Informing Minority Communities:
The English Speaking Black Community of Montreal. Towards a Deployable Model

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Abstract

The Canadian is a complex adaptive social and economic system. It consists of ten Provinces and the North West Territories. It depends on immigration to sustain economic growth. It is a bilingual multicultural country committed to an experiment in nation building based on a policy of multiculturalism entrenched in the Constitution Act 1982, the Multicultural Bill and a number of its Supreme Court Rulings. Its governance is described as a free enterprise capitalist democracy with a West Minister style parliamentary system. It is ranked by Life Style 9 among the 10 best countries to live in with a life satisfaction rating of 82 percent and an overall score of 77%. But not withstanding this, the reports of several commissions, task forces, and the message from several public demonstrations and movements express dissatisfaction with the rate and level of integration of visible and immigrant minorities into the social, political and economic fabric of the society. This raises many questions about the success of the experiment of Multiculturalism in terms of the recognition of the contributions of its diverse immigrant groups, and complaints of failed expectations from immigrant and minority groups. In this dynamic market oriented democracy, how can an "informing" process (communication and exchange of ideas within and across cultures) assist or hinder the effective integration of minorities and engage them in the creation of a more socially cohesive, economic and environmentally sustainable society ?

This paper defines Canada as a fitness landscape. That is to say, it has certain environmental and social properties (attributes) that interact to favour and or hinder the cultural and kinship groups that are a part of that landscape attain socially acceptable levels of wellbeing. The paper postulates that knowledge creation and dissemination, communication and exchange are essential to the integration and advancement of all groups in the landscape. It looks at ways in which the information and communication technologies can be used as part of the strategy of some disadvantaged groups to move to positions of greater advantage (higher fitness levels) on the Canadian fitness landscape. It proposes to develop and test an online learning and communication network with continuous feedback and updating properties. It is our opinion that communication network centers will help to increase the capacity of minority communities for solving problems of social and economic exclusion; and promote sustainable development. The focus of the study is on the English speaking Black Community of Montreal, Quebec, Canada.

Keywords: Fitness landscape, Portal, Multiculturalism

Introduction and Background

Introduction

This study is exploratory. Its analytical framework draws on the theory of agent-based modeling of complex adaptive systems. The approach is inductive: we make assumptions about the system that we believe to be most relevant to the situation at hand and observe the phenomena that emerge from the interaction of our target group with other agents in the landscape. Therefore the study uses an action research methodology. We start from basic premise that society is a complex adaptive system with its primary purposes centered on many diverse subgroups of human species located in a complex environment and motivated by their will to life: survival, reproduction, the perpetuation and improvement of life (Dawkins, 2009), and the search for an ultimate meaning (Frankel, 1997). It explores how a specific cultural sub-group may use the information and communication technologies to inform its responses to change; to gather and use information for improving its fitness. Our target experimental group is Blacks in Quebec, with the main focus on the English speaking Black community. Black as a community represents a very complex system sub-group on many dimensions: culture, race, multiple identity issues, language, religion, place of origin, the balancing of loyalties between local national cultures and external origin cultures. For the purposes of this paper we shall use the term Black as a cultural entity in accordance with the Canadian Census definition s (Statistics Canada, 2006). Also, Blacks in the Canadian context are considered culturally distinct from Blacks in the America context, a distinction effective made by professors Robin Winks (1997) and James Walker (1980).

We take the position that information sharing between exemplars (social entrepreneurs) within the Black communities (various Canadian born and immigrant Black groups) and between them and mainstream Canadian knowledge-based institutions, increases the stock and flow of ingenuity within the groups and the overall system. In turn this increases the capability for the group and its members to overcome barriers to their strategies for moving to higher fitness peaks. In his book The Ingenuity Gap, Homer-Dixon (2001, 19-33) states that population's explosion, urbanization, and rapid growth in technology have increased the complications of human societies and organizational decision making. He proposes that to manage and solve these problems societies need to be able to create knowledge as new ideas (ingenuity) at a much more rapid rate than in the past. He states that "to one degree or another, all human societies are locked into a race between a soaring requirement for ingenuity and its uncertain supply", and concludes that where gaps develop between the need for ingenuity and the supply of it, disaster sets in (Homer-Dixon, p26). Based on these propositions and the inevitability that Homer-Dixon assigns to a global increase in the ingenuity-gap, one might expect that to avoid death intelligent life will act to reduce the level of complexity to a more tolerable level. In fact, this is what Stuart Kauffman (The Origin of Order, 1993) believes is likely to happen in a complex adaptive system. Thus, we argue in favour of a reduction in complexity by increasing collaboration between sub-cultures. Moreover, we propose that Blacks and other minorities in urban settings use the information and communication technologies to greater advantage to create better informing mechanisms and processes if they are to effectively modify the effects of or reduce any ingenuity gaps that act as barriers to their initiatives to improve their fitness.

