

# EDUCATION, TRAINING AND EMPLOYMENT IN THE NEW ECONOMY: THE ROLE OF THE UNIVERSITY OF THE WEST INDIES\*\*

by

*Karlene Gordon  
Sir Arthur Lewis Institute of Social and Economic Studies,  
University of the West Indies  
Cave Hill, Barbados.*

*February 2007*

*\*\*paper presented at The Sir Arthur Lewis Institute of Social & Economic Studies (SALISES) 8<sup>th</sup> Annual Conference on the theme: **Crisis, Chaos and Change: Caribbean Development Challenges in the 21<sup>st</sup> Century**, at the St. Augustine Campus, UWI, March 26 – 28, 2007.*

*This paper examines the impact of changes in the World Economy on Caribbean economies, with special reference to labour markets and organisational structures. Some of these changes have already occurred, others are happening and still others are expected to surface. The increased competition arising from the phenomenon called Globalisation - fueled, inter alia, by technological advances, has forced Caribbean firms to re-think the way they 'do business'; if they are to survive these uncharted waters of intense competition. Governments, organisations and citizens have explored various initiatives in an attempt to either take advantage of any opportunities or cope with any threats arising from these changes. Among the many proposals advanced is the role that education, training and re-training can play in managing the by-products of a more competitive business environment.*

*While this discussion does not suggest that education and training is the only solution, it is thought to be a necessity in an increasingly competitive and rapidly changing market place. Countries are expected to find it easier to cope with the demands of doing business in the new millennium if it has, among other things, a well-trained labour force. This paper starts by looking at changes in the world economy and its resultant effects on the Caribbean. Some suggestions on how organisations can cope are then advanced and finally, a discussion on UWI's role as a 'possible captain' in negotiating these uncharted waters.*

## **Introduction**

Since the last two decades of the previous century, the world economy has been experiencing an increased globalisation of economies and markets on a scale and pace never before seen. This 'globalisation', fueled, in part, by economic, technological and socio-political changes, has led to increased competition in almost every aspect of the business environment. This increased competition has, in turn, created new opportunities and threats for firms. In order to achieve and maintain a sustainable competitive advantage, firms will therefore have to devise new ways of negotiating this changing environment. As firms attempt to manage the 'new' environment, they have sought to revise their culture and structure to those, which are felt to be more suitable for handling such rapid changes. These changes in the organisational culture and structure have led to the need for a different 'kind' of employee to operate therein. Labour Markets (LM) have therefore been affected. These changing requirements have resulted in some criticisms of the formal education system, as employers complain that graduates of these institutions are not meeting their needs (Robotham, 2000 & Severin, 2001).

Formal educational institutions are being asked to re-think the way they undertake education and training. Issues, such as the 'massification' of education, skills gap/mismatch and continuous or lifelong learning have received national attention by governments in most developing countries, including the Caribbean. They have also been discussed at various educational conferences hosted by international bodies such as UNESCO (1995 & 1998) and the World Bank (1995). Educational institutions are being asked to imbue their 'educational outcomes' (graduates) with different kinds of skills. Such skills are considered a necessity in what is now commonly referred to as a 'Knowledge-Based Economy' (KBE) or 'New Economy'. This refers to the increasing use of knowledge and other technical skills in the various production processes.

In its definition of a KBE, the Australian Bureau of Statistics (ABS) first makes a distinction between knowledge and information/data:

*There are a number of ways of viewing and defining knowledge. For instance, a number of authors distinguish knowledge from information (and information from data). Alan Burton-Jones (1999) defines knowledge as "the cumulative stock of information and skills derived from use of information by the recipient". He distinguishes knowledge from data (signals which can be sent by an originator to a recipient) and information (data which are intelligible to the recipient).*

ABS (2000, p.1).

Having made that distinction, the ABS then defines the term KBE:

*The term "knowledge-based economy" was coined by the OECD and defined as an economy which is "directly based on the production, distribution and use of knowledge and information" (OECD 1996). The Asia-Pacific Economic Co-operation (APEC) Economic Committee extended this idea to state that in a KBE "the production, distribution and use of knowledge is the main driver of growth, wealth creation and employment across all industries (APEC 2000).*

ABS (2000, p.1).

