Globalisation: Empowering Women through Information. Impact of Information Availability and Use in Society on Women

Communication and Globalization: New Opportunities for Women in Ireland

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Abstract

   The "Celtic Tiger" (the resurgence of the Irish economy) has brought considerable investments of technology and commerce to Ireland, but primarily to the benefit of larger cities. In rural areas there is still a struggle to find jobs, childcare, and access to digital communication, especially for women because they have traditionally been the caretakers and homemakers, roles that are deeply entrenched in Irish culture as gender expectations. This paper presents three case studies of instances where opportunities do exist for Irish women outside of large urban centers in information and communication technology job:*
   - *In the schools of Ennis, Ireland's Information Age Town,*
   - *In a library system in County Clare, and*
   - *In a teleworking business in rural Northern Ireland.*
   The case studies are based on research completed during 2001 – 2002 based on four onsite visits to Ireland over the course of a year and a half. The study focused on efforts to close the gap presented by the Digital Divide on an island that is already politically

and economically divided, north and south. The cases focus on opportunities for women as technology coordinators in the schools of Ennis, in an interesting publishing and job training scheme organized by the County Clare Library System, and on the founder and director of the Kinawley Integrated Teleworking Enterprise in County Fermanagh. Not only have opportunities arisen for women in these three projects, but in some instances, women are assuming management and leadership positions. The case studies present exemplars of Irish women who are experiencing change as they become information professionals in the public sphere while concurrently continuing with home responsibilities in the private sphere.

Keywords

Teleworking, Telecommuting, Information and Communication Technology, Irish Libraries, Library Publishing, Irish Women, Irish Entrepreneurs, Rural Ireland

1. Introduction

Case studies provide a rich sense of detail in organizations and societies that researchers wish to explore, and they allow thorough and deep information to emerge that is sometimes not possible using surveys, questionnaires, or other research methods. A case study approach was taken in the study of information and communication technology (ICT) in Ireland, a study first intended to investigate technology adoption and its effect on a society. One of the surprising results that emerged from the study was that women are taking leadership roles in information and communication technology fields. Even though the workforce in information and communication technology fields is traditionally dominated by men (Camp, 1997; Grundy, 1996; Margolis & Fisher, 2001; McQuillan & Bradley, 1999), women in Ireland have emerged as technology workers, leaders, and executives. Their roles include technology coordinators, network administrators, trainers, troubleshooters, entrepreneurs, and administrators who have effected change in the way technologies are used in business, publishing, teaching, training, and learning.

The purpose of this paper is to show how Irish women who have traditionally occupied roles as homemakers, mothers, and wives in their domain of home and hearth, have also taken the initiative to embrace technologies for use in employment, education, and the production of information products. Women themselves have evolved the largely gendered roles of teacher, librarian, and clerk-typist into key positions in the "new technoculture" (Plant, 1997) that benefit society and themselves. The first case study describes a group of educators who went from no technology to becoming technology champions; the second explains a publishing and training program that a group of library leaders created with technology tools that helps young women; the third focuses on a technology entrepreneur who created a training and employment program for women in a remote area of Northern Ireland in the face of opposition, adversity, and a deeply divided community.

2. Women Technology Leaders in Ennis Schools

Background

In 1997 Ennis (population of 18,000) was chosen as the Information Age Town of Ireland in a lively competition with 45 other Irish towns (Deegan, 2002). Almost immediately the schools found themselves in a position where they had a massive influx of information and communication technology and a need for teachers who could use computers, the Internet, multiple software applications and integrate the use of it all within the school curriculum. By 2000 EUR 1.9 million (US $1.5 million) was invested in technologies for the schools (McQuillan, 2000, p. 27). As Liam, an Ennis Information Age Town (EIAT) staff member said, "The technology was parachuted in" (Informant #3).

The purpose of the Ennis schools research was to study the influence of information and communication technology (ICT) on the schools in Ennis. Principals in all 13 Ennis schools were interviewed, along with technology coordinators, and the director of the Clare Education Centre. Focus groups were held with teachers, primary and secondary students, and several interviews were conducted with parents, and a survey was distributed to all teachers in the schools. In addition staff members of the Information Age Town Office were interviewed.