The paper bases its analysis on principles and properties derived from agent-based model simulations of complex adaptive human systems. Agent-Based models are interesting because they allow us to consider the effect of collaborative behaviours, information sharing, and increases in knowledge and ingenuity, on the chances for the survival of sub-group cultures in turbulent, competitive, and aggressive external environments. This includes environments in which dominant mainstream cultures are closed, or prefer to collaborate only with cultural groups that most close-

ly resemble them over a selective range of kinship attributes and common cultural and historical experiences. Based on the cases and simulations reviewed, we propose the creation of a communication network system to bridge the gaps in information flows. It is hoped that such a network will act as an informing mechanism to increase information flows within and between the English speaking Black communities and mainstream networks. Feedback loops in the system will allow us over time to test the research hypothesis that barriers to community development in the Black communities of Montreal are partly a result of weak channels for sharing information within the sub-group cultures and between them and the mainstream cultures that have larger stocks of knowledge and greater capabilities for supplying ingenuity when needed. The university is an important node in the larger community communication network system. It is a repository of knowledge and generator of new ideas and ingenuity. The overall objective of the research is to find ways for academia to connect more effectively with nodes (centers) these communities in order to increase the exchange of information between Black community based organizations (social entrepreneurs) and the university, identify change indicators, and input those indicators into a research methodology that becomes the engine for action-research-based planning and sustainable development.

Because of the complex nature of the interactions and adaptations between Black (largely immigrant) groups and mainstream society groups, we have adopted an action oriented research approach that allows us to respond more effective to unexpected and novel outcomes and reactions to the adaptive search decisions of the community organizations. This permits "real time" incremental adjustments to the search rules and strategies used to realign the system to an approximation of the best desired result. This requires interventions and constant interaction with the community organizations in the study over time as the system converges to some ideal. The proposed network communication system makes that real time intervention possible. Our concern is not an analysis of the contributions of the information and communication technologies to GDP-determined economic growth. It is about the use of communication technologies to quicken the access to new ideas for solving problems of social and cultural change in a complex adaptive social system.

Background

The study was motivated by concerns expressed by Black social entrepreneurs managing community-based organizations in the English speaking Black communities of Montreal. The concerns were framed in an unpublished survey by the Institute of Community Entrepreneurship and Development (ICED) of Black leaders of five key English speaking Black organizations: the Black Studies Center (BSC), the Black Theatre Workshop of Montreal BTW), the Black Community Resource Center (BCRC); The Quebec Board of Black Educators (QBBE); and DESTA Black Youth Project. (Survey of Black Organizations, December 2009 - 2010). The survey revealed a strong perception among Black leaders in Montreal that in spite of their efforts to advance their communities there has been far too little progress. They see this as a result of systemic exclusion strategies of mainstream non-Black agencies and leaders. An analysis of the survey responses showed that out of ten mostly University educated managers and Board members of the five key Black organizations, seven either agreed or strongly agreed that their organization and their members believe that "*Quebec and Canada are like a landscape with peaks and troughs. The high peaks offer the best views, the best air, and the best opportunity for Whites. Blacks and other minorities are barred from attaining these fitness peaks*." Two respondents were indifferent and one strongly disagreed with the statement. Also 9 out of 10 respondents disagreed or strongly disagreed with the following statement: "your organization believes that *"In general, Black people feel safe in their neighbourhoods, are respected, valued, well placed and are full participants in the Quebec society."*

From the seventies through to the eighties, constitutional changes at the Federal and Provincial levels of Government legitimized and gave legal force to the pursuit of a more equitable, multicultural and or pluralistic society. In fact, the Canadian Constitutional Act in Article 27 actually states that Canada is to be governed as a Multicultural State (Canadian Charter of Rights and Freedoms, 1982). Notwithstanding these normative changes and update of what was considered proper and right, in the private spheres there was significant research evidence that lend credibility to these perceptions of exclusion and the belief that a negative status is being assigned to Blacks in Quebec. In October 2001, The McGill Consortium for Ethnicity and Strategic Social Planning issued its first of two reports on the level of fitness of the Black Community of Montreal (Torczyner & Springer, 2001). This was followed by a second more longitudinal study in 2010 based on the 2001 Census. Professor James L. Torczyner (Torczyner & Springer, 2009) and his team collected and compared fitness indicators (income, educational attainment, gender ratios, size of labor force, labor force participation, poverty levels, home ownership, family structure) spanning the two census years 1996 and 2001. From the data, he drew the conclusion that Blacks continued to lag significantly behind non-blacks on every success indicator. This corroborated the findings of the Quebec Government Task Force Report on the Full Participation of Black Communities in Quebec Society, released in 2006 ("Task Force on the Full Participation of Blacks…", 2006). Also, in a paper presented at the 8th Conference of the International Society for Third Sector Research, Barcelona, July 2008 (Bayne, 2008), Bayne showed that over several censuses a complex set of social, political, cultural, and preferential race based barriers had operated to minimized the effectiveness of the social and economic strategies used by Black social entrepreneurs to improve the well-being of Blacks in Quebec (Bayne, 2010)

Both Bayne (2010) and Torczyner (Torczyner & Springer, 2009) pointed out that between 2001 and 2006 there was some evidence of growth and positive change with respect to some indicators, but expressed concern about the dramatic disparities in income and employment for given levels of educational attainment; and the levels of poverty among Black women and children; the low levels of savings and capital asset ownership ; and in general, the exceptionally slow pace of integration of Blacks into the economic and democratic decision-making processes of Quebec. The Quebec Government Task Force Report on Full Participation of Black Communities in Quebec Society (2006) also highlighted these problems faced by the community.

