



Effecting social change in the 'smart city': the West End connect community project.

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Effecting social change in the 'smart city': the West End connect community project.

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Brisbane has declared itself a 'smart city'. But more and more Brisbane is also becoming a digitally divided city. The Brisbane community is being separated into those who have access to and are comfortable using Information and Communication Technology (ICT) – the 'haves' – and groups who do not have access to and are not comfortable using ICT – the 'have-nots'. The social and economic implications of digitally divided communities cannot be ignored by government or society as whole. The inner city suburb of West End is an example of a socially, culturally and economically diverse community. 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. This paper explores a case study in which the Queensland University of Technology and the State Library of Queensland worked in collaboration with a number of community groups in West End to help bridge the growing digital divide. The West End Connect Community Project began in November 2004 with the aim of providing the opportunity for West End community groups to develop the skills and knowledge vital for personal and vocational success in an ever-changing environment of digital information. The paper will discuss and evaluate the strategies used to deliver and develop a community education program that will lead to social change for West End. The paper will discuss the impact of the project on the West End community as a way of bridging the digital divide.

Keywords: information and communication technology; digital divide; information society; Brisbane; community projects

Introduction

In 1998 Stichler and Hauptman asserted that the “information age has been widely acclaimed as a great benefit for humanity, but the massive global change it is producing brings new ethical dilemmas” (p. 1). In agreement is Luciano Floridi, who in a 2001 paper based on an invited address to the UNESCO World Commission on the Ethics of Scientific Knowledge and Technology (COMEST) stated that “the information society...poses fundamental ethical problems whose complexity and global dimensions are rapidly evolving” (2001a, p, 1). Floridi 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” (Floridi, 2001b, p. 2). Floridi points to the digital divide in particular as the source of many of the ethical problems emerging from the evolution of the information society. The digital divide “disempowers, discriminates and generates dependency. It can engender new forms of colonialism and apartheid that must be prevented, opposed and ultimately eradicated” (Floridi, 2001a, p. 3). Floridi concedes that on a global scale the issues of health, education and the acceptance of elementary human rights should be among “humanities foremost priorities” (2001a, p. 2), however, Floridi argues that “that underestimating the importance of the [digital divide], and hence letting it widen, means exacerbating these problems as well” (2001a, p. 2). Floridi concludes by announcing that “our challenge is to build an information society for all, and this is a “historical opportunity we cannot afford to miss” (Floridi, 2001a, 4).

This paper discusses a community based project – West End Connect - that was established to - in its own small way - take up the challenge proposed by Floridi. The West End Connect project is a collaborative endeavour between the State Library of Queensland and the Queensland University of Technology. The project, funded by a Faculty of Information Technology Community Service Grant, aimed to bridge the growing digital divide within the inner Brisbane suburb of West End. The project involved the design, delivery and evaluation of information and communication technology (ICT) training programmes to two West End Community Groups: The Women’s Ethnic Network and the African Women’s Network.

The paper is divided into three parts. Part one provides a brief discussion on the digital divide. A brief picture of the digital inequality in Australia is outlined. The current understanding of the digital divide from recent research into the area is outlined. Part two outlines the West End Connect community project. The implementation of the project is considered and the outcomes for both, the individual participants, and the West End Community, are discussed. Part three will discuss the impact of the project on the West End community. Recommendations for future community ICT projects will be provided.

The Digital Divide

This section will provide a brief summary of some of the key writings in the area of the digital divide. In particular the section will explore current attempts to define and quantify digital inequality in community. The section will then explore the idea of multiple digital divides. The perception that digital inequality is not just about ownership or access to ICT but also the lack of confidence or skill in being able to successfully use ICT shaped the West End Connect project.

Defining and Quantifying the Digital Divide

The digital divide between Information and Communication Technology (ICT) 'haves' and 'have-nots' has been a topic of considerable discussion since the US federal government released its 1995 report on household access to technologies such as the telephone, computers and the Internet (NTIA, 1995). The phrase *digital divide* has become the accepted manner for referring to "the social implication of unequal access of some sectors of community to Information and Communication Technology [ICT] and the acquisition of necessary skills" (Foster, 2000, p. 445). The term has been derived from the commonly held belief that access to ICT, such as computers and the Internet, and the ability to use this technology is necessary for members of community if they are to fully participate in economic, political and social life.