Although the Internet and other technological advances have made it easier to access information, it is the use of such information to create and advance knowledge that determines whether or not, an economy is knowledge-based. Massé et al (1998:39), defines KBEs in terms of the skills requirements of the major occupations within a country. They maintain that such an economy requires "higher levels of literacy, education, cognitive and communication skills".

First, this paper begins by looking at some of the major changes that have occurred in the Global Economy over the last two decades. Secondly, an examination of some effects on Caribbean organisations and the resultant impact on the Caribbean Labourer will be undertaken. Some of the skills required by workers in the New Economy will be identified and finally, an analysis of how UWI can help in addressing some of these issues will be offered.

## **Background**

The 'Washington Consensus' is among the many issues that have led to a renewed focus on trade liberalisation and outward looking, market-oriented policies. With the fall of most major socialist economies, various countries found it difficult if not impossible to chart any (successful) developmental path that did not take this route. There was no major alternative to the only remaining 'super power' (United States of America) and its

free market ideology. Countries thus found themselves having to abide by these guidelines or be left out of trade in the World Economy.

The issue of more liberalised trade was given 'legal' status with the advent of the World Trade Organisation (WTO) and fueled by technological advances. Businesses now found it easier to transport goods and information from one part of the globe to another. As the level of trade liberalisation intensified, corresponding increases were registered in the level of competition among and within countries and organisations. This increased competition meant that firms had to respond promptly to environmental changes. Given that the demand for labour is generally accepted to be a 'derived' demand (i.e. it depends on the demand for the products it is used to make), these changes in the environment will have implications for labour. In other words, any changes in the business environment will also have an impact on the demand for workers.

Kotter (1996) views the globalisation of markets as arising from four (4) major areas. He lists these as: technological change, international economic integration, maturation of markets in developed countries and the fall of communist and socialist regimes.

The crumbling of communist/socialist economies led to an increase in the number of market economies, resulting in increased competition amongst these 'old' and 'new' market economies. This factor, coupled with the maturation of markets in the developed countries caused both existing and new market economies to look outwardly for new investment opportunities. The focus of this outward looking stance was the economies of the 'developing' countries. These developing economies were seen as more conducive to investment because of factors such as lower costs, available pool of labour, new markets for products and a more welcoming political environment. The ability to increase the level and scope of foreign direct investment (FDI) by corporations in these market economies was supported by both technological and policy changes.

The General Agreement on Tariffs and Trade (GATT) later the WTO has been responsible for most of the policy changes regarding a less restrictive international trading arena. While the increasing level of international economic integration has risen mainly from policy changes at the level of the GATT and WTO, it has also been supported by technological changes. Technological advances have led to remarkable improvements in communication, transportation, production processes and even the dissemination of information. These improvements have made it easier and cheaper for organisations in the so-called developed countries to establish offices in other countries and yet maintain control of these entities without relocating large numbers of staff from their head offices.

Some firms have chosen to respond to these challenges by adopting a 'worldwide' outlook, becoming multinational corporations (MNCs), to take advantage of opportunities arising in other countries. This has led to changes in both the structure and culture of those organisations that choose such a path. Firms operating on a domestic scale will also face new challenges as a result of the increased competition;

both from these MNCs and from the increased trade in physical goods and services. These 'domestic' firms will therefore have to implement the same types of organisational changes if they are to survive this 'onslaught'. It is generally accepted that most organisations will have to change the way they currently do business as they seek to cope with this 'new economy'; but what will the organisation of the future look like?

## **The Organisation of the Future**

In this arena of rapid change and increased competition, firms must learn to react more quickly to either opportunities or threats – this requires a lessening of bureaucratic procedures in the decision making process. Organisations will thus become flatter - having fewer layers between the senior management and their counterparts in line management. For decision-making powers to be more widespread, information will have to be made available to a wider group of persons so that armed with the facts, they can make the correct decisions. If employees are expected to participate in the decision-making process, training becomes critical in ensuring that information is used wisely in this process.

