Contending with Change: Reviewing Tertiary Education in the English-Speaking Caribbean

(Final Version)

Glenford D. Howe
Research Officer
Office of the Board for Non-Campus Countries & Distance Education
University of the West Indies

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The International Institute for Higher Education
in Latin America and the Caribbean (IESALC), UNESCO
Caracas, Venezuela

As the 21st century opens, tertiary education is facing unprecedented challenges, arising from the convergent impacts of globalization, the increasing importance of knowledge as a principal driver of growth, and the information and communication revolution. But opportunities are emerging from these challenges. The role of education in general, and of tertiary education in particular, is now more influential than ever in the construction of knowledge economies and democratic societies. Tertiary education is indeed central to the creation of the intellectual capacity on which knowledge production and utilization depend and to the promotion of the lifelong-learning practices necessary for updating people's knowledge and skills. At the same time, new types of tertiary institutions and new forms of competition are appearing, inducing traditional institutions to change their modes of operation and delivery and take advantage of the opportunities offered by the new information and communication technologies.....

In response to these momentous and converging trends in the environment, a number of countries have undertaken significant transformations of their tertiary education systems, including changes in patterns of financing and governance, growing institutional differentiation, the creation of evaluation and accreditation mechanisms, curriculum reforms, and technological innovations. But progress has been uneven, and sharp contrasts remain between and within tertiary education systems worldwide.

World Bank: ***"Constructing Knowledge Societies 2002"***

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Glenford D. Howe
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Abbreviations

ABE	Association of Business Executives
ACCA	Association of Chartered Certified Accountants
ACHEA	Association of Caribbean Higher Education Administrators
ACP	Association of Computer Professionals
ACTI	Association of Caribbean Tertiary Institutions
AED	Academy for Educational Development
AIDS	Acquired Immune Deficiency Syndrome
AISOM	American International School of Medicine
AUC	American University of the Caribbean
BCC	Barbados Community College
BIMAP	Barbados Institute of Management and Productivity
BTTC	Belize Teachers Training College
BVI	British Virgin Islands
CAHSU	Central America Health Sciences University
CAPE	Caribbean Advance Proficiency Examinations
CARCOST	Caribbean Regional Communications Study
CARDI	Caribbean Agricultural Research and Development Institute
CARICOM	Caribbean Community
CAST	College of Arts, Science and Technology
CDB	Caribbean Development Bank
CDRC	Chronic Disease Research Centre

CGA	Certified General Accountants (Canada)
CICHE	Committee for International Cooperation in Higher Education
CII	Chartered Insurance Institute
CIM	Chartered Institute of Marketing
CIMA	Certified Institute of Management Accounting
CMA	Certified Management Accountants
CMD	Centre for Management Development
CUSAC	Commonwealth Universities Study Abroad Consortium
CXC	Caribbean Examinations Council
DEC	Distance Education Centre
ECIAF	Eastern Caribbean Institute of Agriculture & Forestry
ETTC	Erdiston Teachers' Training College
FTE	Full Time Equivalent
GCE	General Certificate of Education
HIV	Human Immunodeficiency Virus
HRD	Human Resource Development
IADB	Inter American Development Bank
ICR	Information and Communication Revolution
ICSA	Institute of Chartered Secretaries and Administrators
IESALC	International Institute for Higher Education in Latin America and the Caribbean
IMIS	Institute for the Management of Information Systems
LANs	Local Area Networks
M.Phil	Masters of Philosophy

MD	Doctor of Medicine
MIND	Management Institute for National Development (Jamaica)
MPRG	The Microbial Pathogenicity Research Group
MUA	Medical University of the Americas
NAFTA	North American Free Trade Agreement
NASA	National Aeronautics and Space Administration
NCCs	Non-Campus Countries
NGO	Non-Governmental Organization
OECD	Organization for Economic Cooperation and Development
OECS	Organization of Eastern Caribbean States
OUS	Office of University Services
PhD	Doctor of Philosophy
PUCMM	Pontifica Universidad Catolica Madre y Maestra
PVC	Pro-Vice Chancellor
ROYTEC	Royal Bank Institute of Business and Technology
SCME	Standing Committee of Ministers Responsible for Education (CARICOM)
SCS	School of Continuing Studies (UWI)
SJPP	Samuel Jackman Prescod Polytechnic
TLIU	Tertiary Level Institutions Unit
TTHTI	Trinidad and Tobago Hospitality and Tourism Institute
TVET	Technical and Vocational Education and Training
UAC	University Academic Committee

