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Community ICT projects: do they really work? Reflections from the West End Connect project one year on.

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The West End suburb of Brisbane is an example of a socially, culturally and economically diverse community in Australia. The suburb has traditionally been home to Indigenous and migrant populations as well as being a refuge for many of Brisbane's homeless people. The demographics of this suburb, however, are being significantly altered by new property developments with wealthier residents choosing to move close to the city. West End is rapidly becoming a digitally divided community. In 2004/05, academics from the Queensland University of Technology, worked with staff from the State Library of Queensland and the Ethnic Communities Council of Queensland, and members of two West End community groups – the Women's Ethnic Network and the African Women's Network on a community Information and Communication Technology (ICT) project. Twelve community members from the groups participated in a ten month project that began with focus groups to discuss how ICT was used in the daily life of participants and what they perceived were their personal training needs and the training needs of the larger community group they represent. Training sessions (i.e. Beginning Email) were delivered based on these focus groups. Three months after the sessions, participants were interviewed about their ongoing feelings with ICT; whether they had shared their training experiences with other community members and what impact they felt the training had on their life. All participants reported that the training had a positive impact on their lives and their community. This paper presents the results of a focus group with the participants one year after their initial training experience to determine what ongoing impact, if any, the training had on their life and their community. The study is limited by its small sample size. Nonetheless, three observations can be noted: Firstly, ICT and ICT training does empower and change people's lives. Secondly, ICT training for community groups should be provided via specialized learning environments that will allow the group members to learn and grow at their own pace and style. Thirdly, ICT training that directly involves only a small number of community members can still have considerable impact on the larger community group through shared narratives and support by the training participants with the other community members. Drawing upon the researcher's experience of conducting the West End Connect project from beginning to end (and beyond), and having consulted the existing literature in the field of ICT projects, the following literature based recommendations (or is that predictions?) for future community ICT projects are offered: (i) community ICT projects should identify and utilize 'communities of practice'; (ii) community ICT projects should be inspired to be community ICT initiatives; and, (iii) community ICT projects should use community leaders or educators.

Keywords: ICT training, benefits, ICT projects, ICT initiatives, long-term effects, social inclusion, digital divide, communities of practice, lifelong learning

INTRODUCTION

This paper discusses the West End Connect community Information and Communication Technology (ICT) project. The aim of the West End Connect project was to help bridge the growing digital divide within the West End community by designing and delivering ICT training courses to meet the specific needs of two West End community groups: the Women's Ethnic Network and the African Women's Network. The project was a collaboration between the Queensland University of Technology, the State Library of Queensland and the Ethnic Communities Council of Queensland (EECQ). The expected outcomes and benefits of project for the West End community were: (i) increased ICT skills and knowledge for the residents of the West End community; (ii) increased understanding by the residents of the West End community of the potential of ICT in their lives both personally and professionally;

(iii) increased community capacity¹ building within West End; and (iv) increased understanding and interaction between the West End community, Queensland University of Technology and the State Library of Queensland. The West End Connect project, like many ICT projects, has a definite start and end date. On completion of the project all participants reported that the training had a positive impact on their lives and their community. But did the West End Connect project really work? Did it have lasting impact? This paper presents the results of a focus group with the participants one year after their initial training experience to determine what ongoing impact, if any, the training had on their life and their community. Based on the participant and researcher's experience of the West End Connect project several recommendations are offered to guide other projects seeking to foster inclusive communities via community ICT projects. The paper is divided into three parts. Part one provides a brief discussion on community ICT projects with a focus on the issue of evaluation of long term effects and benefits. Part two outlines the West End Connect community ICT project. The implementation of the project is detailed and the key results from the initial project evaluation are presented. Part three discusses the follow-up evaluation of the project one year after the project ended.