Studies examining the digital divide abound. Three recent studies have been conducted in the United States (Lenhart et al, 2003; NTIA, 2002) and Australia (NOIE, 2002). Each study sought to establish a statistical snapshot of the current state of their nation's involvement with technology such as the Internet and computers. In the second of the studies in the US the NTIA acknowledged that the Digital Divide "is now one of America's leading economic and civil rights issues" (NTIA, 1999, p. xiii). This statement is no less true for Australia. The findings from both the US and the Australian studies highlight several interlocking factors, which heighten the digital divide: race and ethnicity, geography, income, education level, employment status and physical disability. Individuals who can be identified through these factors are more likely to represent the 'have-nots' in the digital divide.

Two Digital Divides?

As personal computer prices have fallen and Internet services to the household are becoming increasingly less expensive the socio-economic perspective of the digital divide offered by the NTIA, NOIE and other studies becomes less convincing to explain all reasons for ICT non-use. The 1999 study by the National Telecommunications and Information Administration (NTIA) into the digital divide in the United States suggested that the "don't want it" attitude is fast rivaling cost as a factor explaining non-use of the Internet. Further support for this suggestion was more recently given by a Pew Internet and American Life Project (Lenhart, et al, 2003) study which stated that nearly one quarter of Americans are "Truly disconnected" having no direct or indirect experience with the Internet. Whilst another 20% of Americans were "Net Evaders", that is, people who live with someone who uses the Internet from home. Net Evaders might "use" the Internet by having others send and receive email or do online searches for information for them.

In 2001 Jung, Qui and Kim considered the question "What is the Digital Divide? Does it mean mere ownership of Internet connections...or does the digital divide describe more fundamental inequalities in people's connection to communication technologies?" (2001, p. 3). Jung, Qiu and Kim suggest that current studies of the digital divide (ie by NTIA and NOIE) fail to consider the social context in which people incorporate technology. They suggest that the personal and social effects of the Internet must be considered in comprehending the more subtle aspects of the digital divide. Jung, Qiu and Kim suggest that once people have access to the Internet the questions to be addressed is how can and do they construct meaning from their being connected. They conclude "existing inequalities even after gaining access to the Internet can directly affect the capacity and the desire of people to utilise their connections for purposes of social mobility" (Jung, Qiu & Kim, 2001, p. 8).

Vernon Harper (n.d.) in a recent discussion paper suggests the existence of two digital divides: Access Digital Divide (ADD) and Social Digital Divide (SDD). The Access

Digital Divide (ADD) is based upon cost factors and is frequently discussed in terms of the presences of computers or Internet access in the household. The Social Digital Divide (SDD) is "a product of differences that are based on perception, culture and interpersonal relationships that contribute to the gap in computer and Internet penetration" (Harper, n.d, p. 4). In agreement is Soraj Hongladarom (n.d.) who stated, "one should more accurately talk about the digital divides, as there are many different kinds of the divide" (p. 3). In stating this Hongladarom points to the work by Hargittair (2002) who argues the existence of a second-level digital divide that involves the gap between the skills people have when they are online. He contrasts this to the usual interpretation of the digital divide as little more than the gap between those who possess or do not possess the technology. This view of a multiple digital divide was supported by a 2001 US study conducted by Mossberger, Tolbert and Stansbury (2003) in which 1837 US residents participated in a telephone survey exploring PC and Internet use. On completion of the project the researchers concluded that there existed four types of digital divides: the access divide; the skills divide; the economic opportunity divide and the democratic divide.

Women and the Digital Divide

Joiner, Gavin, Duffield, Brosnan, Crook, Durndell, Maras, Miller, Scott and Lovatt (2005) note a number of studies which suggested that men are more likely to have access to the Internet than women and that women may use the Internet less frequently than men. Women have also been found to use the Internet for different purposes than men namely for communication and social activities. They note that while it has been suggested that the digital divide for women has been "diminishing or disappearing" (p. 371) this may not in fact be the case. They suggest a resistance to the equalising of digital inequality for women.

Wasserman and Richmond-Abbott (2005) found that women have similar access opportunities as men and that they use the Internet as frequently as men but for different reasons. Their study also finds that women are more likely to use email. They found that knowledge of web use was a very important factor affecting likely use of the Internet by both men and women. They found that Internet use has enabled women to participate in social activities such as "trading stocks" which prior to the advent of the Internet were not often undertaken by women. Internet use can be seen to have an emancipating and empowering effect on women.