UB	University of Belize
UCB	University College of Barbados
UCB	University College of Belize
UG	University of Guyana
UHSA	University of Health Sciences
UK	United Kingdom
UNDP	United Nations Development Programme
UNICA	Association of Caribbean Universities and Research Institutes
UNPHU	Universidad Nacional Pedro Henriquez Urena
UPEC	UWI Planning and Estimates Committee
USA	United States of America
USAID	United States Agency for International Development
UTECH	University of Technology (Jamaica)
UVI	University of the Virgin Islands
UWI	University of the West Indies
UWIDEC	University of the West Indies Distance Education Centre
UWIDITE	University of the West Indies Distance Teaching Experiment
VSAT	Video Satellite
WAN	Wide Area Network
WTO	World Trade Organization

Executive Summary

The Scope and Task of the Study

This review of tertiary education in the region was requested by the International Institute for Higher Education in Latin America and the Caribbean (IESALC). The project aimed to provide a better understanding of the evolution, present situation, and prospects of higher/tertiary education systems in a number of the English-speaking Caribbean countries namely, Antigua & Barbuda, The Bahamas, Barbados, Dominica, Grenada, Jamaica, Montserrat, St. Kitts & Nevis, St. Lucia, St Vincent & the Grenadines, and Trinidad & Tobago. Although it was recognized that the University of the West Indies (UWI) was the main higher education institution in this region IESALC requested that the study should as far as possible also examine trends pertaining to the many other post-secondary and non-university institutions in the region, that is, both private and public. The key issues which were to be examined included: access and coverage of student population, and equity of access; quality of education; relevance of education; management of institutions and national systems; lifelong education; governance of institutions; financial sustainability; innovations, reforms and recent developments programmes; international cooperation; and future development plans.

The researcher conducting the study was given the flexibility to organize the issues as he thought best in order to produce an integrated product as opposed to a mechanistically written document following prescribed themes. The approach therefore adopted was to try to identify and analyze the evolution of the different national systems of tertiary education, as well as the recent and current trends in a comparative manner, to the extent that this was possible given the unevenness in quantity and quality of data available for the different countries. The University of the West Indies (UWI) features prominently in the discussion since that institution was used as a point of reference and comparison with other tertiary institutions, and also because its relatively longer existence meant that many of the trends, issues, problems and challenges facing tertiary education today are being dramatically played out at the UWI, an institution which the Caribbean governments have designated as the regional university, and given a specific developmental and

leadership mandate within the region.

A Note on Geographical Definitions

Throughout this document various geographical and institutional groupings of regional countries are mentioned, all of which include the countries which are the focus of this study. There is thus a need to explain which countries constitute the various groupings mentioned.

1. The Caribbean Community (CARICOM): This organization which is based in Guyana, consists of Antigua & Barbuda, Belize, Guyana, Montserrat, St. Vincent & the Grenadines, The Bahamas, Dominica, Haiti, St Kitts& Nevis, Suriname, Barbados, Grenada, Jamaica, St. Lucia, and Trinidad & Tobago. Its associate members include Anguilla, The British Virgin Islands, and the Turks & Caicos Islands. There are also a number of countries which have observer status, including Aruba, Columbia, Netherlands Antilles, Bermuda, Dominican Republic, Puerto Rico, The Cayman Islands, Mexico, and Venezuela.

2. The Organization of Eastern Caribbean States (OECS): Headquartered in St Lucia, this sub-regional grouping is made up of St. Lucia, Anguilla, Antigua & Barbuda, British Virgin Islands, Dominica, Grenada, Montserrat, St. Kitts & Nevis, and St Vincent and the Grenadines.