THE EFFECTIVENESS OF COMMUNITY ICT INITIATIVE AND PROJECTS: A BRIEF REVIEW

The number of community ICT projects has increased considerably as communities around the world attempt to find ways to not just bridge a growing digital divide but to find avenues to foster social inclusion through ICT. In 2006 Gaved and Anderson examined the evidence for both long and short term effects of community ICT projects or initiatives. They undertook the examination with the view to guide policy recommendations for the implementation and maintenance of future projects/initiatives. One of the key observations they made in their examination was that "detailed empirical research in to the effects of [community ICT] initiatives is scarce, especially over the long term" (p. 4). They suggest that this "may be in part because it was assumed that their effects would be positive, which may have led to a relative lack of assessment" (p. 4). They also note that because many of these community ICT activities are relatively young, occurring only in the last decade, and most evaluating and reporting has focused on the effects while the projects and initiatives are in operations. The fact that many of the ICT initiatives are "project based" (i.e. they have a set time period and fixed funding) means that long term effects or benefits are very rarely captured because there is very little research that explores what happens after initiatives finish. Gaved and Anderson (2006) point to the fact that whilst initial evaluation after the ICT initiative might suggest there benefit to the community in the form of knowledge formation, skill development and improved quality of life or social capital, the reality is that the ending of the ICT initiative may in itself cause difficulties through the withdrawal of ICT access or support; and that this may lead to the reversal of any initial benefits observed. Gaved and Anderson (2006) conclude their evaluation of the current literature with several recommendations and notably is the need "to instigate a systematic programme of follow-up research on existing or recent initiatives to assess their social impact" (p. 29) and for all new "funded initiatives to insist as a condition of funding on the implementation of longer term (>4-5 years) multi-method studies of their social impact" (p. 29).

THE WEST END CONNECT PROJECT: AN OVERVIEW

West End: A Brief Profile

West End is a rapidly changing, economically and culturally diverse inner city suburb of Brisbane. The suburb is both home and meeting place for members of the indigenous community and one of Brisbane's most multicultural suburbs. In the 2001 census West End had a population of 5832 with 2.4% of people identified as being of indigenous origin and 31.3% of people who were born overseas. The main three countries of birth were Greece, the

¹ Capacity Building refers to the 'activities, resources and support that strengthen the skills and abilities of people and community groups to take effective action and leading roles in the development of their communities.' [See Building City Renewal [Online]. Available: <http://www.homeoffice.gov.uk/docs2/ccbrconsultintro.html>. [11th August 2004]

United Kingdom and Viet Nam. 3831 people stated English as the only language spoken at home. There were 3001 males and 2831 females. The median age was 33 years. At this time 19% of the population lived in lone person households.

The 2001 Census also indicated that 56% of the population had no educational qualification or stated no educational qualification. In terms of the labour market, 12% of the residents were unemployed with 35% of the employed residents holding part time positions only. The median weekly income for the area was \$300-\$399. In 2001 less than half of the suburb's residents had a PC in their home and less than 12% of homes had an Internet connection (ABS, 2001). Currently, increasing property values and extensive unit development reflect the growing popularity of the area amongst professional and business people wishing to take advantage of the suburb's proximity to the West End CBD. West End enjoys a vibrant café society street profile with an influx of visitors on weekends. Gentrification of an area now considered valuable real estate is likely to impact the community in a number of ways. Increasingly, the population is separating into groups who have access to and are comfortable using ICT – the 'haves' – and groups who do not have access to and are not comfortable using ICT – the 'have-nots'.

The West End Community: A Working Definition

One of the first challenges to be faced in the project was establishing a working understanding of what is the "West End Community". Taking into consideration the significant social, economic and political changes that have impacted upon the West End area in recent years the project team made two decisions (i) to have a flexible and adaptive understanding of the "West End Community" and of "West End Community Groups" (i.e. group members may either work or live in the area and/or the group holds meeting and events in the area); and (ii) to consult with the ECCQ (which is based in West End) to aid in identifying community groups appropriate for the current project. Through the ECCQ the following two community groups were invited to be involved in the project:

- The Women's Ethnic Network is a community group "working with and for immigrant & refugee women". It is a well established group based at the ECCQ and holds regular meetings and events in the community with group members working and/or living in West End.
- The African's Women's Network is a community group aimed at supporting immigrants and refugee woman from Africa. It is a relatively community group, whilst the group is not based in West End per se (many of its members live and work outside of the area) the group holds its meetings at the ECCQ and as such has ties to the community.