The West End Connect Community Project

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 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 Brisbane 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 Information and Communication Technology (ICT) – the 'haves' – and groups who do not have access to and are not comfortable using ICT – the 'have-nots'.

Collaborative Partners

Two community partners were involved in the project. Each community partner has played a distinctive role in the successful completion of the project.

The **State Library of Queensland** is the official community partner for the current project. SLQ seeks to “empower communities” by trying to “improve information literacy and lifelong learning opportunities” (SLQ, 2004) for Queensland residents. At different stages during the project different SLQ staff provided their expertise and support. It was felt the State Library of Queensland may play a vital role in addressing the effects of the access divide; the skills divide; the economic opportunity divide and the democratic divide, through ongoing training opportunities and Internet access provided at the state's Public Libraries.

The **Ethnic Communities Council of Queensland (ECCQ)** played a vital role as unofficial project partner. The ECCQ is a community organisation, based in West End. It was established in 1976 to “represent the interests of the many people from diverse cultural and linguistic backgrounds who are part of the broad social community of Queensland, and to promote multiculturalism” (ECCQ, n.d. para 1.). The ECCQ was identified as a possible partner after initial attempts to contact possible migrant and ethnic groups in the area failed.

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.

Project Implementation

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: Exploratory research with community groups to identify ICT training needs.
- Stage 2: Design ICT training courses to meet the needs identified in Stage 1
- Stage 3: Conduct the ICT training courses
- Stage 4: Evaluate and disseminate the results of the ICT training courses

These stages are discussed below.

Stage One – Researching the Community Groups

Initially, the SLQ recommended a list of possible associations to target. Early and ongoing difficulties making contact with some of these groups led the project team to approach the Ethnic Communities Council of Queensland (ECCQ) which is a service provider having regular, ongoing contact with ethnic communities in Queensland. The ECCQ were eager to be involved in the project. Thus, the first part of the project was a two fold step: (i) identifying through the ECCQ the two or three West End community groups to be involved in the project; and (ii) developing a detailed understanding of the specific ICT training needs and other unique requirements of the groups. These goals were achieved by interviewing the ECCQ Executive Manager and through community focus group sessions.

The semi-structured interview allows for the obtainment of information about people's views, opinions, ideas and experiences (Arskey & Knight, 1999) and as such is an appropriate data collection method for the current stage of the project. The interview with ECCQ executive manager identified Women's Ethnic Network and the African's Women's Network as being appropriate for the project.

Focus groups 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). They are an appropriate choice for the current project 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. Focus group sessions were held with members of these groups to gather data on the ICT training needs and priorities of the groups.

The West End Connect project focus group process highlighted the extent to which older migrants, particularly women, engaged with computer technology. Two focus groups were held to discuss how the participants used information and communication technologies in their daily lives and what they perceived as their personal training needs and the training needs of the groups and associations to which they belonged. The first focus group was held at ECCQ House at West End. Most of the participants were older women who had each been resident in Australia for at least ten years. Most had mixed feelings about the information communication technology they had used - realising 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. There was limited understanding of saving information and the fear that it would be lost and of accessing information via the Internet without an exact address.

Many of the women found previous training courses difficult due to barriers created by terminology, language and the pace of instruction. They volunteered information about these barriers and stressed many times that the instruction would need to be ‘basic basic’ as if ‘we don’t know anything’. They mostly valued instruction delivered in a ‘hands-on’ manner rather than written instructions but several identified that they quickly forgot the information they were told.

Most of the women are active within the community and almost all wished to be able to create flyers, newsletters and brochures to more effectively communicate information to others. They were able to identify some aspects of their ICT needs and use that they would like to improve or learn more about.

The second focus group of seven women from the African Women’s Network met at Annerley and Districts Community Centre. Most of these women had at least 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.

There was a sense of a much broader scope of needs compared to the first focus group as many of the women commented that they ‘need to know everything’ or ‘need to know it all’. The women seemed reasonably confident in their own ability to improve their skills and knowledge and not daunted by the prospect. Many of the women stressed that sessions would need to be delivered out-of-hours to accommodate working women.

Most of the women wanted to improve their computer skills in part to improve communication within their communities by preparing flyers, newsletters and brochures, and using email. These particular women had better access to hardware than the women of the first focus group with many owning hardware and software, eg digital cameras, but do not know how to use them. Delivering training at a slow pace with time to practise skills was also stressed by several women.

These observations were used to tailor the ICT training courses to the specific needs of the two community groups.