Purpose and Direction of Study

The case, so forcefully made by Torczyner and Bayne, apart from indicating a need for corrective social action, strongly suggested to us that our research take a fresh look at these system outputs within the framework of Quebec as a complex social, cultural and economic landscape. Thus, the intention of this paper is to shift the focus away from the single factor of systemic discrimination to a multidimensional and more dynamic analysis. In the later context, it views the Black community as a complex subsystem, among other subsystems or agents, interacting and adapting to internal and external changes as it tries to find ways to increase the chances for the survival and perpetuation of the life and wellbeing of its members. That is, it treats the problems facing Blacks in Quebec as part of the dynamics of a complex adaptive system. Thus we draw on the properties and theory of complex adaptive systems (Fryer, 2012) to help us understand how information and communication technologies can be used to increase the capacity of Black communities in Montreal to overcome negative biases and to influence change throughout the system for the benefit of the group and its members in the context of the complexity that defines the Quebec and Canadian fitness landscapes at any given time. The characterization of a complex human system depends on certain properties: the nature of the relationships between intelligent agents or sub-groups, and relationships in the system and its environment as a whole. The system is adaptive and emergent at all levels. The wellbeing of "intelligent" agents are dependent on the character of the landscape and that character is dependent on the adaptive decisions and actions of "intelligent" agents, the

strength of the cultures of the groups, their propensity for collaboration, the tolerance for diversity of perspectives, the creation and updating of knowledge, and the capacity for innovation and ingenuity.

For this study, the English Speaking Black community is considered to be one among many agents in a complex Canadian social and cultural adaptive system. As a sub-system it has its own internal environment that distinguishes it from other subsystems or agents. In part, that is due to the fact it is not a homogeneous cultural group. It does not conform to the conventional definition of a strong culture in which a significant number of the components of culture are shared uniformly by all members of the group, nor is it exhaustive in terms of the extent to which these components influence the behavior of all the members. It consists of many subcultures that link its members to Africa, various Caribbean island cultures, and other countries or Continents. This diversity within the group is a direct result of patterns and sources of immigration and the rapid rate with which that has occurred over the last forty years (Bayne, 2008; Mensah, 2010; Torczyner & Springer, 2009). This has led to tension between sub-groups who compete with each other for recognition and resources; and to conflicts of identities as each subgroup exercises its constitutional right to remain loyal to origin cultures: Haitian, Jamaican, Ghanian, Nigerian, Trinidadian, Africa-American, etc. The result often is fragmentation of voice and responses, even when challenged by system generated negative forces affecting any members of any subgroups as belonging to a single cultural class (i.e., a Black in Canada).

It is assumed that strong cultures are essential to the survival of any subgroup and the retention of its origin identity in any complex adaptive human system: that is, the larger the number of persons that share the same values, traditions, vision the greater the possibilities that they will succeed or outperform their competitors on the fitness landscape and improve their fitness. If this is true, what kind of structures and institutional arrangements are necessary to unify the many subcultures that constitute the Black community of Montreal? In a society where all cultural and diverse origin groups have the constitutional right to retain origin cultures or choose alternative cultures (Canadian Constitutional Act 1982), how can we create a strong and more culturally comprehensive larger group from among a loosely linked set of smaller sub-groups? How can we enhance their capacity for producing sufficient ingenuity in order to effectively inform their search decisions and strategies for improving the fitness of the group? What are the potential net benefits of creating collaborative network systems that are based on shared beliefs and norms? What is the likelihood that such a network would move them to higher levels of existence and/or better life styles? How will we go about this?