Through the ECCQ these two groups were chosen for the project on the basis of that they represented the "socially, culturally and economically diverse" West End community, and because they identified as playing an educative role within the community, in their aims and objectives. The fact that both groups were women support groups was an unexpected, but rewarding part of the project. Given the challenge in locating groups to participate in the project no other attempt was made to choose participants on the basis of perceived digital divide issues.

The Project

The project was undertaken within the Participative Action Research framework which has been successfully used in a wide range of fields including education, health, community development and agricultural extension (McTaggart, 1991; Wadsworth, 1998). It was felt this framework best encouraged the inclusion of a diversity of perspectives, regular critical reflection and active involvement by participants and stakeholders in the design and conduct of projects. The ten month West End Connect Project began in November 2004 and consisted of four stages. Stage 1 involved exploratory research with the two community groups to identify their unique ICT training needs. Two focus groups were held. The focus group was held with the Women's Ethnic Network. Most of the participants in this focus group had mixed feeling about the ICT they had used – realizing it was of benefit to them but that it also created a lot of frustration and problems that took up time and forced them to rely on husbands, children and grandchildren to help them with the problems they encountered. All participants expressed the desire to develop the skills and confidence to sort out their own problems. Many of the women had found previous formal training courses difficult due to barriers created by terminology, language and the pace of the instruction. Most of the women were active within the community and almost all wished to be able to create flyers, newsletters and brochures to more effectively communicate information to others. The second focus group was held with the African's Women's Network. Most of these participants had some experience using ICTs, particularly mobile phones which they deemed important for keeping in touch with family and community members. All wished to

improve their computer use and to become more self-reliant in their use so they didn't have to rely on their children's help or for someone to sit with them when they are using a computer. They seemed to be reasonably confident in their own ability to improve their skills and knowledge and not daunted by the prospect. Similar to the first focus group the participants indicated that they wanted to improve their computer skills to improve communication within their communities by preparing flyers, newsletters and brochures and using email.

The findings from these focus groups informed the second stage of the project – the design of ICT training courses. Three training programmes were designed to cater for the specific needs of the two community groups: (i) Beginning Email; (ii) Effective Communication Flyers; and, (iii) Beginning Internet. Gerogogy, or “the strategies employing in teaching older adults” (Formosa, 2002, p. 73) formed the theoretical basis for the design of the sessions held with the Ethnic Women's Network. Participant's in the initial focus group with the community group ages ranged from 48 to 77 with a mean age of 65.84. As the focus group participants were also going to be the ICT training participants geragogy was an appropriate guiding framework. The design and delivery of the training sessions were developed to incorporate key features of gerogogy: social involving group discussions and peer learning and slower paced with plenty of time to do the tasks and activities (Formosa, 2002). The session with the African Women's Network was guided less by geragogy and more by adult learning theory or andragogy (Knowles, 1978). Focus participant ages ranged from 25 to 53 with a mean age of 44.25. Once again as the focus group participants were also going to be the ICT training participants andragogy was an appropriate guiding framework. The design and delivery of the training sessions therefore took into consideration Knowles's description of the typical adult learner as someone who prefers to learn through purposeful activities which have meaning to their everyday lives.

Stage three of the project involved the administration of the ICT training courses. Three training sessions were held for the Ethnic Women's Group – one each of the three sessions. One session – the Beginning Internet – was held for the African Women's Network. This was the only session held for the group because of difficulties in arranging times for the group to get together. The training was held in two locations (i) a training room at the State Library of Queensland; and, (ii) a training room at the West End State School. Photo 1 presents a photo of one of the ICT training sessions taking place.



