

Adult Education, Social Change and Development in Post-Colonial Jamaica

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Shermaine Ann Marie Barrett

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Abstract

The purpose of this qualitative case study was to demonstrate how adult education enabled the process of economic and social change, and national development in Jamaica through a critical review of two cases of adult education provisions in Jamaica since the country gained independence in 1962. Content analysis of various documents from primary and secondary sources as well as interviews with key informants related to the institutional sites provided the data that was used to answer the following research questions. 1) How has adult education enabled the Jamaican society to adapt to social changes and development of the country since it gained independence in 1962? 2) How have societal changes informed the adult education programs and practice in Jamaica since independence? 3) What development themes have created the animating vision that has guided adult education theory and practice in Jamaica since it gained independence? and 4) What adult education programs have emerged based on the perceived purpose of adult education within the Jamaican society at various points in the period under review? Both within case and cross-case analyses were conducted to identify various categories and themes from which a number of assertions related to the relationship between adult education, social change and development were made. The key findings showed six main ways in which adult education enabled the Jamaican society to adapt to social changes and development. Adult education: served to build the human capital needed to drive Jamaica's economic development; fostered upward social mobility of thousands of Jamaicans; was critical in moving hundreds of thousands of Jamaicans from illiteracy to literacy; enabled the personal development of disadvantaged Jamaicans and empowered

them to contribute to their society in meaningful ways; increased the capability of thousands of individuals to access education resources for their continuing education; changed the education system in Jamaica and in so doing fostered a more educated society. As it relates to social changes that informed adult education, the study found that: as Jamaica moved from an agrarian society to an industrial society the nature and type of adult education provision changed; as the country became more technologically advanced the provision of computer and technology related programs became more evident; changes in Government commitment and support as demonstrated in policy and funding emerged as a critical factor impacting the provision of adult education. In terms of the dominant development themes, the study revealed that: industrialization was a dominant development theme impacting adult education in Jamaica, Democratic Socialism influenced both the content and practice of adult education at one point in time, and liberalization foregrounded the kind of skills and knowledge that adult education engendered in Jamaica. Finally as it relates to the types of adult education programs the study found that education for work was the dominant type of adult education program with education for life presenting almost like a sub theme in both the cases studied. Together these findings suggest that adult education played a critical role in facilitating the process of economic and social change and nation building in Jamaica.

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CHAPTER 1

Jamaica is a part of the Anglo-Caribbean countries. It is located in the central Caribbean approximately 90 miles from Cuba and 100 miles from Haiti. It is the largest of the English speaking Caribbean islands and is the largest demographic unit of the region with a population of approximately 2.7 million. Along with its other British Caribbean neighbors Jamaica shares a heritage of British colonization which lasted for over 300 years (Sherlock & Bennett, 1998). This experience undoubtedly impacted the identities, and culture, of the region including that of Jamaica and Jamaicans with experiences with racism, and the effects of a relationship built on oppression and violation of basic human dignity (Preece, 2009). This plantation-based colonization left a legacy of “cheap labor, color-coded racism, low productivity, anti-intellectualism within the middle class, absenteeism in the land-owning elite, and a general reactionary tendency to mimic metropolitan attitudes and inclinations” (Demas, 2009, p xv) with which emerging nations like Jamaica has had to contend throughout their process of growth and development as sovereign nations.

Jamaica celebrated its 50th year as an independent nation in 2012 having obtained its independence from the British in 1962. The accompanying period of celebration provided an excellent opportunity for us to assess our progress as a nation. Against this backdrop an analysis of the contribution of adult education to the nation’s development as is the aim of this study is not only informative but timely.

Many adult education scholars acknowledge the strong interlocking between adult education and the context in which it takes place (Fenwick, Nesbit, & Spencer, 2006; Jarvis, 1995; 2004; Foley, 1998; Merriam, Caffarella, & Baumgartner, 2007). Writers

such as Giddens (1990) draw attention to how the living conditions and habits of people as well as the basis for their choices change as a consequence of changes in society. One area of human choice relate to decisions about what to learn and the ways in which one learns (Merriam et al, 2007). Adult education can therefore be seen as a response to the social context in which it occurs. Adult education scholars also see adult education as a means by which social change is initiated (Freire, 1993, 1995; Shor, 1993). This perspective on the inter-linkage between adult education and social context supports the notion that the major stimulus of adult education at any given time is usually a reflection is the socio-cultural context of the time (Merriam et al, 2007). Consequently, an examination of the social context in which adult education interventions take place is necessary to understand the learning that takes place in adulthood.

Writers such as Olaniyan and Okemakinde (2008) and McGrath (2010) highlighted the widespread acceptance that education creates improved citizens and as such aid in the improvement of the general standard of living in a society. In keeping with this perspective adult education in developing countries like Jamaica is usually seen as a vital prerequisite to nation-building (Gordon, 1985); and a national instrument for promoting and regulating social change and economic growth (Lowe, 1982). Lowe argued that a dynamic adult education service is critical in enabling both individuals and societies to adapt to the effects of social change. The issue of education and development is concerned with the relation of education to major social, economic and political changes within society. It is against this background that this research sought to examine the provisions and practices of adult education in Jamaica juxtaposed against the various

shifts in the social, economic and political milieu of the society over the first 50 years after independence.

Statement of the Problem

This study sought to address a threefold problem. Firstly, there is a paucity of empirical research on the subject of adult education within the Caribbean and specifically in Jamaica. Secondly, where research exists they usually investigate adult education from the non-formal or informal perspective. The literature review conducted for the current study did not reveal any study that looked at the contribution of formal adult education provisions to the development of Jamaica. Additionally, among the few research that have been documented the focus of investigation has been on questions surrounding the ‘what’ of adult education. That is, the main focus of the studies has been on identifying the provisions in terms of what they are, how they are administered and by which entity. Only one study looked at the sectors that were impacted by adult education interventions. None of the studies discussed the provision, organization and management of adult education in light of the social, economic or political need to which the provisions were responding. In other words the researchers did not problematize the role of adult education as an active force in Jamaica’s development. This situation therefore suggests a clear need to demonstrate through the study of specific cases how by preparing the population to deal with issues of change adult education has contributed to and facilitated the process of economic and social change and nation building in Jamaica,

Purpose of the Study

The purpose of this two-case study is to demonstrate how adult education has enabled the process of economic and social change and national development in Jamaica

through a critical review of two cases of adult education provisions in Jamaica since it gained independence in 1962.

Research Questions

Main Research Question

1. How has adult education enabled the Jamaican society to adapt to social changes and development of the country since it gained independence in 1962?

Sub-questions

2. How have societal changes informed the adult education programs and practice in Jamaica since independence?
3. What development themes have created the animating vision that has guided adult education theory and practice in Jamaica since it gained independence?
4. What adult education programs have emerged based on the perceived purpose of adult education within the Jamaican society at various points in the period under review?

Propositions

The case study will be premised on the following four propositions.

1. Adult education is critical in enabling developing nations to adapt to changes within their socio-political and economic context.
2. Changes in society will trigger changes in the provision of adult education programs.
3. Adult education is guided by varying philosophies which are informed by the context.
4. Different educational programs will emerge in response to the needs of society.

Significance of the Study

This study will add to the existing body of literature on adult education in Jamaica and the Caribbean. Additionally, it will serve to move the literature beyond the exploratory nature of previous research conducted in Jamaica and the region by seeking to critically assess the interconnection between social change and adult education provisions. It will also serve to demonstrate the critical role of adult education in nation building in a developing state.

Limitations

Case studies focus on detailed contextual analysis of a limited number of events, process, program or individuals and so the results are usually considered limited in terms of their generalizability. However as Yin (2003) pointed out this is only a limitation from the perspective of statistical generalization. He therefore introduced the notion of analytical generalization in which a previously developed theory is used as a template against which the empirical results of case studies can be compared. Further, Stake (1995) introduced the term naturalistic generalization which is premised on an argument that there is a harmonious relationship between the reader's experience and the case study. Consequently the data generated by case studies would resonate experientially with a broad cross section of readers.

Definition of Terms

The key issues to be addressed in this research cut across both education and development studies. Consequently, I have grouped the terms accordingly.

Education Concepts

Adult learner - In this research the adult learner will be defined from a sociological perspective which sees the adult as one who has a number of social roles which refer to positions and responsibilities and their related expectations based on what is deemed 'normal' by a society. Social roles include being a parent, spouse, employee, employer among others. The concept also speaks to the post compulsory education learners.

Adult education - For the purposes of this research adult education will refer to post-secondary educational interventions including formal and non-formal provisions that target adults as learners to achieve specific educational objectives.

Formal Education - Formal education refers to institutionalized, curriculum driven provisions offered by post-secondary institutions, excluding universities, leading to grades, diplomas or certificates (Jarvis, 2004; Merriam, et al., 2007). These institutions comprise: institutions of higher learning, professional schools, community colleges and technical/vocational institutions.

Non-Formal Education - Non-formal education refers to adult education activities outside the formal educational system (Foley, 1998; Harvey & Williams, 1990; Merriam, et al, 2007) that are deliberately structured to achieve some outlined ends. These activities may be part-time or full-time, short-term or long-term, certified or non-certified.

Development Concepts

Given the colonial history of Jamaica, development is linked to decolonization: a process which aims at transforming former colonial societies (Greene, 2001). The development concepts relevant to this research therefore relate to this process of transformation from a colonial state.

Post-colonial – In this research this term refers to a country that was once colonized by some ‘mother country’ in this case the ‘mother country’ being Britain but that had subsequently gained its independence and the right to establish its own sovereign government.

Independence – This term refers to the end of Crown Colony government when Jamaica achieved self-rule on August 6, 1962. This meant Jamaica now had its own constitution and its government would be duly elected by the people of Jamaica. It therefore marks the beginning of the decolonization process and the emergence of an independent sovereign nation (Demas, 2009).

Development - This term speaks to the systems and processes of social, economic and political growth within the Jamaican society. These processes include efforts to reduce poverty, increase economic viability and reduce dependence - physical and psychological – on the metropolis and the development of an internal system of governance (Greene, 2001).

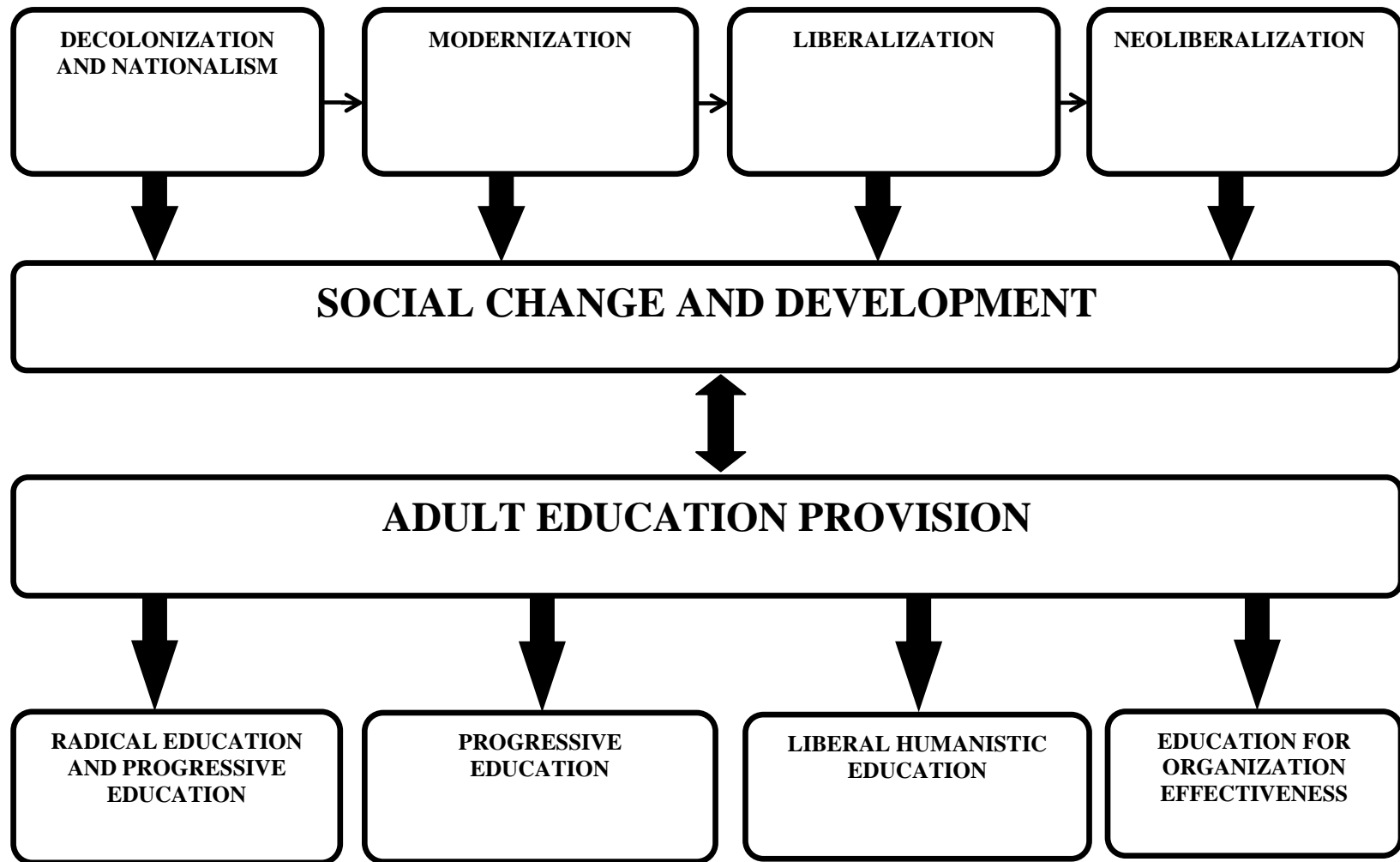
Social Change - This term refers to the social, economic and political changes that occurred in Jamaica over the course of its development as an independent nation. It

speaks to changes at the individual, organizational, institution and societal levels of human life (Lauer, 1977).

Conceptual Framework

This case study does not aim to test any particular theory or to develop a new theory. Rather this study is an attempt to confront the analysis of adult education through highly developed comparative concepts (Stone, 2013). It therefore takes an interdisciplinary approach that draws on several development concepts and educational perspectives to (a) describe the context within which adult education occurred at various periods of Jamaica's history, and (b) analyze the type of adult education provisions that enabled the individuals and the society to adapt to the social changes that occurred. Figure 1 shows these concepts and the network of relationships between them. The key development concepts include decolonization and nationalism, modernization, liberalization and neo-liberalization. The key education perspectives include radical education, progressive education, liberal/humanistic education and technical education for organization effectiveness. These concepts will be fully developed as part of the literature review in this study.

Fig. 1- RELATIONSHIP BETWEEN SOCIAL CHANGE, DEVELOPMENT AND ADULT EDUCATION



CHAPTER 2

Literature Review

Perspectives on Social Change

Lauer (1977) in his seminal work on social change describe the concept as a complex phenomenon. He further defined social change as “an inclusive concept that refers to alterations in social phenomena at various levels of human life from the individual to the global” (p4). In this regard he identifies nine levels on which social change can be analyzed. These include the individual, interaction, organization, institution, community, society, culture, civilization and global levels.

According to Lauer (1977) change at the individual level refers to changes in attitudes and beliefs about various issues as well as individual aspirations. At the interaction level change refers to changes in the types of interaction and communication among persons. It also incorporates the presence or absence of conflict, competition or cooperation between and among persons. Change at the organization level refers to changes in organizational structure, patterns of interaction, authority structure as well as productivity. At the institutional level changes may occur in the economy; politics, religion, marriage and family as well as education. At the community level change may take place in the stratification system and structure, in the demography of the community or in crime. Change at the society level refers to changes in areas as discussed at the community level. At the cultural level changes may occur in material culture as well as in the non-material culture including areas such technology, ideology, values. At the civilization level change may refer to patterns of change in the life cycle of civilization

impacting areas such as social institutions, artistic and scientific and other innovations. Lastly, changes at the global level may include changes in international organizations.

In another piece of seminal work, Morrish (1972) argued that social change may either be exogenous or endogenous. As the word suggests exogenous changes speaks of changes that are influenced by factors external to the country, for example world economic crisis; international inflation or fluctuating oil prices, while endogenous changes refer to those changes that are internally initiated. He further argued that endogenous change may be divided into two groups: episodic change and patterned change. Episodic change he described as change that is brought about by some unpredictable event for example changes brought about by economic fluctuations and structural modification. Patterned change on the other hand refers to change that arises out of a mutual concern about some issue. It refers to a planned, organized program of social welfare or changes resulting from political and economic consensus such as a program of modernization through industrialization. Morrish argues that education best impacts society in times of patterned change.

Philosophical and Theoretical Perspective of Adult Education

One of the key issues in the discourse on adult education is its purpose. In the field of education notions about the purpose or end of education is usually determined by the philosophical perspective undergirding the design and implementation of the intervention. In this regard philosophical perspectives which are usually influenced by ideas about the nature of society are key issue in any analysis of the purpose of adult

education. As such the work of Darkenwald and Merriam (1982), Elias and Merriam (1995) and Plumb and Welton (2001) provide useful sources for such a discussion.

As observed by Darkenwald and Merriam (1982) there is no single conceptual framework, basic assumptions or principles from which all adult educators view the field. A wide range of thoughts and ideas therefore characterize the philosophy of adult education. One reason for this diversity in thought is the view that philosophies are usually grounded in socio-cultural contexts. Nevertheless a review of the adult education literature reveals two main approaches to theorizing about adult education, either in terms of its end or in terms of schools of thought about the nature of society and ways of knowing.

Educational ends of adult learning.

Darkenwald and Merriam (1982) outlined a typology of five orientations as to the purpose of adult education. Among the orientations are those who believe the aim of education is to cultivate the intellect, that is, education is viewed as a *cognitive process* (Darkenwald and Merriam, 1982). Another perspective is that the aim is for *individual self-actualization* where the main focus is on the individual learner rather than the content and the affective rather than the cognitive aspects of education, producing individuals who are capable of living together as fully functioning individuals, (Jarvis, 2004; Knowles, Holton, & Swanson, 2005), this is a psychological perspective. A third perspective is that of the *educational radicals* who write from a socio-political perspective. The belief here is that education should bring about a change in the social order of society (Friere, 1993, 1995; Mezirow, 1991; Welton, 1995). The fourth

grouping includes those who view education as serving the end of organizational effectiveness (Darkenwald and Merriam, 1982). This is a human resource development perspective which reflects an economic focus on education. Finally, is the psychosocial perspective which argues that education should aim for personal growth of individuals and the promotion of a better society (Darkenwald & Merriam 1982). The argument here is that education must not only cultivate the intellect, or prepare people for the world of work but an individual's education should result in their personal transformation and the transformation of their social context. Education therefore serves a dual purpose.

Grounded in John Dewey's progressive thinking, the major concern of educators who believe education serves a dual purpose is how the individual relates to the groups with which he/she is a part (Darkenwald and Merriam, 1982). Further, one assumption here is that self-development leads the individual to being a better member of their society. In support of the dual purpose of education Darkenwald and Merriam (1982) cite Blakely in making the point that education's impact on society is derived from the fact that education leads to a better, more fulfilling personal life, while making a better citizenry and ultimately a better world.

Philosophical categorizations

Elias and Merriam (1995) described five major philosophies of adult education. These categorizations were further explored for their relevance to adult environmental education in the work of Walter (2009). These include the liberal perspective which focuses on the expansion of intellectual knowledge and the development of enlightened, moral and cultural sensibility of learners. Viewed as rational and intellectual education,

liberal education attempts to move the learner from information to knowledge to wisdom. Emphasis is therefore on the power of the mind of the learner (Elias & Merriam, 1995).

Another perspective of adult education given by Elias and Merriam is the *progressive philosophical orientation* which emphasizes education for democracy and social reform. This aim of education from this perspective is to free the talents, experiences and knowledge of individuals for the larger social good and the betterment of human condition. Emphasis is placed on vocational and utilitarian training, learning by experience, scientific inquiry, community involvement and responsiveness to social problems (Elias & Merriam, 1995). Individual experiences are given central focus in this category (Elias & Merriam, 2005; Walter, 2009).

An additional perspective is that of the behaviorist in which the major concern is to ensure survival of individuals and of society and to minimize the suffering of human beings. On the individual level this perspective emphasizes the acquisition of job related skills which enable the individual to survive in society. However, an important idea within this perspective is that education should reinforce cooperation and interdependence in order to address social problems. Emphasis is therefore placed on the creation of human-constructed environments that shape both individual and collective social behavior that lessens the human tendency toward self-gratification, aggression and destruction. The behavioral educational philosophy aims to predict and control behavior and defines learning as a change in behavior (Elias & Merriam, 1995).

The humanistic perspective described by Elias and Merriam (1995) rejects the mechanistic methods and goals of behaviorism and emphasizes personal growth and self-

actualization of individuals. The freedom and dignity of the individual is emphasized within this perspective. Education is therefore concerned with the development of the whole person including the affective and emotional dimensions (Elias & Merriam, 1995). The learners are taken as autonomous, self-motivated individuals who take responsibility for their own learning (Elias & Merriam, 1995; Plumb & Welton, 2001). Consequently, the needs and desires of the adult learner have centrality of focus.

The final perspective described by Elias and Merriam (1995) is the radical perspective. From within this perspective the role of adult education is to liberate humans from social, economic and political oppression. According to Elias and Merriam radical educational philosophy does not conform to the mainstream of educational philosophy in that whereas most educational philosophies accept given societal values the radical educational perspective proposes profound changes to society. Premised on the work of Paulo Freire collective conscientization, praxis and action for social change are emphasized in this perspective (Walter, 2009). The critique of relations and systems of power and dominance is encouraged. Scholars and practitioners operating within this philosophical orientation reject behaviorist philosophy while embracing the ideas of humanistic, progressive and even liberal traditions.

Conceptual paradigms of adult education

Plumb and Welton (2001) drawing on the work of Jurgen Habermas identified three conceptual paradigms within which adult education was practiced: the technical, humanist and critical paradigms. These paradigms speak to ways of viewing the nature

of society and as such provide another means of discussing the role of adult education in societies.

Technical paradigm

The technical paradigm views human beings as solitary and self-interested. One primary goal of education within this paradigm is to ensure the efficient control of an objective reality. The key concern is therefore effectiveness. The implications for the practice of education from within this paradigm is a systematic approach to education where the teacher is concerned with efficiency and control and promotes objective measures of need and success (Plumb & Welton 2001).

The technical paradigm speaks to learning in which individuals engage in task-oriented problem-solving. The main focus is on performance improvement, and skill development that is, on how to do something or how to perform (Mezirow 1991). It involves the process of learning to control and manipulate the environment or other people through schedules of reinforcement and shaping (Plumb & Welton 2001).

Within the field of adult education the technical paradigm has its genesis in behaviorism which has been described as “the quintessential expression of Newtonian mechanistic thought” (Heshusius, 1989, p. 406). Its mechanistic foundation speaks to its fundamental belief in simplicity. Behaviorism’s influence on the technical paradigm means that the focus is on overt behavior that is measurable (Merriam et al., 2007). In this paradigm fact becomes separated from value and quantification becomes the way of knowing such that measuring and ranking took prominence over the humanities, the arts and intuitive ways of knowing (Heshusius, 1989). The ultimate goal of education within

this paradigm is to ensure survival of the human species, societies and individuals (Merriam et al., 2007).

This perspective of adult education has greatly influenced approaches to adult career and technical education and human resource development (Merriam et al., 2007) with an emphasis on skill development and behavioral change (Plumb & Welton, 2001). Notwithstanding the perspective has been heavily criticized for not understanding human behavior: for the machine like quality it accords to human beings; and the idea that nature progresses the same without regard for personal meaning and context. These criticisms gave rise to ways of thinking about educating adults which are now known as the humanistic and critical paradigms

Humanistic paradigm

The humanistic perspective views humans as social beings who are committed to community and group. Humanists see the achievement of mutual understanding and inter-subjective agreement as the primary value that drives the actions of individuals (Plumb & Welton, 2001). The primary concern therefore is that which is morally appropriate. The implication for the practice of education from within this perspective is the active participation of learners and their taking responsibility for the learning experience as autonomous and responsible beings (Plumb & Welton, 2001).

Humanistic adult education is premised on the notion of personal autonomy and social progress (Pearson & Podeschi, 1999). The main assumptions of the humanistic perspective is that humans are essentially good, intrinsically motivated towards higher levels of learning and development, and are capable of examining and drawing meaning

from their experiences (Johansen & Mclean, 2006). The main thinkers associated with this perspective on adult education are Abraham Maslow, Carl Rogers, humanist psychologists and Malcolm Knowles, adult educator and writer.

The humanistic perspective is grounded in the notion of the intrinsic self and as such the writers argue that individual self-actualization must be the principal aim of adult education (Darkenwald & Merriam, 1982; Pearson & Podeschi, 1999). Education is therefore defined in terms of inner growth and development (Darkenwald & Merriam, 1982). Individual freedom, autonomy, and personal experience are seen as key to learning and development (Johansen & Mclean, 2006). Carl Rogers emphasizes self-actualization of the individual as one end of education. Being concerned about learning that leads to personal growth and development he argues that the goal of education must be the fully-functioning person (Jarvis, 2004; Plumb & Welton, 2001).

Additionally, Abraham Maslow has had a significant impact on the theoretical assumptions of adult education (Pearson & Podeschi, 1999). His ideas are premised on the assumption of human-centeredness; a sense of personal autonomy; human dignity; the principles of virtuous action and a sense of personal responsibility. Pearson and Podeschi identified four intertwining concepts that form the premise underlying Maslow's humanistic perspective: the idea of self; human's capability of growth; one's responsibility for what one becomes and one's capability to influence social progress. Maslow sees a symbiotic relationship between individual growth and their social context. He argues that one's capacity for freedom is significantly impacted by one's environment. As such he believes that whereas individuals have the responsibility for

his/her own growth and that this growth will in turn serve to fertilize societal soil, good social conditions are needed to facilitate the individual's fulfillment of their intrinsic nature. Wrapped up in these ideas is a belief in the universality and uniqueness of the individual (Pearson & Podeschi, 1999).

Critical paradigm

Within the critical paradigm humans are viewed as communicative beings that need to participate as equals in society. The primary aim of education from this perspective is to free one's communication with others from the distorting influences of social power, facilitate freedom to critique and choose, promote initiative and facilitate student autonomy (Plumb & Welton, 2001).

Critical theorists criticize humanistic education for being too individualistic and for its failure to connect with the production and reproduction of inequalities in the wider society (Pearson & Podeschi, 1999). They argue that the educational premise being promoted in the humanistic paradigm is maintenance learning that is, learning that maintains the status quo while developing in people the ability to cope with and to adapt to their circumstances rather than to challenging the existing social order (Shor, 1993). The critical theories contend that education should provide not only for personal development but for the active involvement of individuals in the social and political life of the nation (Freire, 1993, 1995; Lovett, Clarke, & Kilmurray, 1983; Popkewitz & Findler, 1999; Shor, 1993).

Within this paradigm the adult is viewed as being responsible, autonomous and reasonable. The main concern is therefore the factors that inhibit or facilitate the

capacities of adults to reason, and to act responsibly and autonomously (Freire, 1993, 1995; Mezirow, 1991; Shor, 1993). The critical paradigm therefore raises questions about inequalities of power, about false myths of opportunity and merit of many and about the way belief systems become internalized to the point where individuals and groups abandon their own aspirations to question or change their lot in life (Popkewitz & Findler, 1999). Freedom to choose and criticize is promoted in education based on the principles of the critical paradigm (Freire, 1993, 1995; Mezirow, 1991; Shor, 1993). The critical paradigm calls learners to move beyond the place of a simple awareness of what they are experiencing, that is, a reflection on content or process, to an awareness of the reason they experience as they do, premise reflection (Mezirow, 1991). It views with importance an awareness of the things that influence the learner's reasoning, thinking and perception and encourages action predicated on the insights gained. The proponents of this type of education believe that this kind of critical reflection can lead to tremendous transformation in the way we view the world and live our lives. This type of education is most important in context of oppression (Freire, 1993, 1995) and distortion in meaning perspectives (Mezirow, 1991). The ideals of the critical paradigm are therefore fundamental to any development agenda that is aimed at facilitating social change. This is particularly so in contexts like post-colonial Jamaica where as noted earlier in this paper the nation has had to contend with issues of social plurality based on race and class and relationships based on oppression and the violation of human dignity.

Paulo Freire, noted educator, and one of the main proponents of critical education posits that the way in which we perceive is not neutrally derived; rather our perceptions

of the world are shaped by social relations to power (Freire, 1993). In the same vein education is never neutral; it is designed to either domesticate or to facilitate freedom (Jarvis, (2004). Learners need therefore to be aware of the impact of power on how they respond to their world. Education should be a process of conscientization that is, bringing learners to a place of critical consciousness of their situation as a beginning point of their liberating praxis (Popkewitz & Fendler, 1999). and the practice of freedom through which learners discover themselves and experience more of the fullness of their humanity by acting upon their world to transform it (Jarvis, 2004). Praxis here means a combination of action and reflection in which critical thinking and dialogue are fundamental features. In this process persons reflect on their understanding of themselves in their socio-cultural context and challenge conventional explanations of everyday life, while at the same time considering action necessary for the transformation of oppressive conditions (Frere, 1993, 1995; Jarvis, 2004). Freire believes that educators have to work on the wide range of experiences brought by oppressed people. Therefore the educational process should entail providing opportunities for people to validate their experiences, culture, dreams, values and histories, while recognizing that such expressions carry both the seeds of radical change and the burden of oppression.

Conceptual commonality among paradigms, philosophies and ends of adult education

Whereas humanistic psychology has been severely criticized by writers of the critical perspective whose ideas are grounded in Marxists principles, it is interesting to note that wrapped up in ideas of critical theory are some humanistic concerns. For

example, the concern within the critical perspective to illicit ideologies and practices that restricts and inhibits one's freedom resonates with the humanistic belief in the need to develop the fully functioning person. Additionally, the critical theorist's view of the learner as a communicative being with freedom of choice is also reminiscent of humanistic thinking. In fact Jarvis (2004) noted that at the heart of Freire's educational idea is a humanistic conception of people as learners. Further the preoccupation of both perspectives with the experiences of the individual gives them some commonality of perspective.

Further analysis of the three groups of categorization presented by Darkenwald and Merraim (1982), Elias and Merriam (2005), and Plumb and Welton (2001) reveal some convergence on the notions of adult education they espouse. For example, all three agree that adult education plays a key role in humanizing the individual and society, and in facilitating personal growth and self-actualization. They all captured the idea of adult education working for the social good and the betterment of humankind. Additionally, all the categorizations included ideas that spoke to the need for adult education to confront issues of inequity, power and dominance within societies and consequently the aim of facilitating social transformation.

Adult Education, Social Change and Development

The issue of education and development is concerned with the relation of education to major social, economic and political changes within society. Writers such as Olaniyan & Okemakinde (2008) and McGrath (2010) highlighted the widespread acceptance that education creates improved citizens and as such aid in the improvement

of the general standard of living in a society. Education has been further conceived of as an enabling factor that opens up varied avenues of personal, community and national development (Alleyne, 2005; Lawson, 1985; McGrath, 2010; Olaniyan & Okemakinde, 2008). Therefore in the course of national development education is generally seen as a necessary investment and an engine of growth (Olaniyan & Okemakinde, 2008). Education is therefore seen as a public good rather than a private good (Alleyne, 2005; Nesbit 1999).

The importance of adult education to national development is generally recognized in both the theoretical and empirical literature. From an adult education perspective the tradition of education serving the public good was founded on a mission of social change that is, adult education as a means of empowerment to enable social change (Nesbit, 1999). The idea as Nesbit noted was to see education as a means of ensuring balance between equality, liberty, and community as a part of the process of nation building. This perspective on adult education accords a political agenda to the practice of adult education. This political agenda was the mission of adult educators such as Thomas Hodgkin of the Mechanic Institutes, the Canadian, Moses Coady, the Brazilian educator Paulo Freire as discussed earlier, and American adult educators Myles Horton and Eduard Lindeman (Nesbit, 1999). The notion of public good has however been expanded to include other contributions to society such as the preparation of people for various roles and the advancement of economic and political purposes (Lawson, 1985).

