Emerging Technologies, Established Communities, & Evolving Universities

Theme: Community Development / a. Community based Learning and Outreach

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ABSTRACT

Post-secondary institutions in Canada and around the world are in a constant state of flux due to changing population demographics and newer technologies. With multifarious demands for corollary revenues and bottom lines, universities are being stretched beyond their limits. Increasingly, the ivory towers have lost their gleam and are under constant pressure to respond to a Net generation demanding employable credentials (Cote & Allahar, 2007). Many of these issues are not recent as we see scholars having raised the alarm bells even in the sixties (Coombs, 1985; Dore, 1997). The emerging technologies have begun to challenge our notion of relevant education in relation to pursuit of knowledge. The influence of technology in the way we learn and interact is undeniable. In the meantime, universities have become isolated islands distanced from their immediate communities. With the seeming disconnect that has plagued higher institutions of learning, traditional universities have begun to revisit the notion of production of knowledge for its own sake. This is especially true in Canada.

This paper explores selected studies within a given theoretical framework involving projects and initiatives at the institutional level. It highlights some of the challenges faced by such emerging technologies along with cultural, political, and economic realities that impinge upon community development.

INTRODUCTION: With newer technologies, post-secondary institutions in Canada and around the world are in a perpetual state of crisis of conflict between objectives and practicality. With higher tuitions, dropping enrollments, increasing class sizes, constrained budgets, aging faculty, increasing salaries, systemic use of sessional and stipendiary instructors, and added demand for corollary revenues and bottom lines, universities are being stretched beyond their limits. Increasingly, the ivory towers have lost their gleam and are under constant pressure to publish or perish, react to grade inflation, increase revenues even as they produce knowledge, conduct quality research, and respond to a Net generation demanding employable credentials (Cote & Allahar, 2007). Many of these issues are not recent as we see scholars having raised the alarm bells even in the sixties (Coombs, 1985; Dore, 1976). With the advent of Toffler's *Third Wave*, we have emerging technologies challenging our notion of relevant education in relation to pursuit of knowledge. Even the influence and adoption of emerging technologies in education have been questioned by some critics. Considerable debate exists on the role and influence of computers in particular and technology in general. While for some like Papert and Zuboff, the computer is a tool which implies a neutral "social and political content," others like Weizenbaum, Hubert, Dreyfus, and Sullivan question these assumptions (Anchan, 2008, 2006, 2003, 2000; Aronowitz & Giroux, 1993). With some of the greatest criticisms of computer technology having emerged from writers in technology and literature (Roszak, 1986; Stoll, 1995; Hislop, 1995), the influence of technology in the way we learn and interact is undeniable. Conversely, these very same institutions have become isolated islands distanced from their immediate communities that are supposed to be the recipients of progress and development. With the seeming disconnect that has plagued higher institutions of learning, traditional universities have begun to revisit the notion of production of knowledge for its own sake. This is especially true in Canada – where the taxpayers highly subsidize education without having maximized benefit of returns. Amidst the phenomenon of globalization, digital divide and the evolution of McCluhan's the global village, the immediate indigenous communities remain alienated and marginalized (Anchan, 2003).

A few case studies involving projects and initiatives at the institutional level will be explored within the theoretical framework of empowerment pedagogy. The discussion will also highlight some of the challenges faced by such emerging technologies along with cultural, political, and economic realities that impinge upon community development.

WORKING DEFINITION: A quick review of definitions may be pertinent to this discussion. The term *community* is understood within a given context. Community learning at the University of Winnipeg has taken on a new meaning as the institution does not research *on* communities but engages communities as partners in research and development. This particular relationship between the institution and the communities has been explicated in an earlier paper using Brofenbrenner's ecological systems approach (Anchan et al, in press). Nevertheless, for this paper, a different theoretical approach is taken by appropriating the Freirean empowerment pedagogy.

An earlier attempt to define community development by Frank and Smith appears to be succinct: "Community development is the planned evolution of all aspects of community well-being (economic, social, environmental and cultural). It is a process whereby community members come together to take collective action and generate solutions to common problems" (p. 6). As a "grassroots" movement, communities become more responsible to organize and plan together and develop healthy options even as they empower themselves. According to Frank & Smith, such an act attempts to reduce ignorance, poverty and suffering. It not only creates employment and economic opportunities but also achieves social, economic, cultural and environmental goals (p. 6). Similarly, Singh (1982) defines *community development* as "efforts of people of a locality to help themselves; irrespective of caste, creed and socioeconomic differences… [It] signifies people's joint effort to develop an area which is common to all" (p.20). Thus, *development* may imply "growth". Albeit, as growth may not always be considered "desirable" or "better", development may also mean "change" for the better. Thus, community development usually occurs in response to challenges and opportunities and aims at capacity building.