3. Non-Campus Countries (NCCs): Sixteen countries currently contribute financially to the University of the West Indies. Three of these countries possess full campuses, namely, the St. Augustine campus in Trinidad, the Mona campus in Jamaica, and the Cave Hill campus in Barbados. The University's physical presence in the other thirteen countries is through units or centres of its School of Continuing Studies with headquarters on the Mona campus in Jamaica. The non-campus countries are Anguilla, Antigua & Barbuda, the Bahamas, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Montserrat, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, and the Turks & Caicos Islands.

4. The English-Speaking Caribbean also termed the Commonwealth Caribbean. This geographical/ cultural/linguistic categorization includes Belize, the Bahamas, the Cayman Islands, Turks & Caicos Islands, Jamaica, the British Virgin Islands, Anguilla, Antigua & Barbuda, St Kitts & Nevis, Montserrat, Dominica, St Lucia, Barbados, St. Vincent & the Grenadines, Grenada, Trinidad & Tobago, and Guyana.

Summary of Chapters

Chapter One

All Caribbean countries are today recognizing the need to make decisive adjustments to more effectively cope with the effects of globalization. Many of these societies are in transition from being primarily producers of goods to societies in which information and the means of knowledge production, processing, and transfer predominate. There is thus a realization of the need for Caribbean human resources development strategies to reflect this growing importance of knowledge in national development approaches.

Chapter Two

Greater access to tertiary education is increasingly being acknowledged globally and in the Caribbean as being a major ingredient if countries want to achieve maximum and sustainable national development, growth and social cohesiveness. However, in the context of the Caribbean it is recognized that tertiary enrollment rates are far too low to achieve sustainable national development, a fact made clear when the region's tertiary enrollment rates are compared with countries in the developed world. New strategies of lifelong learning and a general democratization of access to tertiary education are thus regarded as urgent requirements and imperatives for Caribbean nations in the twenty-first century.

Chapter Three

The information and communication revolution has generated tremendous challenges and opportunities for tertiary education institutions and provision in the region. Institutions such as the UWI, among others, have been grappling with the challenge of utilizing new distance education teaching and learning modalities to increase access to tertiary education and training, and also to meet the new training requirements of the labour force and knowledge-based economies in a timely manner. But indigenous Caribbean educational institutions are not the only players in the Caribbean tertiary education sector. Many foreign institutions, over seventy of them, are also more than ever before seeking to become major educational providers in the region

as part of their efforts at internationalization, and search for profits. Among the fundamental questions which now need to be answered are those pertaining to the interface of the activities of all the different educational players, both private and public, and how will they change, over the long term, the face of tertiary education provision in the region.

Chapter Four

Good governance, innovations and international cooperation must necessarily be at the heart of regional efforts to respond effectively to the social, political and economic changes being produced by the forces of globalization. Educational institutions are challenged to be at the forefront in each of these areas if sustainable national development is to be attained. This requires fundamental reconsideration in their relationship with their multiple stakeholders including the state, students, staff, industry, their alumni, as well as with other tertiary institutions locally, regionally and globally. Tertiary educational institutions are now required to be more transparent and accountable in all their operations and relationships.

Chapter Five

The environment in which tertiary education institutions now operate demand that they increasingly become self-financing, relying less and less on support from the governments in the region, many of which lack the necessary resources to support the changes needed for maximum development of the region's human resources. However, if these educational institutions wish to achieve sustainability they must necessarily seek to improve the quality and relevance of their programmes. This is a challenge not only for traditional public tertiary institutions, but also for the newly emerging private ones as well. Without excellence in the area of quality and an enduring commitment to remaining relevant to the changing needs of educating and training citizens, the very existence of these institutions will be threatened, and national development undermined.

Chapter 1

The Context of Change in Caribbean Higher Education

> Locating the prospects of higher education in the Commonwealth Caribbean against the background of developments in the wider world is particularly useful at this time when the phenomenon known as globalization is being seen as the cause, occasion and result of what is otherwise termed the knowledge economy. The university and related institutions of higher learning, as generators and transmitters of knowledge, find themselves at the heart not only of the discourse but also of meaningful plans of action targeting the development process and its relation to the human resource as well as the paradigm shifts and quixotic changes attendant on the new situation.
>
> (Rex Nettleford, Vice Chancellor, UWI)

1.1 Introduction

Today, the Caribbean and the rest of the world are experiencing the full-blown effects of the new globalized economic order bolstered by neo-liberal economic philosophies very evident in, for example, the rise of 'borderless' transnational/multinational corporations, the creation of powerful trading arrangements such as the North American Free Trade Agreement (NAFTA), the increasing homogenization of culture, the multi-skilled employee, as well as revolutionizing technologies such as the Internet. Societies are in transition from being primarily producers of goods to societies in which information and the means of knowledge production, processing, and transfer predominate. National and regional outlooks are as a result being transformed or superseded (albeit not without contestation) by global visions and perspectives, a fact which has had direct implications for the most personal aspects of the lives of Caribbean citizens.