Organisations will also be expected to respond proactively to changes in the business environment. Responding quickly will no longer be enough, with this increased competition, firms will have to learn to anticipate changes so that they can survive and maintain their competitive advantage. Failure to do this will result in other firms taking advantage of the opportunities that have arisen. Alternatively, it could lead to an inability to effectively manage current and future threats to their existence.

Access to technology is another aspect of the firm's ability to stay competitive. Technology allows firms to be proactive in their planning and decision-making; to become more efficient<sup>1</sup> and effective<sup>2</sup>; to react quickly and to reduce costs in the medium to long-term. In its drive to become and remain competitive – firms will need to access the relevant technology for their industry or industries. They will therefore need workers who can competently use this technology or be able to quickly learn how to do so.

Employee costs are usually among the largest costs in most firms and there is a need for cost containment as firms attempt to lower prices and stay competitive. Organisations will therefore become leaner as firms seek to trim any excess resources, especially labour. They will require employees to be multi-skilled as they seek to combine tasks and even different jobs in one person or position. This will cause employers to seek out employees who are thought to be more "trainable" and more capable of working on their own or with minimum supervision.

---

<sup>1</sup> Efficiency refers to doing things in a manner, that minimises waste or doing things the "right" WAY.

<sup>2</sup> Effectiveness refers to undertaking action that will result in the desired outcome or doing the "right" THING.

While no one is willing to predict what, exactly, will happen in the business environment, most practitioners and academics agree that the only thing certain is change. It follows that firms who have rigid or bureaucratic structures and cultures will not be able to survive, as they will not be able to react quickly to changes in the environment, (Harvey et al, 1997). Implicit in this notion is that firms will need to have employees who can fit into this culture of less bureaucracy and more autonomy. Employees, who are able to quickly respond to change (as required by the environment), will also be a necessity in the organisation of the future.

In short, organisations will have to adopt what is known as a 'learning posture'. As things evolve and change rapidly – their continued survival will depend not only on their ability to change but also on their ability to learn, forget and re-learn. Since humans drive the production processes in most organisations, employees of such organisations will also have to adopt a learning posture. Hence, continuous/lifelong learning will be a central aspect of their lives along with other skills; these will be discussed in another section of this paper.

### **The Impact on the Caribbean Employee**

Like its compatriots in many other countries, the Caribbean employee will find the job market a riskier place (Morley, 2001 & Harvey et al, 1997). In addition, Harvey et al (1997), highlight the non-linear career paths that will become a 'feature of working life' in the 21<sup>st</sup> Century. This means that workers will have to accept that the concepts of a linear career progression or a "job for life" have ceased to exist. Rather, they may change career paths, between and within firms, more frequently. Indeed some studies show that job tenure in the United Kingdom has fallen on average from seven (7) to four (4) years, (Morley 2001). Even within the same jobs, certain skills might become obsolete and new ones will have to be acquired or learnt. It has already been established that workers in the future will have a more uncertain future than did their counterparts of the past (IEE, 1998).

This insecurity in the labour market may arise from attrition, the failure of old businesses or the emergence of new ones, the phasing out of certain skills and products based on changes in technology or market conditions. While no one is certain what, exactly, will happen in the labour market in the future, most practitioners and academics agree that the only thing certain is change (Harvey et al, 1998). Employees, like firms, will need to be flexible and invest in continuous training, as skills become obsolete for their current jobs. Additionally, such training could help in acquiring new skills for future jobs.