FIGURE 1. A West End Connect Training Class

Evaluation was the final stage of the project. Three evaluation strategies were used to assess the impact of the ICT training on the participants and their communities: post training survey; one-on-one semi structured interviews with participants three months after the training; and ICT trainer reflections. A full discussion of the results can be found in McAllister, Hall, Partridge & Hallam (2005). In summary, the evaluation revealed that social change could be effected for a target group by providing opportunities to develop basic computing skills training at a level that encourages continued engagement as well as skill and confidence building for the community members involved. All participants expressed a wish to use their skills to promote the activities of their community groups thus facilitating further social change. Not long after attending the Effective Communication Flyer training session one of the group members designed and developed their own flyer to advertise a community event taking place at the ECCQ

(see Figure 2). The participants also expressed a need for ongoing technical support for their activities. One participant indicated in the post training focus group that she had used the local library for internet access and support. Participants expressed a desire to develop further ICT skills which indicates a growing interest in continuing lifelong learning with ICTs. All has shared the experience with others in their communities and they had names of others wanting similar learning experiences. The project has promoted social change by providing an opportunity for a specialized learning environment that allows the group members to learn and grow at their own pace and style.



FIGURE 2. A real life outcome from the West End Connect project

The following comments are suggestive of a change for the participants in their skills and knowledge of ICT:

“Now I’ll know what people are talking about”

“I only used the computer when someone was around to help me. Now I don’t have to wait for them to be there”

“I was so scared to try all these things. I just needed someone to show me how I could use them”

THE WEST END CONNECT PROJECT: ONE YEAR LATER

Eighteen months after the West End Connect ICT training project was completed a focus group was held with the project participants. The focus group sought to identify what, if any, impact involvement in the ICT training had on the participants and their communities. A focus group was used for data collection as they allow for the gathering of qualitative data through “carefully planned discussion designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment” (Krueger, 1994 p. 6). Krueger goes on to suggest that focus groups are effective because they tap into the human tendency to develop “attitudes and perception relating to concepts, products, services, or programs...by interaction with people” and that “many people need to listen to opinions of others before they form their own personal viewpoints”. This view is also shared by Stewart and Shamdasani (1990) who stated, “focus groups allow respondents to react to and build upon the responses of other group members. This

synergistic effort of the group setting may result in the production of data or ideas that might not have been uncovered in individual interviews” (p. 16). Focus groups are an appropriate choice for the current study because of their ability to produce concentrated amounts of data on precisely the topic of interest (Morgan, 1997, p. 13) and because there is the “opportunity for the clarification of responses and for follow up questions. The researcher can also observe body language, which may be as informative as the verbal responses” (Williamson, 1992, p. 257). According to Stewart and Shamdasani (1990) “the researcher can obtain deeper levels of meaning, make important connections, and identify subtle nuances in expression and meaning” (p. 16). All of the above, however, must be viewed in the light of the inherent limitations associated with the focus group technique, including the small number of respondents that participate, the limitations on generalisability to a larger population, the bias of the researchers/moderators influence and interests. Every effort was made to strengthen the advantages and to the limit the disadvantages of the data collection technique.

All twelve participants involved in the original West End Connect project were invited to attend the focus group. Invitations were issued via the ECCQ. Six of the 12 participants indicated that they would attend however because of illness and other reasons only one participant attended the focus group. Interestingly two other community members—who had not been involved in the original project—quiet unexpectedly decided to attend the focus group session. The two “unexpected” community members had “heard about the focus group” and had decided to attend “because of the good things said about the training”. It soon became apparent that by attending the focus group the two community members were hoping to be offered the opportunity to take part in a similar training programme that the original West End Connect participants had experienced. Both participants had some basic experience with using a computer and the internet but were interested to learn how to use both more effectively for their committee and community work. Both had attended ICT training classes at the local library or Centrelink provider and had found the experience less than satisfactory. The session did not meet their specific learning needs because it was too fast, didn’t provide enough time to practice or was aimed at a completely different audience (i.e. younger job seekers).