Most definitions of community development allude to the conscious collaboration efforts towards emancipation and amelioration. Traditionally, community development in rural India has attempted to address common concerns surrounding basic human needs including, farming, food, worker's rights or equity, literacy, and health. In Canada and other more industrialized countries, community development has aimed to address issues of access, equity, participation, literacy, adult education, health and social services. In India, the federal initiative under the 5 Year Plans adopted community development as one of its objectives. As a corollary to the established community development, the local village Panchayats and labor movements participated in the empowerment programs. Community development in Canada has evolved a bit differently. With its decentralized system that has devolved regional responsibilities in the area of finance, education and health to the provinces, Canada has combined various levels of government (federal, provincial, and municipal) in partnership with NGOs, philanthropic and commercial participants interested in utilizing public services (law enforcement, social services, post-secondary institutions, financial businesses) and private entrepreneurs working together to achieve the common goals of community development.

The role of community development in a nation's growth has been acknowledge by many experts. As Chekki (1979) notes, "Community development has been one of the most significant social forces in the process of change" (p.2). Community development meant many things to different people; economic development, social reformation, housing and education, philosophical and political movements, and organized collective initiatives. The Marxian and neo-Marxian politics – including the Liberation Theology movement, adopted community development within the framework of organized labour movement. Eventually, community development became a vital component of the volunteer sector.

Within the movement of empowerment pedagogy, Paulo Freire, the Brazilian educator occupies an important historical position as a social activist. Having defined the "literacy-conscientization" movement among the Brazilian farmers, the Freirean "Conscientization" and critical theory addressed adult literacy education toward liberation and empowerment. This in essence, saw a strong relationship between organized political movements and community development. The Freirean process involved dialogue, awareness, mobilization, empowerment, and liberation. Banks (in Campfens, 1997) describes a project at the University of Manitoba and differentiates between *applied* vs. *engaged* research (p.113). In fact, the differentiation is essentially akin to the debate between empirical, positivistic, traditional "expert" *research on community* vs. participatory, ethnographic, action research borne out of phenomenological approach to situational experience that entails *research with the community*.

CASE STUDIES: Some of the recent initiatives at the University of Winnipeg, Manitoba, Canada, involve a variety of projects aimed at connecting the institution with the surrounding communities. These include The University of Winnipeg Global College Human Rights degree Program; Aboriginal Governance Program; UWin Edge community participation; the Model School; the University's Community learning centre (Wi Chi Wakanak Centre) for the inner city kids; and environmental initiatives based on the needs of the surrounding communities. All these initiatives attempt to bridge the chasm of disconnect between the university and the surrounding communities even as they open access to the remote and marginalized populations (Anchan, 2003). As the first institution in Canada to become the headquarters for international aboriginal programming affiliated with the prestigious MacArthur Foundation network, the University of Winnipeg will be using the latest technologies from Cisco (TelePresence and WebEx systems) to connect across the country and the around the world. This multimillion dollar project will not only establish world class cutting edge research centre in Canada's newest and most environmentally friendly, Richardson College of Science and Environment, but also be a project that will integrate many of the community needs across the province and beyond. Online/Distance Education using asynchronous and synchronous deliveries will complement state of the art studios to allow collaborative technologies include both urban bureaucrats and remote communities.

The various community projects at the University of Winnipeg are based on the assumptions that providing affordable access to newer technologies to communities that are especially vulnerable, i.e., aboriginal, new immigrants, single mothers, and low SES inner city single parents is a good approach to community development. By allowing free or highly subsidized WiFi or WiMAX along with refurbished computers to access the internet, many low SES inner city residents are able to enhance their employment and education status. Emerging technologies have allowed faster, dependable, and affordable equipment and modes of delivery that allow overcoming traditional time and space barriers. Social networking and other common forms of communication including email have changed the landscape of connecting among learners and between learners and facilitators. Ability to access exclusive academic content has also changed the way community learners successfully utilize newer technologies. Ubiquitous computing has dramatically changed the way younger generation access information. Mobile cell phones, handhelds, and portable computing (esp. Netbooks) have had remarkable influence in internet communication technology based learning. Whether it is a traditional content management system or learning management system or facebook or YouTube, the mode of communication has radically evolved over the recent years. With access to synchronous learning utilizing commercial education software such as Elluminate or freely available Skype, learners have a wide variety of options that are cost efficient and effective. The University of Winnipeg has launched a number of initiatives that connect the surrounding and extended communities. While the cutting edge Telepresence studios cater to business and specific point-to-point communication, WebEX is the free browser plug-in that allows any computer with minimal bandwidth to allow synchronous communication similar to Elluminate. The

advantage of WebEX proprietary system is the fact that it integrates with the telecommunication systems across campus and provides a secure environment that is controlled by established controls and monitoring measures. All classrooms on campus are Smart classrooms with the typical configuration allowing wireless connectivity. These and other systems allow researchers and instructors to collaborate in real-time allowing videoconferencing and webconferencing possibilities across the globe. It is also fortuitous that such newer technologies reduce actual travel time and costs – not to mention reduced carbon footprint, making these the harbingers of environmentally friendly systems.