As labour laws make it more difficult or expensive to get rid of employees, firms may choose to forego hiring full time or permanent workers and instead utilise part-time or contract workers along with not replacing workers who leave. In addition, there have been calls for formal education to place a greater emphasis on entrepreneurship

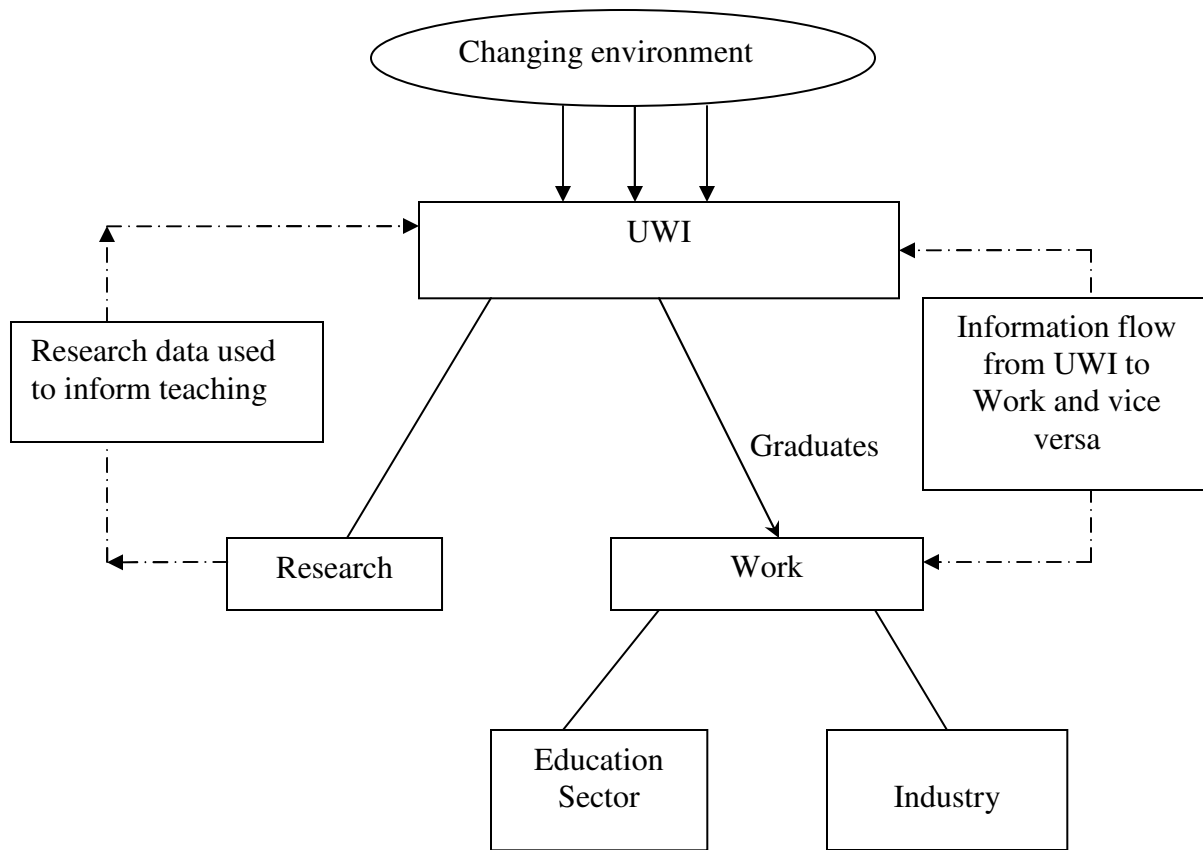
training as one way of helping workers cope with the increasing job instability, (Severin, 2001). This 'career option' has been suggested as an alternative to unemployment, (ILO, 2002). It can help in absorbing some displaced workers, generate employment for others and reduce the demand on the beleaguered 'employer organisations'.

### **Identification of the Required Skills**

In addition to basic technical or 'subject' skills, workers will also be required to have other skills – both work-related and non-related work skills. The ILO (2002) notes that although skill requirements seem to be similar across countries – the term tends to differ based on the countries, regions or institution. The United Kingdom refers to them as "key" skills (formerly "core"), European Union – "basic", Egypt – "essential" and Singapore "critical enabling". On the other hand, Harvey et al (1998) refers to these skills as "a profile of attributes". These skills refer *inter alia* to numeracy, literacy, Information Technology (IT), analytical, problem solving, leadership, initiative, teamwork and communication (both oral and verbal). From a Caribbean perspective, Severin (2001) stated that Dominican employers expressed a desire for employees to have entrepreneurial and conflict resolution skills. Furthermore, they were also interested in graduates with short learning curves and who could adjust quickly to new departments or job rotation.