The one participant who had been involved in the original ICT training sessions indicated that she was now actively engaging with technology. She used the computer on a daily basis and has recently purchased a digital camera, but was struggling to learn how to download the images to her computer. She still had to rely on grandchildren to assist with this. She used the internet to book airline tickets and expressed interest in trying internet banking but was not ready at this point to do this as she didn’t trust the internet for this type of activity. She had also attended another internet training session at the library but found it “too much too fast” and with “little time to go over the same things”. She also indicated that she felt confident now to ask for help – something she said she would not have done previously: “I used to be too stupid to ask”. She also spoke proudly of her ability to be able to pass on or share her new skills to friends: “I can show someone how to turn on the PC and open up the email”. She has spoken widely about her experience of the ICT training sessions to others in the community and indicated that she had the names of another 6 to 10 friends who have asked her to let the project team know they too would like the same opportunity: “I am so lucky I said yes”.

Whilst only three people took part in the focus group—and of these three only one was actually involved in the West End Connect project—a few interesting observations can be made. These observations are based upon the initial discussions with the project participants and the follow-up focus group as well as the ongoing researcher observation and contact with the ECCQ (the organization who has regular contact with the two community groups). Firstly, ICT and ICT training does empower and change people’s lives. Secondly, ICT training for community groups should be provided via specialized learning environments that will allow the group members to learn and grow at their own pace and style. Thirdly, ICT training that directly involves only a small number of community members can still have considerable impact on the larger community group through shared narratives and support by the training participants with the other community members.

LIMITATIONS

The research has several possible limitations that must be considered. First, the research relies upon the use of self-reported data provided by participants. Self reported measures provide a useful opportunity to collect data otherwise not readily available. But self reported data is limited by what “individuals know about their attitudes and are willing to relate” (Nunnally, 1967, p. 590). Also much of the information is recollections of past events and is therefore subject to the problems inherent to memory (even if the past was only the last twelve months). As such a significant potential limitation in the current study is the overall rigour of the data collection measure employed. Second, the research is subject to the influences of the researcher’s characteristics and backgrounds and rely heavily on the researcher’s interpretation of events and focus groups materials (Williamson, 2002). This may limit the

validity of the research findings, although as Yin (1994, p. 10) notes bias may enter into the design and conduct of other types of research. Third, the sample size is quite small. With only one participant from the original project participating in the follow-up study the extent to which the results can be generalized to the entire projects participants' is limited. As such any conclusions drawn are only suggestive at best. Fourth, caution must be taken when interpreting the findings in relation to the broader Brisbane community. This is because the participants were recruited from a small catchment within this community (i.e. only two community groups). Thus, what is presented here is a picture of the ICT and its impact on the West End community as understood by only two specific groups within the broader community and more specifically by only a very small per cent age of members from these community groups. The existing picture can be deepened through replication.

RECOMMENDATIONS

Warschauer (2004) notes that "good big things come from good small things" and this was certainly the case with the West End Connect project. As already noted the current study is limited by its small sample size (i.e. only 1 participant took part in the follow-up focus group). Having 'experienced' the West End Connect project from beginning to end (and beyond), and having consulted the existing literature in the field of ICT projects, the following literature based recommendations (or is that predictions?) for future 'good small things' are offered.