From an economic perspective education is seen as a capital good and relates to the economist's concept of human capital. As a capital good education is deemed helpful in developing the human resource that is needed to support economic and social transformation. The concept of human capital emphasizes the development of skills as an important factor in production activities (Olaniyan, & Okemakinde, 2008). Human capital development as noted by Akinyemi and Abiddin (2013) therefore speaks the acquisition of knowledge and intellectual stock through education, to enable the expansion of productivity, efficiency, performance and output. Through tertiary education and workplace learning for example adult education is instrumental in producing the human capital and technology as well as any new knowledge needed to stimulate the economic machinery of a country (Alleyne, 2005). This human capital perspective is said to be applicable at all levels of human setting and human organizations including the individual, family, community, organizational, national and international levels (Akinyemi and Abiddin, 2013). However Nesbit (1999) argued that one downside of the link between adult education and development particularly in terms of its economic contributions is the increasing focus on individualized; more institutionalized and professionalized adult education provisions which are more oriented toward maintaining the status quo.

Development Models and Their Implications for Adult Education

Jarvis (1986) writing on the link between adult education and development identified four models of development and outlined their implications for adult education. These notions include: industrialization, liberalism, community development and

community action. Industrialization according to Jarvis (1986) refers to the pursuits of modernization, economic growth and social advancement. In this context adult education is accorded a strong economic focus. Education's function is to mold people to function within the wider social structure without disturbing the structure. The emphasis is on supplying the skills needed based on the technological imperative of industry (Jarvis, 1986).

The idea of liberalism according to Jarvis (1986) is founded on the notion that national development is synonymous with human development. As such development is seen as a response to basic human needs. Adult education therefore has the role of responding to the individual needs of people. This individualistic view of adult education has prominence in the work of humanistic adult educators such as Malcom Knowles. Adult education from this perspective is about enabling people to improve their physical and mental well-being and achieve personal fulfillment and contentment (Jarvis, 1986).

Unlike the individualistic nature of the liberal development model, community development takes a more holistic approach to the needs of society (Jarvis, 1986). The model acknowledges the pluralistic nature of society and therefore focuses on improving communication and understanding among various conflicting groups in an effort to facilitate community improvement (Jarvis, 1986). Adult learning in community development places emphasis on the kinds of learning that will increase the skills and capabilities of adult community members to help themselves both as individuals and as a group. Increasing the skills and capabilities of adults support and reinforce community development in ways such as: assisting community members to respond to practical

problems and issues in adult life in relation to their survival, their economic wellbeing and their general quality of life – aging, health issues, parenting, work etc.; integrating learning activities in a corresponding framework of medium and long-term goals to transform society; providing opportunity to examine community and societal issues, foster change for the common good and promote civil society; helping people to become social agents capable of exercising their rights as citizens and assisting local organizations in achieving desired results and adopting to change (Barrett, 2000; Girvan, 1993). The community development model therefore espouses notions that are reflective of both a humanistic and a progressive philosophical orientation regarding the practice of adult education.

The final development model outlined by Jarvis (1986) is the community action approach. According to Jarvis this development approach assumes a more political role. This is a radical approach which combines community action with education. The model contains an overt theory of change within which the adult educator is required to operate (Barrett, 2000). Adult education therefore takes on a critical or radical role in which the adult educator is involved in both the development and political education of the people to enable them to understand and act upon the social, economic and political pressures that affect them. Radical adult educators like Paulo Freire, refer to this type of education as the process of liberation (Frere, 1993, 1995).

One development theory that Jarvis did not discuss, but which is important to this study given the historical context of Jamaica's struggle for self-rule and its transition from a dependent colony to a new independent nation (Ellis, 1992) is

decolonization/nationalism. This theory refers to the political processes by which countries which were once dominated by British rule sought to establish their independence. Premised on the ethical idea of human rights (Crawford, 2002) decolonization promotes the notions of self-rule, self-determination, national liberation, political freedom, state sovereignty and nationalization (Betts, 2004; Crawford, 2002). In contexts where the focus is on decolonization and growth in nationalism adult education is seen as having a major role in facilitating the shaping of the society both in terms of its internal identity and self-articulation and in its relationship to the outside world (Nettleford, 1995). Ellis (1992) argued that in such contexts the focus of adult education should be to generate social responsibility and citizenship: to help people to understand the role that they play and the contribution that they need to make to the development of their country. In so doing adult education will foster in the citizenry a strong sense of nationalism (Ellis, 1992).

Another development theory which has pervaded the development literature particularly since the 1980s (Bowl & Tobias, 2012) is neoliberalism. This theory takes the liberalism agenda further and highlights its economic focus. Neoliberalism is a development theory that is premised on the idea that the market is paramount and the state should play a minimal role in society (Bowl & Tobias, 2012). Key concepts related to the neoliberal agenda include deregulation, privatization and curbing the power of organized labor (Bowl & Tobias, 2012, Harvey, 2005; Klein, 2005). Within the context of neoliberalism the individual, not the government is seen as responsible for their participation or nonparticipation in post-compulsory education and training (Bowl &

Tobias, 2012). The main outcome of education within the neoliberal perspective is therefore the development of the human capital rather than social, cultural or political development (Bowl & Tobias, 2012; Dull, 2012; Walters & Watters, 2001). The focus of education here is similar to that discussed under education and industrialization.

The preceding discussion on the notions of development clearly shows how adult education is linked to the process of development. It also shows how the differing views about development inform the role that adult education is expected to play.

Adult Education, Social Change and National Development in Developing Countries

Adult education in developing countries like those within the Caribbean is usually seen as a vital prerequisite to nation-building (Gordon, 1985); and a national instrument for promoting and regulating social change and economic growth (Lowe, 1982). Lowe argued that a dynamic adult education service is critical in enabling both individuals and societies to adapt to the effects of social change. Adult education in the Caribbean has a long history with programs designed to meet the educational needs of a large number of individuals and a variety of groups (Ellis & Ramsay, 2000). As part of the national strategy for development adult education covers a wide spectrum of topics and subjects seeking to: inculcate a sense of national identity and social cohesion; address the issue of poverty; increase the skills and knowledge of the adult population for work; help the society adjust to the interaction of social and technological change; and to foster social justice (Ellis & Ramsay, 2000; Gordon, 1985; Lowe, 1982). These goals all arise out of the developing country's response to economic, political and social necessities (Gordon, 1985). The following section reports on studies that represent an acknowledgement of

this link between adult education and national development, social change and economic growth. There is not a preponderance of post 2000 empirical literature on adult education, social change and development and where they do exist they predominantly look at adult non-formal education. Those reported on were selected for review because of their focus on the assessment of adult education in developing nations which is the interest in the current study.

Writing from a conceptual position that adult education is embedded in the political, social and economic processes of society Walters and Watters (2001) looks at adult education in the 14 member Southern African countries. Defining adult education as all the educational provisions for adults excluding formal tertiary education the writers identified three themes reflecting the main social purposes of adult education in the Southern African nations. These themes are: survival, economic development and political and cultural development. After a brief synopsis of the major characteristics of the Southern African Region the paper goes on to provide an overview of the dominant development approaches which it sees as instrumental in shaping the practice of adult education in the region. The paper then highlights the main adult education developments within the region over 20 years.

The paper drew on several cases to demonstrate how the dominant development perspectives identified as modernization theory, and neoliberal theory have influenced development policies including adult education within the region. Walters and Watters (2001) noted for example that literacy programs seen as part of the education agenda aimed at survival was very often not successful. This they argued was due to the fact that

while being pronounced as essential to the development objective the literacy programs were often neglected for human resource development programs in the formal sector which was more in keeping with the modernization, neoliberal path that was adopted by these countries. The countries such as Namibia in which literacy programs were deemed successful a different development path was taken. In Namibia the approach to literacy was based on a Freirian approach in which literacy was seen as a basic human right.

Walters and Watters (2001) found that in the last 20 years a number of adult education programs focusing on skill development have been implemented. This again was in keeping with the strong focus on a neoliberal modernization development agenda. They noted however that given the fact that most of the countries within the region have undergone radical political changes in the last 40 years this neoliberal agenda did not always obtain. Importantly, there has been much political activism in which both informal and non-formal adult education was integral resulting in rich learning through social and political action.

In a study looking at the non-formal education in Latin America LaBelle (2000) traced the history of non-formal education programming in Latin America since the 1920s. LaBelle's focus on non-formal provisions was grounded in the idea that non-formal education is central to the strategy for change and socio-economic progress for the poor and disenfranchised in developing countries (LaBelle, 2000). The adult education provisions identified over the 50 year period covered in this study included community-based programs, literacy, fundamental education, community development, technical vocational training, extension education, consciousness raising, popular education, and

community schooling. In reporting the provisions LaBelle made a link between the programmer provisions of the different historical periods with the political and economic context which informed the shaping of the goals, the process and outcomes of adult education. The findings were presented under thematic headings reflective of the socio-political context within which adult education occurred. These headings included: Early Foundations and the 1950s; The growth years 1960: Authoritarianism, nationalism and the Dependency Thesis; The 1970s: Challenges of Reform and Revolution; the 1980s: The Lost Decade; The 1990s: Macro Economic Growth Returns with little effect on the poor.

Looking at the impact of the economic status of the country on adult education LaBelle noted that the economic downturn in the 1980s led to non-formal education being viewed as a less viable socio-economic development strategy. This led to a shift to schooling as a priority and the pulling back of governments from social service funding. LaBelle noted that despite the shift in focus from non-formal provision to schooling by the government in the 1980s the informal economy and social movements emerged as avenues for non-formal education programming and non-governmental agencies became the dominant vehicle for educational delivery. During the 1990s, technical education became privatized, adult basic education was overhauled and citizenship education was seen as a potential avenue for non-formal education investment in the newly democratized region.

Sungsri and Mellor (1984) examined the philosophies and services of non-formal education in Thailand. They presented a historical outline of non-formal education in

Thailand, from its inception as the Adult Education Division in 1940. The philosophy and curricula of adult and non-formal education were examined. The writers provided an overview of activities that were being offered by the Non-Formal Education Department and other agencies. However, the method of data collection was not outlined in the article.

The study found that non-formal education was increasing significantly in Thailand particularly in the rural areas. This was being fueled by the recognition of the Adult Education Division of the need to ensure that development was equitably spread as the general standard of living in the country was rising. Emphasis was being placed on improving the adaptability of communities to the rapid change taking place; on enhancing the skills of individuals to ensure occupational flexibility; and on maximizing the use of available resources. To this end the programs provided served to provide basic knowledge and skills, in particular general adult education and functional literacy; training in vocational and occupational skills; and programs designed to provide relevant knowledge and up-to-date information. All of these adult education activities were premised on a philosophical idea captured in the concept 'khit pen' which means “the ability of a person to manage or to organize himself and his environment fully and harmoniously” (Sungsri & Mellor, 1984, p. 445).

Adult Education and Development in Jamaica

Jamaica shares a common history of domination and struggle for political freedom, economic viability and cultural identity with its Caribbean neighbors (Demas, 2009; Nettleford, 1995). Therefore development of Jamaica as with other Caribbean

islands is set against a backdrop of its struggle to decolonize itself from over 300 years of formation out of a history of transplantation, exploitation, economic dependency, and psychic despair (Demas, 2009; Nettleford, 1995). The aim of the development process has been identified by Nettleford as that of shaping a modern Caribbean both in terms of its own internal identity and self-articulation and in its relationship to the outside world. Critical to this process of development is the education of its people. Given its long history of colonization and the plantation economy in which the vast majority of the population was deprived of education (Barrett, 2010; Sherlock & Bennett, 1998) adult education in Jamaica assumed a very important role of providing a varied and extensive network of educational provisions particularly in early post- colonial Jamaica. Education was deemed an essential component for the success of any development strategy within the region (Nettleford, 1995).

According to Nettleford (1995) education in the region has a major responsibility of facilitating the development of its citizenry through a learning process that ensures flexibility and adaptability resulting from creative thinking and action. In this regard adult education has been concerned with assisting persons to understand the implications of social and economic change for them in the context of their own environment and to enable them to contribute to the good of the society (Lowe, 1982). Lowe summarized the main function of adult education in developing countries like Jamaica as: assisting the population to adjust to constructive changes in the society particularly as these changes relate to the social consequences of national development; improving the quality of human resources to increase labor productivity and efficiency; enabling purpose driven

work; teaching scientific and technological skills to the adult population; and enabling adults to live full and satisfying lives..

Additionally, adult education has had the role of retooling the workforce and in helping both workers and employers to deal with and manage the transformation that takes place in work and other societal organization as the country develops ((Ellis & Ramsay, 2000). Adult education in Jamaica has been organized and delivered by a number of different organizations and individuals (Ellis & Ramsay, 2000). These organizations comprise governmental and non-governmental operating at the community level, and national level. These organizations include educational institutions, industrial companies, trade unions, churches, clubs, and civic groups (Barrett, 2010; Ellis & Ramsay, 2000; Gordon, 1985).

Adult education in Jamaica.

A review of the empirical literature has identified four studies that give focus to the subject of adult education in Jamaica. These include Barrett, (2010), Ellis and Ramsay (2000) Gordon (1985), and Harvey and Williams (1990). The four studies were qualitative in nature. The study conducted by Gordon was set within a Third World context while Ellis and Ramsay, and Harvey and Williams studied adult education within the context of the Caribbean. In these studies adult education in Jamaica was reviewed as one case among several within a geographical region.

The studies conducted by Gordon (1985) and Ellis and Ramsay (2000) provided a comprehensive coverage of the provisions, organization, management and administration of non-formal adult education in Jamaica however neither of the studies problematized

the role of adult education as an active force in Jamaica's development. In other words neither of the studies discussed the provision, organization and management of adult education in light of the social, economic or political need to which the provisions were responding. This is despite the fact that both studies were careful to establish the historical context of Jamaica as a case.

Gordon (1985) noted that educational patterns including patterns of adult education in Jamaica reflected the diverse and distinctive geographical, historical, cultural, political, ethnic and socio-economic patterns of the country. Critical to these patterns is Jamaica's colonial past. Hence as with other post-colonial developing countries, adult education in Jamaica is historically grounded in various collective goals which arose out of its response to economic, political and social needs. This means that adult education has traditionally been more of a national undertaking rather than a personal agenda (Gordon, 1985).

Gordon claimed that adult education in Jamaica has had three main historical strands: illiteracy, community development and university adult education. With these strands he reports adult education provisions in areas such as: literacy education; mass education; adult basic education; community development; remedial education; vocational training for out-of – school youth; business, industrial and commercial education; skills and vocational; labor education; citizen's education; political education; health education; liberal adult education; university adult education. In terms of the management and administration of adult education Gordon spoke to the role of the Social

Development Commission, and the department of Extra-Mural Studies of the University of the West Indies.

Ellis and Ramsay (2000) discussed their findings by looking at various provisions of adult education. These include worker education, information technology, literacy, health education, environmental education, and gender. They noted however that the promised gains in well-being, productivity and efficiency have only been realized in the most innovative of educational packages. When compared to the findings of Gordon (1985) the areas of adult education provision reported in this study seem less comprehensive but highlighted two other areas namely; environmental education and gender.

Harvey and Williams (1990) took their analysis further and reported their findings on the provisions of adult education in terms of the various sectors and subsectors which were identified as critical to the development of the various countries within the Caribbean. In the case of Jamaica they found that the sectors most served by adult education between 1977 and 1989 were the social development sector and the economic sector. In terms of programs aimed at social development emphasis was placed on education, family, health education and nutrition, women, men, youth and political education/human rights/trade unionism. In the economic sector the focus was on education for rural development, tourism, corporate business, urban development, agriculture and fisheries, services, human resource development, manufacturing and fiscal /monetary policy. Another sector of focus during the period investigated was science and technology which included areas such as the transfer and use of technology.

These researchers concluded that the overall picture showed a concentration in adult education activities focused on personal development with community mobilization and the development of appropriate institutions for advancing the development process in the society being given secondary attention.

The fourth study Barrett (2010) defined adult education as all those incidental and intentional activities that societies use to pass on values, attitudes, knowledge, and skills to adult learners. This socio-historical study examined the Jamaican adult education experience in its journey from slavery to liberation and beyond. The focus in this study was on informal learning opportunities. Using a process of document analysis of secondary data, the paper identified several themes which activated the collective learning of the Jamaican people in their journey to nationhood. As such this research looked at adult education in the context of popular education. The themes that emerged as critical in the country's development include: the fight for freedom, black consciousness, racial pride, national consciousness, self-government and a better life for the majority. These themes formed the strategic agenda of the popular education opportunities identified in the review and pointed to a strong focus on a radical perspective of adult education. The study also looked at the methods used by the different teachers, the learning outcomes and some of the obstacles of the learning and development process.

Summary and Conclusion

Based on the literature discussed in this review we can conclude that adult education has been theorized to be a key contributor to society's development through personal development and skill provision, the development of democratic ways of being

and interacting and a critical perspective that challenges social inequalities and other factors that restrict some persons from reaching their full potential while allowing others easy access to do so. In so doing adult education is seen as having served in the continuous development of individuals, their groups and their societies.

Walter (2009) spoke of adult education's strong roots in community development, popular education and social justice, extension education, literacy, workplace learning and various social movements such as civil rights, peace and labor. These various forms of adult education highlight the agendas that have informed the organization of adult education over the years and provided the base for much academic debates among adult education scholars. The findings from this review of literature support these ideas about adult education.

Further, the empirical literature reviewed show a strong focus on research that looked at non-formal provisions of adult education and national development. None of the studies reviewed looked at the contributions of adult education delivered as part of the formal education provisions. This is one area in which this current study will add to the empirical literature on adult education. Additionally, the research related to Jamaica lacked a critical analysis of adult education provisions whether formal or nonformal in terms of the undergirding philosophy, and the social, political and economic drivers of the provisions at a given period in time. This is one of the aims of this current study.

One thing that was very striking throughout the literature review process is the scarcity of research on the subject of adult education independently and adult education and social change within the region and specifically in Jamaica. Hence, in

acknowledging the fact that the education of adults is critical to any successful development agenda more research needs to be done to ensure that arguments for continued investment in adult education in Jamaica is supported by persuasive evidence derived from systematic inquiries. This current research hopes to add to that body of systematic inquiry.

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CHAPTER 3

Methodology

Research Design

This multi-case study examined the philosophical themes and practices of adult education in Jamaica since it gained independence in 1962 to present. According to Dooley (2002), case study research “emphasizes detailed contextual analysis of a limited number of events or conditions and their relationships” (p. 335). It is one method that enables us to understand a complex issue and can strengthen what is already known through previous research (Dooley, 2002). The case study approach provides a powerful means of analyzing the context and process which illuminates the phenomenon that is being studied (Hatley, 2004).

A multiple case study approach was chosen for this study first because multi-case research allows for the study of a phenomenon using individual cases to better understand that phenomenon (Stake, 2006). This allowed for more powerful analytical conclusions (Yin, 2009) about how adult education enabled Jamaicans and the society to adapt to the societal changes that occurred over fifty years of its independence. Secondly, the use of multiple cases indicates the recognition that different adult education provisions emerge over time based on the social, economic and political agenda of the country at a given time. It also shows an appreciation of the fact that the strength of the contribution of individual institutions may vary overtime as a function of the needs of society. Additionally, the institutions that were chosen for this study represented different types of educational provision for example formal or non-formal.

The study was bounded by both time and location in that it sought to examine adult education provisions in Jamaica from 1962 when the country gained independence up to the present time it celebrated its 50th year of independence. As a contextual explanatory case study this research sought to explain how adult education facilitated social change and development given the prevailing social, economic and political context at varying periods in Jamaica's independent history. I studied two adult education institutions so as to understand more clearly how adult education provisions helped Jamaicans to respond to the social, political and economic changes over the course of its development as an independent nation. These adult education institutions represented manifestations (Stake, 2006) of the main phenomenon that was studied in this research that is adult education for national development. The decision to use two cases was informed by the timeframe within which the study was conducted and the manageability.

The main unit of analysis of this multi-case study was Jamaica's adult education provisions that enabled the country to adapt to the societal changes over the course of its development as an independent nation. The focus of the study is therefore on the issue of adult education programs rather than on the individual institutional cases such that the cases were the vehicle that was used to better understand the issue. According to Stake (2006) this act of studying some single cases in order to better understand a phenomenon makes the study an instrumental case study. Additionally, the adult education provisions of each of the cases presented some embedded units of analysis that provided illustrative examples of how adult education responded to the social context. Further, an understanding of the social, economic and political changes experienced by the country

in the course of its development was critical in framing the context in which adult education occurred over the years.

Data Collection

Creswell (2007) noted that one characteristic of case study research is the use of many different sources of information to provide depth to the case. In this study data was collected using an intensive, multisource approach. This included content analysis of various documents from primary and secondary sources as well as interviews with key informants from the institutional sites selected to be part of the study.

Document analysis.

Primary document sources included: National Plan for Jamaica, 1957 -67 (Nat. Plan) Five year independence plan 1963 – 1968 (Ind. Plan), Five year development plans, 1970 – 2000 (DP) Surveys of living conditions (SLC), Economic and Social Surveys for the period 1980 - 2012 (ESS), Vision 2030: Jamaica National Development Plan (V2030), Five year Education Plan, 1978 – 1983 (EP), Fiscal policy, 1970 – 1975 (FP), National Industrial Policy (NIP). These documents provided information on the countries national policy directions, development goals and objectives, sectors of focus, development strategies, education and training requirements, adult education institutions and programs endorsed by the government. Additionally, primary document sources from the institutions included UTech Bill of Charter and Statues (UBC), UTech strategic plans, 1995 – 2010 (USP), UTech summary of programs (USP), UTech prospectus, 1963 – 2012 (UPros), pamphlets (PAM), brochures (Bro), Jamal Foundation 5yr Plan 1978-1983 (JFP} JAMAL business plan, 1998 (JBP), Literacy Survey 2008 (LS). These

documents provided data on the institutional philosophy, program goals and objectives, target groups, program content of the two adult education institutions studied.

Secondary document sources included: an education sector survey, the Task Force on Educational Reform final report, (TASK), JAMAL annual reports (JAR), KPMG Peat Marwick survey report on the impact of illiteracy on productivity in commerce and industry (KPMG), Lamp Light Magazine produced by JAMAL (Jam.LL), JAMAL 10th Anniversary Souvenir Magazine (SM), Paper presented as regional conference (CP), CAST Principal's reports from 1963 – 1994 (Prin. Rep.) President's reports from 1995 – 2004 (Pres. Rep.), UTech annual reports, 2005 – 2012 (UAR), CAST institutional reviews (IR), CAST system analysis (CSA), UTech septennial review (SR), case studies on UTech, (CS), UTech supplements (US) newspaper articles (NA) and website of the institutions (Utech Web, & JFLL Web).

Document analysis served to: (a) identify the country's development plans, policies, goals and objectives over the period to be reviewed; (b) provide information on adult education program offerings and their curriculum; (c) provide information on educational program impact in terms of the graduates from the various programs. The use of multiple sources of evidence in my data collection enabled me to develop what Yin (2009) refers to as converging lines of inquiry. This is described as a process of triangulation and corroboration (Yin, 2009) which will add to the accuracy and integrity of the conclusions drawn in the study and strengthen the validity and reliability of the research (McMillan & Schumacher, 2006; Stenbacka, 2001).

Interviews

Purposeful sampling was used in this study both for the selection of the institutional sites and the participants to be interviewed. One technique used in purposeful sampling is criterion sampling which means that each case meets some established criteria (Creswell, 2007). Criterion sampling was used to select the cases for this study. Each case was selected based on the following 4-pronged criteria. The case: (a) was government funded, (b) national in scope, and (c) delivered programs that fell in at least one of the policy sectors identified in the national development plans as critical to the country's economic and social development, and (d) represented a different type of adult educational provision that is one formal and one non-formal.

The decision to include 'government funded' as one criterion for selecting cases for this study was important as it demonstrated not only the states support for the intervention but also its endorsement of the particular institution as a provider of a critical development service. This was important because as Spencer (1998) noted, adult education is not usually broadly funded by governments. Therefore what is funded is usually related to the norms and values of the political economy of a society (Spencer, 1998). Consequently, government funding was taken as a demonstration of the state's support for the intervention as a public good.

The importance of the adult education institutions providing programs that are national in scope lies in the argument that the scope of a program is usually a reflection of its impact. Harvey and Williams (1990) pointed out that impact is frequently measured by the number of individuals reached and the length of the program.

Additionally, since the main unit of analysis in this study will be Jamaica's adult education provision then it was important to ensure that the illustrative cases reflected a national scope in the programs offered.

In this research it is argued that adult education facilitates national development. Consequently one of the criteria for including an educational institution in this study was whether the program/s offered by the institution related to any of the policy sectors that were identified by the government as important for national development at a given period of the country's development.

Merriam, Caffarella and Baumgartner (2007) make the point that the emphasis placed on adult learning within a society is determined by the nature of the society at the particular time. Consequently it can be argued that different adult education provisions will emerge over time based on the social, economic and political agenda of the country at a given time. This argument supports the decision to select cases that represented different types of adult educational provision that is formal and non-formal.

The informants from the participating institutions were selected using two sampling techniques. Criterion sampling was used to select persons who either had worked in the past or were currently involved in the administration of the institution and the development and delivery of education programs within the participating institutions. According to Creswell (2007), criterion sampling works well when all the participants "represent people who have experienced the phenomenon" (p. 128) that is being studied. Additionally, snowballing was used to add to the pool of informants. Snowballing is a process of identifying persons of interest based on the recommendation of others who

know individuals who are rich with information relevant to the study (Creswell, 2007).

Using these sampling methods seven persons were selected as informants: four from UTech and three from JAMAL.

Procedure

The data collection began with the systematic review of the development plans and related educational plans from 1962 to present. The aim of the review as noted earlier was to identify the key development areas and the related educational needs as identified by the government. It also served to inform me of any institution that may be specified by the government as key in providing the education and training that was considered necessary to accomplish the stated development goals and objectives.

Based on the information gathered from the development plans and their related educational plans two adult education institutions were selected using the 4-pronged criteria outlined earlier in this paper. Once the institutions were selected a letter was written to the head of the institution (See Appendices A and B) seeking permission to use the institution as a case in my study. Having obtained consent of participation and access to the institutions the relevant documents were requested for review. A systematic search strategy was used to collect these data, beginning with documents available in the public domain, followed by requests to key personnel within each of the participating institutions for further material. Where permission was given for the documents to be removed from the institutions those were collected for review. Where I was not permitted to remove the document those were reviewed within the relevant documentation center of each institution.

Interviews have been identified as one of the most important sources of case study information (Yin, 2009). In this study focused interviews (Yin, 2009) were conducted with seven key administrative leaders and other high-level stakeholders within the institution; four from UTech and three from JAMAL. A focused interview is one in which a person is interviewed for a period of about an hour with a focus on a specific set of questions derived from the research protocol (Yin, 2009). Purposeful sampling techniques: criterion sampling and snowballing were used to select the interviewees from each institution. Each potential participant was contacted via telephone and or email initially followed by an introductory letter explaining the project (See Appendix C). On receipt of their consent to participate an interview date was negotiated. The consent information sheet was given to the interviewee at the time of the interview. The consent sheet (See Appendix D) gave a brief description of the purpose of the research, the main research question and why I was doing the research. Participants were also informed that their participation was voluntary and that they were free to withdraw from the process without penalty. Face to face, semi-structured interviews which lasted on average 1hr and 15 minutes were conducted with each informant (See Interview Schedule in Appendix E). Permission was sought and received from each participant to have the interviews audio recorded. Having received permission the interviews were audio-recorded and transcribed verbatim.

The focused interviews served to gather information that would amplify or corroborate information gathered from the document analysis and so specific, carefully worded questions were asked. The questions were focused on the role each of the

participating institution played in the development of Jamaica. The same questions were asked of each interviewee. Great care was taken to ensure that the questions asked were not 'leading questions' in order to ensure that the corroboratory purpose of the interviews was not compromised (Yin, 2009). However the semi-structured nature of the interviews provided some flexibility for the interviewee to give additional information as was deemed relevant to the research topic.

Data Analysis

The data was manually analyzed. The general approach that was taken in analyzing the data involved the use of theoretical propositions developed as part of this study. This strategy has been characterized as the most preferred for the analysis of case studies (Yin, 2009). The use of propositions enabled the researcher to make sense of the data as it was being collected as well as to delineate results that served a wider significance beyond the cases studied (Hartley, 2004). One technique related to the use of theoretical propositions, and the one that was used in this study is pattern-matching. In this technique an empirically based pattern is compared with a predicted pattern (Yin, 2009).

Cresswell (2007) argued that in case study research analysis may either be done of the whole case or of one specific aspect of a particular case. When only one aspect of the case is analyzed the process is referred to as an embedded analysis. The embedded approach was used in this study. This means that the study did not present descriptions, themes, interpretations or assertions based on the whole case. Rather, one aspect, specifically the curriculum offered within the two participating institutions, was the focus

of the analysis. The data analysis process was guided by the data analysis spiral described by Creswell (2007). This recursive process involved organizing the data; reading the data and making sense of it; describing, classifying and interpreting the data; and integrating, summarizing, packing and presenting the data for the readers.

In preparation for analysis all the data gathered from the document review and content analysis process was condensed into two detailed narrative accounts (Stake, 1995) of the two participating institutions. Additionally, individual transcripts were produced from each of the interviews conducted. A within-case analysis of the data was then conducted on each case to identify categories using what Marshall and Rossman (2006) described as a continuum of coding strategies. These strategies included pre-figured categories, that is, categories derived from the literature, as well as emergent categories arising from the data. Each case was analyzed for its contribution to changes at various levels of the society as outlined in Lauer (1977) levels of analysis of societal change. The levels that were focused on in this research included changes at the individual, organization, institutional and societal levels. Through a process of cross-case analysis the data from each case and the various categories were then organized under various themes derived from the research questions. Several assertions were then made under each of the themes about adult education and social change at the individual, organizational, institutional and societal levels over the course of Jamaica's development as an independent nation.

Ethical Considerations

Creswell (2008) makes the point that it is important for researcher to reflect on ethical issues throughout the entire research process. In this regard one important step in ensuring that the current research followed appropriate procedures, was to obtain clearance from the Internal Review Board of the University of Minnesota (See Appendix F). In addition, other critical considerations included the use of multiple data collection methods in an effort to increase the integrity of the information collected through a process of corroboration and data triangulation (Bashir, Afzal, & Azeem, 2008; Yin, 2009). Triangulation of data sources and collection methods also served to control bias and to ensure the validity and reliability of the assertions made in the study (McMillan & Schumacher, 2006). In so doing the researcher sought to increase the trustworthiness of the research findings. Trustworthiness in this research was further enhanced through the inclusion of verbatim accounts of each of the cases captured through the use of literal statements from interview participants and quotations from the documents reviewed. Additionally, as is frequently done in interview studies each interview participants was asked to review the transcripts of their interview to verify the information and to check for accuracy.

In terms of ethical responsibility towards participants in this research the consent of each interviewee was sought prior to the interviews. However given the low risk nature of the research to the human participants a signed consent form was not critical. Instead a consent information sheet outlining the purpose of the study, the procedure, risks and benefits, the voluntariness of their participation and steps towards

confidentiality was prepared. This was read by the interviewee prior to the interview.

The assigning of pseudonyms to the participants was not necessary in this research again because of the perceived low risk of the research to the participants.

CHAPTER 4

Presentation of Cases

This chapter is a documentation of the two institutions cases studied in this research. However the chapter begins with an outline of the Jamaican context within which the cases exist.

The Jamaican Context

Educational institutions exist as part of an education system which is itself a part of a wider social system. It is therefore necessary to place the two cases studied in this research within the social economic, political and educational context that has framed their establishment, development and growth within the Jamaican society.

Jamaica's socio-economic and political development.

Jamaica became a British Colony in 1655 and flourished as a sugar plantation society employing a large labor force mainly of African slaves and to a lesser extent East Indian and Chinese Indentured Laborers (Richards, 2009). The slave trade and slavery in Jamaica continued for more than 150 years (Richards, 2009; Sherlock & Bennett, 1998).

After emancipation Jamaica like its other Caribbean counterparts continued to be ruled by the British Monarchy under a Crown Colony form of government. However by the 1930's after a long period of British Colonial rule Jamaica began to demonstrate some appearance of local political control with the formation of the political party the Peoples National Party (PNP). This was soon followed with the formation of the Jamaica Labour Party (JLP). Both political parties emerged out of two well organized and powerful rival unions which had been operating in the country (Miller & Murray, 1977; Sherlock &

Bennett, 1998). Later in 1962 Jamaica gained full independence and adopted a Westminster model of parliament. Since then Jamaica has operated on a two party parliamentary democracy with a House of Representatives of 60 members chosen every 5 years. This two party system with its attending link to political tribalism and sporadic violence has played a significant role in the way Jamaica has evolved as a nation.