In this new and exciting environment organizations, not least educational ones, are faced with the challenge of changing and adapting in order to prepare for, and spearhead, the entry and prosperity of their respective nation states into the new, highly competitive and uncertain

international socio-economic and political environment. Worldwide, it has now become a compelling imperative that tertiary institutions engage in mutually beneficial dialogue, practical cooperation, and adopt strategies to effectively deal with the challenges of change, its attendant uncertainties, as well as position themselves to optimally exploit the manifold possibilities for new and exciting opportunities. It is not surprising then that at this early juncture in the new millennium, the University of the West Indies (UWI) and the other tertiary institutions in the region, as with similar educational institutions throughout the world, are embarking on profound changes under the impetus of the forces of globalization and the corresponding need, in particular, to internationalize their structures, practices and services, as well as embrace new educational technologies and instructional modalities emanating from the revolution in electronics and informatics.

In the Caribbean, as elsewhere, there exist a certain degree of consensus, by no means unchallenged, that the education system, both its formal and non-formal aspects, is the primary institutional mechanism through which the development and utilization of human resources, and consequently national development, might be achieved and maximized. This is so in spite of the fact that there is as yet no clear consensus among academics or practitioners on the meaning, nature and dimensions of the notion of development, especially as it relates to the developing world. The word development remains an ambiguous concept, one often clouded with political and ideological overtones, and while it is increasingly viewed as being a multidimensional concept (as opposed to a one-dimensional economic one) very few attempts have been made to investigate the interrelationships between, for example, the economic, cultural, ideological, political, and other dimensions, notwithstanding the outstanding efforts of the various UNDP *Human Development Reports*, initially developed under the brilliant leadership of the late Mahbub ul Haq. Not surprisingly then, the belief that education is an integral part of development is still imperfectly understood, and still undergoing critical analysis and reassessment. Nevertheless, under the impetus of nationalist aspirations, the belief that education could lead to improvements in living conditions, funding from UNESCO, the World Bank, and other international agencies, and the strengthening influence of human capital theory, governments in the Caribbean and other

parts of the developing world allocated greater portions of their national budget to education.

1.2 Education in the Context of Development

Until the late 1950s and the early 1960s it was usual, at least among most economists, to conclude that the various forms of physical and financial capital including land, labour, gold and the like, were the key resources to be exploited or developed in order to maximize national development. In recent times, however, as Todaro correctly observes, "most economists would probably agree that it is the human resources/capital of a nation that ultimately determines the character and pace of its economic and social development".[1] Nancy Birdsall of the Inter-American Development Bank (IADB) elaborates:

> Education, the most easily measured form of human capital, is, like land and other forms of wealth, an asset. In today's global markets, it is a scarce asset, and can therefore, generate income for its owners. It is a special asset in two respects. First, once acquired, it cannot be stolen or sold– it cannot be alienated from its owners. Second, as the amount of education increases, other assets such as land and physical capital decline as a proportion of total wealth in an economy; since the ownership of these latter assets is usually more concentrated than that of education, the overall concentration of all assets declines. Thus, an increase in education is likely to have an equalizing effect as long as it is broadly distributed.[2]

Some may argue, perhaps with a degree of justification, that in contemporary Caribbean societies, as indeed globally, the primary function of education seems to be increasingly heavily biased towards making citizens more efficient in commodity production. However, as Anne Case of Princeton University has pointed out, "the primacy of education in the development process stems not only from the fundamental role of education in production, but also from the many and varied ways in which education enhances the quality of life and, in turn, promotes and sustains development... in income generation, in the promotion of health status, and in the reduction of

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[1] Michael P. Todaro, *Economic Development in the Third World* (4th edition) New York & London: Longman, 1990, p.330.