Stage Two – Designing ICT Training Sessions

Three training courses were designed to cater for the specific needs of the two community groups:

1. Beginning Email

This session aimed to provide a basic overview to email communication by allowing the participants to (i) create an email account; and (ii) send and receive an email. Participants will also have the opportunity to explore the functions within the email interface eg attachments, address book etc. The two hour session uses a brief PowerPoint presentation, independent activities, whole group discussion and hands-on exercises.

2. Effective Communication Flyers

This two hour session aimed to provide a basic overview to creating a flyer by allowing the participants to (i) discuss the key features of an effective flyer; (ii) create a flyer using a prepared template in MSWord; and (iii) experiment with different flyer templates in MSWord. Participants will also have the opportunity to overcome any fears of saving and accessing their completed work. The two hour session uses a brief PowerPoint presentation, independent activities, cooperative learning, group discussion and hands-on exercises.

3. Beginning Internet

This two hour session aimed to provide a basic overview on searching for information using the Internet by allowing the participants to (i) search for known and unknown resources using Google; (ii) understand the key features of a URL; (iii) develop an understanding of the importance of search terms when searching for information; and (iv) practice identifying quality items from results lists. The two hour session uses a brief PowerPoint presentation, independent activities, group discussion and hands-on exercises.

Gerogogy, or “the strategies employed 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. Focus group participant 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 gerogogy was therefore an appropriate guiding theoretical framework for these training sessions. 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 gerogogy and more by adult learning theory or andragogy (Knowles, 1978). Focus group participant ages ranged from 25 to 53 with a mean age of 44.25. 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 – Conducting the ICT Training Sessions

Three training sessions were held for the Ethnic Women's Group – one each of the three sessions described above. 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.

Locating suitable training venues was a significant challenge. It was necessary for the training venue to accommodate several very specific requirements which included:

- enough computers for each participant
- a data projector to display PowerPoint slides, internet screens etc
- after hour access to accommodate the diverse schedules of the two groups
- easy access for members of the group who did not drive and who were not familiar with the area

Whilst computer facilities were available at the Faculty of Information Technology at QUT the project team wanted the participants to feel comfortable in their surroundings, and as such, were conscious that a university campus may be perceived by the participants as a daunting and intimidating place. In addition, as the project was intended to assist members of the West End Community it was decided that the training sessions should be held in the West End area (or as close to it as possible). A number of different venues were considered including the Brisbane City Council West End Library, Brisbane State High School and the West End primary school. Ultimately two training venues were located for the project: (i) a training room at the State Library of Queensland Montague Rd premises; and, (ii) a training room at the Junction Park State School. The Junction Park State School was used for sessions with the African Women's Network as members of this group lived in the area and indicated that they did not wish to travel far to attend the sessions. Figure 1 presents a photo of one of the ICT training sessions taking place.



Figure 1: A West End Connect training class

Three evaluation strategies were used to assess the impact of the West End Connect project.

1. ICT training evaluation survey

Participant feedback was formally obtained via self administered surveys at the end of each session. The survey was developed by the project team to determine the success of the ICT training courses in meeting the ICT knowledge and skill development of the two community groups. The results from the survey suggest that overall the participants found the ICT training to be valuable. Evaluation surveys were completed in 3 of the 4 trainings sessions. Participants in the last training session chose not to complete the survey. When asked by the Project Officers why the participants indicated that the “as the session was good as it was there was no need to fill in the form”. No comments were provided on the impact the sessions had on the participants or their community.

2. One-on-one semi structured interviews

At the close of each training course each participant was asked if they would participate in a follow up interview. Participants were informed that the interviews would take place three months after the training courses (late September/early October) and that their decision on whether to participate or not in the interviews is voluntary, with participants able to withdraw at any time. Four participants have agreed to date to take part in the one-on-one semi structured interviews with several other participants indicating that they would like to get back to the project officers. The interviews will be conducted by the project officers. The information gathered here will be important in gauging continuing social change effected by the project.

3. Project officer reflections

On completing the delivery of the training courses the two Project Officers were asked to write their reflective thoughts on the process of the project and the outcomes of the project. Two main points of significance were noted by the project officers: (i) the need to locate a suitable training venue for future ICT training for the West End Community; and (ii) the importance of having a more overt connection between the training and the SLQ by having SLQ staff present at the training sessions. This latter point was suggested as it would help develop a more permanent ongoing relationship between SLQ and the West End Community which has the potential to lead to sustained commitment to social change in the area.