According to the National Industrial Policy of 1996, “Jamaica has had a long history of economic development with many ups and downs, periods of boom, and periods of stagnation” Government of Jamaica (Harris, 1996, p. 15). The same document identified four main stages of economic development: the slave economy of sugar production; a transition to a new economic order based on banana production which provided a strong impetus for growth for a long time; further diversification of the production system through growth in areas such as citrus, coffee, coconut, cocoa and pimento; and finally the development of the mineral industry of bauxite and alumina and the emergence of the tourism industry.

The early years after independence was described politically as a period of neo-colonialism under which the country “retained a strong relationship with Britain while developing ties with the rest of the world for trade and to enable migration (Dyde, Greenwood, & Hamber, 2009). The government of Jamaica built on the gains of the post-war era (1945 – 1955) which according to Miller (2007) “cradled the beginnings of sustained and strong economic growth in the country” (p. 1). Miller and Murray (1977) noted that “with the advent of independence came the need for Jamaica to develop a new and viable economy no longer based on plantation agriculture and the marketing of a few

main crops” (p. 82). This called for a diversification of the Jamaican economy. This need for diversification was buoyed by the fact that Jamaicans were themselves becoming greater consumers and sought to improve their standard of living and opportunities (Miller & Murray, 1977). Consequently, the 1970s marked a shift in the Jamaican economy from agriculture to services.

The National Plan for Jamaica 1957 -1967 described that time as a period of increased industrialization. Special emphasis was placed on building the country’s economy by attracting foreign capital to Jamaica and the provision of incentives by way of tax concession, tariff protection and industrial space (Boyd, 1988; Keith & Keith, 1992). This approach to Jamaica’s economic growth has been referred to as a program of “industrialization by invitation” (Keith & Keith, 1992). Much emphasis was given to the export sector, particularly the bauxite /alumina industry (Boyd, 1988).

The bauxite/ alumina industry that had emerged in 1943 was expanded. There was renewed interest and investment in tourism with the expansion of new attractions and destinations opening up on the North Coast. Secondary and tertiary industries in production emerged, light manufacturing began taking root and was actively promoted by the government, construction was beginning to boom, transportation, communication, as well as refining and service industries were growing (Miller, 2007; Miller & Murray, 1977; National Planning Agency, 1963). The economic growth was rapid and sustained and led to significant changes in the structure of the economy.

As stated earlier Jamaica’s economy was largely dependent on agriculture, however agricultural production declined by some 15% between 1963 and 1970. Sugar

production dropped from 506,000 tons in 1965 to 368,000 tons in 1970. Bananas declined from 290,000 tons in 1965 to 150,000 tons in 1970. As a result of these declines although agriculture was still the largest employer being responsible for 35% of the total employment in 1970 (Miller & Murray, 1977) the agriculture sector contributed only 8% of GDP in 1970. Manufacturing which was encouraged by a program of tax and other incentives accounted for 13.5% of GDP.

The expansion of industry however had both positive and negative effects on the Jamaican society. On the positive side was the growth of new productive sectors in the economy, the introduction of more modern industrial forms of technology and the development of the social relations of production characteristic of modern capitalism, in addition to an increase in the labor force that was engaged fully and directly (Keith, 1978). “Between 1943 and 1970, the percentage of wage earners in the labor force increased by nearly 16 percent” (Keith, p. 43). The economy grew at an annual average rate of 6.7 percent between 1950 and 1968 resulting in noticeable improvement in the standard of living for some (Keith & Keith, 1992).

On the other hand a process of uneven development was accelerated (Keith, 1978; Manley, 1989). The economic strategy resulted in an increasingly wealthy entrepreneurial class which was given much attention by the government that treated their interests as equal to the interests of the economy (Manley, 1978; Sherlock & Bennett, 1978). The government’s actions were based on their belief that the economic future of the country was linked to the continued expansion of this entrepreneurial class (Sherlock & Bennett, 1978) otherwise referred to as the *merchant fraction* (Keith & Keith, 1992).

Sherlock and Bennett and Keith and Keith concurred that this group replaced the planters as the dominant owning interest after the decline in plantation agriculture.

Additionally, whereas the labor force increased economic growth did not match social progress such that unemployment rates grew from 13% in 1962 to 23% in 1972 (National Planning Agency, 1977). Although the government had articulated in the Five Year Development Plan a commitment to finding a balance between economic development and social needs and placing greater emphasis on a wider distribution of the benefits of development, “to provide as equitable a distribution of income and resources among all sections of the population as is compatible with the maintenance of incentives for the achievement of adequate levels of production” (National Planning Agency, 1977, p. 57) there was a widening gap between the general mass of the people and the new entrepreneurs. In the words of one politician the “‘haves’ were getting richer and the ‘have-not’s were getting poorer” (Sherlock & Bennett, 1998, p. 385).

The resources, industries and businesses were owned by foreigners, sugar estates throughout the island, banks, and insurance companies even the infrastructure of a relatively new industry like tourism placing Jamaica in a position of economic dependency (Dyde et.al., 2009). This type of fiscal policy of economic dependence was seen as intolerable for a newly independent government (Boyd, 1988; Dyde et.al., 2009). The measures failed to achieve self-sustained growth and socio-economic development for the country. This led to feelings of anger among the poor toward foreign capital which intensified toward the end of the 1960s (Keith & Keith, 1992; Sherlock & Bennett, 1998). There was a concomitant mass migration to the urban centers and overseas as the

poor searched for work and skilled personnel and professionals sought a better way of life in the United Kingdom, The United States and Canada (Boyd, 1988). Emigration was greatest among professional, skilled and educated workers. As such this resulted in an exacerbation of an existing shortage of skills (Miller & Murray, 1977). This loss of skilled manpower Miller and Murray described as a major inefficiency factor in the economy.

The failings of the development formulas applied by Jamaica up to that point since independence: the dependency on foreign capital, and socio-economic inequalities led to a program of economic nationalism and later democratic socialism in the 1970s. The period was marked by a major socio-political change which resulted in major shift in the economic policy. Arguing from the perspective of the dependency theory which maintains that a state cannot be politically independent if it remains economically dependent on foreign interests the PNP claimed that Jamaica's socio-economic salvation laid in their breaking the bonds of dependence on the metropolitan powers. They took the position that self-reliance and negotiated dependence when necessary were the preferred mode of operation (Keith & Keith, 1992). Consequently, the PNP government under the leadership of Prime Minister Michael Manley in 1974 declared Jamaica a socialist state and introduced democratic socialism as the guiding principles for Jamaica's society and economy (Keith & Keith, 1992).

Democratic Socialism was understood as a combination of "capitalist and socialist socio-economic principles and that parliamentary politics would continue to play a direct role in the ongoing political process" (Keith & Keith, 1992, p. 3). In keeping with the

socialist agenda the government further announced its intention to nationalize many of the country's largest businesses; Bauxite, agriculture, public utilities: the Jamaica Public Service and the Jamaica Telephone Company; the Jamaica Omnibus Company (Dyde, et al., 2009; Keith & Keith, 1992; Levi, 1989). As such a large segment of the economy was brought under direct state control between 1974 and 1978 (Dyde, et al., 2009). Other important new programs implemented by the government in support of its socialist agenda included a national literacy program, skills training for young people, free education, the national youth service, a cultural training center, a national minimum wage and worker participation in management (Boyd, 1988; Levi, 1989).

The main objective of the macro-economic policy for the 70s was to place the economy on a path of economic growth while ensuring that the direction of growth was consistent with and supportive of the fundamental changes in the production structure required for the development of a more self-reliant economy using methods that were consistent with the consolidation of social reform. This social reform grounded in the principles of Democratic Socialism had a philosophy of an egalitarian society based on the twin pillars of social justice and equality of opportunity. From this perspective social goals include the fostering of self-confidence, self-reliance and a spirit of community, nationalism and service (Levi, 1989; National Planning Agency, 1977). Under this regime the aim was to secure economic growth and undertake structural changes by harnessing the productive potential of all socio-economic sectors to the development objectives while guaranteeing that the benefits of such growth were distributed in a socially acceptable manner (National Planning Agency, 1978).

However, as noted by Keith and Keith (1992), the transformative agenda of the PNP -democratic socialism- failed in spite of its network of well laid plans. Like its predecessor neo-colonial “industrialization by invitation” program, democratic socialism enjoyed uneven success up to the late 1970s and soon after went into decline. By 1977 the government was forced to turn to the International Monetary Fund (IMF) for assistance. The funds came with what is often described as draconian demands including a drastic cut in government spending and a massive increase in taxes, major devaluation of the Jamaican dollar, factors that led to widespread reduction in the standard of living for the people (Levi, 1989). Dyde et al. (2009) noted that by the end of the 1970s the price of goods had trebled, and there was massive unemployment. The overall social and economic conditions of the country declined significantly resulting in the net migration of capital and highly skilled labor, a significant rise in political tribalism, violence and drug-related crime (Boyd, 1988; Dyde, et al., 2009; Levi, 1989). Socialism had failed the people, nationalization and the intended break from economic dependence had brought hardship on the people a situation that was greatly aggravated by the IMF agreement. Consequently the people voted against the PNP and socialism.

The decade of the 1980s began with much political tension, violence and cutbacks. Having been voted back into power in 1980 the Jamaica Labor Party (JLP) led government sought to repair the damage caused by the strategies and programs of democratic socialism with an expanded industrialization model. The main theme of this expanded model was trade liberalization (Boyd, 1988). This period saw the removal of price control instituted under the previous administration and the reduction of barriers

allowing the free import of goods and foreign investment. The economic strategy focus was now reversed from nationalization and public ownership of businesses to private ownership.

Although decline was reported in all the sectors during 1980 as a result of the freeing up of the market the first half of the decade saw growth in output accompanied by an expansion in employment opportunities. In the first two years the unemployment declined approximately 5%. The labor force passed the one million target for the first time (National Planning Agency, 1980). Improvement in employment levels spread over all but three sectors: agriculture, transport and communication and public utilities and public administration (National Planning Agency, 1981).

Reports from the Planning Institute of Jamaica showed that in the second half of the decade the all sectors grew in real terms with the exception of agriculture and producers of both government services (Planning Institute of Jamaica, 1986; 1987). Tourism which was one of the sectors of the economy selected for priority treatment under the government's economic strategy was the fastest growing sector. Jamaica benefitted from the favorable turn in the international economic environment as well as real growth in the trading partnership between the country and the United States of America (USA). Employment continued to grow and aggregate productivity increased for the first time in several years in 1987. The manufacturing sector and other services were the main contributors to this increase in employment. In these sectors employment grew by 19.6 % and 5.7% respectively with the garment and tourism subsectors being the

main contributors (Planning Institute of Jamaica, 1987). However the economy continued to suffer during this period (Dyde, et al., 2009).

Whereas the economy showed some evidence of recovery by 1986 Boyd (1988) noted that the macroeconomic indicators did not suggest that the economy had made a lasting recovery. Consequently the government had to turn again to the International Monetary Fund which resulted in a severe program of structural adjustment. The structural adjustment program with its neoliberal fiscal stabilization and economic adjustment policies (Arnove, Torres, Franz, & Morse, 1996) saw another period of major reduction in public spending in an effort to increase revenue. This resulted in massive layoffs, a negative impact on housing, education and health and as such did little to improve the overall socio-economic situation of the country (Clarke, 2006; Dyde, et al., 2009). Youth unemployment became a major issue owing to the budgetary cutbacks. Youths accounted for 56% of the unemployed labor force (Planning Institute of Jamaica, 1985). In an effort to alleviate this situation the government implemented what was called the Solidarity program. The program targeted persons in the 18 – 25 age cohort with low educational attainment and unable to meet the criteria for entry to a technical education program. The Solidarity program provided an opportunity for self-employment in which the government made funds available for individuals and groups for initial working capital (raw material, rent and utilities) for a select range of productive activities in agriculture, vending, handicraft.

With regard to the social sector the main focus of the government in the 1980s was on education, training and health. However, in terms of education the main focus

was on early childhood education through its Program for Advancement of Childhood Education (PACE) and tertiary education with the development of a Bachelor of Education in Early Childhood Education at the University of the West Indies (Planning Institute of Jamaica, 1987). Given its focus on early childhood education the government was of the opinion that a disproportionate amount of the educational budget was being spent on tertiary education while the greatest need for funding was at the primary and secondary levels. It therefore implemented a cess or user charge in which students at the College of Arts Science and Technology and the University of the West Indies were required to contribute towards the tuition cost of education (Planning Institute of Jamaica, 1986). This in effect was a reversal of the free education policy that was implemented in the 1970s at least for the tertiary level. At the same time there was a drastic cut in the budgetary allocation to agencies such as JAMAL which had significant adverse effect on the ability of the agency to carry out its mandated.

The PNP returned to power in 1990 with a much more moderate approach and stressing the need to encourage private investment (Dyde, et al., 2009). The government outlined an economic policy which aimed to:

- Reduce Jamaica's acute external dependency.
- Implement measures to support the private sector
- Create the capacity for self-sustaining growth through human resource development and technological innovation.
- Increase the rate of economic growth, broaden the structure of the economy and achieve greater equity.

- Develop the nation's natural resources while creating an environmentally sound self-sustaining economy.
- Achieve and maintain international competitiveness as a means to increase export.
- Cultivate a spirit of hope and national purpose.

By the 1990s 15% of labor force was employed in the manufacturing sector and 57% in the service sector and Jamaica's export - import ratio fell from 1:96 to 1:78. Jamaica's economic stabilization and adjustment process which began in the 1980s was significantly advanced as the process of deregulation and liberalization were accelerated (Planning Institute of Jamaica, 1990). There were significant policy changes during the first year of the decade to ensure that there was no significant deviation from that path. Expansion in the tourism industry, rehabilitation of export agriculture, recovery of the bauxite/alumina industry and the service sector were the main drivers of economic growth in the first half of the decade. However in the second half of the decade the transport, storage and communication, construction and instillation and real estate and business services sectors recorded what the Planning Institute of Jamaica described as robust growth. At the same time the manufacturing and mining sector experienced decline. The three largest occupational categories in terms of their employment share were skilled agricultural and fishery workers, elementary occupations, and craft and related trade workers (Planning Institute of Jamaica, 1995).

Jamaica's first industrial policy was developed in 1996 in which export was identified as the main growth strategy for the country. This was a decisive step to move away from the passive policy of development by invitation. However, the 1990s also saw

the emergence of several external factors such as globalization and the General Agreement on Trade Services (GATS) which promotes the liberalization of global trade to which Jamaica had to respond. Additionally the country was hit by the adverse effect of the recent global financial and economic crisis. Consequently, the economy of Jamaica continued to contract (Planning Institute of Jamaica, 2009). Bauxite production declined, agricultural products have been struggling, growth trends in tourism have declined, businesses have been closing and there have been massive lay-offs in a number of sectors (Planning Institute of Jamaica, 2009). Educational institutions are faced with rising costs and the current decline in the Jamaican dollar has made foreign purchases more expensive and has added to the operating cost of organizations including institutions.

The country currently faces multiple challenges in achieving managed economic growth. Among these are the fact that manufacturers need to achieve greater efficiency and cost containment that will offset expensive loan capital to retool; corporate and sectorial levels will need to rationalize operations in order to minimize inefficient production and achieve long-term viability; tight fiscal management and monetary policies will continue (University of Technology, Jamaica, 2003). These factors will all impact the social life of the Jamaican people.

Jamaica established its first long-term strategic plan, Vision 2030 Jamaica - National Development Plan (Vision 2030 Jamaica) in 2009. The Plan sets out the country's national vision statement: "Jamaica, the place of choice to live, work, raise families and do business" and provides a comprehensive framework in which the

economic, social, environmental and governance aspects of national development are integrated and is expected. The Plan articulated four broad national goals (Planning Institute of Jamaica, 2009; Planning Institute of Jamaica, 2010). Those goals were:

- Jamaicans are empowered to achieve their fullest potential.
- The Jamaican society is secure, cohesive and just.
- Jamaica's economy is prosperous and,
- Jamaica has a healthy, natural environment.

These goals are expected to yield a number of outcomes that are expected to put Jamaica in a position to achieve developed country status by 2030. These outcomes include: a healthy and stable population; world-class education and training; effective social protection; authentic and transformational culture; security and safety; effective governance; stable macro economy; an enabling business environment; strong economic infrastructure; energy security and efficiency; a technology-enabled society; internationally competitive industry structures in agriculture, manufacturing, mining and quarrying, construction, creative industries, sport, information communication technology, services and tourism; sustainable management and use of the environmental and natural resources; hazard risk reduction and adaptation to climate change, sustainable urban and rural development (Planning Institute of Jamaica, 2009).

Brief history of the development of education in Jamaica.

The Jamaican slave society was one stratified on the basis of color with the white group controlling the means of production and dominating the socio-political life of the country (McArdle, 2002; Sherlock & Bennett, 1998). The society was one in which the

'blacks' which made up nine-tenth of the society, were considered to be an inferior form of human beings and as such were treated as mere property (Sherlock & Bennett, 1998). Consequently, the majority of the population was deprived of all civil rights and social privileges of which formal education was the most important (Barrett, 2010; Sherlock & Bennett, 1998). The slaves were forced into perpetual servitude and taught only the skills and behaviors required for the effective fulfillment of their particular assignments whether in the great houses or in the field or any other place of work (Barrett, 2010).

After emancipation Jamaica like its other Caribbean counterparts continued to be ruled by the British Monarchy under a Crown Colony form of government. The social structure of the society remained relatively the same with a population in which the majority (95%) is of African origin and the rest is comprised of East Indians, Chinese, Syrians, Lebanese and whites. These groups interacted to form a complex social system stratified in terms of race, color, education and means (Jamaica Education System, n.d.; Richards, 2009; Sherlock and Bennett, 1998). The African majority occupied the base of the social pyramid, mostly illiterate and accounted for the semiskilled, the unskilled and most of the unemployed. The White and fairer skinned people occupied the apex of the pyramid and form a small but powerful elite group. This group often comprised of descendants of the wealthy plantocracy. The middle of the social pyramid evolved out of an inter-mix between the occupants of the apex and the bottom strata. This group formed a very influential group comprising professionals, technicians, and bureaucrats (Richard, 1994; Sherlock and Bennett, 1998).

Keith (1978) noted that a feeble attempt was made to construct a popular system of school in Jamaica at the time of emancipation in 1834. Prior to this education in Jamaica was reserved for free whites and later for free mixed children of the planters (Rojewski, 2003). As part of the Emancipation settlement the British is reported to have voted for 30,000 pounds per year towards elementary education chiefly among the ex-slaves (Campbell, 1971; Keith, 1978). This financial grant referred to as The Negro Education Grant provided the main underpinning for the development of this system of education for the ex-slaves (Keith, 1978; Sherlock & Bennett, 1998).

According to Keith (1978) the British were of the view that with the abolition of slavery the introduction of popular schooling was necessary for the development of more modern capitalist social relations of production. Consequently, the British felt that education was necessary to teach the freed slave population to “submit to the conditions of wage labor when the threat of violent coercion to work was eliminated by abolition (Keith, 1978, p. 39). The aim of this popular system of education in the early free society was therefore to integrate the ex-slaves in to the colonial economy and to ensure an orderly lower class (Morrison & Milner, 1995; Wilkins & Gamble, 2000). The missionary societies took the lead in developing the system. However, the system was taken over by colonial government in the late 1800s (Morrison & Milner, 1995).

This move to educate the ex-slaves was not embraced by all. The Jamaican Plantocrats opposed the idea arguing that day schools was a negative force, a threat to the plantations and that the Negroes who were no longer subject to the discipline brought about by the rigors of plantation slavery might have their distaste for agriculture

sharpened. This the Plantocrats saw as a threat to their own interest in cheap docile labor (Campbell, 1970; Keith, 1978). They argued that the production conditions of the plantation economy during the nineteenth and early twentieth centuries did not require skilled labor. Additionally, they argued that education would give the ex-slaves too many skills which would make it more difficult to find workers who were willing to work under the existing production conditions of plantation labor (Keith, 1978).

However schooling for the freed slave emphasized the learning of skills that would prepare the children for employment as estate workers (Morrison & Milner, 1995). Consequently, the curriculum focused on reading, writing, arithmetic with some religious training and occasional geography and history instruction. Boys were given training in agriculture and other manual arts aimed at maintaining the colonial economy and society. The girls on the other hand received training in sewing and domestic science (Brock & Cammish, 1997; Wilkins & Gamble, 2000). This demonstrates the beginnings of early formal vocational education in Jamaica.

Although this type of popular education was consistently opposed by the class of Jamaican Plantocracy (Keith, 1978) the system of education continued to gradually expand as the twentieth century progressed albeit with a strong British elitist ideology. The lower classes who were to be the artisans, semi-skilled and unskilled workers were schooled in public elementary schools that were far beneath the standard of the private preparatory and traditional high school for upper middle and upper classes that were expected to occupy professional careers (Atchoarena & McArdle, 1999; Morrison & Milner, 1995; Taskforce on Educational Reform, 2004, Welch, 2000). In so doing a

two-tiered education system characterized by an elitist streak became enshrined into the social fabric of country (Lewis & Lewis, 1985; McArdle, 2002; Taskforce on Educational Reform, 2004; Welch, 2000). The black majority was still being disenfranchised. Social mobility was elusive and so only a few very 'bright' children from the top of the lower class were allowed to move to the bottom of the emerged middle class giving rise to a technical stream in the education system. These persons were expected to supply the technicians needed to support the fledgling manufacturing and construction industry in Jamaica (Miller, 2007; Taskforce on Educational Reform, 2004). A consequence of this practice of dichotomous education was high levels of illiteracy and poverty among the ex-slaves and their offspring (Taskforce on Educational Reform, 2004).

After 1944 constitutional changes which brought about Universal Adult suffrage, internal self-government was transferred to the elected representatives of the people (Miller, 2007). This enabled the establishment of the Ministry of Education in 1953 and the development of a general national education policy. According to Miller and Murray (1977) the establishment of the Ministry of Education provided the bases for expansion of the system of popular education and a shift from British colonial policies and programs to those that were more Jamaican. Furthermore the move would have enabled greater access to education for the general public. The related education policy covered four levels: infant; primary; post-primary and further higher education. It also included various forms of education for adults and adolescence including education provided by the Jamaica Social Welfare Commission, 4-H clubs, the Jamaica Youth Corps among others (Miller & Murray, 1977; National Planning Agency, 1957).

Having gained independence education of the populace was of primary concern to the government articulating a vision of “Education for All” (Taskforce on Educational Reform, 2004). Miller and Murray (1977) made the observation that relative to education the broad national goals of the society were constructed around of the idea that:

The rights and freedom of the people are enshrined in the constitution and this include the right of every individual to develop his potential through education which is interpreted to mean that he has the opportunity to become a self-sufficient and well integrated personality and a useful and responsible citizen of an independent country (p. 27).

According to the Taskforce on Educational Reform, (2004):

A clear long-term development program aimed at providing the best education the country could afford was embarked upon. A new curriculum provided a wide range of post-primary courses for thousands of children with an emphasis on technical and vocational education in preparation for the world of work (p. 42).

Miller (2007) noted that the technical education sector is now firmly established in the Jamaican education system. There are fourteen technical high schools with an enrolment of over 20,000 students representing approximately 15% of the secondary level students. Miller further noted that technical high schools “run a close second” (p. 5) to traditional high schools. Additionally, he reported that the curriculum of traditional high schools has been diversified to include technical subjects as part of their offerings.

In terms of education for adults or post-secondary education the 1957 – 1967 National Policy also spoke of the need to establish a Technical College that would serve

the principal purpose of enabling the country to meet what was described as the rapidly increasing demands of the country's expanding economy as well as the increased activities that were taking place in areas such as mining, industry, building, agriculture, tourism among others. According to the Policy document the Technical College would have been developed mainly as an institute for evening and night classes to facilitate apprentices and persons who were employed in the daytime. However a moderate proportion of full-time students interested in higher levels of technical training would also have been accommodated. This led to the establishment of the Jamaica Institute of Engineers which was soon after renamed the College of Arts Science and Technology (CAST).

The education of the nation's adults continued to feature prominently in the educational policies of the 1970s. The Education Policy outlined within the Second Five Year Development Plan, 1970 - 1975 reported that the government had designated education as top priority in its development plans and programs. The government argued that education needed to fulfill certain basic needs both for the individual and the society as a whole. These needs were economic, social, political cultural and psychological. From an economic perspective the government's position was that the country's primary economic need was the provision of a trained and technologically progressive labor force which would provide the essential input of human resources that was essential to propel the society from a status of developing to developed. Education of the people would therefore support its economic agenda. Socially, education was seen as that which would enable the widening and homogenizing of national interest, purpose and commitment as

well as facilitate social mobility for those at lower levels of the society. Politically, education of the populace was seen by the government as necessary for developing an informed, analytical public that was able to communicate their ideas to those representing them and to evaluate the policies of government as well as the objectives of the political platform. In so doing education would be supporting the country's democratic system of governance. From a cultural perspective education was seen as the major vehicle within the society that would serve to bond Jamaicans into a nation that is distinct from all others and would include exposure to Jamaican folklore, religion, culinary traditions and local dialect. Psychologically the aim of education from the government's perspective was to create an environment that would enable the individual to develop his/her inherent capabilities to their fullest potential. Education was seen as the means by which persons would experience personal growth and develop their confidence and sense of self-worth (Planning Institute of Jamaica, 1990).

During that same period as the government embarked on its program of social democracy it called for a concerted effort to deal with the high level of illiteracy in the country arguing that it was important for the successful future of the country. The government realized that it was not possible to aspire towards development –economic, political or social when a significant portion of its population did not possess the necessary tool (Millman, 2000). Prime Minister Michael Manley saw illiteracy, a legacy of the slave plantation and colonial period as an affront to social justice and described it as an abdication of any possibility of major social and economic development (Millman, 2000). Literacy was seen as a pre-requisite for the economic development of the country.

Consequently the government established the Jamaica Advancement for Adult Literacy (JAMAL) to implement the national literacy program. Manley also promulgated the idea that “every developing society must aim at free, compulsory, universal education as its highest national priority” (Manley, 1990, p. 138). With this mindset he implemented a system of free education from early childhood up to tertiary level. In so doing he underscored his belief in the notion that it was through equality of educational opportunity that the masses could access quality education that would equip them with the technical and professional skills for their personal upliftment both socially and economically (Hyman-Anglin, 2000).

More recently, the government outlined in its development plan of 1990 – 1995 what it describes as the three fundamental principles of education in Jamaica. These are:

- the right of all individuals to education and training opportunities in order to develop their innate creative and intellectual capabilities;
- the vital role of education as a tool for social change and stability; and
- Education as a desired end of society and so regarded as a social good.

Post-secondary education was seen as critical in enabling the country to meet its manpower needs in an efficient and cost effective manner. In this regard training which the plan refers to as those pedagogical instructional and related activities which are not strictly regarded as part of the formal education system but which also incorporates schools and institutions of tertiary and higher learning in the preparation of individuals for job related productive activity (Planning Institute of Jamaica, 1980, 1990) was seen as vital to the country’s development. The government argued that training needed to be

linked to the labor market and responsive to the changing demands of technology as well as to national needs for the development of a flexible highly skilled pool of labor (Planning Institute of Jamaica, 1990).

To this end an array of autonomous institutions provided a wide range of education and training for adults in both the formal and non-formal system. All were established to meet the educational needs at different times. Training for Administrative, Managerial, Professional, Technical and related manpower needs for which tertiary or university certificate or degree is required was offered by the regional university, the University of the West Indies, the College of Arts Science and Technology (CAST) now the University of Technology, Jamaica (UTech), Teachers Colleges, the West Indies College now the Northern Caribbean University (NCU) and a number of professional bodies and public and private sector training institutions (Planning Institute of Jamaica, 1990).

Training for Clerical, Sales and Services for which secondary level education with certificate is required was provided by CAST/UTech, Academies of the Human Employment and Resource Training Trust, National Training Agency (HEART Trust, NTA), Industrial Training Centers (ITC), Community Colleges, Technical High Schools, Business and Commercial Schools, Nursing Schools, the Police Academy, and the West Indies College (WIC) now the Northern Caribbean University (NCU). The College of Agriculture now the College of Agriculture, Science and Education (CASE), Community Colleges and HEART Academies provide training in Agriculture, Fisheries and related areas.

Occupations in the Craftsman Production Process and Operations for which education at the secondary level or below and vocational certification was required was provided by institutions such as the Cultural Training Center (CTC) now the Edna Manley College of the Visual and Performing Arts, CAST in the early days, Community Colleges, HEART Trust Academies, Tool Makers Institute, ITC, Jamaican German Automotive School (JAGAS), WIC along with a number of private institutions (Planning Institute of Jamaica, 1990).

In the 1990s the government through the HEART Trust NTA sought to develop an integrated Technical Vocational Education and Training system in order to more adequately satisfy the manpower needs of the country. The main objectives of the system were to institute a well-articulated training system which would facilitate progressive improvement in skills; ensure that training programs were geared to meet the quantitative and qualitative needs of industry; reduce fragmentation and duplication of resources in the training system; establish and uphold nationally accepted standards and provide accreditation; develop the staff of the public sector to meet its operational needs and improve efficiency within the sector (Planning Institute of Jamaica, 1990). In the meantime a number of other changes have taken place in the formal adult education system. The College of Art Science and Technology was granted university status greatly impacting the type and number of certification it offers. Additionally as the country entered the twenty first century the government was intent on developing a workforce that was adequately prepared to meet the challenges of the new millennium and so a number of programs were advanced. These include the introduction of

Information Technology ventures at all levels of the educational system; HEART NTA operated entities have been redefined into Workplace Colleges and Technical Vocational Education Institutes incorporating training for at-risk and unattached youths (Planning Institute of Jamaica, 2000; 2010). That mandate of JAMAL Foundation has been broadened and the institution rebranded the Jamaican Foundation for Lifelong Learning (JAMAL, 2008).

As noted earlier in the literature review there exists in Jamaica along-side the programs outlined in the afore mentioned sections, a strong and well organized non-formal system for adult education offered by different arms of the government, non-governmental organization, community based organizations, churches and outreach programs of Colleges and Universities.

One factor that has been of major influence on the provision of adult education in Jamaica has been the economic instability of the country. This is so because tertiary education in Jamaica is largely government funded (University of technology, Jamaica, 1995). Consequently, the county's income level and the requirement of the structural adjustment programs imposed by the World Bank/IMF at various points in Jamaica's post-independence history have grossly impacted the funds available to invest in education. The government has therefore taken the decision to invest more in early childhood, primary and secondary education with the concomitant reduction in expenditure at the tertiary/post-secondary level. The reintroduction of the fees has also been a critical factor in the post-secondary education of the country. Therefore despite

the pronouncements of varying governments on the value of education including the education of the nation's adults Sangster (1994) noted that:

there has been a significant decline in real terms in the financing of education.

The increased reliance on cost-recovery issues and methods (mostly fees) is putting increasing strain on the community and the real danger is that education – a major element of social and upward mobility of our people - may lose its impact (p. 206).

The Case of the College of Arts Science and Technology (CAST) now the University of Technology, Jamaica (UTech)

The founding of CAST.

The College of Arts Science and Technology (CAST) was first established by the Ministry of Education in 1958 under the name the Jamaica Institute of Technology. However the institution was renamed in 1959 as the College of Arts Science and Technology (CAST). By so doing the College became aligned with the system of Colonial Colleges of Arts Science and Technology established by the British Government in its effort to fill an identified gap in the areas of technicians and higher technicians within its colonies (CS3).

From a national perspective however, CAST was established by the government as part of its pre-independence strategy in anticipation of independence which was obtained on August 6, 1962 (UAR8). CAST was one of the institutions that were envisioned to help the newly independent state in its modernization and development as a nation state and to move it from an agrarian society to a more industrial society (Nat. Plan). The establishment of the institution mirrored similar reforms that were taking place in Britain where the British government was seeking to improve the level of skills in the country in order to make British industry more efficient and competitive. Jamaica was among several commonwealth countries that followed the British pattern of establishing higher technical institutions (Sep. Rev.).

The establishment of CAST was a direct response to the need to train higher level technicians and professionals for the development of the country. It was part of the

overall strategy to provide the advanced technological skills needed to support the economic policy of the country (DP1; UPS1). As such CAST was seen as one of the principal means of meeting the rapidly increasing demands of the country's expanding economy and the increased activities in mining, industry, agriculture, tourism, construction and other general fields of effort (Sep. Rev.; UAR8). The Daily Gleaner of December 23, 1957 reported that the Minister of Education, Hon. Florizel Glaspole in announcing the opening of the Jamaica Institute of Technology stated that:

the needs of industry for men skilled and trained in all trades are well known to all of us. We are faced in certain fields with such serious shortages of skilled men that incalculable damage can be done to the Government's development programme as well as expansion in private industry if men are not trained very rapidly to fill the needs.