Research Results

This study provided some answers to one major question – does the use of ICT make a difference in teaching and learning for the 5,000 students in Ennis when networking, training, software and hardware have all been made available for each child and each teacher in the schools? Results showed that the project was transformative. In 1997 many of the teachers were frightened by the technology and had little or no experience using ICT. By 2002 ICT was integrated in the everyday learning activities of primary schools and had influenced secondary education, although not as pervasively as in the early grades (McInerney & O'Donnell, 2003). In order for these dramatic results to take place, extraordinary efforts were taken and exercised by Ennis educators, the majority of whom are women. Women comprised seventy-three percent of the 158 teachers who answered the ICT survey distributed to the 350 Ennis teachers. The surveys were distributed and returned and the interviews were conducted in November 2002; some of the teacher focus groups were held in January 2003.

The Women of Ennis Schools

The women profiled here who took on the task of learning about new technologies in the Ennis schools invested considerable time and, in some cases, their own financial resources to become computer literate and software proficient. What effect did learning the new skills have on their teaching and on their lives? *Bridget*, a primary school information technology coordinator said, "I think the Information Age Town has changed the face of the schools completely: it certainly has changed my life, and I think it has changed everyone's life who is involved in the schools" (Informant #4). Today Bridget, a teaching veteran of 23 years, is the technology coordinator for one of the primary schools, and she helps other teachers who wish to incorporate technology learning in their courses. *Maire*, a school principal who also teaches, explained that in 1997, the educators were "clueless" and "initially, we couldn't even do a Word document….you know, we didn't even know how" (Informant #5). Now her school has a

state of the art computer lab for which *Celine* installed the local area network*.* Celine is the technology coordinator for the school, and she has also developed the multimedia computer lab. Her students are using the Internet for information research, the staff and the students use email, and the older students have a self-paced learning program that they can use independently. One of the biggest changes she sees from the first days of the Ennis Information Age Town (EIAT) is that in the beginning, the EIAT staff had to recommend computers, software, peripherals, and they had to do the networking as well. Celine says that "Since we've upgraded the system twice or three times since then, now the information is coming from us because we have…you know what I mean…the knowledge" (Informant #6).

Women principals in Ennis have been strong proponents of ICT, and have championed their use in the curriculum and in the classroom. One of the principals, *Anne*, was on the Task Force that developed the Information Age Town proposal, and now she says that the first thing she does every morning is to log onto e-mail (Informant #7). Another principal, **Deirdre**, reiterates the story researchers heard again and again about the shaky beginning with technology.

> The teachers were quite reticent and just wary of the whole thing [using ICT]. Everybody was a beginner…The teachers had huge fears. They were looking at it as a replacement of themselves and more traditional ways of teaching. They saw it as an extra, not as an enhancement of what they were doing. We were brave; we were very brave, but I think from day one we went into it with great enthusiasm (Informant #8).

In Deirdre's school one teacher was designated as the technology coordinator, and the children in the class she would normally teach were divided up and assigned to other teachers' classrooms. In a focus group teachers said that although having one less classroom teacher affected the pupil-teacher ratio (more children per teacher), having a technology teacher was "a fantastic advantage." **Helen**, one of the teachers in the focus group said that in addition to having designated technology teachers, individual classroom teachers still have to learn the technology themselves. For the most part Helen said "teachers are doing courses throughout the year, but get absolutely nothing from the department [of education]. It's done on their own time. OK, they might not have to pay for some of the courses, but they don't get any time off or anything like that" (Informant #9).

These women teachers and principals are just a selected few of the educators who invested themselves in a new project with high aspirations. When asked what the single most important impact of the Information Age Town had on their school, *Teresa,* the principal of a school for children with special needs said, "I'd say it gave good enthusiasm to people because they got a lot of this equipment for free, and they were enthusiastic to put it in motion. It was very big for the children" (Information #10). Enthusiasm carried the teachers, principals, and students a long way toward becoming Information Age schools.