[2]. Nancy Birdsall, "Education: the People's Asset", paper prepared for the workshop "Asset Distribution, Poverty and economic Growth: Theory, Empirical Evidence, and Policy Implications. Ministry of Land Reform, Brazil with the University of Brasilia, and co-sponsored by the World Bank, July 14-17, 1998.

fertility- all of which contribute to sustained development and justify education a place in the core agenda of the World Bank."[3] Indeed, in the context of the Caribbean the difference in relative scale and nature of the investments in human capital development, over time, is one of the explanations which has been given by some economists to explain the relatively more stable and dynamic growth and development of the Barbadian economy in contrast to the historically more turbulent experiences of, for example, Jamaica which is strikingly richer in natural resources such as bauxite and timber, among other things.[4]

Frederick H. Harbison, has also argued that human resources are the ultimate basis of the wealth of nations and therefore the "goals of development are the maximum possible utilization of human beings in productive activity and the fullest possible development of the skills, knowledge and capacities of the labour force".[5] Human resources, according to Harbison, comprise "the energies, skills, talent, and knowledge of people which are, or which potentially can or should be, applied to the production of goods or the rendering of useful services for the social, political, cultural and economic development of nations".[6] Crucially, however, underutilization of human resources is regarded by Harbison as the most serious and intractable problem facing less developed countries, and is manifested in the form of open unemployment, underemployment, disguised unemployment and mal-unemployment. The key dimensions of the human resource problem in developing countries such as those in the Caribbean, relate firstly to the underdevelopment (or persistent use below its potential socio-economic development) of skills, knowledge, and talents of persons in the labour force, and secondly, to those stemming from underutilization of their energies and capabilities.

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[3]. Anne Case, *The Primacy of Education*. Paper prepared under the auspices of the Research Programme in Development Studies, Princeton University, June 2001, p.1

[4]. Havelock Ross-Brewster, "Social capital and development: Reflections on Barbados and Jamaica", Barbados Economic report 1995, produced for the Ministry of Finance and Economic Affairs, May 1996

[5] Frederick H. Harbison, *Human Resources as the Wealth of Nations*, New York: Oxford University Press, 1973. (Preface).

[6] Ibid., p.3.

Although possessing or exhibiting distinct characteristics or manifestations these dimensions of the human resource problem are often, especially in the developing world, interrelated, as the underdevelopment of human resources is to some extent a cause of underutilization and vice versa. The task of conceptualizing the problem becomes additionally difficult and problematic given that there is still no comprehensive indicator of human resources development, that is, no accepted yardstick for measuring the development and utilization of human resources.[7] Even more troubling and more fundamental, there are those authors like Chinapah et al., who argue with justification, that there is need for a reinterpretation of the notion of human resources and their development, which would encompass a much wider range of human competence than those that are relevant to productive work in the economic sector. A new conceptualization should instead include those resources and skills which human beings need to protect and improve people's health, to keep population growth within reasonable limits, to sustain and develop cultural traditions and identities, to enjoy recreational activities, to put nutritional resources to the best possible use, to preserve a less hazardous and endangered environment, and to assume and play an active role as a citizen.[8]

Despite the recognition that education is vital to national development, it has now become fashionable for some academics and policy makers to speak about the "crisis in education" and its apparent failure to meaningfully contribute to the real needs of social, economic and overall national development. Studies have shown that the educational system of many developing nations such as those in Latin America rather than fostering justice and equity function to increase rather than decrease income inequalities.[9] Not surprising, in some quarters a powerful challenge

[7] Ibid. pp.12-13.

[8] Vinayagum Chinapah, Jan-Ingvar Lofstedt and Hans Weiler, 'Integrated Development of Human Resources and Educational Planning', *UNESCO, Quarterly Review of Education*, vol. X1X, no 1, 1989, p.12.