The College was originally mandated to provide specialist training for technicians and middle management personnel and as such provided an important means for supplying the manpower needs of industry and commerce in Jamaica (DP1). This foundation established a highly technical focus for the new College. However as early as 1966 the then Principal of the College made the point that specialized training was not enough. He argued that the ability to understand others and to work with them was perhaps the most useful ability one could possess. Therefore, "the purpose of a college education was to benefit the recipient so that he can play a useful part in the community" (Prin. Rep.4, p. 8). The College, he argued, should therefore give some instruction as to what is useful in a community. In so doing the Principal was adding a humanistic

dimension to the technical focus of the institution. However, it was not until the 1990s that the Liberal and Education studies Division was established at CAST. This Division sought to provide knowledge and learning experiences that enabled graduates to better understand themselves, their environment and their community and to apply their technical expertise more humanistically (Pres. Rep.1).

In the early years the College was governed by an autonomous Council consisting of 12 members: One representative of the Ministry of Education; one representative from the University College of the West Indies (now the University of the West Indies, UWI); ten members appointed by the Minister of Education. These persons were chosen from among persons who appeared to be qualified as having experience of, and shown capacity in matters relating to the Arts, Science Technology, Commerce or industry and from among other persons considered suitably qualified by the Minister.

From the beginning the cost of operating and maintaining the College was the sole responsibility of the Government of Jamaica. The capital funds for the College originally came from the Colonial Development and Welfare Fund of the United Kingdom and the Government of Jamaica. However, the College received much assistance in terms of personnel and equipment from various sources over the years. Some of these sources include international agencies such as the Voluntary Services Overseas (Canada), the Canadian International Development Agency (CIDA) the United States of America International Development (USAID) agency, the German Volunteer Service (GVS), the United Nations Development Programme (UNDP); United Nations Educational Scientific and Cultural Organization (UNESCO), the Pan-American Health

Organization (PAHO) and Project Hope; local based entities such as some commercial banks through the Bank of Jamaica, the Institute of Chartered Accountants of Jamaica (ICAJ), Jamaica International Communication Ltd. (JAMINTEL), and the petroleum company, Shell (Prin. Rep.4).

Given the current economic situation of the country and the attending costs and pressures, the Government has sought to rationalize its approach to financing the tertiary education sector (USP1). A 1994 ministry of Education publication outlined the Ministry's Framework for financial contribution to the tertiary sector. This Framework showed that primary education had the first call on the public funds with a reduction in the proportion of public funds that is allocated to tertiary education. The document noted that funding for tertiary education should be a shared responsibility between the state, the corporate sector, students and educational institutions. These statements led UTech to change its financial strategy leading to an increased reliance on student fees and private sector support (USP1). This financial approach has been maintained to the present. UTech recorded its sources of funding as follows: Government subvention – 51%, (this percentage represents 9% of the total tertiary education budget) Percentage from students 35%, Percentage from other sources – 14% (USP1). This focus on students' fees was a major shift in position from earlier years when as in the 1970s when the economy was buoyant, inflation was low and the currency strong fees at the institution was very low. Further in 1973 the Government of the day established a system of 'Free Education' which meant that the students at CAST and other institutions were no longer required to pay tuition fees. They were also eligible for a Boarding Grant. At CAST the students

continued to pay an ancillary fee which provided a cushion for the institution against the deficiencies that resulted from the shortfall resulting from the cut in student fees (CS3). This free education policy was officially reversed in 1986 against much protest from the student bodies and the public (CS3).

Academic development at CAST/UTech.

The College started with four Departments: Engineering, Building, Science (a service department) Commerce and an Institutional Management section. By 1966 the Institutional Management section was upgraded to a department putting the number of departments to five. Fifty years after its founding the institution now boasts 3 Colleges: The Joint Colleges of Medicine, Oral Health and Veterinary Sciences; College of Health Sciences and College of Business and Management, 5 Faculties: Faculty of Education and Liberal Studies, Faculty of the Built Environment, Faculty of Engineering and Computing, Faculty of Law and the Faculty of Science and Sports, 17 Schools: School of Public Health and Health Technology, School of Allied Health and Wellness, School of Pharmacy, Caribbean School Nursing; School of Business and Management, School of Hospitality and Tourism Management, The Joan Duncan School of Entrepreneurship Ethics and Leadership, UTech/JIM School of Advanced Management, School of Technical and Vocational Education, School of Humanities and Social Sciences, School of Building and Land Management, Caribbean School of Architecture, School of Engineering, School of Computing and Information Technology, Caribbean School of Sport Sciences, School of Mathematics and Statistics, and the School of Natural and

Applied Sciences with three Professional Centers (Engineering, Science, Technology Innovative Center (US5).

In 1986 the original CAST Scheme was revised making the college a degree-granting institution. According to the report of the first Septennial Review during the time between 1986 and 1995 CAST functioned as a University College given certain features. These features included: having its own identity and degree granting status, offering a limited number of degree programs, with most of its programs at the certificate, diploma and associate degree levels, offering a wide array of programs, the fact that the majority of its students were enrolled in certificate and diploma programs and a large number of them moved on to universities to complete higher education, and it had a focus on teaching and transmission of knowledge (Sep. Rev.). Later, on September 1, 1995 the institution was formally accorded university status under the name University of Technology, Jamaica. It became fully chartered in 1999 (UAR8) resulting in UTech being the only polytechnic university in the region (Pres. Rep. 1). As the institution embarked on its new position as a University the President made the following observation:

Because of technological advanced our lives are being characterized by rapid change: knowledge is expanding at a more rapid rate; the world of work is requiring the ability to manage a greater diversity of information and skills in building cooperative relationships. Workers need high-level thinking skills as well as the ability to adapt. Educational institutions are challenged to re-invent

themselves to provide the environment necessary to meet these new demands.

(Pres. Rep. 4, p. 1).

Now a University, UTech considered itself to be “at the top of the apex of the national technical vocational education system serving Jamaica’s human resource and socio-economic development need.” (USP2). With this new designation the mandate of the institution was expanded to provide high levels of human resource skills and services such as applied research and technology transfer that were deemed important to accelerate national and regional development (USP2). In keeping with this expanded mandate the 2000/2004 Strategic Plan stated that as a University, UTech was now expected to play a leading role through the generation, conservation, transmission, dissemination and application of knowledge and to train professionals, scholars and future leaders of the society. To this end Article 2 of the University Charter outlines the objectives of the University as:

- a. To advance education and development of technology through a variety of patterns, levels and modes of study and by a diversity of means by encouraging and developing learning and creativity for sustainable development for the benefit of the people of Jamaica, and the Caribbean and elsewhere.
- b. To preserve, advance and disseminate knowledge and culture through teaching, scholarship and research.
- c. To make available the results of such research and service.
- d. To promote wisdom and understanding by example and influence of corporate life

(Source: UBC).

In support of this expanded mandate the Minister of Education was quoted in the Jamaica Herald of May 10, 1995 as saying of the new polytechnic, “CAST will have to provide professionals with higher levels of qualifications who will help to drive the productive sector.”

A system analysis of UTech conducted in 1992 prior to its designation of University status noted that CAST had played a pivotal role in education in the Caribbean region and had embraced sustainable growth for the region in general and Jamaica in particular (CSA). The document further reported the following as major strengths of the institution:

- Responding to national and regional workforce needs through professional and industry groups
- Providing technical education related to the world of work for mid-level management and technicians for both public and private sectors.
- Offering innovative and flexible training programs for graduates of secondary school and professionals in the field.
- Offering alternatives to the University of the West Indies and foreign higher education institutions for higher professional accreditation in technical and applied science areas.

These strengths were later endorsed in the 1995/98 Strategic Plan in which it was noted that the institution was distinguished by a number of special features including:

- Emphasis on programs of direct value to careers in industry, commerce and the professions

- Provision of alternative models of academic scholarship
- Flexibility in program design and delivery
- Program offerings at several levels ranging from pre-degree to post graduate studies.
- A wide variety of delivery modalities such as full-time, part-time, sandwich or co-op courses with periods of commercial and industrial placements.
- Flexible entry and exit
- Inter-disciplinary programs combining subject specializations within a single degree program.
- Several niche activities such as entrepreneurial training, architectural studies.
- Positive profile of graduates.
- Positive industry response to graduates

The first Septennial Review reported similar views noting that there was broad consensus that CAST in its 37 years of existence up to 1995 achieved the following:

- A good reputation for its academic staff and as a teaching institution
- Recognition for producing 'work ready' graduates who are well prepared and held their own in workplaces both regionally and internationally.
- A good record and reputation with employers locally and across the region.
- A sound working relation with industry to the fields in which the institution operated.
- A record for students going on to Universities in the region and internationally and being successful.

- A good but not the first choice for tertiary education among students. (Sep. Rev.)

In addressing the issue of alternative model of academic scholarship and flexibility in program design and delivery the 1999 System Analysis reported that CAST developed from a traditional set of programs a unique commitment to the adult learner. Such that, rather than limiting individuals to a pre-determined academic delivery system the college deliberately looked at what employees needed in the type of programs that generated graduates who were virtually assured of employment (CSA).

The document further noted that CAST had married an “entry level industry response model of program development to a highly complex but working ‘Alternative program tracks’ and ‘upward through program flexibility’ model” (CSA, p. 57) into one integrated system. From a conceptual perspective this system was described as one that integrated social, educational and employment mobility expectations (CSA).

The Alternative Program tracks model was one that combined a number of adult education, adult learner and technical educational ideals into one integrated system of program delivery. This system consisted of a vertically integrated step-by-step process and a horizontal cross-over system. The vertical integrated step-by-step process referred to the articulation and up-grading of the programs so that students were able to proceed from Certificate to Diploma to Degrees in their chosen area of specialization (Prin. Rep.). The integrated system is one in which a student could arrive at a specific exit point where the individual obtained the knowledge and skills to sit an external professional examination or obtains either a certificate or diploma and entered the world of work. The student who exited with a certificate to enter the world of work was later able to return at

no penalty to complete a diploma. The horizontal cross-over system encouraged students to move from part-time to full-time to part-time status and between complementary programs based on their need (and that of their employer or job opportunity). At the same time they were able to move up the academic hierarchy. Later the post-diploma, work-based bachelor's degree offered by CAST generally demanded that all diploma students completed a degree through some combination of a day release, 2 summer modules and inter-summer courses. The observation was made in the CSA document that the college seemed to have moved into a unique co-operative education/work experience model of advanced education and training without getting involved in the cost structure related to that model.

In more recent times flexibility in the academic programs at UTech is reflected in the various modes of course delivery including the launch of a semesterized mode of delivery in the academic year 1999/2000. This semesterized system was later adjusted in academic year 2009/2010. Under the system the academic year was restructured from two semesters to three sessions and all the programs were modularized (SP).

In addition to the structural aspects of the model both instructors and students were required to inter-relate what was being done on-the-job with what was taught in the classrooms and laboratories. Another feature of this system was that individuals were not excluded simply because they may not possess the proper number subjects. Rather the opportunity was provided for individuals to participate in remedial and development programs where it was economically feasible or through co-operative arrangement with other colleges. In keeping with this commitment to access by UTech a case study

conducted on the institution made the observation that the institution was “committed to providing the widest possible access to its program through the broadest of articulation criteria ” (CS, p. 1). This commitment to access was further articulated in the Strategic Plan of 1998/2000 where it states that; accessibility to UTech’s programs will be enhanced by provisions such as:

- Formal assessment of prior learning and experiences obtained both within and outside the formal education system. This led to the establishment of the Prior Learning Assessment (PLA) Unit which was responsible for the implementation of the PLA scheme, “which was designed to provide an alternative admission option and also to grant advanced standing based on the applicant’s extra-institutional learning” (Pres. Rep. 9, p. 11). In essence PLA gives academic credits to adult learners for learning they attained through work and life experiences.
- Linkages with the Secondary School system to improve the transition from secondary school to University.
- Bridging mechanisms for students from the vocational education system. This was implemented through a formal agreement between UTech and the Vocational Training and Development Institute attached to the HEART Trust NTA to upgrade technical teachers in the then Technical Education Department at UTech (Prin. Rep. 2)
- Using open learning and distance education modalities. Distance Education was introduced in 1996 with the aim of achieving greater scope, quality, cost

effectiveness and feasibility in program delivery to off-campus students (Prin. Rep 2).

- Establishing outreach centers and continuing education programs in off-campus locations
- Franchising of lower levels of diplomas and degree programs to Community Colleges.

Over the first seven years of attaining University status the academic structure of the institution changed to include an academic Board, Faculties, Schools, Departments, and quality assurance mechanism. The number of degree programs expanded with all Faculties offering first degrees and some introducing Master's degree and Doctoral programs. In keeping with its University status UTech also sought to Franchise most of its Certificate, Diplomas and Associate degree programs to other institutions particularly Community Colleges (Sep. Rev.). Under the franchise arrangement students undertaking the first and second years of degree programs are:

guaranteed places in the University in order to complete their degrees. The rationale informing this strategy was that it allowed the University to deploy and focus its on-campus resources on its Degree programmes while, at the same time, providing both greater access and lower costs to students. (Sep. Rev., p. 54).

With a shift in focus from certificates and diplomas to degrees including postgraduate degrees, the School of Graduate Studies, Research and Entrepreneurship (SGSRE) was established in 2007. According to the Head the Schools main remit is "to deliver graduate programmes, guide and support research activities and engage in

entrepreneurial activities to generate income through the delivery of consultancy services and the creation of research and development innovations” (US5, B14). With this growing focus on research the SGSRE also has responsibility for the management of intellectual property rights.

Program offerings.

UTech articulates a commitment to ensuring that its programs are academically sound as well as practically tested. The institution’s position is that its programs must help to drive the development of the nation, to help create health, wealth and knowledge (AUR12). As such UTech has pursued an aggressive strategy of developing both its infrastructure and its programs in response to industry requirements for trained technical and professional manpower (USP1).

UTech has noted that its history as an educational institution is “intimately connected with the social and economic development of Jamaica” (US5, p. B6). Consequently, as the country changed, evolved and developed so too has UTech. As a result the institution that started with 4 programs and just over 50 students in 1958 now boasts a student population of over 14, 000. It now offers over 100 programs in a variety of disciplines at certificate, diploma and degree (undergraduate and graduate) levels with more of its programs at the undergraduate degree level. The university has become well known and respected for its strength in preparing work-ready graduates in the fields of engineering and computing, science; pharmacy and health sciences; business and management; architecture and construction; technical teacher training; and hospitality and tourism management (US5).

The programs at UTech consist of long-term professional programs, short-term professional courses, workshops, seminars, public lectures and other educational activities attached to specialized Centers of Learning.

Long-term professional programs.

Originally, the aim of these programs was to provide training courses for those persons who would fill the demands of Jamaica's developing economy for technical (between professional engineers and foreman/craftsmen) and middle management (between executive managers and skilled clerical workers) personnel. In this regard from its inception the institution offered training courses in four Departments and an institutional management section. Up until 1986 the programs were delivered over a period of either 2 years culminating in certification at the certificate level or three years culminating in certification at the diploma level. The diploma students were trained to be qualified at the 'near professional' level (Prin. Rep. 2). This was so because professional recognition was accorded only after suitable academic standards were achieved and suitable practical experience was obtained while attending college. Students were able to access the various programs on a fulltime, part-time (day) evening and day release basis. The students in the part-time day release courses were in employment and were allowed to attend the College one or two days per week through joint arrangement between their employers and the College. In 1986 the institution began offering its first program at the bachelor level with the Bachelor in Technical Education (Home Economics). With the reclassification of CAST as a university its program offerings at the degree level have increased exponentially and currently include degree programs at the postgraduate level.

During the first six years after the country gained independence CAST was offering in excess of 20 courses at the diploma and certificate levels. These included mechanical and electrical engineering, construction engineering, pharmacy, business studies, institutional management, secretarial studies, commercial studies, personnel management, and marketing and sales. The number of long-term courses continued to increase as the need for new professional skills arose. Over the five years subsequent to 1973 the number of courses increased to about 35 and included areas such as construction engineering, telecommunication, laboratory technicians, accounting, banking, marketing, chartered secretary, personnel management, architectural drafting, structural engineering, structural technician, medical representatives, medical records, medical technology, instrument technology, technical teacher education: industrial technology, business education, secretarial studies, and home economics, pastry making, clothing and fashion. As the country became more industrialized through its program of 'Industrialization by invitation' the need for more and different technical skills increased. CAST was always ready to respond to the new demands such that the number of courses increased to over 60 over the ten year period from 1974 to 1984. As stated earlier the institution now offers over 100 Courses of Study. In addressing the expansion of courses the Principal's Report (1975) stated:

Originally established to provide courses ranging from technician through the middle management and professional there has been the need to review the programmes in order to assess their viability and where necessary to introduce new developments which are critical for active growth, community involvement

and satisfactory academic and professional levels of competence. (Prin. Rep.13, p. 12).

One example of UTech responding to new demands is shown when the Prin. Rep. 10 document noted that with the demand by industry for trained technicians came the demand for technical teachers at the Secondary and Technical High School levels to prepare students for CAST and other similar institutions. This need gave birth to the Diploma in Technical Teacher Education Program which began 1970 with a pilot batch of 6 industrial teachers. A second group began in 1971 along with a Business Education group. In 1986 when CAST began offering degree programs the first degree to be granted was in the area of Teacher Education.

Program design and delivery.

According to the 1998 – 2000 Strategic Plan the UTech places a high value on program design features such as: flexibility, practical orientation, Innovative methods of delivery, accessibility to programs, scientifically based, technologically oriented, work related, marketability of graduates and uncompromising quality. Advisory Committees were put in place in each School in the 1990s to facilitate the institution's compliance with the needs of the Jamaican private and public sector (Pres. Rep.5). These committees comprised industry representative, (who based on their professional qualifications and expertise are invited to sit as members of the Advisory Committees) heads of departments and members of Faculty Through these committees UTech collaborates with industry to develop, monitor and evaluate the programs offered by the institution.

The CS3 document pointed out that an analysis of a typical diploma/degree at UTech would reveal elements such as: General Education with English Language, specialist technical and professional courses, supporting disciplines and practical courses. General Education courses include: communication, mathematics, information technology, science and technology, one humanities course, one behavioral science course, research methodology and an integrated study (research). Classes involve students in laboratory and fieldwork, project work, class presentations, team-based learning experiences, small group discussions and research projects as well as the more traditional lectures (CS3).

Certification

In the beginning the long-term professional courses were geared at preparing the students to sit various international exams that would qualify them at the professional level thus giving them professional recognition in whatever field was appropriate to the student. These exams included City of Guild Institute certification, intermediate certificates of Chartered Institute of Secretaries, the Corporation of Secretaries, and The Institution of Electrical Engineers in Britain, The Institution of Mechanical Engineers in Britain, Union Lancashire and Cheshire Institute (ULCI) ONC, HNC, the Licentiate of the Institute of Building (LIOB), ACA, and British Computer Society Exam.

Additionally, as CAST, the institution held its own internal examinations so that students were able to qualify not only professionally but academically as well thus giving students an alternative to a University degree (Prin. Rep.2). Students were awarded Diplomas for Courses not less than 3 years full-time duration and Certificates for the shorter courses

(Prospectus, 1965/66). Since the institution became a University students are also awarded Undergraduate Degrees having satisfied the requirements including 4 years of full-time study or 6 years of part-time study.

Entry qualifications

Entrance to the full time day courses was normally by way of the college Entrance Examination which was held in July of each year. This entrance exam was pitched at the level of the GCE Ordinary Level standard. These exams included English, Mathematics, Physics with Chemistry for the Department of Engineering; English, Mathematics and a general paper for Commerce; and English and two other subjects for Institutional Management program. Students who had passed any of the required subjects at the GCE O-level were granted exemption from the exam in that subject (Prin. Rep.5).

Entry requirements into evening Courses demonstrated the flexibility of the Alternative Tracks Program of Integrated System in that the entry requirements were more flexible. For example the Prospectus for the academic year 1963/64 outlined the entry requirements for the Evening programs in the Department of Engineering as:

- A pass in the first year of the Part-time day course
- A pass at a suitable grade in appropriate subjects at one of the Technical High School or School Certificate or GCE passes in English, Mathematics and a Science subject.

The requirements in the Building Department included:

- Course Certificate in Building from the Kingston Technical High School
- A ULCI group course certificate in Building from the College

- Proof of having obtained an equivalent standard.

With University status the entry requirements now include;

- passes in 5 CSCE (CXC) subjects including Mathematics, English and 3 other subjects based on the student's program of choice at the General Proficiency level grades 1, 2, 3 (Passes at grade 3 are acceptable only if they were obtained after June 1998).
- O-Level passes Grades A, B, C
- Equivalent qualifications and other technical examinations qualifications are assessed on an individual basis.

(UPros.13).

Evening and short-term professional courses

The evening classes prepared students for recognized qualifications in many fields including, accountancy, commerce, marketing and sales, insurance, banking, office management, and modern languages.

On the other hand UTech has had a rich history of collaboration with industry partners in the design and delivery of several short-term professional courses. Further, grounded in a commitment to life-long learning the institution implemented an extensive Summer Institute as a means of opening up its resources to the community in order to allow working persons and others a means for professional growth and development. These courses offered included credit and non-credit courses and were meant to upgrade the skills of workers or to enable them to learn something new (Prin. Rep.19).

The 1998/99 Prospectus reported over 60 different short-term courses in addition to in-house training conducted for firms and agencies. Some of the short-term courses were: Accounting for Small Business Operators; Business Education, Education Administration (with the Ministry of Education), Sugar Factory Foreman's Course (in association with the Sugar Industry Authority, SIA), Television Maintenance (in association with RCA Institute), Well Maintenance for Parish Council and Water Authority personnel (in association with PAHO), Water Treatment Plant Operators course (sponsored by PAHO and conducted by the Nescho School of Water and Waste Water Treatment in Texas in collaboration with CAST), Workshop for Educational Planners (in association with the Regional School Building Center for Latin America and the Caribbean (CONESCAL), Management and Town Planning, Real Estate Dealers, Valuation Practices, Process Instrumentation, Typewriting, courses for cooks and chefs such as Introduction to Catering, Chinese Cookery, Basic Pastry Making, Advanced Pastry Making and Cake Decorating; Family Life and Population Control (sponsored by PAHO), course for Junior Lab Chemist and Factory Maintenance Foremen (UPros10).

Specialized centers of learning.

Entrepreneurial center.

UTech established an Entrepreneurial Center in 1987 with support from CIDA. The Center was first established to increase the relevance and practical aspects of the institutions educational offerings and to enhance the development of entrepreneurial skills among the student body, graduates and the wider community. It also served to

broaden the graduates' options for employment by imparting to them the necessary skills for self-employment (Prin. Rep.27).

The rationale for the creation of the center was grounded in an appreciation of “the increasing importance of the role that businesses play in developing economies worldwide and in particular in Jamaica and the Caribbean and the need to provide education and training as well as tangible assistance to young entrepreneurs” (Prin. Rep.28).

The Entrepreneurial center was seen as another way of enhancing the institution's reputation as an institution which is committed to seeking out new and innovative ways to address the changing needs of the Jamaican society (Prin. Rep.28). Students were exposed to a 36-hour modular course on how to start a small business and succeed. They received motivation from successful young entrepreneurs through a guest speaker series that was sponsored by the Jamaica Chamber of Commerce in the early days of the Center (CS3). The center also provided financing to feasible projects through a small revolving loan fund that was offered in collaboration with the National Development Foundation of Jamaica (NDFJ). Facilities were also provided for graduates to set up their businesses where the need existed.

On the strength of the results of market studies which confirmed the need for a Technology Innovative Center (TIC) in Jamaica UTech signed an agreement with the Caribbean Development Bank (CDB) which saw the transformation of the entrepreneurial Centre into the Technology Innovation Center and the creation of an incubator for technology-based businesses. The center and Incubator were launched in

2002. The business incubator sought to nurture start-up businesses and facilitate the development of early stage technology-based enterprises into stronger and larger companies. The incubator therefore provided what was referred to as the “Seven Ss”: Work space, shared facilities, skill development, speed in securing facilities, access to seed capital, and synergy of sharing and networking. According to the Pres. Rep.5 document the TIC has played a critical role in the development of knowledge-based enterprises, producing value added goods and services started by local entrepreneurs, UTech students and faculty.

Energy center.

Arising out of an Organization of American States (OAS) project for the utilization of solar energy a solar energy institute was established at CAST in 1983. Funding for the Institute was provided by the Petroleum Corporation of Jamaica (PCJ) with the government providing support for staffing under a USAID/GOJ ESA project. The mandate of the Energy Institute was later broadened to include all forms of energy and energy conservation activities. “The new concept of an Energy Center was introduced to serve as a national focus for self-sustaining activities in alternative energy technologies” (CS3, p. 81). The general objectives of the Energy Center were outlined as follows:

- Education and training in the technology, economics and management of energy and energy conservation systems
- Applied research on cost-effective development in specific technologies of alternative energy.

- The gathering processing and dissemination of information to encourage the introduction and proliferation of alternative energy technologies.

The establishment of the Energy Center at CAST represented the first involvement of the institution in research and development. There was much activity in research and development on sola stills, solar crop drying, lumber drying and solar water heating. The center also developed and delivered a number of short term courses and workshops in energy conservation and renewable energy technologies that were offered to industry. Additionally, the Center provided the opportunity for students to work on various renewable energy and energy conservation projects (CS3). This Center was however disbanded in 2002 due to lack of funding. Nevertheless the institution continues to conduct energy related research in the Energy Unit of the School of Engineering.

Engineering training center.

The Engineering Training Center began operations in 1995 in response to the need for continued opportunities for training and development for graduates of the Diploma and Degree programs in Engineering as well as for uncertified technicians and operators in various fields of Engineering.

The main goal of the center was to enhance the capability of engineers and technicians to access, assimilate and diffuse new and relevant knowledge and technologies. The Center has been operating on the believe that “the way forward for national economic growth is to improve our productive sector and we must play a critical role in laying the educational and technological foundation required for carrying the productive sector forward” (Pres. Rep.2, p. 28). Therefore the center strives to “provide

the educational and technological foundation requisites for carrying the productive sector forward” (Pres. Rep.5, p. 27).

In keeping with UTech’s strategic plan to reach into the workplace the Engineering Center has always sought to interact with “industry and professional organizations to ascertain the engineering and computing skills, knowledge and competencies needed at the national level” (Pres. Rep.5, p. 27) and to offer a range of programs to support key industry sectors. One example of the areas of training provided by the Center includes a 1-yr modular program in Hotel Engineering at Sandals Hotel, Montego Bay and Negril. The course was specifically designed to upgrade and multi-skill Sandals line technicians in the maintenance department. Other examples include courses such as: Cable Technician Design and Engineering, Computer Aided Drawing, Air Conditioning and Refrigeration, Auto Electronics, Gear Design and Inspection and Computer Network Engineering courses.

Self-access learning center.

The center was established to provide remedial and developmental help to students with the English Language (Pres. Rep.4). In so doing it supported program of study in English Language and provided opportunities for members of the University to upgrade their oral and written language and communications skills through self-determined, independent study. The area of focus was later expanded to include other languages such as Spanish, Japanese, and French.

Program support

The academic programs of the institution are supported by:

- Professionally qualified and trained staff with strong industrial or commercial experience
- Administrative Services
- A modern Library
- Health, Counseling and Placement Center
- Limited residential facilities for staff and students
- A full program of recreational activities and a variety of clubs and societies
- A very successful sports program

Special features of UTech.

Link with industry.

The College continued its commitment to training for national manpower needs which resulted in a great amount of public support for the institution both in terms of Funding for program development, Scholarship and awards for students and partnership in course delivery (Prin. Rep.17; USP1). Further, CAST/UTech developed a strong relationship with industries related to the disciplines taught at the institution. Consequently the institution developed a reputation for producing ‘work ready’ graduates as evidenced by high levels of employment of its graduates.

Community service.

Community Service forms an important part of UTech’s program. The UAR8 document stated that “underpinning the institutional commitment to service on the job is the concept of each citizen’s responsibility to his/her community” (p. 5). In keeping with this commitment the work study program was introduced into the UTech system in 1977

in which all full-time students have been required to give 30hrs of community service.

The work study program was made a requirement for graduation giving the program legitimacy within the institution. In 1999 the program was reorganized and formally included in the curriculum as the “Community Service Program”.

The main objectives of the program were stated as follows:

1. To harness the creativity of young people
2. To encourage the involvement of students in the wider society.
3. To develop interest in activities that provide recreation and physical fitness
4. To encourage the spirit of volunteerism
5. To broaden the outlook of students
6. Wherever possible to encourage students to apply specialized knowledge to community problems.
7. To develop positive work attitudes.

Source: CS3

Cooperative education.

Co-operative Education is a structured approach to integrating classroom learning with on-the-job work experiences which are related to students' courses of study and career goals. Work Experience has been a central part of many of the programs at UTech from as early as the 1970s particularly in Science, Engineering, Teacher Education, and the Built Environment. However the Co-operative Education Unit which was established some thirty years later was charged with leading the establishment of cooperative education as a core element of all programs at the University of Technology. This thrust

according the UAR4 document was in keeping with the University's commitment to maintaining and strengthening the institution's tradition of providing rounded students who possess the required skills to enable them to perform creditably at the workplace. The Co-operative Education program therefore seeks to strengthen the workplace partnership and the interface between education and industry. Students are given the opportunity to learn the values and operational strategies of the workplace thus improving their marketability, facilitating a better understanding of their career choice, and aid in their development of workplace competencies. According to the University's Website (UTech Web) UTech's Co-operative Education program is designed primarily to:

1. Provide students with practical and professional exposure in real work settings, through internships, externships, professional experience, practicum and other forms of work integrated learning activities which are graded.
2. Provide industry with students who are equipped with the necessary skills and competencies that will enhance their position in a globally competitive environment.

The program also provides the employers with the opportunity to assist UTech in enhancing the quality of their graduates, thus maintaining their preferred position with their industry partners.

New initiatives.

UTech Academy.

The UTech Academy is the “pre-University continuing education and outreach arm of the University” (UAR10, p. 38). The Academy operates as the open Learning –

Open Access arm of the University. “It provides access to the University through facilitation for matriculation, articulation and continuing education for non-degree modules and programmes” (US5, p. B14). It serves the needs of communities all across Jamaica and the Caribbean, utilizing a range of delivery modalities to provide professional courses and continuing education for both personal and professional development of individuals. The Academy aims to respond to the training and development needs of businesses and industry and to the needs of people who might not have otherwise had access to the programs of the University (UAR10). Consequently the students who access the academy come with various educational needs varying from special interests to certificate –level in specific academic and occupational areas. The Academy also provides opportunities for prospective students of the University to meet matriculation requirements for specific disciplines and other professional programs (US5). Examples of courses offered by the Academy are Foundation Mathematics, Developmental English, short courses such as Emergency Medical Technicians, Phlebotomy, and Hospitality modules (UAR10).

Legal Advice Centre.

In 2010 the Chancellor describes UTech as “The People’s University” endorsing the institution’s commitment to the development of the people of Jamaica. In keeping with this commitment the Faculty of Law that was established at UTech in 2008 launched a Legal Advice Center in 2011. According to the Head of the Center it provides legal advice to members of the public who are socially, economically or otherwise disadvantaged (UAR13; US5, p. B14). Students from the Faculty provide advice under

the supervision of an Attorney –at-Law allowing them to obtain hands on training in several areas of Law. The Legal Advice Center advises persons on how to handle legal, administrative and other problems (US5).

The student population.

The USP2 document describes the UTech student as generally: mature working adults pursuing part-time programs and having significant practical (working) experience on which to build and relate training; drawn from the middle to lower income levels and evenly balanced in male/female ratios; have Caribbean Examination Council (CXC) or General Certificate Education (GCE) as their highest level of certification upon entry. Although the student population includes students from across the island the student population up to the mid-1990s was primarily urban with 37% being from rural parishes. A small percentage of 3.4% were from other countries.

Graduates of UTech.

CAST had its first formal graduation in February 28, 1962 with 37 graduates. The total number of graduates over the first 37 years was 23,781 (USP1). Since then the numbers continue to grow (See Table G1 in Appendix G). Graduates of the institution have been described as being “highly innovative, multi-disciplined individuals capable of operating at middle and upper management levels. “They are immediately marketable as a result of being trained to support the productive base of industry, including labor and management, marketing and distribution (UPros11, p. 3).

Recognition and commendations.

From as early as 1964 the then Minister of Education noted that “when CAST was established Jamaica made a breakthrough” (DG1).