Brief Review of Some Relevant Literature

Modelling Complex Adaptive Systems (CAS)

There are three main approaches to modeling complex adaptive systems: agent-based modeling, networks and cellular automata. In its most general form, a complex system consists of many components or agents that interact and connect with each other in unpredictable and unplanned ways. From this mass of interactions regularities emerge and start to form a pattern that informs the agents within the system and the behavior of the system itself. In short these systems are emergent and co-evolutionary. Because they are a part of their environment, when they change, they change their environment, and as it has changed they need to change again, and it continues in unpredictable cycles of varying amplitudes and lengths of time (Fryer, 2012). Bounded rationality tells us that complex adaptive system exists between two extremes; equilibrium and chaos. Complex adaptive systems (CAS) cease to be adaptive when the system is in a state of equilibrium (steady state) and cease to function as a system when the system is in a state of chaos. Bounded rationality also tells us that intelligent life act to optimize fitness which is more likely to occur

close to chaos than under equilibrium conditions. The conclusion is that humans function most efficiently and effectively at the edge of chaos where they are constantly challenged to be technically and socially ingenious. Disaster strikes most severely when we lack the time and capacity to adapt to the best fit possible. This is certainly true of human societies where the change in the global environment are so rapid and chaotic that humans lack the capacity or ingenuity to respond in time and effectively to avoid disaster or act to mitigate its negative effects (Homer-Dixon, 2001). A special aspect of human complex adaptive systems is that human agents are capable of learning and creating new ideas for solving problems: constructing "sets of instructions that tell us how to arrange the constituent parts of our social and physical world in ways that help us achieve our goals": reach higher levels of fitness (Homer-Dixon, 2001, p21). He says if a society cannot supply sufficient ingenuity to meet its needs; it develops an ingenuity gap between what is required and what is actually supplied. Societies or systems with severe ingenuity gaps cannot adapt to or mitigate stresses in their environments. The same is true of cultural subsystems in a society. In such situations the system emerges into chaotic behavior patterns, and mass migrations, riots, insurgencies and other forms of social disorders take place (Homer-Dixon, 2001, pp. 21-24).

Given the non-linear dynamics of the interactions between agents in complex adaptive human systems, the randomness of events, and uncertainty of the level of their initial impact, predicting outcomes in CAS environments becomes extremely difficult and unreliable. However, the study of natural and artificial complex adaptive systems enables us to distil general properties and processes associated with these systems that are very useful in thinking of the world around us. CAS theory provides a conceptualization and framework for a class of complex systems and their resulting phenomena. Studies of CAS provide us with computational tools (computer algorithms for deriving simulations) and a set of insightful principles deduced from the behaviour of the system (Brownlee, 2007; Holland, 2006,) that we can use as guidelines for determining what decision search rules to apply in an evolving landscape.

Thus, to assist our thinking, we have borrowed from the work of scholars conducting research on agent-based modeling of cultural change. The overarching intent is to get an informed sense from the simulated results of what the impact is likely to be on a system's configuration and its social wellbeing function (fitness) when cultures change in a landscape (set of ecological sub-systems). The works consulted are "Growing Artificial Societies" by Joshia M. Epstein (Epstein & Axtell, 1951), "The Origins of Order" by S.A. Kaufman, (1993) and two keys articles in the field by Ziad Kobti, Tim Kohler, and Robert G. Reynolds (2003a) on agent-based modeling and multi-agent simulations. We have elected to use the simulated results of Kobti et al. because of the clarity of exposition and because they are agent-based designs in which the design of culture bearing kinship networks can be assumed to approximate racially constructed sub-cultures. This makes the simulations derived more useful in helping us to get a better understanding of global or emergent outcomes specific to the target group for this project (Blacks in Montreal and Quebec). The model results act as proof-of-concepts about culture retention, the role of kinship networks in the adaption process and as informing channels. It helps to understand leadership as an entrepreneurial function in the system. It will allow us to think more clearly about the arrangements of kinship and social culture systems that have the best chance of surviving in the face of negative environmental changes. We believe the approach is relevant for informing local, national and international policies on sustainable social and economic development. The issues explored in the model simulating the fitness landscape are relate to developing and managing (1) population and human resources; (2) food production, distribution and exchange; (3) species and ecosystem preservation; (4) consumption patterns; (5) agricultural and industrial practices and (6) rapid urbanization. This can be easily visualized in the context of challenges confronting modern complex adaptive social and economic systems, and their concerns relating to equity and sustainable development as expressed by the World Commission on Environment and Development (1987).

Agent-Based Modeling of Cultural Change Using Cultural Algorithms

Tim Kohler, Ziad Kobti, and Robert G. Reynolds over a three year period 2000-2003 carried out a number of exploratory agent-based modeling studies of the settlement and farming practices of the Pueblo Indians of Southwest Colorado (Kobti et al., 2003b). The initial study, the multi-agent village simulation, was developed by Tim Kholer (2000) to simulate the effect of negative environmental changes (drought) on the capacity of the group to sustain its culture and survive in the region. The initial simulation suggested that factors other than drought lead to the disappearance of the communities. The team proceeded to update the model by adding economic factors, exchange, cooperation and learning rules. They then observed the impact of learning, collaboration and exchange on the resilience of the community. They used a cultural algorithm to simulate a socially adaptive and self-regulating system to mimic imagined behaviours and events in the Pueblo Village. As they updated the model, the simulations progressively produced larger and more complex system with greater interdependencies and more responsive and adaptive to external change (Kobti et al., 2003b). This suggested to us that the model had meaning for an exploratory study of ways that the Black English speaking communities, as well as other minorities, could improve their level of fitness in the Quebec fitness landscape.