[9]. See for example, PREAL. *The Future at Stake. Report of the Task Force on Education, Equity and Economic Competitiveness in Latin America and the Caribbean,* Washington DC: Partnership for Educational Revitalization in the Americas, April 1998.

has been mounted especially against the "cult of formal education" as Todaro[10] explains:

> After almost three decades of rapidly expanding enrollments and hundreds of billions of dollars of educational expenditure, the plight of the average citizen in many parts of Asia, Africa, and Latin America seems little improved. Absolute poverty is chronic and pervasive. Economic disparities between rich and poor widen with each passing year. Unemployment and underemployment have reached staggering proportions, with the "educated" increasingly swelling the ranks of those without jobs.... many of the early claims made on behalf of unfettered quantitative expansion of educational opportunities-- that it would accelerate economic growth; that it would raise levels of living especially for the poor; that it would generate wide-spread and equal employment opportunities for all; that it would acculturate diverse ethnic or tribal groups; and that it would encourage "modern" attitudes-- have been shown to be greatly exaggerated and, in many instances simply false. As a result there has been a growing awareness in many developing nations that the expansion of formal schooling is not always to be equated with the spread of learning; that the acquisition of school certificates and higher degrees is not necessarily associated with improved ability to undertake productive work; that education oriented almost entirely toward preparation for work in the modern urban sector can greatly distort student aspirations....

To make matters worse, as finances and resources shrink there has been a corresponding increase in competition for scarce resources not only between education and other sectors of the economy but within the educational sector itself, due in part to influential World Bank studies and funding policy orientation.

During the 1970s and 1980s Rate- of- Return analysts produced empirical, but now highly controversial and heavily criticized, studies showing that the private and the social rates of return to investment in education were the highest at the primary levels. These analyses exerted powerful influence on education systems worldwide, and the evidence on the surface, as well as the social returns on investments in primary and secondary education over time, seemed to confirm the value of these studies. Over several decades countries around the world were able to significantly raise their literacy rates through massive expansion of access to primary and secondary education. These achievements were certainly quite dramatic in the Anglophone Caribbean. As Edwin Carrington, Secretary-General of CARICOM has observed:

[10] Todaro, *Economic Development*, p.331.

> The CARICOM member states have improved literacy rates over the last (50) fifty years. Literacy rates reported for CARICOM member states in the Human Development Report 2001, ranged from eighty-two per cent (82%) in St. Vincent and the Grenadines to ninety-seven (97%) in Barbados. These literacy levels correlate with the high enrolment rates at the primary level. With the exception of Haiti, CARICOM has achieved net primary level enrolments rates ranging between eighty-four per cent (84%) in St. Vincent and the Grenadines and one hundred per cent (100%) in Barbados.

As a result of these Rate-of-Return analyses most international funding tended to be focused on primary and secondary education arguably to the detriment of higher education. However, as the relatively recent World Bank report, *Higher Education in Developing Countries: Peril and Promise* has noted, there has since been a major turn about in that institution's position on the relative importance of higher education. While recognizing the major importance of investment in primary and secondary education, the report was critical of the Rate- of- Return perspective on higher education. It noted:[11]

> Rate-of-Return studies treat educated people as valuable only through their higher earnings and the greater tax revenues extracted by society. But educated people clearly have many other effects on society: educated people are well positioned to be economic and social entrepreneurs, having a far reaching impact on the economic and social well-being of their communities. They are also vital to creating an environment in which economic development is possible. Good governance, strong institutions, and a developed infrastructure are all needed if business is to thrive- and none of these is possible without highly educated people. Finally, rate-of-return analysis entirely misses the impact of university-based research on the economy---- a far-reaching social benefit that is at the heart of any argument for developing strong higher education systems.

Despite the manner in which higher education support and funding has been stymied in the past the notion that higher education is a major key to fostering national development has been gaining greater acceptance, not so much perhaps because of fault lines in the rate-of-return analyses, as perhaps more so in other evidence which seems to support the argument giving primacy to the importance of higher education. Many economists and education analysts now

[11]. World Bank. *Higher Education in Developing Countries. Peril and Promise*. Washington DC: World Bank Task Force on Higher Education and Society, 2000,p.39

believe that the successes of the countries of East Asia have in no small way been due to the fact that they possess well educated workforces.