On the occasion of its thirtieth anniversary the Prime Minister at the time acknowledged the contribution the institution had made to the development of modern Jamaica. He noted that he felt “pride because of the high standards of performance; appreciation for the commitment and deep sense of service successive members of the academic, non-academic and student bodies have brought to their respective tasks” (US3, p. 2). He further noted that “Jamaica appreciates the role CAST has been playing in the country’s development and the fact that the College has been producing graduates and scholars who have been contributing significantly to our society attest to its success” (US3, p. 2). At the same time the Minister of Education praised the institution saying:

In the thirty years since it first opened its doors CAST has come to be recognized as one of the finest institutions for academic, technical and vocational training anywhere within the Caribbean region. Its graduates have a record in the academic, commercial and industrial development of our nation for which we are proud. (US3, p. 2).

The Chairman of the Governing Council noted that “in only 30 years CAST has imprinted itself indelibly on the collective mind of the people of Jamaica (US3, p. 2). He pointed out that the graduates of CAST are found in every area of life in Jamaica. They occupy positions in Accounting, Banking, Business, Catering, Construction, Engineering,

Finance, Food Services, Health Services, Management, Insurance, Teaching and a host of other professions and occupations. Many are also owners of their own businesses.

The 30th anniversary Supplement also noted that “CAST was established shortly before independence, the growth of the college has been paralleled by the growth of the nation. It is a growth in which, increasingly, Science and Technology have had to play an important role” (US3, p. 2). It further stated that graduates are “keeping the cogs of the vital sector turning over for the benefit of Jamaica as a whole” (US3, p. 17).

The 35th Anniversary Supplement states,

As an institution of higher learning CAST has been making an important contribution to the development of our human resource in the area of the Art, Science and Technology. The future development of our country will depend on institutions like CAST to produce the graduate who will be industry leaders of tomorrow (US4, p. 9).

The Minister of Education noted that “CAST in its 35 years of existence has distinguished itself as a multi-disciplinary tertiary institution, serving particularly the local Jamaican community and the wider Caribbean” (US4, p. 3). He added that the business of CAST has always been the fostering of development, and that development has to take as more than improving the general economic condition of the country or region. Real development he noted “assumes a comprehensive and integrated plan for education and training” (US4, p. 3). In that regard he praised the institution as one that has “epitomized an institution that has worked hard to foster the kinds of attitudes necessary to achieve in the competitive environment of today’s world” (US4, p. 3).

A Gleaner Supplement published on September 28, 1995 affirmed CAST's contribution to national development when it reported:

CAST's special contribution to the economic life of the region has been the preparation and training of men and women who brought to the workplace transferrable and applicable knowledge and skills, along with an awareness of the unique demands of the workplace. They represented a marriage of academia and the shop floor, and were welcomed as such by the region's employees. (GS1).

CAST's contribution to the life of Jamaica was further highlighted by the fact that a Wage, Salary and Benefits survey that was conducted by the Employer's Federation revealed that a majority of the participating companies employed graduates of CAST. These graduates the survey reported were employed in various activity areas – Production, Maintenance and Administration. It was further noted that CAST certificates, diplomas and degrees were being asked for in equal standing with University Qualification indicating how employers considered the College (US3).

As part of the CAST system analysis conducted in 1992 interviews were conducted with 12 individuals who were employers of CAST graduates in the private and public sectors. The interviews which focused on opinions about quality and credibility of CAST programs and graduates revealed that CAST was a highly regarded tertiary institution in Jamaica. The interviewees had high praised for the institution its program and graduates. It was made very clear that the institution was fulfilling a national need by training technicians and technologists at the entry level and with the post-diploma

opportunities, also training individuals for middle management and supervisory positions (CSA).

The UTech Prospectus (UPros 13) and the (CS3) document articulated similar sentiments that the history of UTech is intimately connected with the social, economic and political development of Jamaica. This connection is not only through the institutions responsiveness to national goals and its successful implementation of strategies for self-transformation into a world-class University but also in terms of the significant contributions made by its graduates to national development.

As Jamaica celebrated its 50th year as an independent nation several tributes were made to CAST/UTech for its sterling contribution to nation building. The Prime Minister, Portia Simpson Miller has this to say:

As one of the institutions on which Jamaican's have come to rely in their quest for higher learning the University of Technology, Jamaica has made a sterling contribution to this process and remains central to the educational development component of nation-building. In fulfillment of its mission the University has continually expanded its services to meet the aspirations of a nation of learners and in the building of the skills base and professional competencies of our people. Its course offerings have not emerged out of institutionally determined and narrowly conceived goals, but from deep discussions with stakeholders about the needs of business and industry and the range of skills required discussions with stakeholders about the needs of business and industry and the range of skills

required our vibrant and developing society. UTech is indeed a true nation-building institution in outlook and in practice (US5, p. B2).

The Governor General said among other things “for over 50 years the University of Technology, Jamaica formerly the College of Arts Science and Technology has been molding professionals in areas of critical need in Jamaica’s development (US5, p. B2).

The Case of Jamaican Movement for the Advancement of Literacy (JAMAL) now the Jamaican Foundation for Lifelong Learning (JFLL)

Early beginnings

Before Jamaica gained independence education was considered to be a privilege reserved only for the upper and middle class in the society. This resulted in a situation in which a study conducted in 1971 showed that almost half of the nation's population (500,000) was illiterate (Mag3). The government of the day saw this as a grave problem for the development of the newly independent state and as such a situation that had to be strategically addressed. The 1972 Ministry Paper that laid out the justification for the establishment of JAMAL stated that:

the government regards illiteracy as a grave and fundamental problem in Jamaican life. On one hand illiteracy restricts freedom, self-reliance and potential for achieving true independence; and on the other hand, it impedes national progress by hindering the release and full utilization of human resources for economic and social development (JFP, p. 2).

In light of this perspective on illiteracy the government made the decision to make literacy a national priority and as such to launch a vigorous and massive attack on illiteracy. (JFP). The Daily Gleaner dated June 1972 reported that the Prime Minister announced a program aimed at wiping out illiteracy in 4 years with the help of 20,000 volunteers workers. The same article reported the Prime Minister's declaration that the government was willing to commit massive resources going into the millions of dollars in support of the project. The Prime Minister was further reported as saying that illiteracy

was “a major national priority beyond politics and having to do with national development and individual conscience” (G11). He said that he was not about to quarrel with history on the matter of illiteracy rather he was intent on challenging what existed at the time in order to conquer the future of the country. He was further quoted as saying that “the half a million persons who were unable to read and write were blocked off from most of the normal avenues of economic opportunity and suffered tremendous disabilities” (G11). He therefore argued that “in such a situation the chance of economic advancement for the country was also blocked which therefore left the entire society condemned to a lower standard of living than was necessary” (G11). According to the Prime Minister the door through which citizens march into full participation in the life of the country is the ability to read and write. Therefore given the fact that the greatest resource that Jamaica has is its people then success in beating illiteracy was seen as removing one of the stumbling blocks to economic power. Learning to read and write the Prime Minister argued would release in persons self-confidence and a sense of self-reliance with the concomitant confidence being released within the society. The society, he argued would become a free, proud, educated society with all its members walking in a common brotherhood and sisterhood of Christian concern in which each is his brother’s and sister’s keeper “so that one day out of Many One People will no longer be a motto but the living reality in the island of ours” (GL1).

At the time the national program that was announced would have been the country’s newest attempt to deal with the problem of adult literacy at the time. The projected effort of 1972 was preceded by a 1943 Literacy campaign based on the

Laubach system in which each one taught one. This was later followed by the work of the Jamaica Social Welfare Commission now Social Development Commission (SDC) in the 1950s (Mag2).

The government's commitment to advancing literacy was propelled by the results of a Literacy evaluation which was carried out between 1970 and 1971 with support from UNESCO. The Literacy Evaluation and Planning Committee established by the government found that illiteracy levels were approximately 500,000 or 40% to 50% of the population 15 years and over. In response the National Literacy Board (NLB) was established in 1972 to implement the agenda to eradicate illiteracy. However, due to a number of problems such as a high rate of drop-outs among both students and teachers; the poor quality of teaching; and the shortage of staff with the desired skill, an evaluation of NLB was conducted and the recommendation for a total restructuring and re-visioning of the strategy for program implementation was made (JFP). Consequently, in 1974 the government embarked on a new design for a program of "reclamation education" in which adult literacy would constitute the first basic layer in what would be an integrated program of activity (JFP).

The plan was to reclaim the persons who the system could not handle by getting them into a harmonized three tier program. The first tier, the basic layer is the literacy program that would get persons to the point where they were capable of taking further training. The second tier was the Youth Centers, which was to implant basic skills in things like agriculture or other skills in urban areas. At the apex of the program was the Trade Training Centre which was to develop what was described as "a far more

sophisticated level” where the Trade Centres would stand almost like the University of the reclamation program (JFP). Through this three tier program JAMAL would facilitate life-long learning opportunities for adults to equip them to cope with and adapt to changes in the environment especially those that impacted their ability to earn a living (JFP).

This reorganization included a change in the name of the entity from the National Literacy Board to the Jamaican Movement for the Advancement of Literacy (JAMAL) in 1974. The new entity JAMAL was established as a statutory agency under the Ministry of Education and Culture with primary responsibility for adult education in the areas of literacy and numeracy. The symbol of the agency was the ‘Tin lamp’ also known as ‘the kitchen bitch’ (a kerosene lantern) signifying persons being brought into the light by learning to read and write. The agency was mainly funded by the Government of Jamaica with additional funding provided through grants, technical assistance and equipment financed by agencies such as the Canadian International Development Agency (CIDA), United Nations Development Programme (UNDP), and World Literacy of Canada. Countries such as the USA, Britain, Korea, Australia, Germany and Brazil also provided funding in the earlier years of the literacy program (G13).

JAMAL was organized through a 12 member national Board of Directors, all volunteers, drawn from a wide cross-section of the community and appointed by the Prime Minister. The day to day administration of the agency was carried out by a paid staff headed by an Executive Director and the necessary supporting staff. They were supported by a large complement of volunteers serving at various levels such as zone

committees, parish committees, fundraising advisory committees and teachers. The parish committees functioned as advisory bodies to the Board of Directors as well as played a supervisory role within the parishes. The Parish Chairs were selected by the Chair of the Board of Directors in consultation with the field staff. For organizational purposes the island was divided into 18 zones twelve of which had the same boundary as parishes and the other six in the corporate area of Kingston and St. Andrew. Each zone was administered by a zone office (Mag2).

JAMAL became Jamaica's largest voluntary-based, non-formal institution utilizing the services of over 13,000 voluntary teachers, 2000 voluntary committee members to drive the mass literacy campaign. Additionally, some 4000 buildings many of them church halls were placed at the disposal of the organization to conduct classes (Mag2). JAMAL was described as a people's program that was organized along the lines of a voluntary self-help organization relying heavily on volunteers to teach adults all over the island (GI3).

The mission statement of JAMAL was:

To provide, through non-formal education programmes, and in partnership with other organizations, an opportunity for Jamaicans to improve their literacy, numeracy and life skills and thus to empower them to participate more fully in the determination of their economic, social and cultural development (JFD).

The objectives of the program were:

1. To eradicate illiteracy in Jamaica in the shortest possible period
2. To improve the literacy skills of the adult population of Jamaica

3. To develop human resources and so enable each adult citizen to participate meaningfully in the social, economic and cultural development of the country.
(Mag2)

These objectives were later expanded to include:

4. To provide literacy and basic occupational skills training to new readers, 15 – 20 years.
5. To prevent lapsed literacy through the provision of follow-up literature for new readers (JAR2).

JAMAL restructured.

By 1982 over 200,000 Jamaicans were made functionally literate (Mag2) that is they possessed skills and competencies required for reading and writing and calculation for personal and social development (JND). However, JAMAL's program was again restructured to enable the institution to play a major role in the implementation of the Government's policy regarding:

1. Full and comprehensive Primary education for 6 -12 years old
2. Re-direction of the JAMAL program to incorporate a non-formal education program for 15 -19 year olds.
3. Rationalization of secondary schools
4. Rationalization of examinations (Mag2).

Further the period of structural adjustment which began in 1983 resulted in a 50% decrease in the budget allocation for the literacy program. In light of this situation JAMAL was forced to reduce its staff compliment drastically from 900 in 1983 to 117 by

1989 (JCS). This issue of financial constraint has persisted in JAMAL to the current time.

The re-direction of JAMAL's program in the 1980s fell into four main thrusts:

1. Illiteracy Prevention which was to implement compulsory education among children 6 – 11 yrs.
2. Literacy and Work skills Reclamation Thrust
3. Remedial Literacy Thrust for what was referred to as residual illiterate adults
4. Prevention of Regression Thrust. (Mag2).

Additionally, instead of the 'mass' literacy approach of the 1970's, *literacy on demand* became the new thrust, with fixed points of delivery in Adult Education Centers.

The new mandate of JAMAL was carried out under the guidance of 2 main departments: the Field Operations Department and the Technical Support Services Department. The Field Operations Department was responsible for: establishing and conducting classes in adult basic literacy education inclusive of literacy and numeracy island-wide, providing opportunities for graduates to be placed in occupational skills training, and for other activities such as the National Quiz and the National Literacy Week (JAR5). The Technical Support Services Department was charged with the responsibility of the pedagogical aspects of the programme. The Department works in collaboration with all other department and units of the agency but more-so with the Field Operations Department as they execute their functions (RCP). The main activity of this Department has been curriculum development, material production, development of educational media and methodology, training of volunteer teachers and staff, monitoring of Adult

Education centers and the linking of occupational skills training projects with other institutions (RCP).

The first thrust, illiteracy prevention among children 6 – 11 yrs is outside the scope of this research and therefore will not be given any focus in this document.

Literacy and work skill reclamation thrust.

The main objective of this thrust was to make students employable as well as literate by taking them through various levels of academic training before sending them to a skills training institution. The strategy was to place the unskilled, non-reading young adults in a full-time educational institution to get intensive training in basic literacy and work skills to make them suitable for entry into the productive workforce or self-employment (Jam. LL). At that time in 1979 it was estimated that 20% (70,000) 15 -20 year olds were unemployed and approximately 140,000 were unskilled (Mag2). Special Guidance Officers were appointed to seek out opportunities in institutions of higher learning for JAMAL students and to establish links with institutions such as the Excelsior Community College and the Social Development Commission (Star4).

With the restructuring of JAMAL in 1982 greater emphasis was placed on the Literacy and Work skills program. The program became a formal component of JAMAL's offerings (JAR2). The program was offered to students attending day classes in eight parishes. However following an in-depth assessment of the program in 1988, it was expanded to include all persons attending JAMAL literacy classes. In that year over 200 students were placed in some 20 institutions to pursue training in 25 different skill areas (JAR2). In some instances the work skill thrust offered students the opportunity to

earn while they were learning while providing the means to improve their economic situation after they graduated. The skills training dimension of the thrust was implemented by JAMAL in collaboration with the newly established Human Employment and Resource Training (HEART) Trust National Training Agency (NTA) and the National Youth Service (NYS). The program was conducted with a heavy utilization of existing training facilities operated by other organizations to ensure that the overhead costs were minimized.

Training was provided in skill areas related to the needs of the productive sector and included in the earlier phase areas such as agriculture, auto-mechanics, candy making, cookery, crochet, dressmaking, home management, lithographic, machine embroidery, needle craft, plumbing, repairs to small home appliances, straw work, table waiting. The offerings were later expanded to include refrigeration, basket craft, masonry and steel fixing, industrial sewing, pastry making, cosmetology, machine shop operation, carpentry and joinery, woodwork, housekeeping for villas and apartments, sewing and pattern drafting, upholstery, show making, handicraft, hat making, home economics, home management, soft toy making, data processing, bamboo craft, fabric design, catering, bartending, auto-body repairs, auto mechanics. The training that was given to these young adults was also viewed as helpful in developing the human qualities which were as urgently needed as the skills training (Mag2). The skills training lasted for six weeks to 18 months, depending on the particular course. Students received a stipend of \$15.00/day in addition to the cost of tuition and materials. Funding was provided through the assistance of the World Food Programme.

The HEART Trust reported that about 80% of the participants found ready employment. Employment was found in entities such as Serv-Well, Homelectrix, an appliance store, and 807 garment construction factories. However, by the 1990s the skills training aspect of JAMAL's program offerings was significantly reduced and ultimately discontinued as HEART/NTA assumed responsibility for the delivery of skills training (JAR9).

Remedial literacy thrust.

The remedial literacy thrust for illiterate adults was implemented through the collaboration between paid staff and voluntary workers. This program was administered through evening and night classes which met twice per week for two hours each. Additionally, in keeping with its literacy on demand focus a number of adult education centers were established across the island to provide full time day classes to supplement the evening and night classes.

These adult education centers operated 4 days per week Monday through Thursday and catered to adults 15 years and older. The students in these classes included dropouts from the formal school system, early school leavers, self-employed, unemployed, shift workers, housewives, part-time and full-time workers. At the end of March 1986 there were 14 of these adult education centers across the island with 632 classes (JAR7). By 1987/88 there was at least one adult education center in every parish except St. Thomas, Westmoreland and Trelawny while there were four centers in Kingston and St. Andrew (JAR2). By 2006 the number of centers had increased to 27 (JAR10).

In the early years students were grouped in four level: Level 1- non-readers; level 2 – lapsed literates; level 3- low level readers who lack comprehension and level 4 – students who can read but lack comprehension (JAMAL Foundation, 1990). Currently the four levels remain. However the designations reflected some differences such that currently level 1 = non-literate; level 2 = Basic One – able to identify simple word; Level 3 = Basic Two – can read but poor comprehension skills; and level 4 = functionally literate - can understand and solve problems (JFLL Web).

Continuing education program.

A programme of continuing education was introduced in the centers in association with other training institutions such as Secondary schools and Community Colleges. The teaching of reading, writing and numeracy was combined with the development of desirable attitudes towards work and productivity, societal problems, occupational interests and toward other members of society (Mag3). The curriculum was therefore developed to include themes which were indicators of the competence of the learner in the use of the literacy skills they acquired and that were relevant to the fulfillment of the objectives of the program. Some of these developmental topics for the adult learners as outlined in the (CP) document were:

- Identity and self-image – appreciation of origin and heritage;
- Community and you – participation and the relationship between individuals and the community (belonging);
- Citizenship and government – function of government and knowledge of services offered;

- consumer education – understanding basic concepts relating to the economy;
- continuing education – learning to develop the ability to evaluate and adjust to change and to accept and practice lifelong learning;
- home and family life – accepting responsibility for betterment of household (sharing and caring);
- food and nutrition – applying the basic principles of using nutrition, food and improved eating habits;
- occupation – taking responsibility for production and on the job performance;
- agriculture – knowing and applying modern techniques for agriculture and fishing;
- work- basic idea about work ethics and seeking and holding employment;
- communication – ability to communicate effectively with members of the household and other groups orally and written;
- reading – learning new words, longer simple sentences, reading letters, books, papers etc., writing – letters, receipts, writing numbers in figures, etc.,
- health and hygiene – understanding the basic principles of individual and family health in daily life;
- inquiry and critical thinking – being able to judge between facts and opinions and make decisions.

Prevention of regression thrust.

The main thrust here was the introduction of levels V and VI of the literacy program to assist new readers to continue their education at a more advanced level.

Additionally, there was the development and expansion of a printery to provide simplified material which could be acquired by the JAMAL graduates and other low level readers (Mag2). In this way new readers were supported in maintaining their newly acquired reading skill through the provision of follow-up literature (JAR2). The printer was seen as an important aspect of the literacy process because lessons learnt in the earlier years of the adult literacy movement showed that imported reading materials did not work. The literacy students could not relate to the ideas presented in those reading material which came from a context that was vastly different from their own. The printer therefore facilitated the printing of material written by Jamaican professionals and related to the local experience (JAR3).

Workplace literacy program.

In 1994 the Academy for Educational Development conducted a study for the United States of Agency for International Development (USAID). The study identified deficiencies in literacy and numeracy skills and the work ethics of the labor force as major factors in the continued failure of the Jamaican economic sector to increase productivity (JFD: JAR9). The report stated that the academic foundation of the workforce was poor and that significant numbers of new entrants to the labor force as well as older workers were functionally illiterate. The recommendations for addressing these challenges included the development of sector –specific, on-site training programs which would address the needs of workers and employers. In response JAMAL commissioned a survey on “The Impact of Illiteracy on Productivity in Commerce and Industry”, which was conducted by KPMG Peat Marwick. The survey acknowledged the

fact that illiteracy at the workplace is problematic to quantify due to the difficulty in measuring illiteracy without administering test. However, the survey report noted that the respondents reported becoming aware of worker illiteracy by observation, during training, during performance appraisals or through direct reports from the employees themselves. The main findings of the KPMG survey were as follows:

- 74% of the 31 companies surveyed believed that they had significant problems with basic literacy in some areas of their organizations.
- 64% of the employers indicated that inadequate literacy skills were responsible for production issues such as accidents, absenteeism and poor work attitudes.
- 48% of respondents stated that illiteracy adversely affected product quality.
- 58 % of the respondents attributed the need for excessive supervision, extensive rework, slow-down and wastage due to illiteracy as major contributors to low productivity levels.
- 63% of the respondents had male employees in the organizations who were illiterate, while 37% had female employees who were illiterate (KPMG).

Problems with illiterate workers were found in all regions of the country and in every sector. However the sectors with the highest levels of illiteracy reported were: the hotels, restaurant, and transportation and storage sectors. The financial sector reported the lowest level of illiteracy. Thirty six percent of the respondents reported that about 0-80% of their total cost in various categories could be attributed to illiteracy. The various cost categories included:

- The number of defects produced

- Pounds of waste
- Training costs
- Cost associated with accidents (KPMG)

The major deduction from the findings was that direct costs of illiteracy to businesses was estimated at approximately J\$3.9 billion or 2.3% of GDP in 1995 (JAR8; JBP).

Given the fact that literacy skills are nearly always a prerequisite for dealing with the changing workplace in an era of computerization and technological advancement the findings of the survey presented a challenge for the workplaces. Nevertheless, the main policy decision taken by companies to combat the problem of illiteracy in the workplaces was to encourage staff to attend JAMAL classes (JAR8).

In response to the findings of the survey JAMAL in collaboration with the private sector implemented the Workplace Literacy program renamed the Workplace Education in Literacies and Life Skills (WELLS) to promote increased productivity among the workforce (JFLL Web). The Gleaner Dec. 2, 1996 reported that the Workforce literacy program would have the added advantage of assisting organizations in competing more effectively in the global market place.

The strategy of the Workplace Literacy program was to collaborate with manufacturers, and other types of producers, as well as the service sector to provide adult literacy education on the job to those who needed it. The approach sought to marry the resources of the private sector with the expertise of JAMAL to train groups of people where they work and so to promote increased productivity in a meaningful way (JAR6;

JBP). The programs are customized to meet the needs of the particular workforce. The process begins with a simple 30-minute Diagnostic Test conducted by JAMAL to determine the starting point. JAMAL provides the company with a confidential report outlining the findings and recommendations, and then the company and JAMAL decides how to proceed based on the results. Classes are scheduled to the convenience of the employer and their team (JFLL Web).

By the year 2000, 38 companies were involved with an enrolment of 1,688 students. The total number of persons who had attended workplace classes between 1997 and 2000 was 2, 388. A total of 1,102 persons had by then achieved functional literacy (JAR11). The number of participants subsequently increased to 2,444 by year 2006 (JAR12).

Other program areas development over the years.

Grade 9 academic upgrading program.

In 1995 JAMAL established a Grade 9 Competency Level Program for HEART/NTA , under a formal contractual arrangement to provide remedial education to adults who did not meet entry requirements to HEART academies to enable them to satisfy the prerequisites for entry to their training programs. This program was a response to a challenge which arose when HEART/NTA found that 40% of those who applied for entry failed to pass the English or Mathematics pre-entry test. These persons were therefore sponsored by HEART to receive upgrading instructions prior to re-sitting the test. The program sought to bring the participants up to the grade 9 proficiency level

(JAR8, 12). This program was continued even after the formal arrangements with HEART/NTA had expired.

Computer - assisted learning.

This program was launched in 1997 in eight centers in seven parishes throughout the island. Intensive training in the use and application of Microsoft Windows and the Academy of Reading Software was conducted. This program was meant to enhance the delivery of basic literacy in the Adult Education Centers as well as provide the facility for database training for staff and students. It also served to boost the potential for dissemination of information in an interactive mode (JAR9). Working in collaboration with the Jamaica Computer Society Education Foundation (JCSEF) and the Workforce Consortium JAMAL's three-fold objective in this program was to:

1. improve productivity in the workplace
2. provide instruction in the use of computers
3. provide basic education through computer assisted learning programs.

Adult computer program.

The adult computer program which started as a project was launched in 2002 with significant financial support from the Carreras Foundation. According to the 2003 annual report the main objective of the project was to “provide computer education for JAMAL Level IV graduates and marginalized adults in the society-at-large” (JAR14, p. 8). It was anticipated that with the training received under this program participants would acquire the basic competencies that would “equip them to: benefit from computer-aided instruction in continuing their education; and utilize opportunities for personal socio-

economic advancement in an age where the use of technology predominates” (JAR14, p. 8). The program now goes by the name Computer Application Software for Empowerment (CASE). Learners are taught to use Windows computers, Microsoft Office Suite, Internet browsing, and Internet research including Google. These courses are taught at the Basic, Intermediary and Advanced level in comfortable Computer Labs at selected locations across the island (JFLL Web).

Life skills and numeracy programs.

The Life skills and numeracy programmes were developed out of a collaboration between JAMAL and the Fanshawe College of London, Ontario, Canada. The project was funded by the Canadian International Development Agency (CIDA). The JAMAL/Fanshawe project served to assist JAMAL to widen the scope of non-formal adult education, especially in the area of workplace literacy, numeracy and life (coping) skills (JAR8, 9). The life skills training sought to give each individual the proficiency to function responsibly in a social, familial, communal manner in the society (JAR13). JAMAL staff members and community workers were trained by representatives from Fanshawe College to conduct life skills coaching. Areas covered under the life Skills program were: Values exploration; giving and receiving effective feedback; exploring the dimensions of trust; helpful and hindering group behaviours; creative problem solving and Balanced Self-Determined Behaviour (BSD). The BSD lesson encouraged participants to develop belief systems which support their rights and the rights of others, practice using positive affirmation of themselves, reduce excessive feelings of guilt,

anger and anxiety, and increase the repertoire of positive behaviours available to them (JAR13).

The numeracy program sought to enable persons to function in an increasingly digital world. The aim of the program as stated in an organization paper was “to broaden the scope of JAMAL’s educational thrust beyond purely functional literacy to include numeracy skills since, in an increasingly digital world basic numeracy is critical to those who would participate in the labour market” (JFD, p. 7).

High school equivalency programme (HISEP)

The High School Equivalency programme was established to provide additional opportunity for adults 18 year and older to earn a high school diploma, through the utilization of independent learning methodologies outside of the formal educational system (JAR17). “Learners are exposed to world class training and mentorship in five subjects: Language & Communication, Literature, Culture and the Arts, Mathematics, Science & Technology, Society & Citizenship

The curriculum and testing mechanisms for the HISEP program were developed by National CT/VET while the programme is delivered through the JFLL’s network of HISEP learning centres across Jamaica” (JFLL Web).

Upon successful completion of each subject/module learners are given statements of competence and a High School Diploma upon successful completion of the programme. The HISEP diploma is equivalent to 5 CSEC subjects, and as such provides a pathway to tertiary level education. It is accepted throughout the National Education

system, and winning the acceptance of a growing number of private tertiary institutions (JFLL Web).

Motivational activities.

The programs at JAMAL were supported by a massive promotional campaign in addition to its main programs JAMAL implemented a number of motivational activities which sought to encourage participation in JAMAL programs. The promotional activities included a national television quiz, the JAMAL/JBC National Quiz Competition. The main aim of the quiz competition was to motivate both students and teachers and to stimulate public interest and involvement in the program of basic adult education. The objectives were to encourage participation of students and teachers; improve regular attendance at the classes; to facilitate, supplement and intensify the teaching of basic literacy skills; increase student confidence and build commitment to continuing education; increase public awareness of the scope and value of the JAMAL program; encourage the organized registration of classes and students to stimulate better record keeping and reporting systems; encourage pride of achievement that can be acquired through hard work discipline cooperation and united effort. Students had the opportunity to a wide range of prizes including scholarships for vocational training (JAR1, 2).

Other motivational activities included the production and broadcasting of a number of radio and television programs. The radio programs were: Lamplight, a 5min. educational and motivational program; Into the light, a 30 min, magazine feature aimed at encouraging participation in JAMAL; Teaching Box, a 30 min program that provides

instruction in basic reading, writing and arithmetic. The Television feature was aired once per month (JAR1, 2).

Transformation of JAMAL to the Jamaican Foundation for Lifelong Learning (JFLL)

In June 2005 Cabinet made a decision to change the name of the organization from JAMAL to the Jamaican Foundation for Lifelong Learning (JFLL). This decision was based on a submission made by JAMAL in 2004 to the Minister of Education, Youth and Culture for the transformation of the JAMAL Foundation to a Lifelong Learning institution. Among other things this change was seen as vital to enhancing the entity's capacity to move away from the effects of the stigma associated with the name JAMAL (JAR15). Despite the varied programs that had been implemented by JAMAL as shown earlier in this paper many persons still saw the organization as providing only a narrow range of remedial programs in adult literacy and numeracy (JAR15). More strategically though, this meant that JAMAL would officially be transformed from an organization which primarily offers programs of Basic Literacy to one providing a wide range of educational opportunities (beginning with basic literacy) to an estimated 750,000 who lacked secondary education and certification and the majority of adult population who needed to be placed on the path to lifelong learning (JAR17). As such the organization would provide persons with a range of training and learning options including basic literacy and numeracy, the HISEP program, computer studies and though collaborative initiatives with other training providers like the HEART Trust NTA, National Council on

Technical and Vocational education and Training (NCTVET) and community colleges access to a wide range of skills, vocational and tertiary-level training (JAR15).

Jamaica adult literacy surveys

The report of the 2008 Literacy survey stated that with the exception of 1994, there has been a steady improvement in the literacy levels over the period 1975 to 2008 with significant improvements between 1999 and 2008. The 1999 literacy survey conducted by JAMAL estimated that “JAMAL had touched the lives of some 300,000 people by facilitating them in becoming functionally literate “(JAR15, p. 3). This represented a 20.1 % illiteracy rate in 1999 down from the 40% - 50% reported by UNESCO in their 1970 survey. In 2008 the illiteracy rate was at 8.3%. Table H1 in Appendix H shows the literacy rates of Jamaica between 1975 and 2008 based on the adult literacy surveys commissioned by JAMAL on a five yearly basis.

Recognition and commendations.

In 1989 JAMAL was the recipient of the most prestigious UNESCO award, the Nadezhda K. Krupskaya award for literacy. According the Daily Gleaner dated Wednesday, September 20, 1989 the award was established in 1969 through the generosity of the Soviet Government to reward organizations which had been excellent in the struggle against illiteracy.

The Daily Gleaner dated June 29, 1990 in an article titled JAMAL – A small movement of hope in Jamaica reported how the life of students were changed through the work of JAMAL. One graduate was reported as saying that his life has changed since he

joined the movement. Literacy classes have given him confidence and helped him find a job. He said

“I think JAMAL is one of the greatest organizations in Jamaica. After graduating from the movement I decided to be a motor mechanic. In 1987 I was made foreman at the garage where I work. Today I would like to open my own.”

The Sunday Gleaner of September 12, 1982, the year JAMAL celebrated its 10th anniversary, carried an article titled ‘A decade of JAMAL’. The article noted that “some see the programme as one of the greatest pieces of social and educational reforms instituted in Jamaica. Others see it as the silent revolution helping to change the face of the society” (G11).

On the occasion of the twenty first anniversary of the National Literacy program in Jamaica the then President of the Private Sector of Jamaica (PSOJ) noted that “over the past 21 years JAMAL has indeed made a significant contribution to national development and is certainly deserving of commendation” (Mag4).

CHAPTER 5

Presentation of Findings

This chapter presents the findings of the study. The findings have been organized around four themes related to the four research questions that guided this research.

Under each theme the findings that emerge are discussed in relation to a theoretical proposition that was previously established again based on the research

Theme 1: Education, Social Change and Development

Theoretical Proposition: Education has been a critical factor in fostering social change and development in Jamaica.