The Theoretical Framework for an Informing System

Kohler and his colleagues define an agent-based model as consisting of two spaces: a belief space and a population space (Diagram 1). The belief space is like the brain of a complex system. It is a repository of knowledge. Some takes the form of facts and basic skills which are fixed at any given time. Some can be updated and learned over time. Fixed knowledge may be topographical, temporal or historical, and the current level of skills and inventory of ingenuity in the population. Global dynamic knowledge is generated by the collective experience (the successes and failures) of the most effective and efficient social and economic entrepreneurs, in the sub-groups and population. This is generalized knowledge accumulated in the belief space for use by current and successive generations. This knowledge is of two types, situational and normative. These are the two dynamic factors responsible for change, self-regulation and adaptations in the cultural framework. It is debatable as to whether normative knowledge is arrived at through the success-failure experiences of the population or transcendentally or both. We will simply take it to be generalized knowledge about what ought to be or should be that is accumulated and validated by the population in some collective sense (an acceptance process). It is used as a reference or guideline in making or influencing decision making, planning and implementation. The latter acts use situational knowledge of both a global and local nature (the art and science of knowing and doing). Normative knowledge is updated in terms of the new experiences of the population. Cultural knowledge which may be specific to particular sub-groups is also accumulated and used to communicate information that facilitates self-adaptation at the level of the population space. It legitimizes activities and controls population and sub-group behaviours. The normative process helps to define the ideal personalities to which we aspire and how we relate to each other in the population space. In the population space households/agents interact and engage in a complex set of dynamic social and economic behaviours that determine the types of groups and the nature and structure of those groups; what is produced, how much, when, and where; who gets what, how much and when; and what is the socially desirable distribution of resources, goods and services. The topographical dimensions of the landscape are themselves complex and evolving such that decisions and choices are made by the agents/households under varying degrees of uncertainty generated by external changes. Interdependencies in the biosphere contribute to the creation of a recursive or self-adaptive system.

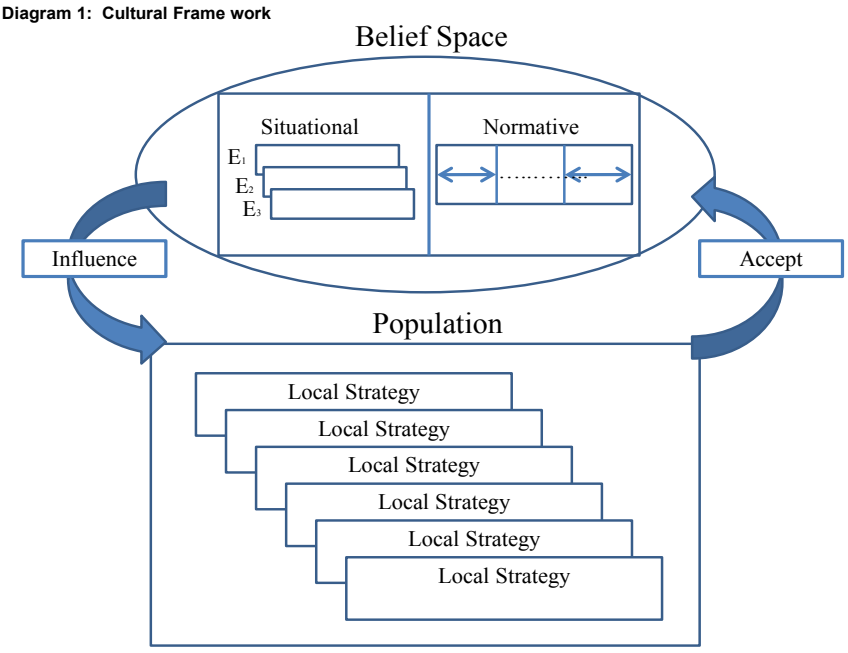

Diagram 1. Cultural Framework

In this model (Diagram 1) the central purpose of population activity is the survival and reproduction of itself. The survival of the species is achieved through the innovative use of knowledge derived from the success-failure experiences of exemplars in the population. In its most rudimentary form the system achieves its central objective within the framework of a culture and kinship networks and a process of social entrepreneurship. In this adaptive system production is for the preservation of life and improving the fitness of the kinship and cultural groups; not for the accumulation of private profit. There is a compassionate distribution mechanism in place. Surplus food (grain) is shared on a needs basis. The studies reviewed (Kholer, 2000; Kobti et al., 2003a, 2003b) provide us with the simulated results of a computational and algorithmic framework that incorporates concepts of the creation, accumulation, and the updating (creation of ingenuity) and sharing of knowledge into a dynamic analysis of social and cultural of adaptation.