But the arguments in favour of providing more support for tertiary education have more than an economic basis. The World Bank expresses the complex and integrated benefits of tertiary education's value to national development quite nicely:[12]

> Tertiary education institutions have a critical role in supporting knowledge-driven economic growth strategies and the construction of democratic, socially cohesive societies. Tertiary education assists the improvement of the institutional regime through the training of competent and responsible professionals needed for sound macroeconomic and public sector management. Its academic and research activities provide crucial support for the national innovation system. And tertiary institutions often constitute the backbone of a country's information infrastructure, in their role as repositories and conduits of information (through libraries and the like), computer networks hosts, and Internet service providers. In addition, the norms, values, attitudes, and ethics that tertiary institutions impart to students are the foundation of the social capital necessary for constructing healthy civil societies and cohesive cultures- the very bedrock of good governance and democratic political systems.....
>
> Through the transmission of democratic values and cultural norms, tertiary education contributes to the promotion of civic behaviours, nation building, and social cohesion. This, in turn, supports the construction and strengthening of social capital, generally understood as the benefits of membership in a social network that can provide access to resources, guarantee accountability, and serve as a safety net in time of crisis. The institutions, relationships, and norms that emerge from tertiary education are instrumental in influencing the quality of a society's interactions, which underpin economic, political, and social development. Universities and other tertiary institutions are the cross-roads for social cooperation, which can foster strong networks, stimulate voluntary activity, and promote extracurricular learning and innovation.

Other influential international education agencies such as UNESCO have also been expressing strong support for increased attention to higher education as an important driving force of development, and most certainly the forerunner in knowledge generation for development,

[12]. World Bank. *Constructing Knowledge Societies: New Challenges for Tertiary Education*. Washington, DC: The World Bank, 2002, pp.23 & 31.

especially in developing countries. This developmental function of universities in the developing world was well expressed by the UNESCO International Commission on Education which observed:

> No where is the universities' responsibility for the development of society as a whole more acute than in developing countries, where research done in institutions of higher learning plays a pivotal role in providing the basis for development programmes, policy formulation and the training of middle- and higher-level human resources. The importance of local and national institutions in raising the developmental levels of their countries cannot be overemphasized. Much of the responsibility for building bridges between the developed, industrialized countries and the developing, non-industrialized countries rests with them.[13]

The UWI as the designated regional university has been mandated by the governments of the region to facilitate the growth and development of the region and its people.[14] It is expected to unlock West Indian potential for economic and cultural growth through the provision of high quality teaching and research aimed at meeting critical regional needs.[15] The symbolic and functional importance of the UWI has been well summarized by the 1994 Chancellor's Commission[16] which noted:

> To the peoples of the countries of the Commonwealth Caribbean, the University of the West Indies is as much symbol as it is institution. It is regarded not simply as a repository of knowledge but as a beacon for future accomplishments... It remains today one of the two entities which enjoy a reputation as being regionally representative. Both in function and in promise, the importance of the UWI to the future of the West Indies cannot be overstated. Should the University not fulfil the high expectations of its constituents, the well-being of the peoples resident here

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[13]. Delores, Jacques, *Learning: the Treasure Within*. Report to UNESCO of the International Commission on Education for the Twenty First Century. Paris: UNESCO: 1996, pp.131-132.

[14] *The University of the West Indies, Strategic Plan 1997-2002*, Revised March 1, 1997, p.9.

[15] UWI, *Unlocking the Potential of a Region*, Kingston Jamaica: Lithographic Printers Ltd, 1996/97. p.1.

[16] *A New Structure: The Regional University in the 1990s and Beyond: Report of the Chancellor's Commission on the Governance of the UWI*, (Co-Chairmen Neville V. Nicholls and Ivan L. Head, (July 1994), p.8.

and the quality of their societies will unquestionably deteriorate.

This important role of the University was also acknowledged in the context of the Grand Anse Declaration, whereby Caribbean governments "in examining the long-term prospects for development, articulated recognition of the primary importance of human resource development and the expansion of scientific and technological capability to the modernization of the regional economy, and of the special value of human resource development in the exploitation of new opportunities arising in the services sector through the development of information technology."[17]

In this role the UWI as well as the other tertiary level institutions, both private and public, are in step with the thinking that as the twenty-first century evolves organizations may be well placed to effect unanticipated advances for society, and to resolve the most complex problems by virtue of their ability to mobilize resources and transcend to some degree political boundaries.[18] The manifold stakeholders in the regional tertiary institutions, who include the governments, private sectors, students and parents, all have high expectations with respect to the UWI and the other tertiary institutions' capacity to optimally perform their developmental role, but many recognize the difficult task ahead consequent on the increasingly complex global environment in which these institutions now operate.