The findings showed that adult education provided both by CAST/UTech and JAMAL/JFLL served to build the human capital needed to drive Jamaica's economic development. With the advent of independence the Jamaican government sought to build the capacity of the Jamaican people to enable them to meet the demands of the newly independent society. CAST was one the institutions envisioned to help the society in its modernization and development as a nation state and to enable the country to move from an agrarian society to a more industrialized society (CAST/UTech Case Report, p. 68). One interviewee captured the symbiotic relationship between CAST and the development of Jamaica into a more industrialized society in this comment that one CAST lecturer had:

traced the need to move from dependence on agriculture and sugar and the whole post- slavery development into more technological backgrounds. One of the important developments that emerged from that was the establishment of

Kingston Technical High School which essentially was a pioneer well over a hundred years oldwhich led the way for the establishment of technical education in many, many areas: business, engineering, commerce and so on. But the bridge between that initiative which was at Secondary level to move into tertiary level was the establishment of the Jamaica Institute of Technology, later CAST and still later UTECH (Interviewee #1).

The institution was established specifically to train the higher level technicians and middle management personnel for the productive sector of the country's economy. As the country's economy expanded and activities in the areas of mining, manufacturing, construction tourism among others increased so did the need for more highly trained individuals with advanced technological skilled. UTech's 1995 - 1998 Strategic Plan (USP1) identified a number of ways in which CAST has contributed to education and HRD in Jamaica. Among those ways identified were that the institution:

- Contributes substantially to the supply of middle-level manpower in the fields of commerce, industry, government, management, health services, support services and applied science and technology.
- Provides leadership in many applied sciences and technology programs which are not available in any other country in the region.
- Provides certification and upgrading mechanisms for para-professionals and professional groups by offering educational opportunities which were previously not available locally.

- Is able to develop new courses and awards based on a philosophy of clear articulation of curricula and standards to enable professional growth.

CAST provided education and training in various sectors of the economy. As shown in the CAST/UTech Case Report p. 81 the institution was offering in excess of 20 courses at the diploma and certificate levels during the first six years after the country gained independence. These courses highlight the heavy focus that was placed on programs that were directly related to the manpower needs of the society. The case document revealed that these courses included:

Mechanical and Electrical Engineering, Construction Engineering, Pharmacy, Business Studies, Institutional Management, Secretarial Studies, Commercial Studies, Personnel Management, and Marketing and Sales. The number of long-term courses continued to increase as the need for new professional skills arose. Over the five years subsequent to 1973 the number of courses increased to about 35 and included areas such as: construction engineering; telecommunication; laboratory technicians; accounting; banking, marketing; chartered secretary; personnel management; architectural drafting; structural engineering; structural technician; medical representatives; medical records; medical technology; instrument technology; technical teacher education: Industrial technology, business education, Secretarial Studies, and Home Economics; pastry making; clothing and fashion (CAST/UTech Case Report, p. 81). These all related to the areas of focus in industry and commerce.

As the country became more industrialized through its program of 'Industrialization by invitation' the need for more and different technical skills increased. CAST was always ready to respond to the new demands such that the number of courses increased to over 60 over the ten year period from 1974 to 1984. The institution now offers over 100 Courses of Study all in line with industry. As the country became more technologically driven the courses offered at CAST/UTech reflected this change with the addition of courses such as computer science, and Electronic Data processing (CAST/UTech Case Report, p. 82).

One interviewee responding to the contribution of UTech to building the human capital of the country said:

Well you know, what is the developmental need? When you look at it, you know, Science, Technology, Engineering, Mathematics (STEM), have been shown to be the real core of the developmental thrust -that has been our core, it continues to be our core. Sixty percent of our programs now are what you would call STEM and Innovation, twenty percent is Business and Management and the other twenty percent in areas like Faculty of Education and Liberal Studies (FELS) and Law. Under these STEM programs will come Technical Vocational as well as Nursing and the Medical Programs that we have. So we feel that we have really stayed the course, intensified and enhanced it.

Based on Science and Technology which I think has been shown to be the developmental tool for all the first world countries I would think that we are right on track and we can do more - The core still remains the STEM group of subject

areas and that is what has been driving this place. The engineers, I mean you need an engineer for everything, even the chair you sit on, - we look at the Water Commission, look at the Public Service, some of these big entities, you know, it's our drivers, and as such they have come and they've run programs with us to ensure that our students are *offe* and I feel very, very strongly - you know- our supply of Pharmacists, the whole Health Service has been dependent on us. Medical Technologists and the Pharmacists, these are people not just in the backroom. You may say the doctor may lead the team, but he can't function without the medical technologist, you know, the pharmacist, so, I feel comfortable that we are at the center of the drive and as such our graduates are pushing the whole development of the country.

If you look at what the Government has said, when they sat down in 2010, to say what it is the country needs for development? They identified the big four and the fifth one, they probably never put because it was so obvious. They were saying, nurses, teachers, pharmacists, land surveyors, that's what they saw as their need you know. That is UTECH and the other one which has to be there of course is engineering and that is UTECH. So I don't know what else you could want. You know we have been central to the development and I think it has to be given credit that we have stayed that course and we have seen the role that we have to play in development and I think we have been executing (Interviewee #4). The interviewee further noted that unquestionably CAST/UTech:

has been the main driver, because it has not been an academic institution in the sense that you write a paper on your philosophy and your esoteric thought and then it gets into the publication and it gets onto a shelf. We have been producing the professionals who can get out there and work and anywhere you go, all the way down the Caribbean, the medical technologists, the surveyors, the pharmacists, they've all been UTech, CAST/UTech graduates. You go abroad, Toronto, all over the place, the engineers they're all there. So I must feel proud of what the institution has done, and there is no question that it has been I would say the major engine for the developmental skills. In terms of the academic, and esoteric and the political, social science we have never attempted to get in that area, we have stayed with the real scientific implementation and bar none, you know, I say that this institution has been responsible for it (Interviewee #4).

Another interviewee supported these points saying:

We have a number of Professional programs here at UTECH: Pharmacy, commission land surveying, engineering, nursing, to name a few, architecture, that are underpinned by professional driven bodies. In other words you cannot practice as a pharmacist in this country unless you're registered and to be registered you must follow the course, pursue the course that is in fact recognized and accredited by the Pharmacy Council of Jamaica embedded in Law. So majority of our STEM type programs are embedded in Law, so if you look at a SWAT analysis of CAST/UTECH with other institutions, you will find that our threats are very minimal because any of the institutions wanting to compete, they

would have to compete with the professional body which is a very serious link adopted into the CAST/UTech structure. There are some other courses that are embedded like that, and one of them is Nutrition, Dietetics, you cannot practice in that particular profession until you are registered in this country. So it makes us very unique (Interviewee #3).

The same interviewee added that “the CAST students, the UTech students are the hub of the wheel of industry. In any industry you go you find a CAST/UTech student” (Interviewee #3). Another comment was simply that CAST/UTech was about “educating the professional and the para-professional” (Interviewee #2).

The system analysis of CAST done in 1992 reported that the institution was recognized for its responsiveness to national and regional workforce needs through professional and industry groups; providing technical education that is related to the world of work at the mid-level management and technicians for both public and private sectors; Emphasis on programs that are of direct value to careers in industry, commerce and the various professions. Additionally, CAST/UTech became known for its consistency in producing work ready graduates. This capability of producing work ready graduates was enabled by the close link and collaboration between CAST/UTech and industry and commerce in the design and delivery of its courses. This was done formally through what the institution refers to as the Advisory Committees. These committees are established within the various Faculties of the institution and comprise members of industry and commerce related to the area of focus of the particular program area. Through these committees industry is able to contribute to the design of the program and

to ensure that the programs are aligned to needs and standards of industry and the labor market (CAST/UTech Case Report, pp82-83).

Furthermore, CAST/UTech through its Co-operative Education program seeks to give students on-the-job experience in their particular professional area. The Co-operative Education program serves to strengthen the students' readiness for the job market by providing them with practical and professional exposure to the real work setting thus enabling them to perform creditably on the job (CAST/UTech Case Report, p. 92). Commenting on the role of the advisory boards and co-operative education program at UTech one interviewee observed that:

Again what they have been seeing in terms of graduates who are able to make that difference, the average time taken a young graduate with a first degree is about 18 months for them to be able to make any significant contribution to the institutions to which they are employed, they have to go out literally and learn. What UTECH has done as a part of its policy is that every single program is directed by the industry through the so called "advisory committees" and we try to ensure that the students get externship, where they go and have a period of time in these companies or institutions. So they're understanding and acculturating, so that by the time they're graduating they know a number of the modus operandi of some of these, hence they can hit the ground running. That's another aspect of the work-readiness (Interviewee #4).

UTech's commitment to building the human capital was also evident in its focus on part-time and evening courses as well as its short-term professional courses that it

offered both on its campus and within companies. These courses were often offered in collaboration with businesses or professional bodies. Through these courses the skills and capabilities of working persons were upgraded. In so doing adult education was enabling improvement in worker productivity and the productivity of industry and commerce. Over 60 different short-term courses were reported up to 1999 (CAST/UTech Case Report, pp. 88-89). Then there was the work of the Specialized Centers of Learning such as the Engineering Center and the Energy Centre. The Energy Centre offered training courses in technology, economics and management of energy and energy management systems (Case Report). The Engineering Training Centre sought to enhance the skills and capabilities of Engineers and technicians in key industry sectors (CAST/UTech Case Report, p. 89). Through the Entrepreneurial Center CAST/UTech further contributed to the development of the human capital through the development of entrepreneurial skills of students and young entrepreneurs (CAST/UTech Case Report pp. 86 -87).

A Gleaner Supplement noting the contribution of CAST to building the human capital stated that:

CAST's special contribution to the economic life of the region has been the preparation and training of men and women who brought to the workplace transferrable and applicable knowledge and skills, along with an awareness of the unique demands of the workplace. They represented a marriage of academia and the shop floor, and were welcomed as such by the region's employees (CAST/UTech Case Report, p. 97).

The graduates of CAST/UTech have been described as being “immediately marketable as a result of being trained to support the productive base of industry, including labor and management, marketing and distribution” (CAST/UTech Case Report, p. 95).

In the case of JAMAL, the case report states that one of the objectives of the Foundation was to develop the human resources and so enable each adult citizen to participate meaningfully in the social, economic and cultural development of the country (JAMAL/JFLL Case Report, p. 104). Its literacy and work skills reclamation thrust sought to make students employable in addition to being literate. To this end JAMAL collaborated with a number of other institutions to deliver training programs in skill areas that were closely related to the needs of the productive sector. These areas included: agriculture, auto-mechanics, candy making, cookery, crochet, dressmaking, home management, lithographic, machine embroidery, needle craft, plumbing, repairs to small home appliances, straw work, table waiting, refrigeration, basket craft, masonry and steel fixing, industrial sewing, pastry making, cosmetology, machine shop operation, carpentry and joinery, woodwork, housekeeping for villas and apartments, sewing and pattern drafting, upholstery, show making, handicraft, hat making, home economics, home management, soft toy making, data processing, bamboo craft, fabric design, catering, bartending, auto-body repairs, auto mechanics (JAMAL/JFLL Case Report, p. 108).

In support of the relevance of the JAMAL skills training program a HEART Trust report found that “80% of the program found ready employment” (JAMAL/JFLL Case Report, p. 108). Additionally, the Workplace Literacy Program which was a partnership

between companies and JAMAL/JFLL sought to build the capacity of the labor force in the area of literacy and numeracy skills and work ethics. Reiterating the idea that the workforce literacy program was critical to the productivity of businesses The Gleaner reported that “the workforce literacy program would have the added advantage of assisting organizations in competing more effectively in the global market place”

(JAMAL/JFLL Case Report, p. 114).

In respect to the JAMAL training programs one interviewee stated:

We do think based on what the population or what the society needs. For instance, in Jamaica, we have a work force that is woefully untrained and so our policy is to get into the workplace and train those persons. So in that sense we have a working relationship with the Ministry of Labor and partnership with other government agencies to achieve this. If that is achieved then the more educated work force tends to be a more productive work force. That is one of the things that drive our programs, the level of the current work force and the reason for that and one of the main reasons for that is the lack of education. So we are driven by these kinds of concerns (Interviewee #7).

Another interviewee shared an example of how JAMAL contributed to the development of the human capital:

You’re gonna say to the workplace, what is the literacy need that you have? And you know some generic thing is designed, you know, reading of memos, reading of notices and so on and then you say alright, these are your needs but what is the language, what are the words, what are the things that you use in the business and

you get that from looking at their documents, talking to people, the supervisors and you just use the same JAMAL whole word methodology to teach.

So you would go into a hotel and you begin to teach reservations and luggage and transportation to and from the airport and the language that should be used and the sentences and the words and such that should be used in that. We would go to the banana industry and we would do the same thing, St. Mary Banana and out in St. Thomas. Bauxite Company we did the same kind of thing and you'll be surprised the range of the illiteracy impact - the extent to which it exists in just about every sector (Interviewee # 5).

Secondly, the findings showed that adult education fostered upward social mobility of thousands of Jamaicans. One finding that emerged out of the UTech case was the impact of education on the socio-economic status of those who participated in their programs. Adult education became the means of escaping a life of poverty and marginalization for many individuals. Recalling the development of the public education system in Jamaica we will see the development of a two-tiered education system characterized by an elitist streak in which the black majority of the country continued to be disenfranchised. The secondary school system that undergirds the formal adult education system was divided into what the UNESCO report of 1983 described as "the high schools and the others" (TASK). The high school for the upper class held the promise of post-secondary studies and the expectation that its graduates would occupy professional careers (Atchoarena, 1999; Morrison & Miller, 1995; Taskforce, 2004). The *other schools* refer to those whose students were expected to satisfy the rising demand for

technicians to support the manufacturing and construction industries that were emerging as the country embarked on a program of industrialization. The emerging technical education system with its cadre of technical high schools and the College of Arts Science and Technology was therefore developed to supply this demand. Consequently, the students of the technical high schools were the main targets for studies at CAST. As was mentioned earlier in this document CAST was established not as a competitor to the University College of the West Indies, which was the University of choice for graduates of the elitist 'high Schools' but as a second choice (Sep. Rev.), an alternative path. In so doing the social stratification of the society with its norms and privileges would remain intact and reinforced. The children of the upper middle and upper classes would continue to have greater currency and be equipped to run the country.

However, the case of CAST/UTech demonstrates a different outcome. First the establishment of CAST/UTech meant an expansion of education opportunity for members of the lower, middle and working classes in Jamaica. CAST/UTech through its flexible system of entry and exit, variety of delivery modalities: full-time, part-time sandwich and co-op education, short-term professional courses; vertically integrated step-by-step process which allowed student to proceed from certificate to diploma to degree and horizontal cross-over system, which allowed students to move from part-time to full-time to part-time, created an integrated system of social, educational and employment mobility for its graduates (CAST/UTech Case Report, pp. 83 -84).

Without articulating a policy committing to do so CAST/UTech created a shift in the social fabric of the society. The social composition of the various strata was impacted

particularly the middle class as more and more Jamaicans were facilitated in accessing the kind of education that afforded them the opportunity to gain higher paying jobs and thus the ability to access various social services that enabled their social mobility. The notion of individual social mobility through learning was further enhanced at UTech when the institution established its diploma–degree program. The approach to degree development directly targeted graduates of the institution who wanted advanced education and training to facilitate access to better jobs. These factors coupled with the removal of the tuition fees between 1973 and 1983 and access to a number of grants and scholarships (CAST/UTech Case Report, p. 70), enabled thousands of individuals from underprivileged families to access higher education and to become more marketable. In reference to CAST/UTech one interviewee noted that:

the number of scholarships we have far exceeds UWI and if you talk to the people in financial aid you will see that in 2006 /7 the financial aid program was 89 million Jamaican dollars for students. So that there was a drive to support students in all kinds of different ways (Interviewee #1).

The short-term courses were also instrumental in facilitating the progress of individuals from one income bracket to another. For example the CAST Principals Report (1981) reported that the Industrial Training they offered was aimed at upgrading the skills and management techniques of persons who had moved up from the shop floor to become supervisors but who had never had the benefit of any formal training for a supervisory role. The recent establishment of the UTech Academy in 2009 demonstrates a continued commitment to this notion of enabling the progress of individuals to be able

to access the kind of education that will get them into better paying jobs and so facilitating their upward mobility.

Another finding is that adult education was critical in moving hundreds of thousands of Jamaicans from illiteracy to literacy. Literacy education has been a major component of the adult education landscape in Jamaica particularly through the work of JAMAL/FJLL. The literacy of the Jamaican adult population was seen as a major national priority (JAMAL/JFLL Case Report, p. 100). Established in 1974 the Jamaican Movement for the Advancement of Literacy was mandated to deal with the problem of adult literacy. The decision to establish JAMAL came in response to a national survey which showed that almost half the population at the time (500,000) was illiterate (JAMAL/JFLL Case Report, p. 102). This was viewed as a major impediment to economic growth and thus a problem for development.

Among the original objectives of the institution were the following: To eradicate illiteracy in Jamaica in the shortest possible period and to improve the literacy skills of the adult population of Jamaica. Within eight years of its establishment JAMAL/JFLL had successfully enabled over 200,000 Jamaican adults to become functionally literate (JAMAL/JFLL Case Report, p. 105). That means those persons now possessed the skills and competencies required for reading and writing and calculation for personal and social development (JAMAL Foundation, 2001). By 1999 the literacy survey showed that JAMAL had touched the lives of some 300,000 people facilitating them to become functionally literate. This represented a decrease in the illiteracy rate of 20% down from 40% - 50% (JAMAL/JFLL Case Report, p. 120). The latest survey conducted by the

Planning Institute of Jamaica in 2008 found that the literacy rate in Jamaica stood at 91.7%.

In reflecting on the work of JAMAL/JFLL one interviewee said:

when the World Literacy Survey was done in Jamaica, it was done I think in a number of so called developing countries in Latin America, Caribbean and in Africa in particular. When the way it was done indicated that half of the Jamaican adult population age 15 years and over was unable to write on that application, to read and write a simple statement of everyday life that was interesting because if half of your adult population 15 and over cannot do that then we have a problem. So, JAMAL was the response to this problem and a great deal of money, energy, time, resources of every nature was put into it and it was a success...people learning to read and write in a short space of time (Interviewee #5).

He further noted that JAMAL's contribution to the country's development: would have to be in literacy the improvement of the basic reading and writing literacy level nationally. When you consider 50 percent, 40 to 50 percent when the survey was done at the outset to a 90 percent literacy rate, 90 whatever it is now" (Interviewee #5).

The same interviewee made the observation that:

the philosophy of JAMAL at the outset was just to teach adults and by the definition I gave you 15 and over to read and write a simple statement from everyday life. In other words basic literacy was the purpose and even the language

of the tagline that went ‘from darkness into the light’ that was its purpose, darkness of illiteracy into the light of literacy (Interviewee #5).

In respect of the impact of JAMAL on illiteracy in Jamaica another interviewee noted that, “an example of national change brought about by the work of JAMAL is the level of literacy” (Interviewee #7) in the country.

Additionally the findings showed that adult education enabled the personal development of disadvantaged Jamaicans and empowered them to contribute to their society in meaningful ways. Adult education’s role in the developing the whole person and enabling them to function meaningfully in society was most evident within the JAMAL/JFLL Case.

The mission statement of JAMAL was:

To provide through non-formal education programmes, and in partnership with other organizations, an opportunity for Jamaicans to improve their literacy, numeracy, and life skills, and thus to empower them to participate more fully in the determination of their economic, social, and cultural development (JAMAL/JFLL Case Report, p. 104).

This was accomplished through several of the program activities of the agency. One example of such program activity is the continuing education program which included the teaching of reading, writing and numeracy combined with the development of desirable attitudes towards work and productivity, societal problems, occupational interests and toward other members of society (JAMAL/JFLL Case Report, p. 109). Through this program persons were facilitated in appreciating their origin and heritage;

engendering a sense of belonging within their communities, understanding the functioning of government; understanding the basic concepts related to the economy; developing their ability to evaluate and adjust to change; appreciate the need for lifelong learning; applying the basic principles of nutrition, taking responsibility for on the job performance; understanding the basic idea of work ethics, developing the ability to communicate effectively with members of their household and other groups both orally and written, understanding the basic principles of health and hygiene, developing the ability to judge between facts and opinions and make decisions (JAMAL/JFLL Case Report, pp. 110 -111).

Further the Life Skills Program built on the aforementioned skills to help the individual to develop the proficiency to function responsible within their families, their communities and their society. The life skills program covered areas such as: values exploration; giving and receiving effective feedback; exploring the dimensions of trust; helpful and hindering group behaviors; creative problem solving and Balanced Self-Determined Behavior (BSD). The BSD lesson encouraged participants to develop belief systems which support their rights and the rights of others, practice using positive affirmation of themselves, reduce excessive feelings of guilt, anger and anxiety, and increase the repertoire of positive behaviors available to them (JAMAL/JFLL Case Report, p. 117).

In discussing JAMAL's purposefulness in enabling the personal development of its students, one interviewee had this to say:

the readers in the early part of the program it was not only about reading and writing but was also about life skills and educational skills because there were readers that were developed - they were color coded gray level 1, red level 2, yellow level 3 and green level 4. But now books, readers, were written separately along the same color coding, well not level one really, but level 2, 3, 4. So they're written now on topics like family, how to feed baby, how to make like carpentry, how to do all sort of things and actual story, story for reading. So there was a whole barrage, whole heap of these readers that were directed at enhancing the individuals. So from the very outset that was part of the program (Interviewee #5).

Another interviewee shared this:

The underlining philosophy that drives the work, well it's about empowering people. That is, as good as the formal system is there are people who slip through and there are people who miss their opportunities for various reasons especially among girls for pregnancy and so on. And for others, a number of them, for economic reasons, they didn't have the parental support and so they went to school very irregularly. They are big persons now, they want a job and they can't get a job because, they want a skill and they can't get a skill because they can't pass the entrance exam. So what drives us really, our philosophy, is to train people, to empower them. Our tag line, there is a tagline for JFLL now, which says, "Changing lives forever", that is what we try to do (Interviewee #7).

He shared further:

You know what, we do all the bank forms and the different organization forms we use them as part of our training. Filling out forms is something most people don't like to do and more so person that can't read ... so we take those things into consideration when we train our students. We are training them to function not only in their social skill but in their economic environment because to go to the bank and use their bank card is economic, you are using it to get your money and that kind of stuff (Interviewee #7).

Interviewee #5 sums up this developmental function of adult education as practiced by JAMAL very well by saying that their teaching to read and write symbolized by "darkness into light" is:

more than being only productive but it was also a matter of your humanity, not just productive but how to be a human, that basic human right, human dignity, human everything that is tied into that, the maximization of your human potential.

A further finding is that adult education increased the capability of thousands of individuals to access education resources for their continuing education. In the case of JAMAL/JFLL we see where thousands of Jamaican youth and adults were enabled to access other educational resources as a result of their participation in the basic literacy program. This was evident in the government's program of "reclamation education" in which adult literacy formed the first tier in a three tier program (JAMAL/JFLL Case Report, p. 107). In this way persons were given the opportunity to build on their literacy skills other skills in areas such as agriculture and other trade skills. Successful individuals could then move on to learn more "sophisticated skills" (JAMAL/JFLL Case Report, p.

102). Many JAMAL students were facilitated in accessing education in institutions of higher learning such as the Excelsior Community College in Kingston, Jamaica.

Another way in which persons were enabled in accessing continuing education was through the Grade 9 Academic Upgrading Program offered by JAMAL. This program provided remedial education for adults who did not meet the entry requirements to the Human Employment and Resource Training Trust, National Training Agency (HEART Trust, NTA) academies training programs. Successful completion of the upgrading program meant that persons were now qualified to sit the HEART entry test to pursue the skills training course of their choice (JAMAL/JFLL Case Report, p. 115). One interviewee's comment highlights the success of this JAMAL/HEART upgrading program:

We have that kind of arrangement where the people that go to HEART and did the entrance exam and failed, they would send them over to us and we would bring them up to the level and send them back to HEART. As a matter of fact, in JFLL we do a national exam, the students do a national exam called the "Achievement Survey" and this year at our center...all level four students who sat the exam passed, 100% passed and the person from HEART, Placement Office said "send over the list" because they're going to take it from there. So there is a very strong relationship between us and HEART, where once we bring them up to the level HEART is willing to take them (Interviewee #7).

From a CAST/UTech perspective the structuring of its program facilitated access to a diversity of groups because it allowed a relatively open entry and allowed several

entry and exit points on vertical and horizontal tracks of study (CAST/UTech Case Report, pp. 76 - 77). This commitment to access was further articulated in the Strategic Plan of 1998/2000 where it states that; accessibility to UTech's programs will be enhanced by provisions such as:

- Formal assessment of prior learning and experiences obtained both within and outside the formal education system. This led to the establishment of the Prior Learning Assessment (PLA) Unit which was responsible for the implementation of the PLA scheme, "which was designed to provide an alternative admission option and also to grant advanced standing based on the applicant's extra-institutional learning" (UAR4, p. 11). In essence PLA gives academic credits to adult learners for learning they attained through work and life experiences.
- Linkages with the Secondary School system to improve the transition from secondary school to University.
- Bridging mechanisms for students from the vocational education system. This was implemented through a formal agreement between UTech and the Vocational Training and Development Institute attached to the HEART Trust NTA to upgrade technical teachers in the then Technical Education Department at UTech.
- Using open learning and distance education modalities. Distance Education was introduced in 1996 with the aim of achieving greater scope, quality, cost effectiveness and feasibility in program delivery to off-campus students.
- Establishing outreach centers and continuing education programs in off-campus locations.

- Franchising of lower levels of diplomas and degree programs to Community Colleges (CAST/UTech Case Report, p. 78).

The final finding related to the first theme is that adult education changed the education system in Jamaica and in so doing fostered a more educated society. The education landscape in Jamaica was directly impacted by the development and work of CAST/UTech. One interviewee made the following observation:

The critical initiative, in terms of technical education and technology, the extension of that began through a mission from the UK establishing the Kingston Technical High School and the Jamaica Institution of Technology and CAST which was to play significant roles in Jamaica's educational system. The extension of technology in the academic area spread from Kingston Technical High School to an associated development along with CAST where six other technical high schools were established, there was Vere, there was St. Elizabeth Tech, there was St. Andrew Tech and Holmwood and Dinthill were converted to technical high schools. So that was the expansion at the high school level. The tertiary beginning was in fact the beginning at Jamaica Institute of Technology which lasted for a year and a half when about 1959 a Mr. Jones from England came JC Jones came and recommended that Jamaica Institute of Technology's name was not appropriate and so it was changed to the College of Arts, Science and Technology which linked it with many such technical colleges in Great Britain which essentially was the springboard for that development but also linked it with a lot of parallel developments in the post war colonies in the same way that

UWI and the early Commission established University of Education. So the critical mission established a parallel technological system not only in Jamaica but also in the Caribbean (Interviewee #1).

The interviewee noted further that:

What you're talking about is technology in development. You're also talking about technology and its social implications because it would have impacted on people's understanding of what education should be. When you think of how education has changed from this Classical tradition of Latin and Classics and so on to an increasing expansion of education into other avenues and these are critical features that both impacted on the sociological value system as well as the educational value system. Not only educational value systems but educational direction so that in some ways this was good for education in that it challenged, if you like, the academic track to another track and that challenge remain to this day.

What do we mean by technology and what do we mean by vocation? We also talk about technical and vocational education and vocational in that term tends to mean hands on woodwork, carpentry, machine shop that sort of stuff. But vocation has to come out of that narrow definition into the vocation of law, and engineering, medicine, nursing, teaching and so on so that we have tried to move vocation as a career, as an option and not as a restrictive element of being able to saw and clay and weld (Interviewee #1).

Another interviewee said:

I think that they have been focusing more and more on Technical/Vocational Education as a major direction for a number of our youths, significant number and the fact that we have led in that area at the tertiary level and we do so most cost effectively I would think that the whole national thrust in terms of Technical Voc., competency based education has really come out of UTECH, (when I say UTECH, you know its CAST/UTECH), out of the way in which we have shaped the educational process and implemented it (Interviewee #3).

In support of this one of the documents reviewed noted that since the establishment of CAST the technical education sector has been firmly established within the society (Sep. Rev.).

Theme 2: Social Changes impact on Adult Education

Theoretical Proposition: Societal changes will trigger a response from adult education.

The first finding related to this theme is that as Jamaica moved from an agrarian society to an industrial society the nature and type of adult education provision changed. Adult Education became more technical in focus. The establishment of CAST demonstrates a response on the part of the government to the changes that were happening and the changes that were anticipated in the near future in terms of the economic focus of the country. Jamaica was in the early stages of industrialization and so it was imperative that the manpower to support this economic system was trained and available.

Adult education provision was closely linked to industry needs such that the development of new industries and businesses led to an expansion of education programs. This was very evident in the case of CAST/UTech. The close link between programs at CAST/UTech and the changing needs of industry was noted in these comments:

As a government owned and funded institution UTech's mission and policies are expected to be guided by and responsive to national policies. UTech is expected to be aware of and be responsive to national and regional issues and policies concerning human resource and socio-economic development (USP2).

Originally established to provide courses ranging from technician through the middle management and professional there has been the need to review the programmes in order to assess their viability and where necessary to introduce new developments which are critical for active growth, community involvement and satisfactory academic and professional levels of competence (CAST/UTech, Case Report, p. 82).

One of the strengths of - I think - the CAST/UTECH model in terms of program development, is the close relationship between the institution and the professions. I think the model still holds that programs are developed alongside a professional grouping and professionals. The advisory committee, has a strong say in terms of developing programs and guiding the institution in terms of what to drop, how to enhance it, I think it is a very strong model (Interviewee #2).

We're very, very much demand driven. I spoke to you earlier about our new degree program in Animation, Forensic Computing. Now I think you'll agree with

me and I hope I'm not being too big headed by telling you that we in terms of forensic computing we are the leaders... we are right up there at the cutting edge (Interviewee #3).

Many of the programs were developed when people came and said they needed training in this area we would look around and look what the job market was developing and say "well hey maybe we ought to go into that area" and this is one of things about the institution. In fact it is multi-leveled, multi-aged and multi-programming. So that you would have Certificates, Diplomas, Degree Programs, Post graduate programs now later on as University which was geared to different level of skills, and different levels in the work place. Not everyone can be an engineer, there are technicians, there are technologists and so on.... So you're gearing your training, and in fact, I think it's well talked about, education and training as partners in the courses of human development (Interviewee #1).

One example of how programs responded to the changing needs of industry may be seen in the development of the Certificate program in Aerospace Technology and the 4-yr Civil Aeronautics program which were developed by CAST in response to the need of the national airline at the time, Air Jamaica. The program Aerospace program was offered in collaboration with Air Jamaica to train the maintenance technicians that were needed by Air Jamaica to undertake tasks related to aircraft fleet maintenance within the country. The Civil Aeronautic program prepared the students to obtain the Civil Aeronautics Authority's License in the different specializations (Prin. Rep.24).

A second finding under this theme is that advancement in technology has propelled major changes in how people live interact and do business. Adult education's role in enabling Jamaica's response to technological change is evident in this comment:

I know we have produced the man power, for the workplace, how effective has that been? I think we have been effective. I think that when we look at the changes, especially in the last 20 or so years, the changes taking place in the workplace.....Take ICT for example, and look at the ease with which we have moved into this new dispensation. At all levels, from the youngsters up to our level we have managed that transition quite well as a society. I think education can take some of the credit in dealing with that (Interviewee #2).

Additionally, as Jamaica became more technologically advanced the provision of training in computer related areas became more evident in CAST/UTech's program offerings. The institution offered courses such as Basic Electronics, Digital Circuits and Computer Technology. A computer Centre was officially opened at the institution in 1976 and among its offerings was a course in Electronic Data Processing in which students were prepared to sit the British Computer Society Examination (Prin. Rep.19). The services of the Centre were soon expanded to include an evening modular Computer Studies Certificate course, and a course in Computer Assisted Drafting (CAD). By 1988 a highly demanded full-time Diploma course in Computer Studies was being offered. This was later upgraded to a Degree in Computer Studies and Management Studies. CAST/UTech's response to the changes that were taking place in terms of technological

advancement went beyond program content. It also influenced how courses were delivered. This was evident in this comment:

Changes in terms of the workplace demands certainly would have influenced changes at UTECH. Again, primarily in terms of the level of preparation of the graduates and the type of preparation of the graduates. When I mentioned student centered learning the point is that, I think both in terms of acknowledging the availability of the ICT technological solution to accessing information and in terms of using that facility to encourage learning, working in teams, research, problem solving, we all agree that you can't sit down and teach, and that's the end of the class. It's a dynamic situation and that is arrived at from looking at the societal changes in terms of that kind of approach to learning and maximizing the use of it, you know (Interviewee #2).