These requirements can be summarized in Harvey et al's (1998) view on the skill requirements for employees in the 21<sup>st</sup> Century. Their research showed that employers have indicated a preference for workers who are adaptive, adaptable and transformative. Adaptive employees refer to those who have the ability to enter a new organisation or job situation and quickly fit in with minimum effort and cost – the brief learning curve desired by Dominican employers in Severin's 2001 study. Adaptable employees are those who are flexible and can easily respond to the changing environment. Transformative refers to those who will take a proactive approach to their jobs and their organisations. Such workers will have the ability "to anticipate and lead" the change processes which will be necessary skills in a fast-changing competitive environment.

If workers are to satisfy these new skill requirements then they will have to be taught these skills. This will therefore require changes to the present education system – both curricula and policies. This paper takes the view that the best way to approach this reformation is by initially utilising a 'top down' approach – from the tertiary to the primary. Subsequently, the levels can be integrated; where each level feeds into the other, in a never-ending cycle. This approach therefore justifies the role of the University of the West Indies (UWI) as shown in the diagram below.



**Diagram 1**

The diagram shows how the changing environment is impacting teaching policies and methods at UWI along with the twin roles of research and manpower requirements (providing graduates for the world of work). For the purposes of this paper, work has been divided into industry and the education sector. The diagram shows the information flow where the Research arm of UWI should be used to inform teaching practices and policies at the institution. On the other hand, information from changing work practices should also have an impact on UWI’s teaching and the research at the institution should also be used to inform work practices in both industry and the rest of the education sector. The details of this UWI/Work relationship will be discussed in the next section of the paper.

**UWI’s Role in the Process**

As the premier tertiary institution in the region; UWI is best placed, has the potential to and must assume the leadership role in this process of education, training and re-training. Hence, the university must lead by example and adopt a learning posture, changing in response to changes in the society, economy and business environment. UWI is well known and respected in the Region and has a wide reach with three main campuses in Jamaica, Trinidad and Barbados. In addition it has other “Distance” and



“Continuing” Education centres in various islands of the Caribbean. It has been the tertiary institution of choice for many because of its longevity and quality, becoming what can be called a ‘brand name’ university. It has the support (financial and otherwise) of many governments, institutions and organisations in and outside the Region. In marketing terms, this has led to a situation where a brand name (UWI) becomes synonymous with the product name (university). Its uniquely Caribbean and West Indian perspectives makes it ideally placed to handle the challenges of a Caribbean economy. As noted by Severin (2001) the institution can and should establish itself as an “entrepreneurial university”. This means that UWI should take a business approach to conducting its affairs and ‘selling’ itself to the public as the education/training service provider ‘of choice’. The University should use its goodwill; generated by over fifty (50) years of dedicated service to the region to assist in this regard.

In solving the problem of ‘education, training and re-training needs’ for the new economy, UWI should look at the problem in terms of the past, present and future. This translates into three (3) groups of persons: employees, students and teachers. In engaging the problem from these perspectives, the institution will ensure greater coverage and lessen the likelihood of those who are likely to be overlooked.

The past refers to current employees who were once students of various educational institutions across the region. These employees, would, for the most part, have been educated under the ‘old regime’, with skills suitable for the ‘old economy’. As the needs of the economy changed, their skills became less and less relevant and some even obsolete. Such a situation calls for some re-training, to ensure that skills are in line with the needs of a new economy and a changing work place. UWI should adopt the lead role and approach employers rather than waiting for the latter to approach them. Together, they can devise creative ways in which such training can be undertaken with the minimum disruption to the business process. Although lifelong learning has been generally accepted as one of the key requirements in the new Economy, Downes (2000) points to the lack of emphasis on training in the region. If Caribbean businesses are to remain competitive, more emphasis must be put on training. Employers must show their willingness to support this continuous/lifelong learning by investing heavily in both formal and informal training systems. One example is distance training by using Computer Based Training (CBT) and or e-learning. Alternatively, this can be undertaken by use of paper based instruction manuals, although this process might be more costly than the first alternative.