What happened in the schools of Ennis may seem ordinary on the surface, however, there were extraordinary aspects to what was accomplished and how the women especially took on the challenges. As Terry and Calvert note in their book *Processed Lives: Gender and Technology in Everyday Life,*

…basic access to technologies, especially high-tech microelectronic technologies, is significantly restricted for most women in the world due primarily to their lack of money and their exclusion from technical training, and due to a socialization process that discourages women from thinking technology is theirs to invent and use (1997, p. 8).

Implications for the Future

In Ennis, the technology *was* made accessible. The teachers themselves invented and took advantage of training that was offered, and they made the technology theirs for the most part. There are still women teachers in Ennis who remain ambivalent about using technology, and some who will never fully embrace it in their teaching, and they might very well remain excellent teachers. However, the women technology coordinators who have become enthusiastic about using ICT can now serve as mentors and role models to the young girls in the schools to encourage them to work with technology with ease and grace. As principals, technologists, or classroom teachers, the Ennis men and women educators took leadership in transforming the schools into their own "wired" communities. The women are singled out here because for them, leadership in technology is a new societal role in Ireland, and there is every reason to believe that they will continue their leadership roles in curriculum development, training, writing, and encouraging younger women in the future.

3. Creative Training and Publishing Initiative – Young Women and the Clare Local Studies Project (CLASP)

The library system of County Clare, the county considered the home of traditional Irish music, and the home of some of the most spectacularly beautiful landscape in Ireland, just happens to be headquartered in the Information Age Town of Ennis. It has a large central library in Ennis and 14 other branch libraries in small towns around the county. The library staff were thinking through the implications of having a "wired" library several years before Ennis received the large investment of technology that came with designation as the country's networked community. Having plans in place for an online catalog helped the library leverage the equipment and connections made possible by the largesse from Eircom, the Irish telephone company. This strategic positioning also helped make possible a creative publishing and programming venture that preserves historical materials, offers job training to young men and women, and also expands the influence of the library throughout the global community. The mission statement of the Clare County Library is as follows:

> *Clare County Library Service is a publicly funded resource to be used for information, learning, culture and the imagination thereby improving the intellectual and cultural quality of life of the community, and is crucial in achieving equality of access to the benefits of the information society* (Clare County Library Website).

It is clear that the publishing initiative created by the library staff disseminates information, facilitates learning, preserves the area's culture and appeals to the imagination to benefit people of the county and others around the world, thereby fulfilling the organization's mission on a number of counts. But it does more – it also

offers opportunities to young people to learn about archives, books, and publishing and to develop expertise in information and communication technology.

Background

Clare County library was the first of the Irish libraries to go online with an automated catalog and a website portal in 1996. As the county's executive librarian and technology director Sean says, the system went for the "Big Bang" (Informant #1, 2001). The Big Bang means that all materials in all the branches were automated, as compared with an implementation plan where one or two libraries went online. The Information Age Town office provided access to the Internet through ADSL lines, and a volunteer began training the staff.

Information and communication technology made the Clare Local Studies Project (CLASP) possible, but the library staff was the creative spirit and driving force behind its organization and implementation. The project is intended to develop an awareness of and increase access to source documents related to the history of the County. This means that the CLASP team takes archival material about the history, geology, folklore, and records of events from years past, and publishes selected items electronically on the Web and in book length printed volumes. Many of these materials have been archived in the "Local Studies Centre," part of the library that houses historical materials, including hand-written diaries, old sketches, manuscripts, logbooks, and assorted primary accounts of historical events and observations. A sample of the work accomplished by the CLASP staff since 1995 to date include:

- diaries written in the nineteenth century online,
- the census of 1901,
- records relating to home evictions in the mid-nineteenth century,
- travel accounts of visitors in County Clare from 1534 – 1950,
- a scientific account of the archeology of the Burren, the stony landscape of northwestern Clare,
- a statistical survey of the county in 1808,
- holiday activities and locales in towns across the county in 1891, and
- other reports and book length works..

Although the current executives of the program are not exclusively women, women do play key roles in CLASP, and to date most of the trainees have been young women. At its heart the program has two objectives: to make historical and archival materials available to a broad spectrum of individuals and to offer young people an opportunity to learn about book planning,design, production, and publishing. The job of publishing gets done, and the young staff learn useful work skills that can help them secure jobs in the future or to assist in academic study.