Additionally, UTech now boasts an Office of Distance learning (ODL), which is evidence of its acknowledgment of the advancement in technology and how it impacts where adult students learn and how they learn. The Office of Distance Learning coordinates all distance learning initiatives. The long term objective of the unit is to provide multiple options for diverse students to pursue their academic studies in various blends of traditional face-to-face, online or other technology-mediated learning environments (UAR8).

Speaking about changes in the JAMAL program one interviewee identified two ways in which changes were brought about in the provision and practice of JAMAL/JFLL's programs. He said:

One way is societal changes influencing and the other is recognizing, identifying the need for change. So for instance I would think the new mathematics program was the recognition within for a need to change meaning to say mathematics is a problem so let's do something to improve the way we teach our mathematics.

When we look at change, something like the new workplace program was recognizing that there is an issue in society, that this illiteracy thing is creating an issue in society. It's recognizing that productivity, national productivity is being hampered by the level of illiteracy in the society (Interviewee #5).

Another interviewee said:

You have new industries or new companies coming on stream, for instance many years ago you hear about a Digicel or some other company that has come on stream and some of these companies need people to work and some of the people in the society could not get the work because they are not trained in that area or they did not have sufficient training to get the job and so we just have to do that. Technology is also a reason why we have to adapt to some changes, why we have computer centers ... if you go to the work place they may ask you to figure out something on the computer and so we have to change to meet those needs (Interviewee #7).

A critical component of JAMAL/JFLL's program in recent years is the Computer Application Software for Empowerment which started 2002 with significant financial support from the Carreras Foundation. The main objective of the project was to "provide computer education for JAMAL Level IV graduates and marginalized adults in the

society-at-large” (JAMAL/JFLL Case Report, p. 116). Learners are taught to use Windows computers, Microsoft Office Suite, Internet browsing, and Internet research including Google. These courses are taught at the basic, intermediary and advanced level. The expected outcome of this program is that participants would acquire the basic competencies that would “equip them to: benefit from computer-aided instruction in continuing their education; and utilize opportunities for personal socio-economic advancement in an age where the use of technology predominates” (JAR). This is evidence of JAMAL responding to the growth in technology that continues to occur in modern day Jamaica and within the global context in which Jamaican must operate.

Another finding is that changes in Government commitment and support as demonstrated in policy and funding emerged as a critical factor impacting the provision of adult education. At the founding of JAMAL the government had declared its commitment to the agency pledging millions of dollars in support of the literacy project (JAMAL/JFLL Case Report, p. 102). Since the agency was largely government funded the financial commitment of the government was in large part responsible for the success achieved in over 200,000 illiterate Jamaican being made literate in within eight of the establishment of the agency up to 1982 (JAMAL/JFLL Case Report, p. 105). However, it was noted that changes in Government in Jamaica 1981 coincided with economic difficulties and structural adjustment resulting in drastic cuts in government spending (JCS). The cut back in government spending as noted in the Contextual Report had a negative impact on the social institutions such as housing education and health. The effect on JAMAL was felt when the budgetary allocation to the agency was dramatically

reduced by approximately 50%. As a result JAMAL had to dramatically reduce its staff from 900 in 1983 to 117 in 1989 (JAMAL/JFLL, Case Report, p. 105). A further change in JAMAL's program was the shift away from its original campaign approach to adult literacy education to a demand driven approach. As such 'literacy on demand' became the new thrust with fixed points of delivery in Adult Education Centres (JAMAL/JFLL Case Report, p. 106). This was largely due to reduction in funding particularly during the periods of structural adjustments in the 1980s.

In the case of CAST/UTech the cost of operating and maintaining the College was the sole responsibility of the Government of Jamaica from the beginning. A responsibility it carried out with assistance in terms of personnel and equipment from various national and international agencies (CAST/UTech Case Report, p. 70). Consequently the tuition fee for studies at CAST in the early beginnings was minimal (Prin. Rep. 6). This enabled many working class Jamaican's to access tertiary education. This situation was further supported with the implementation of the system of 'Free Education' which meant that the students at CAST and other institutions were no longer required to pay tuition fees. They were also eligible for a boarding grant. At CAST the students continued to pay an ancillary fee which provided a cushion for the institution against the deficiencies that resulted from the shortfall resulting from the cut in student fees (CS3). However given the serious financial challenges that faced the country in the 1980s this free education policy was officially reversed in 1986 against much protest from the student bodies and the public (CS#).

Further, a 1994 ministry of Education publication outlined the Ministry's Framework for financial contribution to the tertiary sector. This Framework showed that primary education had the first call on the public funds with a reduction in the proportion of public funds that is allocated to tertiary education. The document noted that funding for tertiary education should be a shared responsibility between the state, the corporate sector, students and educational institutions. These statements led UTech to change its financial strategy leading to an increased reliance on student fees and private sector support (CAST/UTech Case Report, p.71). This financial approach has been maintained to the present. The 1995 -98 Strategic Plan recorded UTech's sources of funding as follows: Government subvention – 51%, (this percentage represents 9% of the total tertiary education budget) Percentage from students 35%, Percentage from other sources – 14%. This focus on students' fees was a major shift in position from earlier years when as in the 1970s when the economy was buoyant, inflation was low and the currency strong fees at the institution was very low (CAST/UTech Case Report, p. 71).

Theme 3: Development Themes Guiding the Practice and Provision of Adult Education in Jamaica

Theoretical Proposition: Adult Education will be influenced by the prevailing philosophies existing within its context.

One finding under this theme is that industrialization was a dominant development theme impacting adult education in Jamaica. One of the areas of interest in this study is the development themes that impacted the practice of adult education in Jamaica over its 50 year history as an independent nation. The contextual analysis shows

that during the first ten years after Jamaica gained its independence from British colonial rule the main development thrust was the industrialization of the country. Consequently as noted in the section under the Jamaican context the emphasis was on moving away from a focus on agriculture to a more diversified economy. This new focus was captured in the 1957 –1967 National Plan for Jamaica which described that time as a period of increased industrialization. Special emphasis was placed on building the country's economy through a program of "industrialization by invitation" which concentrated on attracting foreign capital to Jamaica through the provision of incentives by way of tax concession, tariff protection and industrial space (Boyd, 1988; Keith & Keith, 1992 as cited in the Jamaican Context). Much emphasis was given to the export sector, particularly the bauxite /alumina industry (Boyd, 1988). A critical enabling factor in the success of this industrialization agenda was the availability of highly trained and skilled workers who were able to satisfy the manpower needs. As has been shown earlier in this section of the study this situation resulted in a strong focus on building the work related skills and competencies of the adult population both in the formal sector and the non-formal adult education sector.

Another finding is that Democratic Socialism influenced both the content and practice of adult education at one point in time. Following this period of strong focus on industrialization Jamaica came under a brief period of Democratic Socialism (Jamaican Context, p. 50). The main economic strategy was the nationalization of businesses, the restriction of imports and the implementation of price controls (Jamaican Context, p. 50). From a CAST/UTech perspective this political perspective did not seem to impact the

program content of the institution. Its main effect on CAST/UTECH was in terms of the increased access to post-secondary education it afforded many arising from the institution of the system of free education. However, it was during this period that the JAMAL Foundation was established. The concept of equality of opportunity set the stage for a national agenda to eradicate illiteracy which was seen both as a personal impediment for those so affected as well as a stumbling block to economic progress (JAMAL/JFLL Case Report, p. 101). Therefore in this context of nationalization education for the populace was seen by the government as necessary for developing an informed public that would be able to participate in the governance process (Jamaican Context, p. 63).

A third finding under this theme is that Liberalization foregrounded the kind of skills and knowledge that adult education engendered in Jamaica. With the failure of Democratic Socialism to take root in Jamaica the ensuing government reverted to a more liberal economy. Consequently there was a reversal of the economic policies that were implemented under Democratic Socialism. This resulted in an opening up of the market for imports, the removal of price controls, and the privatization of businesses (UPS1) thus setting in place an economic agenda of liberalization. The aim was to increase businesses to facilitate economic stability and growth. At the same time the structure of the labor force was changing with services accounting for a large proportion of the labor force. This liberalization agenda continue to guide the current economic decisions in Jamaica

There was no evidence of any direct impact of this liberalization agenda in terms of the content of programming at CAST however it must be noted that the most recent annual report of the institution reviewed for this study showed that the Faculty of

Business and Management had the largest student population within the University (UAR8). This is evidence to a high demand in the service areas which is in keeping with the demand of the labor market. The actions of the government during this period also included the reversal of the free education system and the implementation of a “cess” that is user fee for tertiary education. This resulted in an intense period of unrest as this meant that many persons would no longer be able to afford post-secondary education (CAST/UTech Case Report, p. 71).

On the other hand the decision to adopt a liberalization agenda severely impacted the work of JAMAL. It was during this period that the work of JAMAL was restructured to give focus to the government’s program of illiteracy prevention which implemented compulsory education among children 6 – 11 years. This meant a diversion of both staff and funds from the adult literacy program to support a process of monitoring school attendance. This situation severely impacted the effectiveness of the literacy programs. The situation was further exacerbated by the effects of the structural adjustment that took place during this period which resulted in a 50% decrease in the budget for adult literacy education (JAMAL/JFLL Case Report, p. 105). Additionally, it was during this period that JAMAL was required to give greater focus to skills training for youths. The aim was to make students’ employable as well as literate. Again, the focus of the agency being shared.

Further, the delivery mode for the adult literacy program was changed from the mass campaign approach to one of “literacy on demand” became the new thrust. This

evidenced a shift in focus from adult literacy being a national priority to one in which persons accessed the service as they saw the need.

Theme 4: Types of Adult Education Programs Developed Since Independence

Theoretical Proposition: As society progresses different types of education programs emerge in response to identified needs within the society.

A key finding under this theme is that the dominant adult education program that was evident in both the cases when taken together is education for work. That is education to prepare people for work or to participate in the economic life of the country. As shown under the first theme discussed technical education and professional training were critical components of adult education provision in the two cases. The aim was to build the human capital that would support the country's economic development.

In the case of CAST/UTech a System Analysis done in 1992 identified some of the institutions major strength which serves as evidence to its strong focus on education for work. Among the strengths were the institutions ability to respond to national and regional workforce needs through professional and industry groups and providing technical education related to the world of work for mid-level management and technicians for both public and private sectors (CSA).

Additionally, the 1995/1998 Strategic Plan noted that the institution had distinguished itself by emphasizing programs of direct value to careers in industry, commerce and the professions. The professional areas addressed by UTech are many and varied but may be captured in terms of its Faculties and Schools which include:

Engineering and Computing; Business and Management, Education and Liberal Studies, Built Environment, Health Sciences, Science and Sports and Law.

In the case of JAMAL/JFLL skill areas Taught included: agriculture, auto-mechanics, candy making, cookery, Crochet, dressmaking, home management, lithographic, machine embroidery, needle craft, plumbing, repairs to small home appliances, straw work, table waiting, refrigeration, basket craft, masonry and steel fixing, industrial sewing, pastry making, cosmetology, machine shop operation, carpentry and joinery, woodwork, housekeeping for villas and apartments, sewing and pattern drafting, upholstery, show making, handicraft, hat making, home economics, home management, soft toy making, data processing, bamboo craft, fabric design, catering, bartending, auto-body repairs and auto mechanics (JAMAL/JFLL Case Report, p. 108).

Education for life was found to be another area of emphasis. In terms of education for life the literacy education program which was within the remit of JAMAL is most demonstrative of this. As stated in its mission JAMAL sought:

to provide, through non-formal education programmes and in partnership with other organizations, an opportunity for Jamaicans to improve their literacy, numeracy and life skills and thus to empower them to participate more fully in the determination of their economic, social and cultural development (JAMAL/JFLL Case Report, p. 104).

Life skills training was seen as an essential part of the education that would enable to Jamaican adult to function effectively and participate more fully in the affairs of their own lives. One interviewee stated that:

The outcome of education is to make the person more productive, a better person to live both in the social environment as well as the economic environment. The outcome should enable the person to function in a more desirable way in the society, so that the young man who I refer to earlier, he used to cut peoples lawn and he has moved as a result of the training he has moved from a man who cut a lawn to a man who has a permanent job as the chief plumber. So that should be the outcome. The outcome should result in improving in the status of the person's life (Interviewee #7).

CHAPTER 6

Discussion

Theme 1: Education, Social Change and Development

The findings of the study revealed a number of ways in which adult education enables the change and development in Jamaica. These include: building the human capital, facilitating social mobility, enabling hundreds of persons to become literate, facilitating personal development, enabling access to continued education, and creating a more educated society. These findings are discussed in detail in the following section.

Building the human capital.

One of the findings under this theme is that adult education served to build the human capital needed to drive the economic development of Jamaica. In the case of CAST/UTech the institution was established to train the higher level technicians and middle management personnel for the productive sector of the country's economy. The courses highlighted a heavy focus on programs that were directly related to the manpower needs of the society. Therefore the emphasis was on programs that were of direct value to careers in industry, commerce, government and the professions. In fact the leadership of the institution saw it as their responsibility to help to drive the development of the nation, to help create health, wealth and knowledge (UAR8). The institution was constantly recognized for its responsiveness to national and regional workforce needs providing technical education that is related to the world of work. In the case of JAMAL it was argued that the economic advancement of the country was directly related to the people's ability to read and write and to access continued education as well

as acquire gainful employment once they became literate. Additionally, the workplace literacy

Both cases highlight a clear acceptance of the view that education and training is an important antecedent to economic growth. This contribution of education and training to the overall economic development and growth of a country and to an individual's economic future has been long recognized (Becker, 1975; Schultz, 1961, 1963; Spencer, 1998). The human capital theory which captures this relationship between education and training and economic growth was established in the early 1960s. The theory likened the skills and knowledge that people gain through education and training to a form of capital resulting from deliberate investment (Spencer, 1998). As a capital good, education is deemed helpful in developing the human resource that is needed to support economic and social transformation. Human capital theory therefore believes that both individuals and society derive economic benefits from investment in people (Sweetland, 1996). The theory argues that the productivity and efficiency of workers are increased through education that increases the level of economically productive human capability. It therefore makes the assumption that formal education is instrumental and necessary to improve the production capacity of individuals (Olaniyan & Okemakinde, 2008). According to the theory education and schooling represent a deliberate investment that prepares the workforce and lead to an increase in the productivity of both individuals and organizations (Nafukho, Hairston & Brooks, 2004).

Whereas this research did not measure productivity levels the fact that before CAST obtained University status its certificates, diplomas and degrees were being asked

for in equal standing with University qualifications was an indicator of how employers considered the programs offered by the institution. Further feedback from employers as indicated by statements such as:

CAST's special contribution to the economic life of the region has been the preparation and training of men and women who brought to the workplace transferrable and applicable knowledge and skills, along with an awareness of the unique demands of the workplace. They represented a marriage of academia and the shop floor, and were welcomed as such by the region's employees (CAST/UTech, Case Report, p31).

The notion of human capital and its economic focus is however not without its critics. Nesbit (1999) for example argue that this emphasis on workforce education maybe seen as supportive of the capitalist elite thus maintaining the status quo rather than building community. In a similar vein Bouchard (2006) contended that when used as an ideological base for public policy human capital theory only serves to further the neoliberal agenda. Olaniyan and Okemakinde, (2008) spoke of the theory's "failure to account for a growing gap between people's increasing learning efforts and knowledge base and the diminishing number of commensurate jobs to apply their increasing knowledge investment, especially in developing countries" (p. 160). Such a gap was evident in the Jamaican context as pointed out in the various economic and social surveys conducted by the Planning Institute of Jamaica, a situation which led to mass migration and brain drain.

In line with the critics Miller and Murray (1977) noted that emigration was greatest among professionals, skilled, and educated workers in search of a better way of life. However this to my mind does not negate the effect of adult education in building the human capital rather it points to the fact that education alone does not act to create economic development. In this regard the observations made by Ellis (1992) are important. She stated that adult education is only one of a number of inputs that influence and determine meaningful development at both the individual and societal level. She identified a number of other inputs such as the economic wellbeing of the individuals, the opportunities one has to meet their financial needs, access to proper nutrition, good health, adequate housing and recreational facilities.

Education, social mobility and social change.

The findings of this research indicate an interrelationship between education, social mobility and social change. One of the early writers on this interrelationship Havighurst (1958) made the point that social mobility is an important aspect of social change. He further noted that education is a major factor which affects the degree of upward social mobility within a society at both the individual and group level. In a similar vein Breen (2010) argued that inequality in educational attainment is considered by sociologists to be a major cause of inequality between people in their chances of social mobility.

Social mobility speaks to the movement of people as individuals or in groups from one class of origin to another. Several writers have examined the idea of education's effect on social mobility (Breen 2010; Havighurst, 1958, Richardson, 1977).

Breen (2010) found that the expansion of educational opportunity promoted greater social mobility. This supports the position put forward by Levi (1989) who argued that “educational reforms increased poor people’s access to a key element of social mobility” (p. 264). Richardson (1977) underscores this idea of education supporting social mobility noting that education has typically been viewed as the key to individual social mobility as well as an essential ingredient for the smooth and efficient functioning of an industrialized and bureaucratic society. Writing from a Caribbean perspective Nettleford (1995) noted that for most persons in the region education is seen as the only means of social mobility. As such he argued that education was a necessity for the success of any development strategy within the region.

Speaking about education’s influence on social mobility and social change Havighurst (1958) suggested that the main issue lies in a distinction between the functional and symbolic value of education. Education is considered to be of functional value when it is used directly to accomplish a purpose. As is the case in the Jamaican context adult education from both CAST/UTech and JAMAL/JFLL served to build the capacity of the participants to fill the increasing demand for skilled workers, technicians, and professionals. This demand resulted from the fact that Jamaica was becoming less of an agrarian society having adopted a modernization agenda through a program of “industrialization by invitation” (Jamaican context). The growing bauxite, manufacturing, construction, transportation, communication and tourism industries were requiring more and more persons with technical training. The relevance of the skills and training provided by CAST/UTech led to an increasing demand for its graduates and

consequently the ready employment of its graduates allowing them to leverage greater positions in industry and professional groups. Consequently there was a clear link established between the type of education provided and the effective functioning of the emerging industrial society. The need for skills at all levels was further emphasized by the fact that JAMAL which was earlier established to eradicate illiteracy was restructured to include the provision of lower level skills training. Newly literate individuals were provided with the opportunity to learn new skills to make them marketable thus increasing their standard of living. Again these findings find support in the work of Havighurst (1958) who noted that a change in the type of industry or the introduction of new industries within a society creates the climate for upward mobility.

On the other hand education has a symbolic value when it is used as a symbol of status. Richardson (1977) related this symbolic perspective of education to the British elitist ideology of education in which only a small proportion of society is seen to have the talent to pursue post compulsory education. This type of education he further argued inhibits individuals of lower economic background from entry into higher education. Consequently access to tertiary education becomes a symbol of status. This was exactly the kind of situation that existed within the Jamaican society into which both institutions studied in this research were established. Only a few privileged individuals from families in the upper classes were able to access University education due to the inadequacy of their pre-university education and the lack of financial resources to do so.

Havighurst (1958) contended that given certain conditions functional education serves to promote both individual and group upward mobility. These conditions include:

training persons from lower status to occupy position in higher level occupations thus enabling them to enter the *new middle class* for example the short-term, industrial training offered by CAST aimed at upgrading the skills and management techniques of persons who moved up from the shop floor to become supervisors (CAST/UTech Case Report); the provision of scholarships and grants to poor but capable youth; or a system of free education at the secondary and higher education levels. These conditions all existed in the Jamaican context thereby supporting the views of Havighurst.

UTech clearly stated that its students were drawn from the middle to lower income levels of the society (CAST/UTech Case Report). Additionally, this target group benefitted from the period of free education implemented between 1973 and 1986. Sangster (2011) reported that CAST/UTech placed emphasis on helping students access funding for their course of study through their scholarship office. He noted that in 2006/7 a total of JA\$ 89 million was spent on grants and scholarships. At the group level Havighurst (1958) noted that governments may use a functional type of education usually at the primary and secondary level as a means of upward group mobility for members of the working class. This he argued would serve to increase the productivity of this group and provide additional income that would be used to raise their socio-economic level.

Literacy adult education and personal development.

Adult literacy was found to be a major component in the adult education landscape of Jamaica. An important debate in the adult literacy arena relates to the question of the purpose of adult literacy programs. In respect of this question Wickens and Sandlin (2007) reported two schools of thought as identified in literature emanating

from two of the most influential organizations on education policy and practice internationally, UNESCO and The World Bank. Adult literacy is viewed on the one hand from a functional perspective and on the other from a socio-cultural perspective by The World Bank and UNESCO respectively.

From a functional perspective adult literacy is seen as grounded in basic functioning and survival and is related to the labor market and individual productivity. Functionality is therefore an economic concept. While from the socio-cultural perspective adult literacy is based on personal and social improvement and literacy is seen as a source of freedom for the individual and social change.

In the Jamaican context adult literacy as implemented by JAMAL/JFLL embodied both these ideas albeit with a stronger emphasis on the functional perspective. At the outset of the literacy program illiteracy was viewed as one factor that restricted individuals' freedom, self-reliance and potential for achieving true independence. These ideas ascribe a socio-cultural orientation to the literacy program, as described by UNESCO. But the government also spoke of illiteracy as blocking persons from the normal avenues of economic opportunities thus impeding the economic advancement of the country indicating a functional perspective to adult literacy. Other statements such as "persons who were unable to read and write were blocked off from most of the normal avenues of economic opportunity and suffered tremendous disabilities" (JAMAL/JFLL Case Report, p. 108), that "the chance of economic advancement for the country was also blocked which therefore left the entire society condemned to a lower standard of living than was necessary" (JAMAL/JFLL Case Report, p. 108), and that "given the fact

that the greatest resource that Jamaica has is its people then success in beating illiteracy was seen as removing one of the stumbling blocks to economic power” (JAMAL/JFLL Case Report, p. 108), further endorsed a functional perspective to adult literacy at the national level. The Jamaican situation showed that adult literacy became a policy priority for both economic growth and social development (Pont, 2004).

In the practice of adult literacy in Jamaica the adult literacy program focused not only on developing the skills of reading and writing but also had a strong life skills component wherein persons acquired knowledge that enabled them to function responsibly in a social, familial, communal manner in the society (JAMAL/JFLL Case Report, p. 117) as well as to develop desirable attitudes towards work and productivity, societal problems, occupational interests and toward other members of society (Mag3). Here again adult literacy was shown to have more than just a functional purpose in economic terms. However, the strong emphasis on the Literacy and Work-skills program which sought to make students employable as well as literate by taking them through various levels of academic training and then sending them to a skills training institution supports the functional agenda. This functional view was further evidenced through the workplace literacy program delivered by JAMAL/JFLL in collaboration with the private sector.

Adult literacy could also be argued from the perspective of its personal as well as national benefits. Ensuring a literate adult population in Jamaica was described as critical in enabling the full participation of citizens in the life of the country and therefore to the process of national development. Again the life skills dimension of the JAMAL/JFLL

program spoke to a focus on the benefits for the individual. The Balanced Self-Determined Behaviour (BSD) lesson for example sought among other things to encourage participants to develop belief systems which support their rights and the rights of others, practice using positive affirmation of themselves, reduce excessive feelings of guilt, anger and anxiety, and increase the repertoire of positive behaviors available to them (JAR13). The program further facilitated values exploration among learners, developed their capacity for giving and receiving effective feedback; helped them to explore the dimensions of trust; enabled an appreciation of helpful and hindering group behaviors; and the development of creative problem solving. All these benefits on the personal level had the potential to effect national change as a cumulative by-product of the personal development of the citizens. This link between adult literacy and individual and national development has been recognized by writers such as Asha (2000) who argued that literacy involves preparation to earn a living, to live and work with others, and to contribute toward the development of both self and the community. He noted therefore that literacy must encompass among other factors the power to realize aspirations and its effects on social change as well as the general skills, abilities, and knowledge required for a productive life. He reasoned further that adult literacy speaks to a level of ability that enables an individual to enter the workforce and function effectively.

Enabling access to continuing education.

One of the spin offs to education has been found to be increased aspirations among the beneficiaries of education. The findings of this study supports this view in

that in both the case of CAST/UTech and JAMAL/JFLL it was found that persons having gained one level of training went on to obtain higher levels of education. In addition to the various actions of CAST/UTech such as franchising arrangements with Community Colleges, Prior Learning Assessment and its flexible entry and exit system one statement speaks very clearly to this idea of enabling access to continuing education:

The point should not be missed that many CAST graduates in the past, through access to universities in the Caribbean, North America, Europe and elsewhere, have become technologists that are widely respected in their fields. The University of Technology now has the opportunity to do for its students what it previously relied on other universities to do (Sep. Rev).

In the case of JAMAL/JFLL adult education opening access to continuing education was seen in programs like the three tier reclamation education intervention which saw persons moving from a basic literacy program that took them to the point where they were capable of undertaking further training in basic skills in things like agriculture or other skills. This then opened the door to training that was described as “a far more sophisticated level” of skills training at Trade Centres (JFP). The Literacy and Work Skills program and the Grade 9 Upgrading program are two other examples of how adult education provided through JAMAL/JFLL created access to continuing education for its graduates.

The issue of access to education is an important one because as Conrad (2001) argued access is undoubtedly critical to the social and economic well-being of society. Very often in the literature access is discussed in terms of time and location (Conrad,

2001; Pont, 2004) for which technological advancement has provided an answer through online learning technologies (Conrad, 2001). However in this study access is being viewed from the perspective of students' readiness as affected by socially constructed barriers such as class as well as institutional factors such as matriculation requirements.

Given the history of education in Jamaica which gave rise to a two-tiered elitist system based on class in which the poor and marginalized were denied access to good quality primary and secondary education then it is not unreasonable to conclude that access to post-secondary education which requires a degree of mastery of basic and general education (Miller, 2000) would have been denied. Miller noted:

that students from the lower socioeconomic categories are concentrated mainly in the types of secondary schools that allow limited access to tertiary education either through not being articulated with the GCE/CXC examination systems or through poor performance if they are so articulated (p.132).

Miller (2000) further reported that "several studies have found a strong positive correlation between social class and performance in the GCE and CXC examinations. It is against this backdrop that adult education became a 'savior' for many illiterate poor Jamaicans as they learned to read and write through JAMAL and moved on to gain access to skills training. For others whose access was denied to tertiary education due to insufficient qualifications the flexible entry points offered by CAST along with its program of progressive qualification going from Certificate to Diploma to Degree made it possible for many to access further education. These factors were strengthened by the fact that education programs offered by both institutions were government funded which

kept the cost down and that they also benefitted from the period of free education that was implemented at all levels of the education system between 1973 and 1986.

Another lens through which to view adult education's role in enabling access to continuing education is through the increased aspiration that comes with exposure to learning. If as noted by Himelfarb & Richardson (1991), "poverty is not simply a lack of money –but- also a world-view, or sub-culture which leads to a kind of cognitive poverty – a world with narrowed horizons, limited aspirations and inadequate knowledge and social skills" (p. 309), then adult education as shown in this study has the potential to broaden the horizons and expand the aspirations, knowledge and social skills of the marginalized leading to increased access to continued education.

Adult education fostering a more educated society.

If the benefits of post-secondary education are measured in terms of the incremental earnings accrued to individuals only (Ravinder, 2008) then we deny the potential of adult education to enrich society in various ways one of which is the facilitation of a more educated society. In Jamaica the shift from a purely academic track as offered by the University of the West Indies to a technical track offered by CAST/UTech facilitated an expanded tertiary education system. This means that an increased percentage of the population was facilitated in obtaining tertiary education. Additionally the work of JAMAL/JFLL enabled hundreds of thousands of individuals to become literate. A more educated citizenry offers much benefit to society. These include the fact that those with more education tend to be employed and live above the poverty level. This lessens the need for welfare programs (Ress, 2013). Through the adult

education provision of the institutions studied many adults were better able to access jobs lessening the need for welfare expenditure by the government. Seya (2005) supports this notion arguing that even adult basic education equips beneficiaries with essential literacy and numeracy skills which in turn yields high rates of investment and enhanced productivity. Further economic benefits include the idea that an educated population provides a more attractive climate for investment (Seya, 2005).

In addition, to the economic benefits the better educated enjoy better health, thereby reducing healthcare costs. They are less likely to commit crimes that translate into fewer dollars spent on correctional facilities and rehabilitation activities. The better educated are also more likely to be well-informed and capable of thinking critically and making a positive contribution to society. Further, education even basic literacy also enables citizens to participate in the political life of the country through voting (Seya, 2005).

Theme 2: Social Changes impact on Adult Education

The findings showed that adult education in Jamaica was influenced by three major societal changes since its independence. First was the process of industrialization in which the country transitioned from an agrarian society to an industrial one; second, was the fact that Jamaica became more technologically advanced over the years and third, the reduction in expenditure on post-secondary education due the constraining circumstances of structural adjustment and fiscal challenges. These are discussed in the following section.

Industrialization and adult education.

As Jamaica moved from an agrarian society to an industrial society the nature and type of adult education provision changed. Adult Education became more technical in focus.

One of the significant changes that took place in Jamaica is the country's transition from an economic dependence on agriculture to a diversified program of economic activity. This program of diversification was grounded in a system of industrialization by invitation and supported by an export-oriented manufacturing industry. This period in the 1960s saw the expansion of the mining industry for bauxite, and other elements and there was the introduction of new businesses in manufacturing and processing. The tourism sector was strengthened and the construction industry was also growing. Agriculture was no longer the lone economic activity (Ellis, 1992). In fact agricultural production was reported to have declined 15% between 1963 and 1970 (Miller and Murray, 1979).

Industrialization brought with it the need for persons skilled in areas that were not previously relevant under the agricultural system. Additionally, where a need existed for skilled personnel under the agricultural system, those skills were usually imported. However, industrialization demanded a steady flow of adequately trained and qualified personnel to fill the various roles and functions that emerged with the increasing manufacturing activities. This situation gave rise to the need for persons equipped with the requisite knowledge and skills to support the diversification program and to increase and maintain high levels of productivity. This called for a special type of education and

gave rise to a post-secondary system of technical education which was supported by CAST in the formal system and JAMAL in the non-formal system.

Industrialization affected both the demand and supply of adult education in Jamaica. The focus of tertiary education prior to industrialization was the development of the intellect. Such education program focused on the needs of the elite classes such that only a privileged few were afforded that opportunity. The idea was that the children of the privileged classes who would have benefited from the elite preparatory and high school education would be trained to be the leaders of the society. Those were the persons who were afforded post-secondary education with the exception of the teachers colleges which attracted students from the lower classes who in many instances saw teacher training as a 'stepping' stone to advancement and to a change in their socio-economic status (Evans, 2009).

With the advent of the new independent status as the Jamaican government sought to establish its nation state and to grow the economy the focus on industrialization led to a major change in the provision of post-secondary adult education. There was a demand for more technically trained individuals. This led to a strong focus on work education aimed at supplying the skills required based on the technological imperatives of industry (Jarvis, 1996). As was found by Crookson and Hooks (2012) in this context of industrialization the needs of businesses and industry formed the core of the curriculum. Additionally, adult education during this period of industrialization tended to emphasize the importance of science and technology in national development as evidenced in the types of courses offered particularly in the case of CAST/UTech.

As discussed earlier in this paper CAST was tasked to prepare personnel to occupy positions as high level technicians and supervisory managers. Additionally CAST operated a strong system of short-term, part-time and evening programs in specific areas of work aimed at training, retraining and upgrading the existing workforce. JAMAL on the other hand was tasked with preparing persons with entry level skills in various vocational areas. In this regard adult education was seen as a critical foundational activity that would enable the country's progress by increasing the technical competence of the population.

In line with these findings Ellis (1992) reported that post-secondary education, technical and vocational training is usually focused on ensuring that the population was equipped with the wide range of skills that were needed to support the production process. She made the observation that adult education is important during times of rapid economic growth, industrial development and technological change when the introduction of new skills and the upgrading of existing ones are vital to increase productivity as well as the amount and quality of production. Seya, (2005) made a similar observation opining that adult education is one of the key building blocks of human development.

On the supply side the growth in national income and the productivity of businesses enabled the government to support the provision of adult education both at CAST/UTech and JAMAL/JFLL particularly during the period prior to the 1980s before the first structural adjustment program was introduced in the country. As will be discussed later in the section the structural adjustment programs of the 1980s and the

1990s resulted in a reduction in government expenditure on social services including post-secondary education both in the formal and non-formal education sectors (JCS).

Advancement in technology impacting adult education.