Firstly, community ICT project should identify and utilize "communities of practice". Lave and Wenger (1991) note that almost all human learning takes place within "communities of practice". Communities of practice are "networks of people who engage in similar activities and learn from each other in the process" (Warschauer, 2004, p. 120). Communities of practice are often found in informal networks such as families, occupational groups or in social contexts such as sports teams (Warschauer, 2004). Warschauer (2004) notes that learning in communities takes place through a "process of apprenticeship" (p. 121). This learning can occur formally through direction instruction or informally when "learners and experts observe, imitate, experiment, model, appropriate and provide and receive feedback" (p. 121). Thus, "an ideal learning situation provides the kind of scaffolding needed for apprenticeship learning to take place in a safe, supported way" (p. 121). Warschauer (2004) argues that communities of practice are important for community ICT projects because the "most valuable learning in society involves not so much *learning about* as *learning how*" (p. 122) and that learning how is intimately tied up with learning to be (ie developing the disposition, demeanor, outlook and identify of the practitioners). In support of this view Warschauer (2004) notes the study by Stanley (2001) that involved computers users at a community technology center. The study found that many of the study participants who owned a home computer admitted they had never used them because of fear and lack of knowledge but also because of their own self concept. It was only after visiting the community technology center that they began to change their perceptions of themselves as computer nonusers. In short, they didn't see themselves as the type of people who used computers. Stanley (2001) concluded that effective learning involved not only a mastery of skills but also joining a community of practitioners. The West End Connect project clearly revealed that a "community of practice" was essential to success and that "apprentices" were a vital tool for passing on the "learnings" to the broader "community".

Secondly, community ICT projects should aspire to be community ICT *initiatives*. Mehan (1997, cited in Lenhart & Horrigan, 2003, p. 25) notes that "language has power" it makes a difference to the way "we talk about events and people...[and] in the way we think and act about them". He concludes that "words have constitutive power; they make meaning. And when we make meaning, the world is changes as a consequence". Gaven and Anderson (2006) note that ICT developments are frequently labeled as "projects or initiatives" (p. 6). They support the view of Day and Cupidi (2004) that ICT developments should aspire to be "initiatives" rather than "projects". This is because an "initiative" emphasizes the need for ICT within community to be developed as "an integral part of community infrastructure" and that the "short term nature of the project mentality" is considered detrimental to the aim of social sustainability" (Day and Cupidi, 2004). It is true that the West End Connect project had a closed timeline and limited resource funding which are the frequent hallmarks of a "project" however by opting instead to refer the project as an "initiative" may have helped shaped the mind set of all stakeholders that there could be (should be) longer term implications for what was trying to be achieved.

Thirdly, community ICT projects should use community leaders or educators. Warschauer (2004) observes that ICT projects and initiatives often have powerful leveraging potential that can be used to support broader strategies of social inclusion. The roles of leadership, vision and local "champions" are crucial to the success of ICT projects for social inclusion. He notes that a common mistake made in ICT development projects is to make primary use of computer experts rather than the best community leaders, educators, managers and organizers. The West End

Connect project did not involve any ICT “experts” per se. It was a collaboration between three institutions prominent in the broader West End community. The sessions themselves were run by qualified librarians (both also qualified teachers).

CONCLUSION

In 2001 Luciano Floridi, in his invited address to the UNESCO World Commission on the Ethics of Scientific Knowledge and Technology (COMEST) observed that “information and communication technologies have put humanity in charge of the world. We are the masters of the universe...The problem is that our ethical development has been much slower than our technological development (p. 4). Floridi (2001) argues that “how information and communication technologies can contribute to the sustainable development of an equitable society is one of the most crucial global issues of our time” (p. 2). Floridi (2002) contends that our challenge is to build an information society for all, and this is a “historical opportunity we cannot afford to miss” (para. 14). The West End Connect community ICT project outlines in this paper will help the West End and the Brisbane community to take steps to re-align ethical and technological developments within its boundaries. More community ICT projects are needed if Brisbane is truly to become a ‘smart and inclusive city’ (BCC, 2001). If we are to meet Floridi’s (2004) challenge of developing an ‘information society for all’ then we must become more actively engaged in social change that will bridge the digital inequality within community.

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