Fulfilling the library's mission of cultural conservation

The publishing initiative does what libraries are meant to do, that is, "to bring human beings and recorded knowledge in as fruitful a relationship as it is humanly possible to be," as Jesse Shera said (Shera in Broadbent, p. 25). Many of the materials that are given new life through the CLASP publishing efforts would be languishing in the Studies Centre, accessible only to those able to travel to Ireland, if they hadn't been made

available on the Web or in book form. Technology has made the effort possible because of the Internet and the automation of manuscript preparation that is now possible on desktop computers. The young CLASP trainees enter historical manuscripts into electronic formats, and create html documents. The technology coordinators in the library then post the items to the library's website (http://www.clarelibrary.ie/). Some of the longer works that are perceived to have a broad interest are organized in book form by the library's own publisher, CLASP PRESS, and printed by Coulour Press, a Dublin firm. A list of these publications is given in the Appendix B of this paper.

A learning opportunity with potential lifelong benefits

The young staff who work as trainees in publishing the high quality books that result from CLASP learn skills that can carry over to the workplace or to school. The staff are primarily "school leavers" who have dropped out of secondary school or unemployed young adults. They are trained for six months in book production from the ground up, learning book design, word processing, desktop publishing, Excel, Microsoft Access as well as proofreading, copy editing, and editorial processes. The attention to detail and persistence required of copy editing and proofreading are cognitive disciplines that the trainees develop even though they haven't always been successful in academic endeavors.

When the training period is over, some of the young staff members return to school, and others are successful in finding jobs in business, in publishing, or in the library itself. An example of how the training program impacts the lives of the trainees can be demonstrated by the course followed by the young women and handful of men that belonged to one training cohort (2000-2001). After they completed their CLASP apprenticeship, some were able to take positions in industry, get jobs in local organizations, or returned to school. The following table shows the self reported occupations of trainees in the 2000 – 2001 cohort as given on the CLASP website http://www.clarelibrary.ie/eolas/library/local-studies/clasp/.

[Appendix A]

Table 1. *Occupation of the 2000 – 2001 CLASP Training Cohort after Apprenticeship*

Type of Work After Internship	Number of Trainees
Industry	7
Returned to school	6
Clare County Library	3
Clare County Council	3
Continued with CLASP	1
Newspaper	1
Non-governmental agency	1
Travel	1
Maternity leave	1
Unknown	1

Funding and Support

Funding for the innovative publishing/training project is not born by the citizens of Clare County alone, although it was started with 2,000 Irish Punts from the Clare County Council (Informant #1, 2001). The project is a joint partnership with the Irish national training initiative FÁS. FÁS is the Irish Training and Employment Authority, an agency of the national government that attempts "to increase the employability, skills and mobility of job seekers and employees to meet labour market needs, thereby promoting competitiveness and social inclusion," according to its mission statement (FÁS website). In fact, the Project won the FÁS Community Regional Initiative Award in the Environmental/Heritage category and received a Special Merit Award at the National Finals for its commitment, energy and expertise in 2001. CLASP has also cooperated with the European Union to fund one project on the history of Scattery Island. In addition each of the governmental authorities (there are over 30) in the County offered funding for one or more of the publishing projects (Informant #1, 2001). After the books began to be published, the sale of one book helped to finance the publishing of the next one.

Significance of the project

The project is somewhat unusual for a library in that it is entrepreneurial, sustainable, and focused on publishing rather than collecting texts that are already published. It fulfills the library's mission of preserving and disseminating cultural artifacts of the region, and helping those interested in Clare's past learn about it through primary materials. However, the deep significance of CLASP may lie in what it does to help young people develop skills related to books, the Web, and publishing in general. As a result of the project young women and some young men are able to enter the work world literate in computer use and knowledgeable about publishing. In addition they have a solid grounding in what libraries are all about and how libraries are connected to locale and community.

Implications for the future

Potentially, the young women who graduate from the CLASP apprenticeship could go on to take leadership positions in the Irish Information Society or the "knowledge society" an agenda put forward by the Irish government (Information Society Commission, 2002). CLASP has already seen some of the trainees go on to work in the library and in local government as well as in industry. Since a number of the trainees return to school, one could project that there might also be some trainees who go on to study library and information science.