Advancement in technology influenced changes in adult education program offerings of both institutions. Technological change effects changes in society owing to the fact that advances in technology impacts the way people live, work and do business. Ellis and Ramsay (2000) observed that the restructuring of economic activity and the increase use of technology demands changes in patterns of employment. As production becomes more dynamic there is need for persons skilled in operating complex information systems and in analyzing data (Ellis & Ramsay, 2000). Consequently, changes in technology usually lead to a demand for highly skilled technical and professional training (Chandra & Sharma, 2004; Ellis & Ramsay, 2000). In line with these ideas as Jamaica became more technologically advanced and shifted away from a manufacturing economy to a service, information and knowledge economy the provision of training in computer and information, communication technology related areas became more evident in the program offerings of both CAST/UTech and JAMAL/JFLL. In this regard adult education was enabling the adult learner to both develop new skills and upgrade others to be able to function within the changing market place.

The impact of the changes in Government commitment and support for adult education

Changes in Government commitment and support as demonstrated in policy and funding emerged as a critical factor in the provision of adult education. An important

finding related to adult education in Jamaica is the critical role of government support and funding. In the face of increasing costs and pressures the government of Jamaica has sought to rationalize its approach to education financing (Pres. Rep.1). This has had a major impact on the financing of adult education. Primary education is given first priority and there is a constant reduction in funding to adult education programs. By way of illustration the most recent adult literacy survey showed that the literacy rate which was between 40 and 50% in the early 1970s had been reduced to approximately 10% in 2008 (See Appendix H). However, the majority of those persons became literate during the first 8 -10 years of the program. That period coincided with major budgetary allocations to the program by the government and a clear government policy that articulated the government's commitment to eradicating illiteracy. On the converse was the period of shortage of funding allocated to the agency resulting from the IMF imposed structural adjustment program which had a negative impact on the literacy program. During this time JAMAL found it difficult to provide the quality teaching it desired. There were no funds to effect essential repairs to equipment, there was inadequate staff and they were unable to recruit and retain the services of some categories of workers owing to uncompetitive salaries. JAMAL became challenged to acquire premises to accommodate offices and classes in some areas and there was a shortage of both desks and chairs. Arnove and Torres (1996) concurred with this finding regarding the impact of structural adjustment on adult education provision. They reported that in Latin America structural adjustment policies recommended by the World Bank affected the financing of various adult education provisions to various populations. They went on further to argue that the

gain made in extending education to populations that were previously neglected had been substantially eroded by the introduction of market-based policies designed to decentralize and privatize education.

In the case of UTech, whereas the institution is a national institution whose main source of funding is the government of the country it was found that there has been a steady decline in the total subvention to the institution over the years. This has led to a change in the financial strategy of the institution in which the institution has had to draw on other sources of funding. Consequently funding for the institution is approached as a shared responsibility between the state, the corporate sector, the students and the institution. This has had serious implications for the accessibility of the programs at the institution as students are being asked to take on more and more of the costs related to their program of study. As found by Crookston and Hooks (2012) this increase in tuition is posing overwhelming challenges for less affluent families. In order to access post-secondary education the less affluent in the society must depend on loans or scholarships. This means that as noted again by Crookston and Hooks post-secondary education comes with indebtedness.

This situation suggests that critical to the success of adult education programs in effecting change in society is the need for government support both in terms of policy and funding. In line with this position Crookston and Hooks (2012) suggested that government appropriation may have been the most effective means for adult education institutions to affect local employment. However, Levi (1989) surmised that “in addition

to economic resources a committed government is needed to sustain social reform designed to meet the majority's basic need" (p. 264).

Theme 3: Development Themes Guiding the Practice and Provision of Adult Education in Jamaica

The research findings reveal that adult education was influenced by two development themes: liberalization and democratic socialism. These two themes are discussed in the section below.

Liberalization and adult education.

Liberalization and neoliberalism foregrounded the kind of skills and knowledge that adult education engendered in Jamaica. The findings of this research reveal that Jamaica has for most of its post independent years adopted a free market, liberalization approach to its economic policy. This is with the exception of the period between 1974 and 1980 when an attempt was made to establish democratic socialism within the society. The free market strategy of between 1962 and 1973 grew out of an endogenous program representing a systematically organized program for socioeconomic growth. This strategy was seen as central to the country's process and the means to attaining economic viability (Nat. Plan; Ind. Plan). However the post 1980 free market agenda could be described as, at least up to the 1990s, an exogenous agenda given that the liberalized market policy was a conditionality of the structural adjustment program which came as a stipulation for loan funds received from the International Monetary Fund. It meant that the education agenda particularly of adults would be aimed at serving the goals of this liberalized market.

The implications for education resulting from this policy of liberalization, reinforced by the establishment of the World Trade Organization and the General Agreement on Trade Services (GATS), is an orientation of the programs towards the needs of business and an emphasis on the development of the human resources necessary to support economic growth (Walters and Watters, 2001). This was evident in the cases examined in this study. Both CAST/UTech and JAMAL/JFLL demonstrated a strong focus on building the skills and knowledge needed for persons to function effectively on the job. In support of these findings Walters and Watters (2001) noted that neoliberal theory is currently the dominant international policy on development and Dull (2012) made the observation that many writers believe that neoliberalism or the ethos of the free market has been the driving force influencing the teaching and learning agenda of contemporary societies. In the current research the case of JAMAL highlighted a striking evidence of adult education being affected by the neoliberal thought that participation in education is the responsibility of the individual and not the government (Bowl & Tobias, 2012). This is seen in the shift from a campaign approach to literacy to the literacy on demand approach (JAR5).

Another key factor supporting the prevalence of education for work goes back to the idea of functionality of the education provided as argued by Havighurst (1958). The idea is that workforce education is seen as education that is valued in a neoliberal society in that it serves the function of building the capacity of individuals to fill the increasing demand for skilled workers, technicians, and professionals.

Democratic socialism and adult education.

Democratic Socialism influenced both the content and practice of adult education at one point in time. For a brief period between 1974 and 1980 Jamaica came under the influence of the dogma of democratic socialism. The government of the day announced that democratic socialism would be the model of governance that would direct the path of Jamaica during that time. This had some positive spin-offs for adult education as illustrated by the two cases. The introduction of the system of 'free education' under this regime led to an opening up of access to formal post-secondary. This enabled many under-privileged persons to access postsecondary education. Additionally, it was during this period that the literacy campaign program was established and given the kind of focus and strong government backing that enabled over 200,000 persons to be made literate over a period of eight years. In keeping with Democratic Socialism's philosophy of an egalitarian society that is based on social justice and equality of opportunity adult literacy was viewed as a negative factor within the society that hindered thousands of Jamaicans from actively participating in the life of the country.

Therefore under democratic socialism adult education in Jamaica took on a social justice and equalitarian role conveying a strong humanistic flavor. As evidenced both in practice and in pronouncements made concerning the adult literacy's potential to, release persons self-confidence and to empower, there was a strong a belief that the literacy program should lead to the personal growth and development of the participants. These are concepts that concur with the articulations of proponents of the humanist approach to education (Darkenwald & Merriam, 1992; Jarvis, 2004; Plumb & Welton, 2001).

Theme 4: Types of adult education programs developed since independence

Two main types of education programs were evident in the cases studied. First was education for work and secondly, education for life.

Education for work and economic development.

Work education focuses on those forms of adult learning which are seen to be directly related to the country's economic development (Ress, 2013). Two major indicators from the findings of this study that point to the need for workforce education are the period of industrialization and the liberalization agenda. The adult education programs offered by the two institutions studied evidenced a strong focus on work skill development. In the case of CAST/UTech, as the country sought to diversify its economy the institution started out providing training for high level technicians and middle management personnel in various industries and businesses. As the work environment emerged into a knowledge-based and skill intensive work environment demanding workers who are multi-skilled and have an appropriate general education that enables them to be more flexible and adaptable to new workplace opportunities and challenges (Government of Jamaica, 1996) CAST evolved into a University that trains professionals, scholars and future leaders of the society (UAR1).

JAMAL/JFLL transitioned from an agency that gave full attention to the eradication of illiteracy to one that enabled the development of literacy skill coupled with work related skills in several skill areas. JAMAL/JFLL's current focus on lifelong learning signaled by its name change also indicates a belief in the need for continued

education or skill development. This supports the view that schooling, that is compulsory education, cannot prepare individuals for their life work (Harvey & Williams, 1990).

Harvey (1998) in his study of adult education in the Caribbean also found that corporate business and human resource development (HRD) were the subsectors that received most attention in adult education within Jamaica and the rest of the Caribbean region. The objective of work education programs is to help individuals to acquire the necessary skills and competences to facilitate their productivity and ultimately the productivity of the country (Ellis, 1992). Therefore the discussion on education for work must also be linked to our earlier discussion on building the human capital within a modernization and neoliberal environment. Education for work is all about building the human capital that supports the neoliberal focus of education for economic development (Dull, 2012; Walters and Watters, 2001). Education is therefore seen as “a productive investment that is essential for economic growth (Walters & Walters, 2001, p. 103). The literature shows that this economic focus of adult education has dominated the work of adult educators in recent years as neoliberalism with its emphasis on free market economies prevails. Within an ethos of neoliberalism, competition is encouraged and so the success of business is seen as being linked to the development of a highly competitive workforce (Centko, 1998). In agreement with this view the World Bank (2000) advocated that technical and higher education is important for countries not to be left behind in a global economy particularly one based on knowledge.

Education for life.

UNICEF defined "Life skills" as:

psycho-social abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life. They are loosely grouped into three broad categories of skills: cognitive skills for analyzing and using information, personal skills for developing personal agency and managing oneself, and inter-personal skills for communicating and interacting effectively with others.

Life skills training was seen as an essential part of the education that would enable the newly literate Jamaican adult to function effectively and participate more fully in the affairs of their own lives. The early national goals and objectives of the education and training system of Jamaica indicated that the social life and development of the people were of primary concern to the government. As such among the programs offered by JAMAL/JFLL was life skills. This type of education was deemed useful in enabling the adult to adjust to the rapid changes in the society and the impact those changes would have on their personal lives. In keeping with this line of argument Ravinda (2006) argued that purposeful education is one that enables the individual to understand and study real life situations and to develop and generate confidence in the mind of the individual which would in turn provide a strong base for nation building.

Conclusions

The main purpose of this research was to demonstrate how adult education has enabled the process of economic and social change and national development in Jamaica through a critical review of two cases of adult education provisions in Jamaica since it gained independence in 1962. The research was guided by one main research questions

and three sub-questions. The conclusions are presented in relation to each of the four research questions that guided this research.

Main Research Question

How has adult education enabled the Jamaican society to adapt to social changes and development of the country since it gained independence?

The findings of this research suggest that whatever the initial intent of adult education programs, they have the ability to instigate social movement within a country. This idea is supported by the work of Darkenwald and Merriam (1982) which suggests that education should aim for personal growth of individuals while promoting a better society. The findings showed that adult education facilitated social change at the individual, organization, institutional and societal levels. At the individual level adult education was found to be a tool for personal growth and development, and for building persons individual agency, that is enabling the individual to act independently and to make their own choices. In this regard adult education releases the powers of the individual to better act within their social context and to respond to the various issues that arise (Darkenwald & Merriam, 1982). Adult education serves to increase the individual's capacity to transcend the limitation placed on them by social structures such as race and class. Through participation in adult education many persons are able to rise above the boundaries of their class of origin and attain social mobility resulting from an increased capacity to access better paying jobs thus increasing their standard of living. Further, adult education facilitates an increase in personal aspirations which results in persons pursuing higher levels of education.

At the organization level the impact of adult education may be seen from an economic perspective. Adult education is critical in supplying the workers with the skills needed in the workplaces. Through its training and retraining of individuals adult education plays a key role in facilitating organization productivity and consequently the economic development of the country. These findings contradict the argument that in developing countries investment beyond basic education benefits the individuals but does very little for the economic or social benefit of the nation (Bouchard, 2006). Rather as pointed out by Harvey (1990) adult education was illustrated to be one of the critical factors in national development especially in the periods of economic and social change. However as Havighurst (1958) suggested the type of education that is offered is critical. A functional adult education that fits the individual for a purpose that is valued in society will undoubtedly be seen as a worthwhile contributor to the development of that society. On the other hand symbolic education which speaks to education for status would tend to be more beneficial to the individual who gained higher knowledge than to the society as it would have less economic value and more status value for the individual.

Adult education can foster major shifts at the institutional level. In this study at the institutional level adult education fostered major a shift in the educational system of Jamaica. The inclusion of technical education at the post-secondary level both in the formal and non-formal system triggered greater acceptance of the area of study resulting in greater support for technical education at the secondary level. Additionally, this led to a major shift in social constitution of those who were able to attain post-secondary education and thus an expansion of post-secondary education provision.

It can be argued that changes at the societal level result from the collectivity of the changes at the individual level. For example arising from the mass literacy program and the expanded access to formal post-secondary education the Jamaican society became a more educated society. Additionally, there were some changes in terms of the race and color of those who constituted the new middle class as a result of the new entrants who gained access through education and training and higher paying jobs. Further, adult education was instrumental in enabling the transition from an agrarian society to an industrial one. However it must be noted that education's economic and social impact will increase based on its relevance to the economic and social agenda of the society.

Research question 2

How has societal changes informed the adult education programs and practice in Jamaica?

Major shifts in the social conditions of society impacts the accessibility of adult education, what is taught and what people learn within a given time and context. These changes include socio-economic shifts, technological growth, national budgetary and fiscal constraints due to economic fluctuation and structural adjustment, as well as changes in the socio-political ideology. Changes in government support both ideologically and financially affects the impact of adult education by virtue of the fact that such changes affect both access to and supply of adult education as well as the quality of the adult education programs. Further, in keeping with Morrish (1972) adult

education was found to play a critical role in times of planned change as demonstrated in the transition from a colonial, agrarian society to an independent, industrial society.

Research question 3

What development themes have created the animating vision that has guided adult education programming and practice in Jamaica since it gained independence?

Both the adult education provision and the implementation practices are influenced by the prevailing developmental theme at a given time within a society. These different notions of development ascribe different aims to adult education and therefore have varying outcomes.

Research question 4

What educational programs have emerged based on the perceived purpose of adult education within the Jamaican society at various points in time?

Within a context of industrialization and liberalization the purpose of adult education is seen as building the human capital. That is preparing people to function in the workplace. Consequently a strong technical based education focused on supplying workplace demands is evident within a liberalized market. Adult education is therefore seen for its economic benefits. By contrast in a context of democratic socialism adult education is viewed differently. Adult education is valued as a means of facilitating social justice aimed at ensuring that all citizens are equipped to function effectively within their context.

Implications

The findings of this study suggest that education's economic and social impact will increase based on its relevance to the economic and social agenda of the society. Therefore if as shown in this study investment in the development of human capital through adult education is essential for developing the requisite labor force and the managerial skills and capability to enable the country to remain competitive in the global economy then as the Jamaican context and the world becomes more and more entrenched in a knowledge-based economic structure and more technologically dependent an effective systems need to be in place to "ensure that individuals with the requisite high-level skills are produced in sufficient numbers to meet the growing demand for knowledge workers, especially through higher education" (Ress, 2013, p. 202). The implication here is that as the economy changes from production based to knowledge-based less value will be placed on traditional technical education subjects and so the impact of institutions like UTech may be less felt in the society if they do not make the necessary adjustments to their program offerings. UTech would therefore need to respond to the new knowledge-based economy to ensure that its courses of study remain relevant. It is heartening to note that UTech is already responding as evidenced by the changes that have taken place at the institution critical among which is the institution's upgrade to University status as well as the expansion of its program to include those areas that have a greater focus on service such as Information technology and Communication, health sciences and business (finances, accounts etc.).

In the case of JAMAL/JFLL the response to the changing needs of the context is evident in the renaming and restructuring of the agency in recent years and its new focus on lifelong learning rather than only on literacy, numeracy, remedial and basic education. The agency also has a strong emphasis on technology education aimed preparing participants to function effectively within the knowledge based, technological context.

Another implication arising from the study is the need for government to continue and increase its support ideologically and financially for both the non-formal and formal adult education provisions particularly in areas that are seen to be relevant to the needs of the society. This is in keeping with the finding that where government support was evident both financially and ideologically adult education programs had greater reach and therefore greater potential to impact and to lead to social change. Additionally, in line with the idea of the importance of government support for adult education the government should also seek to establish and fund new adult education programs that will address those issues that negatively impact national development within its current context chief among those being crime and violence.

The findings of this study showed a sustained focus on adult education's role in building the human capital of the nation. This means that the major focus will be on building the technical skills and competencies of the citizens to satisfy the needs of the labor market. One implication of this focus on technical aspect of adult education is the tendency to deemphasize other roles of adult education for example the affective role of education. That is education's role in building the social and cultural capital of the citizens that should lead to a more socially integrated society. One in which there is the

exercise of civility, mutual caring, and civic social order which is critically lacking in contemporary Jamaica but is an essential ingredient in ensuring a civilized society as well as sustainable economic growth and development. A further implication arising from my arguments here is that this type of socializing education should not be left for the family only and further that development in these dimensions must extend beyond the compulsory school years.

The study further shows that much has been accomplished by way of education however Jamaica's economy continues to struggle in a precarious, dependent state. The implication here is that despite the findings of this study that education facilitates social change, education as noted by Appiah and McMohan (2002) is not the only or may not even be the major cause of national economic development. Clearly there are other contributory factors which must be addressed to ensure the economic growth that is desired.

Recommendations Arising from the Study

The vision statement in the National Development Plan of Jamaica, Vision 2030 sees Jamaica becoming the place of choice to live, work, raise families and do business. This statement along with the related national goals: Jamaicans are empowered to achieve their fullest potential; the Jamaican society is secure, cohesive and just; Jamaica's economy is prosperous; and Jamaica has a healthy, natural environment presents a major challenge for the country. This is so because among the outcomes of this envisioned society are the following: a healthy and stable population; world-class education and training; effective social protection; authentic and transformational culture; security and

safety; effective governance; stable macro economy; an enabling business environment; strong economic infrastructure; sustainable management and use of the environmental and natural resources; hazard risk reduction and adaptation to climate change, sustainable urban and rural development (Planning Institute of Jamaica, 2009). However, Jamaica is confronted with several serious social factors that are having a debilitating effect on our progress as a nation. Critical among these is crime and violence, coupled with lawlessness; increasing poverty for many; worker exploitation; feelings of exclusion among many citizens; and environmental degradation (UNDP YEAR). Former Prime Minister P.J. Patterson reported that successive governments have been grappling with the issue of crime and violence since the 1970s (as cited in Franklyn, 2004). However if we should consider the budget presentations in the House of Parliament over the period 1992 – 2002 as an example, the efforts to tackle this monster have mainly been focused on remedial actions either through the structure and operation of the police force or at the level of legislation (Franklyn, 2004). Emphasis was not given to preventive measures such as a different type of education than the traditional skills training.

As I reflect on the finding that adult education has the capacity to facilitate social change at the individual, organization, institutional and societal levels I think of the developmental challenges that face contemporary Jamaica and how the society needs to change. The question is what kind of education will result in the kind of change that is required to facilitate a fully democratic, just, peaceful, egalitarian, and sustainable society? My recommendation is for an education agenda that would counter the individualistic nature of economic education and advance instead a balanced perspective

of individual growth within a context of community. I am recommending a deliberate and planned education approach particularly for young adults grounded on the progressive humanistic principles of personal autonomy, interaction, dialogue, respect for the views of others, tolerance for diversity and cooperation. My argument is that this type of education would serve to engender a spirit of cooperation and interdependence that would go a long way in helping to curb the negative factors identified above and play the central role in establishing cohesion and harmony within the local context of mistrust, violence and aggression. This approach to education targets the affective domain, and seeks to develop the psycho-social aspect of our people. Central to the approach would be a process of self-transformation as Manley (1990) called for. The outcome of this kind of education would be citizens who demonstrate at the individual level a balanced sense of self, self-confidence, self-respect and self-worth and at the interpersonal level mutual respect, and civility. Persons who are less prone to indifference, neglect, crudity, vulgarity, and who are less inclined to solve their differences through acts of violence (Franklyn, 2004). At the national level the ends of a just, free, decent and civilized Jamaica would be enabled (Franklyn, 2004).

In keeping with the findings of this study that adult education programs that enjoy government articulated commitment and financial support are better positioned to create national impact my recommendation is that this education intervention be implemented at the national level with the full backing of the government. Failure to take on this agenda will be in the words of a former Prime Minister, P.J. Patterson “at our peril” (Franklyn, 2004, p. 232). Whereas such an education agenda should be infused in all our technical

education and skills training programs my recommendation for a non-formal education program with the kind of dedicated focus that has been given to education for work and literacy education. The mechanism is already there by way of the National Youth Service which I believe presents an excellent means to deliver such a program given the target group of this program of young adults, ages 17 - 25 years old.

Another recommendation of this study arises from the recognition that adult education impacts productivity. Therefore based on recent reports that over 700,000 workers are in jobs for which they are not trained then I recommend that it is vital that the government continues to invest in the training and retraining of individuals. However, whereas public provision is critical in this process the recommendation is that a public-private partnership approach be maintained since the private sector stands to benefit from this process.

Additionally, the government should increase its efforts to ensure that all the adult population is literate and numerate as this will result in the recipients' personal development which has cumulative benefits such as increased social development, organizational productivity and ultimately national economic growth. Special emphasis should be placed on rural males as recent reports identify this category as the most uneducated and vulnerable group of the society.

Further, efforts must be made to increase the number of persons who are able to access post-secondary education as this will result in benefits for the individual, businesses and the society in general. These benefits are social, economic, and political. This means that care should be taken to reduce or remove those factors – institutional,

financial, and cultural that act as barriers to access and participation in post-secondary learning opportunities.

All these recommendations call for adult learning to be given policy priority in the country's development plan so as to facilitate both economic growth and social development.

Recommendation for Further Study

The following recommendation arises from the fact that the data used in this study represents the views of those in authority either as interviewers or writers of the various documents that were reviewed as part of the study. This means that the experiences and views of faculty for the most part and students have not formed a significant part of this study. I therefore recommend the need for studies that will capture the lived experiences of those who have benefitted from the adult education provisions in Jamaica particularly in terms of their perspective on the impact of that type of education on their ability to function effectively within the Jamaican society.

Additionally, it would be very useful to conduct a similar research looking at an expanded number of institutional cases both formal and non-formal particularly where it is possible to discern a difference in focus in the education provision than that of the two institutions studied in the current research.

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Appendix A**Letter For Access to the University of Technology.**

Shermaine Barrett, shbarrett@utech.edu.jm

Prof. the Hon. Errol Morrison
President,
University of Technology, Jamaica
237 Old Hope Road
Kingston 6

Dear Prof. Morrison,

Re: Permission to Conduct Study

I am currently a PhD candidate at the University of Minnesota, USA having been granted study leave from the University of Technology, Jamaica (UTech) to complete my studies.

By way of this letter I am seeking permission to use UTech as one case in a multiple case study in partial fulfillment of my PhD in Work and Human Resource Education specializing in Adult Education. The title of the study is “*Adult Education, Social Change and Development in Post-Colonial Jamaica*”. The purpose of the study is to demonstrate how adult education has enabled the process of economic and social change and national development in Jamaica through a critical review of multiple cases of adult education provisions in Jamaica since it gained independence in 1962.

My initial review of the development policies of the Jamaica over the past 50 years highlights the College of Art Science and Technology (CAST) now UTech as one of the key institutions identified for the preparation of a labour force that was trained and technologically progressive. This trained labour force was viewed as the essential input of human resource that was necessary to move the country from developing to a developed status. It is against this background that I have selected UTech as one of the institutional cases for my study.

This is a qualitative research consequently my methodology will include interviews of key stakeholders and review of various critical documents that speak to the goals, objectives and programme areas of the institution over the years.

I anticipate your positive response and look forward to the opportunity to further highlight the contribution of this noble institution to the development on our country.

Yours truly,

Shermaine Barrett (Mrs)
Senior Lecturer
University of Technology, Jamaica

Appendix B**Letter For Access to Jamaican Foundation for Lifelong Learning**

Shermaine Barrett, shbarrett@utech.edu.jm

February, 20, 2013

Dr. Alison Cross
Executive Director
Jamaican Foundation for Lifelong Learning
47b South Camp Road
Kingston 4

Dear Dr. Cross,

Re: Permission to Conduct Study

I am currently a PhD candidate at the University of Minnesota, USA having been granted study leave from the University of Technology, Jamaica (UTech) to complete my studies.

By way of this letter I am seeking permission to use the Jamaican Foundation for Life Long Learning (JFLL) as one case in a multiple case study in partial fulfillment of my PhD in Work and Human Resource Education specializing in Adult Education. The title of the study is “*Adult Education, Social Change and Development in Post-Colonial Jamaica*”. The purpose of the study is to demonstrate how adult education has enabled the process of economic and social change and national development in Jamaica through a critical review of multiple cases of adult education provisions in Jamaica since it gained independence in 1962.

My initial review of the development policies of the Jamaica over the past 50 years highlights the Jamaican Movement for the Advancement of Literacy (JAMAL) now JFLL as the agency charged with the mandate to execute a nation-wide literacy programme. This programme was geared at eradicating illiteracy among the adult population in Jamaica as part of the country’s development plan. The eradication of

illiteracy was viewed as an essential input that was necessary to move the country from developing to a developed status. It is against this background that I have selected JFLL as one of the cases to study as part of my research.

This is a qualitative research consequently my methodology will include interviews of key stakeholders and review of various critical documents that speak to the goals, objectives and programme areas of the institution over the years.

I anticipate your positive response and look forward to the opportunity to further highlight the contribution of the JFLL to the development on our country.

Yours truly,

Shermaine Barrett (Mrs)
Senior Lecturer
University of Technology, Jamaica

Appendix C

Sample Letter for Interview Participants

Dear

I am currently a PhD candidate at the University of Minnesota. I have been granted permission by the President of the University of Technology, Jamaica (UTech) to use the institution as one case in a multiple case study in partial fulfillment of my PhD in Work and Human Resource Education specializing in Adult Education. The title of the study is “Adult Education, Social Change and Development in Post-Colonial Jamaica”. The purpose of the study is to demonstrate how adult education has enabled the process of economic and social change and national development in Jamaica through a critical review of multiple cases of adult education provisions in Jamaica since it gained independence in 1962.

My initial review of the development policies of the Jamaica over the past 50 years highlights the College of Art Science and Technology (CAST) now UTech as one of the key institutions identified for the preparation of a labour force that was trained and technologically progressive. This trained labour force was viewed as the essential input of human resource that was necessary to move the country from a developing to developed status. It is against this background that I have selected UTech as one of my institutional cases for my study.

This is a qualitative research consequently my methodology will include interviews of key stakeholders and review of various critical documents that speak to the goals, objectives and programme areas of the institution over the years. I have selected you as a

key stakeholder who, given your years with the institution and the areas in which you have functioned would have detailed information critical to my study. I am therefore requesting your participation in this study by way of an interview.

I anticipate your positive response and look forward to the opportunity to talk with you about the contribution of UTech to the development on our country.

Yours truly,

Shermaine Barrett

Appendix D

Informed Consent Information Sheet

Purpose of the Study: The purpose of this study is to demonstrate how adult education has enabled the process of economic and social change and national development in Jamaica through a critical review of multiple cases of adult education provisions in Jamaica since it gained independence in 1962. The main research question is: How has adult education enabled the Jamaican society to adapt to social changes and development of the country since it gained independence in 1962?

Procedure: If you agree to participate you will be asked to engage in an interview looking at the role of the University of Technology, Jamaica in facilitating national development. The interview will take about 45 min. to an hour. With your permission I would also like to tape-record the interview.

Risks and Benefits: I do not anticipate any risks to you participating in this study other than those encountered in day-to-day life.

Voluntary participation: Your participation in this research is completely voluntary. You may refuse to participate or discontinue your participation at any time. There will not be any negative consequences should you decide not to participate.

Confidentiality: The record of this study will be kept private. Only the researcher will have access to research data and results associated with your identity. In the event that this research is published no personally identifying information will be disclosed.

Contact Information for the Researcher If you have any further questions about this research study please feel free to contact the researcher Shermaine Barrett, at Tel. 340-1552 or shbarrett@utech.edu.jm or shermainebarrett@gmail.com.

Appendix E

Adult Education, Social Change and Development in Post-Colonial Jamaica

Interview Schedule

Purpose of the Study

The purpose of this multi-case study is to demonstrate how adult education has enabled the process of economic and social change and national development in Jamaica through a critical review of multiple cases of adult education provisions in Jamaica since it gained independence in 1962.

1. What role do you think adult education should play in the development of a country?
2. Do you see adult education as a driver of social, economic and political change or a responder?
3. To what degree has your institution contributed to changes in national policy and direction?
 - a. To what degree are those policies followed?
4. Can you give an example to how national policy may have been shaped or changed by the contributions of your institution?
5. Can you give an example of how national policy has informed the programme offering of this institution?
6. Describe how the institution fosters the social responsiveness of its graduates.
7. Do you feel your graduates now and in the past have made contributions to the development of the country?
8. In what area/s of the country's development plan has the institution contributed the most?
9. What do you perceive is the philosophy on which the institution operates?
10. From the perspective of this institution what should be the outcome of education?
11. How would you say the programs offered within the institution changed over the years?
12. How has societal changes influenced the changes in the programmes delivered by your institution?

Appendix F

12/23/13

University of Minnesota Mail - 1304E31882 - PI Barrett - IRB - Exempt Study Notification



Shermaine Barrett MA <barre286@umn.edu>

1304E31882 - PI Barrett - IRB - Exempt Study Notification

1 message

irb@umn.edu <irb@umn.edu>
 To: barre286@umn.edu

Tue, May 7, 2013 at 11:01 AM

TO : parkx002@umn.edu, barre286@umn.edu,

The IRB: Human Subjects Committee determined that the referenced study is exempt from review under federal guidelines 45 CFR Part 46.101(b) category #2 SURVEYS/INTERVIEWS; STANDARDIZED EDUCATIONAL TESTS; OBSERVATION OF PUBLIC BEHAVIOR.

Study Number: 1304E31882

Principal Investigator: Shermaine Barrett

Title(s):

Adult Education, Social Change and Development in Post-Colonial Jamaica

This e-mail confirmation is your official University of Minnesota HRPP notification of exemption from full committee review. You will not receive a hard copy or letter.

This secure electronic notification between password protected authentications has been deemed by the University of Minnesota to constitute a legal signature.

The study number above is assigned to your research. That number and the title of your study must be used in all communication with the IRB office.

Research that involves observation can be approved under this category without obtaining consent.

SURVEY OR INTERVIEW RESEARCH APPROVED AS EXEMPT UNDER THIS CATEGORY IS LIMITED TO ADULT SUBJECTS.

This exemption is valid for five years from the date of this correspondence and will be filed inactive at that time. You will receive a notification prior to inactivation. If this research will extend beyond five years, you must submit a new application to the IRB before the study's expiration date.

Upon receipt of this email, you may begin your research. If you have questions, please call the IRB office at (612) 626-5654.

<https://mail.google.com/mail/u/1/?ui=2&ik=75ea28e037&view=pt&search=inbox&th=13e71ba2f1c6da76>

1/2

12/23/13

University of Minnesota Mail - 1304E31882 - PI Barrett - IRB - Exempt Study Notification

You may go to the View Completed section of eResearch Central at <http://eresearch.umn.edu/> to view further details on your study.

The IRB wishes you success with this research.

We have created a short survey that will only take a couple of minutes to complete. The questions are basic but will give us guidance on what areas are showing improvement and what areas we need to focus on:
<https://umsurvey.umn.edu/index.php?sid=94693&lang=um>

Appendix G

Table G1
Summary Showing Growth in Student Numbers 1962 – 2012

Academic Year	Fulltime	Part-time	Evening	Total
1962-1963	205	175	196	576
1965-1966	343	1282	-	1625
1969-1970	403	657	430	1490
1974-1975	1143	1095	563	2801
1979-1980	1626	928	790	3344
1984-1985	1944	837	1186	3967
1989-1990	2114	1130	1361	5416
1994-1995	2646	3740	634	6386
1999-2000	4580	3020	-	7600
2004-2005	4964	2966	-	7919
2011-2012				14000

Appendix H

Jamaica Adult Literacy Surveys

Every five years JAMAL commissions an adult literacy survey. The field work is conducted by the Statistical Institute of Jamaica (STATIN).

Table H1

Literacy Rates in Jamaica, 1970 – 2008

Year	Number of Persons Illiterate	Percentage Illiterate
1970	500,000	50%
1975	373,000	32%
1981	323, 725	24.3%
1987	278,578	18%
	Functionally illiterate (of this no. 201,246 or 15% were totally illiterate)	
1994	–	24.6%
1999	–	20.1%
2008	–	8.3%