Where distance learning is either impossible or impractical, the institution should consider going to the organisations and establish classes on site. This can be particularly useful where there are many employees from one organisation or where the training required is unique to that organisation or industry. Such an approach could

prove to be particularly effective in the Non Campus Countries (NCC)<sup>3</sup>, where the lack of a physical presence precludes some citizens in these countries from pursuing further education. Although the establishment of Distance Education Centre (DEC) in these countries have been beneficial, the courses are limited in scope and mainly academic in nature. The university must adopt a more technical, practical and user-friendly approach to education. Short to long term courses, of a more varied nature could be held on weekends with the support (financial and otherwise) of the business community.

If religious convictions or other reasons prevent a significant number of students from attending weekend classes, consideration should be given to having week-day classes after working hours. At present, there is concern in some campus territories that part-time students (who are usually mature and employed) are being asked to attend classes during the day. This sometimes conflict with professional and family demands and could prevent a student from completing the course of study. All these new approaches reflect the willingness of UWI to be sensitive to the needs and circumstances of its students. Additionally, this shows UWI's commitment to ensuring that Caribbean citizens receive the education they desire and need for the New Economy.

The present refers to tertiary level students in regional educational institutions. This includes both students of UWI and other tertiary institutions. It is critical that these students be taught the kinds of skills which will be demanded by the new economy. Such graduates are more likely to hold senior positions in organisations and will therefore have responsibility for leading the change process. It is generally accepted that managers determine the direction of an organisation by their actions and should therefore lead by example (Kouzes & Posner, 1995). Hence, tertiary graduates and potential managers must be taught these skills if they are expected to teach these skills to others and modify organisational structure and culture.

Some ways in which this can be undertaken is by changing the curriculum, teaching styles/methods and evaluation processes. The involvement of the business community/industry is also critical. Managers can be brought in as guest lecturers to give a 'practical' aspect to the academic component of the course and help in re-assessing evaluation criteria. Additionally, students can go on internship where they earn credits based on their performance on the job. Although it seems obvious, classes should be places where these skills are modeled and developed. Students cannot be taught to be innovative, creative etc and encounter classroom practices where these skills are either not valued or practiced. However, in order for educators to be able to teach these 'new' skills they will have to be re-trained. This leads to the final aspect of this three-pronged approach to UWI's role.

---

<sup>3</sup>The website of the Cave Hill Campus (<http://www.uwichill.edu.bb/bnccde/>) lists the NCCs as Anguilla, Antigua and Barbuda, The Bahamas, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Montserrat, St Kitts & Nevis, St Lucia, St Vincent & the Grenadines, The Turks and Caicos Islands.

The future looks at the 'next generation' of employees, who are yet to enter tertiary institutions - students, in the primary and secondary levels of education. These future employees are under the directive of educators and in order for the system to be successful, they must be taught by educators who understand and appreciate the requirements of the new economy. Government must ask UWI to undertake this re-training of educators so they can become more effective at their jobs. In short – how can they teach what they don't know? Their classes can be held during the summer vacation or on evenings after school, thus minimising any disruption to normal school time.

The approach would be similar to that of tertiary institutions, only now the teacher becomes the student. Teachers would have to be exposed to industry leaders so they can better understand the needs of industry and employers. Lecturers at UWI who feel the need for 'refresher' courses or who want a better understanding of industry needs should be encouraged to participate.

## **Conclusion**

In summary, the increased competition and technological advances have forced businesses to re-think the way they 'do business'. As technology becomes more available to all firms, the service component of products becomes more critical to success. In a KBE, what will increasingly distinguish firms is not only the knowledge possessed by its employees but the quality of its human resources. In other words, the service that is offered by the employees of a particular firm can become a source of competitive advantage for that business. Pfeffer (1995) looks at ways in which businesses can gain a "sustainable competitive advantage through the effective management of people".