4. A Teleworking Centre for Women in Rural Northern Ireland

Background

Women in Northern Ireland face specific challenges in employment and in opportunities for technology work. The area is largely rural, and in some counties, there are no organized group childcare providers at all. Although industry in the north is

scattered and located primarily in the larger cities and towns such as Belfast and Derry, there is nothing to prevent rural women from telecommuting or teleworking (as it's known in Europe, the UK, and Ireland), if they have access to technology in order to work via computer and high speed data lines. There are other "ifs" as well -- there is also the child care factor for parents, and the need for training in ICT skill development.

A Technology Entrepreneur

Sheila McCaffrey, the director of the Kinawley Integrated Teleworking Enterprise (K.I.T.E.) has made considerable progress in an innovative scheme to establish information and communication technology-related employment for women in the border area between north and south near Eniskillen. To find K.I.T.E. one crosses into Northern Ireland at the tiny checkpoint of Swanlinbar and travels two miles down a country road that becomes narrower and narrower until it is only one lane. The vines and trees hang over the lane on one side and a barn is on the other with only the small sign "Telecottage" guiding the way. Eventually, the visitor is greeted by a large open space with several contemporary styled white and blue buildings and a play yard with climbing toys and a child's playhouse.

Inside the two story work and office space that resembles a modern urban building, a well-equipped computer work area is available on the main floor and another one upstairs. Women spend their days here working via high speed data lines while their children are cared for at the adjacent child care center: one building for infants and young children, and one for school-aged boys and girls. Each space comes equipped with a separate tearoom so that preparations can be made for morning and afternoon tea and lunchtime. When asked why she invested in a new building, a large financial burden for a new enterprise, McCaffrey says,

> You have to understand that in 1993 [when investment capital was being raised] we had two very divided communities – one was Catholic, and the other was Protestant. In this community each tradition was used to having its own buildings, either green or orange. If you're starting fresh and want something clear and white, and that is not going to have a traditional background, the only way we could do that was to build. We wanted this to be a welcoming environment for both denominations or no denomination. It doesn't really matter in a working environment, and we didn't want it to matter here. We wanted to go out there publicly and say this place is for both [Catholics and Protestants]. There was a time when it wasn't popular to be saying so.

McCaffrey indicates that there was some pressure and disapproval from the community, and she explains that this venture was going against tradition. Some locals didn't want a business that was nondenominational.

McCaffrey says she was able to persist in the face of adversity, because "When you look at the caliber of the person who turns up at your door opposing you, you ask yourself what has this person has ever done to create work, and the answer is usually 'very little.'" She puts the establishment of K.I.T.E. into a larger social context, saying, "You have to be open and ask yourself, can this make a difference? And I wholeheartedly believed that it could happen; it could make a difference." During the startup time, it was not popular to have an integrated business, and the whole concept of teleworking was

largely unknown. McCaffrey and her husband Michael (the firm's Operations Manager) were pioneers of sorts, not just in this remote rural area, but in Ireland in general. In 1995 the training business they started was also based on the principle that everyone was welcome, and the firm opened its doors to Catholics and Protestants alike with contracts from the European Commission to train Irish people in technology and software applications. The business evolved into a teleworking outsourcing firm when the McCaffreys realized that the generic ICT training being promoted by the European Union (EU) was limited and didn't always offer what was needed in a business environment. It should be said, though, that the connection with the EU did provide the business with capital and was a source of solid contracts for the first few years.

     During the first phase of K.I.T.E. over 2,000 women went through the training programs. Sheila McCaffrey says that she believes the participants benefited as much from the programs socially as they did they did with the training. The training portion continued for those who would be employed by the business in the new focus on teleworking, but now it accounts for only 5% of the business. In the mid-1990's McCaffrey visited the United States for several months to survey the needs of businesses since her assessment showed that the market in Ireland was not large enough to support a medium sized telework business. She also used her time in the US to evaluate various business models so that a successful one could be chosen for her to follow. The visit to California and other states also allowed her to develop business prospects in data and information management, the company's present focus.