Some Relevant Results

Simulated results based on the agent-based modeling carried out by Kobti, Kohler, and Reynolds, (2003a) and others show that the larger the stock of ingenuity (the larger the knowledge base), the more frequently knowledge and new ideas for solving problems are shared across groups, the more instances of collaborations within and between kinship groups, the greater the resilience of the system, and the larger the size of the network nodes the social and cultural system can support. That is the greater the amount of complexity the system can tolerate. In general, increased levels of learning (situational and normative, technical ingenuity and social ingenuity or intelligence) produce a more resilient system able to make better recoveries from disaster. It is noted that this is achieved by greater dependency on connectivity between sub-groups (Kobti et al., 2003a, 2003b). This view is consistent with findings of Stuart Kauffman in The Origins of Order (1993). Kauffman in his NK model of evolution posits the argument that adaptive evolution is bounded by the character of the fitness landscape (its ruggedness and number and heights of peaks). But that character is in turn dependent upon the agents that are evolving. Entities that evolve as fractured subcultures increase the number of conflicting constraints on the system and create conditions that do not allow adaptive evolution to be optimized.

The agent-based analysis makes exemplars responsible for dynamic change in knowledge accumulated in the belief space. Exemplars are considered the true agents of change and growth subject to societal values that are global (moral and cognitive legitimization). Thus the model defines, in our sense of the concept, the social entrepreneur, since their function is to continuously engage in increasing the fitness level across kinship groups, and not the accumulation of wealth: the social entrepreneur is motivated by the will and the urgency to act to survive and to perpetuate the existence of the kinship group, not solely by the private and personal benefit of his/her acts (Bayne, 2008)

Policy Implications

The policy implications are that groups develop programs that increase access to greater education resources and skills acquisition; that they set up improved communication network systems to assist in the greater dissemination of knowledge; greater communication and collaboration across kinship groups, strong support for the social entrepreneurial spirit; that they participate more fully in general movements for the development of a moral framework and strategies for attaining socially cohesive and sustainable communities and society.

Building a Results Based Communication and Informing System

Our research and analysis strongly supports the view that access to information (knowledge), having the capacity and capability for innovation (ingenuity) are critical factors for the success of any kinship or cultural group navigating the fitness landscape. We assume that this is particularly true in the Canadian Multicultural state. Therefore, we decided to construct a results based management communication network system linking key organizations in the English speaking Black community of Montreal. The central network mechanism will be a portal with the capability for logical network analysis. The planned network will constitute a set of online communication centers providing information and learning resources requested by the Black community organizations (ICED Survey, 2010). The system will use a feedback function to update and improve the flow and quality of information and promote greater communication between members of the group and with mainstream networks and knowledge creation institutions. At John Molson School of Business, Professor Raafat Saade has been working on the development of an online learning model which links community based centers within a communication learning network. There may be many different centers, each one or clusters of centers addressing a range of problems and issues impacting on the well-being of a community. Diagram 2 illustrates the proposed linkages and information flows between the key organizations.

The establishment of the communication network centers are expected produce two sets of outcomes. It is hoped that the proposed network system of which ICED is the central node will:

1. Increase the capacity of each communication Center (organization) to meet the needs of its constituents

2. Establish sustained services to support its members' searches in the emerging market economy and changing and political terrain of Quebec.

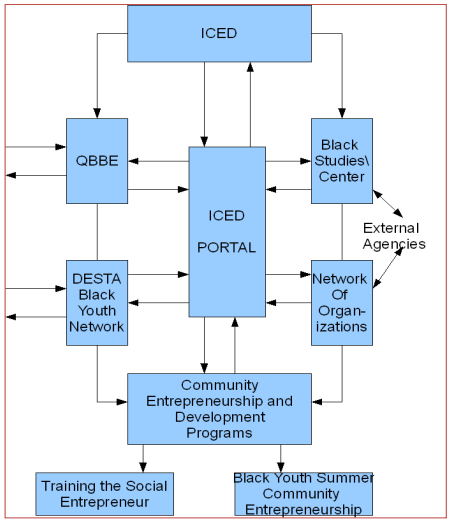

Diagram 2. Proposed linkages and information flows between key organizations.

These two expected outcomes describe the overall ideal desired level of improvement in fitness of the target groups. Hopefully, it will increase the capacity and capability of members of the groups to adapt more efficiently and effectively to changes in the fitness landscape of Montreal and Quebec.

The Impact-Outcome-Output Chain

Diagram 3 illustrates the impact-outcome-output expectations for the project. The outputs must be understood in the context of this paper to be a desired ideal which is subject to revisions in terms of the feedbacks from the system. The desired outputs are:

1. Enhanced business resources,
2. Enhanced abilities of staff and members to develop and deliver services,
3. Training methodologies utilized by faculty members to provide services;
4. Development of flexible courses,
5. Portal development to connect ICED and centers,
6. Sustainable improved collaboration networks, and
7. Strengthened professional abilities.

