rural township. The school provides after hours access to computers and the Internet to adults in the community who are taught by the school children.

Creation of an online magazine for young people.

Community members are interested in using the LEARNERS process to help people in the Shire work together more effectively and to improve communication and collaboration among community members. They are keen to include representatives from all the main townships in the Shire on the project steering group and in project activities. The focus of the project is expected to be the planning and evaluation of a web-based community 'billboard' or portal that would facilitate better communication and sharing of information. In the interim, a Shire-wide calendar of events is planned for the Tara Shire Community website.

Stanthorpe Shire

The Shire of Stanthorpe is located 230 kilometres south west of Brisbane in an area near the border of New South Wales known as the Granite Belt. It has two main towns and six villages within an area of 2,700 square kilometres and a population of 10,383 people. The main industries in the Shire are agriculture, farming and tourism and the area is well known for its popular wineries and national parks.

In comparison with Tara Shire, the area has good communication systems and is serviced by a local radio station and newspaper. However, there is a lack of public access to the Internet and a lack of awareness among the business community of the opportunities that can be provided by new C&IT initiatives. A key issue is the sustainability of new C&IT initiatives once government funding runs out.

Meetings and workshops with community members have identified the following C&IT initiatives:

The 'GraniteNet' website and virtual community project

(http://www.granitenet.net.au), managed by a Project Officer in the Stanthorpe Shire Council. People can join a large and diverse range of online community groups or start their own community or interest group. Community and business users can build their own web sites.

The Shire of Stanthorpe website (http://www.stanthorpe.qld.gov.au) which provides access to Council services and information.

The Stanthorpe Community Learning Centre initiative which aims to become the hub of learning in the area and provide access to a range of education and training courses and communication technologies.

A Learning Network Queensland Centre located in the Stanthorpe High School. Computer and Internet training courses.

Several community members involved in the LEARNERS project are extremely enthusiastic about developing the Shire into a learning community. They are also interested in using the LEARNERS process to facilitate community interaction, capacity building, sharing information on initiatives, undertaking a needs assessment, and making initiatives such as GraniteNet more sustainable. A steering group for the project has been formed and strategies have been developed to encourage participation in the project by a wider diversity of people.

Conclusion

Long-term sustainability is a key issue for many rural communities, which see C&IT-based community and economic development initiatives as offering potentially effective solutions to their social, economic and environmental problems. We have outlined a participatory evaluation and planning process that could be effective in building more sustainable and inclusive rural communities. We are undertaking a participatory evaluation of a trial of this process in two Queensland Shires as part of a three year action research project.

Given the rapidly evolving character of C&ITs, and the often complex nature of C&IT initiatives, we argue that the participatory evaluation methods advocated by the LEARNERS process are the most effective methods to use. However, these methods require the strong commitment of community participants, more resources, time and energy than other methods, and have other potential limitations that need to be taken into account. Despite these limitations, we anticipate that use of the LEARNERS process could have many social and economic benefits for rural and regional communities in Australia.

Questions for discussion:

- 1. How effectively could participatory evaluation methods contribute to demystifying the evaluation process for the community and increasing understanding of evaluation processes generally?
- 2. In what ways can participatory evaluation methods contribute to building rural communities that are sustainable, inclusive and empowering?
- 3. What are the strengths and limitations of participatory evaluation in the context of projects such as the one described above?
- 4. How can we strengthen participatory evaluation methods and overcome their limitations?

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