     Subsequently, the business has been a global player with contracts coming from Australia, Kenya, the United States, the United Kingdom, and other countries. The strong education level of the Irish workforce combined with the extensive technology training offered to the women employees of K.I.T.E, make this labor pool an attractive one for companies in search of an outsourcing firm. The firm started teleworking with a guaranteed overnight delivery of medical records transcriptions, and since then they have branched out to include examining electronic records for United Parcel Service, database building, and other information management tasks.

[Appendix B]

Table 2. Work Undertaken by Kinawley Integrated Teleworking Enterprise

Type of Work Completed by K.I.T.E. Employees
Telephone research
Transcription
Targeted mail shots
Internet searchers
Web page writing
Database building
Reporting
Customer training
Telephone calls handling
Remote conference management

Source: European Union Flexwork Website
http://www.flexwork.eu.com/members/sme_cases/sme06.pdf

Implications for the Future

The European Union's flexwork website says that the K.I.T.E. initiative is "a brainchild of the manageing director" Sheila McCaffrey (EU Flexwork website). In speaking to K.I.T.E.'s impact, the EU says

> The teleworking initiative had a considerable impact on the community and individual level namely through job creation and skill acquisition. Its well thought policy of providing child care facilities are rather novel in the UK and Irish context and the impact of this initiative might be far reaching, should it become widely emulated (EU Flexwork website).

When asked if she would advise other women to become technology entrepreneurs McCaffrey says that she believes that 90% of the people have an enormous untapped potential for entrepreneurial work, and she would hope that other women would use this potential. Her influence has certainly been felt in the community of teleworkers. McCaffrey served as president of the Teleworking Association of the UK, an organization with 3,000 members, and she was a founding member and chair of Telework Ireland. Although when interviewed in 2001 she indicated that she hoped K.I.T.E. would be bought out by a larger firm so that she could retire by age 40, McCaffrey is still managing director of the company and continues to expand the business and serve in her leadership role. As both a business executive and technology pioneer, Sheila McCaffrey promises to be a continuing influence in Ireland and in the global business arena.

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Appendix C
Informants Interviewed in Ireland

Note: All names given here and used in the paper are substitute names used to provide anonymity for interviewees in the research study.
Sean, Informant #1 – County library executive and technology director
Phillip, Informant #2 – County library director
Liam, Informant #3 – Information Age Town executive
Bridget, Informant #4 – Primary school technology coordinator
Maire, Informant #5 – Principal for school with adult students
Celine, Informant #6 – Technology coordinator for school with adult students
Anne, Informant #7 – Primary school principal
Deirdre, Information #8 – Primary school principal
Helen, Informant #9 – Primary school teacher
Teresa, Informant #10 – Principal of a school for children with special needs.
Note: Sheila McCaffrey of the Kinawley Integrated Teleworking Enterprise (K.I.T.E.) Enniskillen, Co. Fermanagh, agreed to be interviewed without anonymity. Consequently, her name and the name of her business are used here.

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Appendix D
Books published by the CLASP project

Kilrush Union minute books, 1849.

Knott, Mary John. *Two months at Kilkee*. Originally published in 1836.

Lewis, Samuel. *County Clare: A history and topography*.

Ó Dálaigh, Brian. (Ed.). (1998). *The strangers gaze: Travels in County Clare 1534-1950*.

Ó Murchadha, Ciarán. *Sable wings over the land: Ennis, County Clare, and its wider community during the Great Famine.*

O'Donovan, John & O'Curry, Eugene. The antiquities of County Clare; letters containing information relative to the antiquities of the County of Clare collected during the progress

of the Ordnance Survey in 1839 & letters and extracts relative to ancient territories in Thomond, 1841.

P.D. *A handbook to Lisdoonvarna and its vicinity giving a detailed account of its curative waters, and tours to the principal places of interest in the County Clare*. Originally published 1876.

Anonymous. *Poverty before the famine: County Clare 1835; first report from His Majesty's commissioners for inquiring into the condition of the poorer classes in Ireland.*

Westropp, T.J. (2001). *Folklore of Clare*.