The Campus Manitoba (CMB) initiative has existed in various iterations even as it has evolved adapting various technologies that allow communication over distances. This initiative responds to the needs of remote northern communities in Canada and remains a showcase for provincial government support for collaborative programming between various post-secondary institutions within the province. With the involvement of provincial government and participating Manitoba post-secondary institutions, CMB has provided access to university education utilizing a combination of existing and newer internet technologies. This consortium has become a case study for similar projects and initiatives across the country. Currently, CMB allows students to apply for acceptance to any one of the participating partner institutions, which then function as their home institution. Thereafter, students are able to take a variety of courses in different modes of delivery for credit (referred to as course/credit equivalencies) from any one of the participating partners. All partnering institutions and the government recognize the transcripts and allow students to graduate with undergraduate degrees from their selected home institution.

The technologies used in this initiative are varied and evolving. Synchronous Internet Site-Based audio and graphics; Online, asynchronous Learning Management Systems (LMS-Online) and the Video-on-Demand (VOD) allow students the flexibility in accessing and communicating during their studentship. Thus, students both in urban centres and in rural areas have the opportunity to continue their education without leaving their current residence. Some of the newer internet technologies allow 24/7 access from anywhere in the world. Even newer technologies are being installed for access to on-site science laboratories and three-dimensional simulation systems at the University of Winnipeg. These complementary delivery systems will allow richer experience for users and address the increasing demand for access to post-secondary education from students in various parts of the country and beyond. By not having to relocate, students and their parents continue to participate in their communities without disruption. This also allows affordable and enhanced community access to learning utilizing newer technologies.

In all these examples, emerging technologies have been instituted to provide affordable access to the community. These initiatives attempt to overcome the traditional barriers placed on communities namely, time, space, and socioeconomic status. Universities in North America have recognized the four pillars expected of the academics, namely, research, teaching, governance, and community service. Thus going beyond the traditional notion of scholarly activities, universities now work with surrounding communities by sharing the product of their teaching and research even as the academics access knowledge from the Gramscian notion of *organic intellectuals*.

CHALLENGES AND LIMITATIONS: Even back in 1972, an analysis of community development in Northern Manitoba, Canada, had recognized the limiting factors that influence the relationship between government and community engaged in a joint venture of community development. These constraints impinge upon the successful planning and implementation of community development (Campfens, 1972, p.59).

In Canada, the landscape was influenced by its decentralized, regional, ethnically diverse nature. With increasing immigration from non-English speaking countries, a new group of vulnerable population that spoke little English and followed different cultures and social norms created a new set of challenges. Community development that had historically responded to aboriginal and inner city challenges was face with the needs of a changing population of new immigrants. Issues of literacy, English as an Additional Language (EAL), employment, education, housing, health, youth integration, single women, and refugee populations became agenda items for community development. In one form or another, community development may consist of collective action, solidarity, cohesion, praxis, adult education, mentoring, integration, education, settlement, and adaptation.

Community development in India has mostly targeted agricultural issues. The legitimacy and credibility of government interventions have been subject to some criticism and scepticism. Nevertheless, over the years, the 5 Year Plans in India have been instrumental in strengthening community development initiatives. Whatever the nature of activism, Dore contends that, "only organization of, by and for the poor can actually help the poor" (p. 26). This is reflected in some of the earlier community development initiatives in India. In a rural project based on Gandhian traditions, Gaikwad reports the cooperative farming focus within the framework of community development (Dore, 1981, pp. 245-334). The two case studies conducted in Seshagirihalli and Ganakal in Ramanagaram block of Bangalore, Gaikwad describes the agricultural emphasis placed on community development initiatives among the farming community.

As to the intervention of universities in community development, back in 1976, Marshall and Miller conducted a pilot extension project involving universities and communities. The report concluded that the project was only partially successful. The exercise involved participation of faculty in research and engagement, an overall revision of the university philosophy, and purposeful participation. This study concluded that university resources and management of community development initiatives required planned coordination and commitment from all levels of the institution. Conversely, unclear power and decision-making structures created impediment resulting in confusion and conflict. Universities have consistently challenged issues surrounding workload and primary responsibilities of academic scholars. As knowledge production and dissemination centres of excellence, academics at universities have contended that the objectives of community development were only corollary to research and teaching. With decreasing resources, academics have argued the case for primary and core functions over social development.

Overall, some of the challenges faced by university community outreach programs relate to the cultural, political, and economic realities that impinge upon community development. Irrespective of the various concerns, the success of any extensive initiative is dependent on a consolidated effort involving centralized university level council transcending departments and disciplines. This would ensure stronger support and participation among faculty and staff members. A clearer and predefined relationship between the university and community may alleviate some of the pitfalls and tensions inherent in such complex projects. Clarification of roles and responsibilities among researchers and community participants and the nature of shared resources will facilitate the process. In other words, a common buyout from the President's office down to the various departments is crucial to make the university community venture a success. Thus, a successful community development initiative needs to be an initiative that involves all levels of academics, university administrators, and active community leaders.

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