Organisations have been forced to radically alter both their organisational structure and culture, to cope with the demands of the new economy. As decision-making becomes more widespread throughout organisations, training will be critical in ensuring that the correct choices are made. These skills will have to be embedded in the process of education and each level should seek to produce the kind of citizen/employee needed in this new economy. For this system to be effective, the goals and objectives have to be taught and reinforced at every level – from primary to tertiary.

This training process is not only applicable to students; organisations also need to be taught how to cope with the new environment. It also helps in ensuring that employees do not return to organisations where they will be frustrated by an inability to utilise their 'new' skills and 'grow' their jobs and businesses. UWI should therefore conduct seminars designed to help organisations cope, learn and change. Its excellent teaching staff combined with its focus on 'things Caribbean' will be particularly useful in these training sessions. Businesses will realise that it is not always necessary to hire

consultants from outside the region, who might be more expensive or not understand the unique culture of the region. To quote the slogan of a Barbadian bank “we don’t need a seminar to learn about you, we know the old neighbourhood...”

\*\*\*\*\*

***'To cope with a changing world, an entity must develop the capacity of shifting and changing - of developing new skills and attitudes; in short, the capability of learning.'***

***A De Gues, The Living Company.***

## References

- Australian Bureau of Statistics. 2000. 1375.0 Discussion Paper: *Measuring a Knowledge-based Economy and Society - an Australian Framework*. [online] <http://www.abs.gov.au/Ausstats/abs@.nsf/66f306f503e529a5ca25697e0017661f/fe633d1d2b900671ca256c220025e8a3> [Accessed 30/3/2003]
- Bernhardt, Annette, Morris, Martina, Handcock, Mark, & Scott, Marc. 1998. *Work and Opportunity in the Post-Industrial Labor Market*. Institute on Education and the Economy, Columbia University. [online] <http://www.tc.columbia.edu/~iee/Labor2.htm>. [Accessed 27/7/2001]
- Downes, Andrew S. 2000. Human Resources Development and the Services Sector in the Eastern Caribbean. *Paper prepared for conference on Alternative Development in the Eastern Caribbean: The Role of the Services Sector*.
- Harvey, L., Moon, S. & Geall, V. WITH Bower, R. 1997. *Graduates' Work: Organisational change and students' attributes*. Birmingham: Center for Research into Quality, University of Central England in Birmingham and Association of Graduate Recruiters.
- International Labour Organization. 2002. *Learning and Training for Work in the Knowledge Society*. [online] <http://www.ilo.org/public/english/employment/skills/recomm/report.htm>. [Accessed 20/1/2003]
- Kotter, J. P. 1996. *Leading Change*. Boston: Harvard Business School Press.
- Kouzes, James M. and Posner, Barry M. 1995. 2<sup>nd</sup> ed. *The Leadership Challenge*. San Francisco: Jossey-Bass Inc.
- Massé, Philippe, Roy, Richard and Gingras, Yves. 1998. *The Changing Skill Structure of Employment in Canada* [online] <http://www.hrdc-drhc.gc.ca/sp-ps/arb-dgra/publications/research/1999docs/r-99-7e.pdf> [Accessed 30/03/2003]
- Morley, L. (2001) Producing New Workers: quality, equality and employability in higher education. *Quality In Higher Education*. 7 (2), 131-138.
- Pfeffer, Jeffrey. 1995. Competitive Advantage through People. *Academy of Management Executive*. 9 (1), 55-72.
- Robotham, D. 2000. Changing a University: Reconciling Quantity with Quality. The Case of UWI. In: Howe G. D. (ed.) *Higher Education in the Caribbean*. Kingston: UWI Press. pp. 237-249
- Severin, Francis. 2001. Dominican Employers' Perceptions of Graduates of the UWI: The Ramifications for the University in an Entrepreneurial Era in Higher Education. [online] <http://www.uwichill.edu.bb/bnccde/dominica/conference/papers/Severin.html> [Accessed 7/11/2002]