Participants had expressed a high degree of frustration with past training encounters due to a mismatch between their needs and expectations and the course material and its delivery, leading to digital divide for these people. It was therefore very important to note training feedback for future projects.

Participants appreciated the safe and supportive environment which the sessions created. They commented that they did not feel stupid or lacking because of their inexperience. The surveys showed they were satisfied with the content, level and pace of the sessions. All participants wished there could be continuing series of such workshops. The majority of them said the sessions had made a positive difference to their confidence in using computers. The positive feelings instilled during the training course may contribute to a continued desire to pursue ICT activities thereby impacting the digital divide and effecting social change for this group.

The project indicated 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.

The problems experienced with venues cannot be overlooked. Without suitable venues the sessions simply cannot take place. The size of the venue determines the size of the group to be trained and the availability of the venue determines the timing of the sessions. Initially it appeared that many possible venues existed in the local area: educational venues of many types - high schools, primary schools, a TAFE college & universities; many community centres, local libraries and the State Library.

However, the search for suitable venues proved to be a major frustration after the decision was made to find venues within the local area so that participants would feel comfortable attending them. This was due to a number of reasons: Christmas holidays coinciding with the initial stage of the project; BCC library - lack of computers & training area; schools - rooms not available during the day due to classes or after hours, costs of venue hire; community centres - lack of computers, co-ordination problems, existing bookings, lack of security after hours etc.

Even when two suitable venues were located (a primary school and the SLQ training room) obstacles abounded. These problems affected the scheduling of sessions & the subsequent rescheduling. These obstacles included: school holidays; school fete day, multicultural festivals; coordinating session times to fit in with participants' work commitments; overly long time responding to communication attempts; non-availability of venue or training staff to assist etc.

Outcomes and Benefits

The project has supported the two groups by designing and delivering ICT training courses tailored to the specific needs of the group members. By doing so the project has promoted social change by providing an opportunity for a specialised learning environment that allows the group members to learn and grow at their own pace and style. 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.



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 skill 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 feel confident with the mouse now”

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

It is also hoped that a lasting impact may be felt by the communities involved, as participants take their new learnings and enthusiasm back into the community. Interviews are to be conducted during late October to identify what, if any, lasting benefits may have followed for the participants themselves and for their communities. The Ethnic Communities Council of Queensland has suggested that the training received during this project may provide necessary impetus and support for grants applications for available funding to provide the communities with hardware and software so that community members can undertake their own training programmes tailored to the individual needs within the community.

The sustainability of the opportunities provided by this project is of major concern to participants and training providers alike. Perhaps it is a weakness of this type of project, that sustained opportunities introduced to participants cannot be guaranteed. The State Library of Queensland may have a role to play in advising Public Library policy regarding Internet training and access for migrant and ethnic groups.

Recommendations for Future Projects

The following recommendations arise directly from what worked well and what caused problems during the current project.

- Approaching potential groups through a governing body such as the Ethnic Communities Council of Queensland to promote effective communication between project stakeholders.
- Using local venues for the training sessions.
- Limiting group sizes to ensure maximum participation and effective participant - trainer ratios.
- Designing session content and training at a level and pace determined by the participants themselves.
- Engaging participants in authentic, real-world tasks in response to focus group findings.
- Arrange possible training venues before conducting focus groups
- Formalise the agreement between partners

Conclusion

In terms of the four dimensions of the digital divide identified earlier in this paper, what has been the effect of this project? Participants have become aware of access and training opportunities offered by their Public Libraries. This may have the long term effect of ameliorating access and economic issues of Internet use. If, as is hoped, participants are able to take their learning back to the communities and undertake further training of community members, the social aspect of the digital divide may also be lessened. While it is difficult to measure the impact of this project on digital divide issues faced by the communities involved, all stake holders agree there has been a positive effect on the participants as evidenced by the feedback received.

In 2001 Luciano Floridi argued 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” (Floridi, 2001b, p. 4). The West End Connect Community project outlined in this paper will help the Brisbane community to take steps to re-align ethical and technological developments within its boundaries. More collaborative community projects aimed at helping to bridge the digital divide within community are needed if Brisbane is truly to become a “smart and inclusive city”. If we are to meet Floridi’s challenge of developing an “information society for all” (2001a, 4) then we must become more actively engage in social change that will bridge the digital inequality within community.

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