The first five outputs are a result of outcome level 1 and the last two (5 and 6) are a result of outcome level 2 (Diagram 3). Note that output 5, ICED portal development, is central to the implementation and development of the network system as a whole.

The learning aspects of the communication network will involve discussions in the ICD Portal about social issues; monitoring the progress and displaying outcomes and best solutions; on-line and face-to-face workshops. There will be a real-time feedback loop mechanism created and built into to the site for each Center. All programs and strategies will be subject to a results based management process to determine their efficacy as strategic search rules (procedures). Data collected across all centers can be used to develop a general well-being index for the kinship group. This has been partially tested in the ICED Survey instrument during the first phases of this study

(ICED, 2010). Specific Center-based information can be used to update knowledge in the larger community belief space about the target group.

There are three time related phases to the development of the project.

The first phase is the development stage requiring a review of the center's mission and history of successes and failures. Online Reports will be updated periodically.

1. The second phase relates to development of information and data collection structures, content creation and validation, content management. The Global Reporting Initiative system (GRI) guidelines will be used for reporting and making standard organization disclosures; and keeping track of local fitness indicators (https://www.globalreporting.org/reporting/get-started/Pages/default.aspx).

2. The third phase is the usage stage: sustainability of activities and connections with Centers, monitoring the changes in the GRI reporting systems and social indices at the Center levels, and measuring their overall impact on the social wellbeing of the kinship group and society. A built in real time feedback mechanism will enable a continuous monitoring and updating of the effectiveness of the communication of ICED with members, and between the membership. It facilitates the creation and sustainability of learning resources, and provides continuous access to new knowledge. It helps to reduce the ingenuity gap at the local levels.

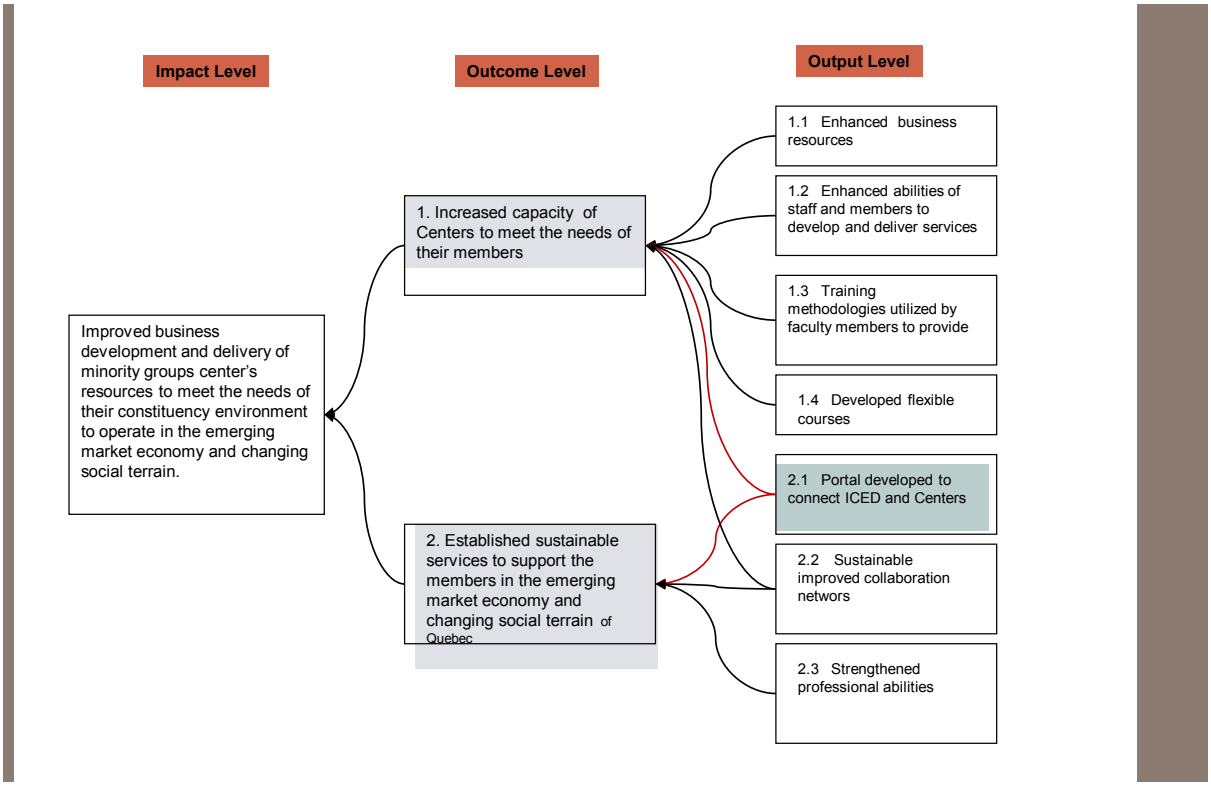

Diagram 3. The Output-Outcome-Impact Chain

Initial Applications and Test Sets

The learning strategies and cultural change model we have described above are being developed and tested in three key organizations in the English Speaking Black Communities. Diagram 2 shows the planned linkages with some key centers in the Black Community: DESTA Youth Networks, the Quebec Board of black Educators (QBBE), and the Black Studies Center (BSC). All of these organizations, including the Black Theatre Workshop of Montreal and the Jamaica Association of Montreal, participated in the initial phases of the data gathering analysis conducted by ICED

Building the Membership Database

A Portal has already been built for ICED (http://www.icedportal.com). It is linked to BSC, QBBE, and BCRC but there is no direct data sharing as yet. There are security issues that present serious problem in terms of access to some University data bases. The ICED database is still being built, and some content issues studied and solutions sought. However, archiving, eLearning, News, and resource and information sharing capabilities are in place

Doing a pilot among three organizations

Similar portals have been created at the Black Studies Center and the Quebec Board of Black Educators. These two organizations and the Black Theatre Workshop have the capacity and the trained personnel to manage a sophisticated network system and provide limited training to the personnel of other organizations. At the current time the organizations are not linked in the sense visualized for the planned network system. However, much more information is being posted by the organizations consistent with the GRI concepts and principles: Annual Reports, Program Reports; Town Hall Reports and Discussions; historical and cultural documents; videos of workshops and conferences. Access to these is on the portals of the organizations. BSC: http://www.blackstudies.ca; Quebec Board of Black Educators: http://www.qbbe.org. And Kola Magazine http://www.kolamagazine.com/?q=poetry-2.

Creating a pilot of a virtual news and information network in community

The BSC News Studio: In October 2012, at a conference and workshop sponsored by the three network organization (BSC, QBBE, and ICED), the Black Studies Center (BSC) unveiled a Video News and Information Program which is to be housed at the BSC dedicated to the presentation of News and information of interest to the Black community organizations, supporters and stakeholders. This represents a significant advance in the creation of the network system. Several persons are being scheduled to speak on a number of topics of an educational and informative nature. There will be a series of topics on the use of accounting software available on the Internet.

The network organizations youth summer school

Consistent with our findings that Blacks need to participate more fully in creating more jobs for themselves by increasing the number of Black owned business per 1000 Black population ICED, BSC, and QBBE have been providing a comprehensive program of start-up business courses in the Summer for Black youth. The courses cater to small businesses that operate in the “cracks of the market”. These courses are hosted by ICED, JMSB. Incubation space and services are made available by the BSC. Videos of these summer programs have been posted on the ICED Portal and the QBBE Portals. The BSC and ICED offer ongoing support to the new businesses. ICED and BSC prepare the course materials and provide space and equipment to support the Black Youth Summer School Program.

Summary

The usefulness of the network dependents on how the outputs (results) of the network are perceived at the individual level; on how effective the network has become in increasing the capacity of their member institutions to achieve and sustain the desired output levels (attain a higher fitness level for their members); and the general contribution of these achievements to the movement to a higher fitness level for the group as a whole. This will be tested recursively using the information provided by the built in feedback subsystem of the network.

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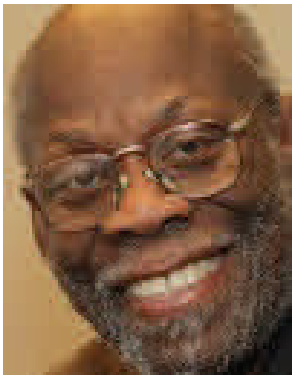
Biographies



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Dr. Bayne obtained his BA in Economics and Political Science and his MA in Economics at the University of British Columbia. He then enrolled at McGill University, where he did his Master's comprehensives in Transportation Economics, and completed his PhD in Economics, specializing in econometrics and monetary and macro-economic theory. He was the Director of the Graduate Diplomas in Administration and Sport Administration (DIA/DSA) Programs from 1991-2006. He is currently the Director of the Institute for Community Entrepreneurship and Development (ICED). He teaches applied statistics for Business and Economics. He is also one of the authors of a statistics book, "Statistics Applied to Canadian Issues". His research in statistics focuses primarily on the applied aspects of the field. In 1991, Professors Bayne, Joy, et al. conducted a major statistical study on the demographics of Black Communities in the Montreal Census Metropolitan Area. He is currently exploring the use of information and communication technology as a tool for assisting in the "integration" of minorities into Canadian society.

Dr. Bayne's research interest is cross disciplinary, with an emphasis on community development. He has published, and lectured quite extensively in this area in many cultural communities across Canada (including the Cree and Innuit territories); in Nigeria, and South Africa. Dr. Bayne has received several distinguished Awards and recognition for his work in community development from the Federal and Municipal Governments of Canada, as well as various community based organizations. He was recently the recipient of the Queen Elizabeth Diamond Jubilee Medal and was honoured by the Government of Trinidad and Tobago for his outstanding achievements and contributions to Canada.

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