1.3 Global Imperatives and Challenges to Regional Education

Caribbean countries, like all others globally, now face three major but interconnected challenges, namely globalization, the growing importance of knowledge as the engine of economic development and national prosperity, and the impacts of the information and communication revolution, all of which have striking implications for their educational institutions and systems. Everywhere, educational policy debates are embedded and infused with the imagery, jargon, expectations and misapprehensions of globalization, and these debates are increasingly having profound impacts on educational practice and action. Globalization however conceptualized and

[17] Ibid, p.51.

[18] Gill Hickman, Transforming Organizations to Transform Society, Jepson School of Leadership Studies, Richmond Virginia, 1995.

perceived is now widely regarded as posing the most fundamental challenge to education, and how its role is defined in the twenty-first century.

All the changes in education are however being undertaken with a certain degree of trepidation, inevitable perhaps, but in this case certainly exacerbated by the fact that while the effects of globalization are everywhere being felt, its actual forces are not always readily discernible, and they often provoke contradictory and oppositional responses. On the one hand, for instance, educational planners and policy makers are being propelled to implement changes at a rapid pace in favour of convergence reflected in growth of global education, but on the other hand they are fearful of losing the indigenous peculiarities of their educational systems through the global homogenization of cultures. As British sociologist and the Director of the London School of Economics, Professor Anthony Giddens has observed, the complex set of processes known as globalization not only pulls upwards but also pushes downwards creating new pressures for local autonomy, including the revival of local cultural identities in different parts of the world.[19] They must at once therefore implement changes to facilitate these often conflicting, though by no means mutually exclusive processes or imperatives.

While globalization in effect means that countries and their institutions must now operate in a highly competitive global environment, those in developing countries like the Caribbean are often hampered by the dominance of neo-liberal economic philosophies which provide the guiding light for the forces of globalization. These global forces affect all levels of education in a number of ways including causing a reorientation of the goals of public education such as preparing students to be active participants in democratic society and ensuring they acquire the knowledge and skills required to understand, prosper and live harmoniously in their societies. Consequent on the rising influence of multinational companies and the reduction of the nation state's influence there has been a significant re-orientation in the major goals of public education. To a large extent it is the economic agenda which has become the most distinguishing feature of higher education in recent times.

[19]. See speech reproduced in the Barbados *Sunday Advocate* April 18, 1999.

A remarkable degree of consensus has emerged among the corporate/multinational business elites, government officials, leaders of higher education institutions and many international agencies that education at all levels, but especially at the higher level must seek as a primary objective to be the main vehicle of achieving and sustaining economic productivity in the new globalized environment. Thus the emphasis on the importance of the multi-skilled and multi-lingual employee and the learning society, not merely for meeting the needs of the multinational corporations and new business environment, but also it is claimed to achieve optimum individual and national competitiveness and success. There is now an overriding emphasis on the economic benefits of education as opposed to the social and cultural dimensions of the educational process which in some ways are treated more as appendages. But perhaps this is not surprising given that as a result of neo-liberal economic policies such as structural adjustment, many countries in the developing world, including most of those in the Caribbean, while recognizing the need to increase the quality and amount of their human resources, find themselves less able to accomplish these goals.

The multiple changes produced by globalization have also meant that in modern-day societies knowledge acquisition, and indeed the capacity to learn how to learn, have now taken on an increased importance. The point is well put by Jamil Salmi of the World Bank:[20]

> Economic development is increasingly linked to a nation's ability to acquire and apply technical and socio-economic knowledge, and the process of globalization is accelerating cheaper labour, and more and more from technical innovations and the competitive use of knowledge. The proportion of goods with a medium-high and high level of technology content in international trade has gone from 33 per cent in 1976 to 54 per cent in 1996. Today, economic growth is as much a process of knowledge accumulation as of capital accumulation. It is estimated that firms devote one-third of their investments to knowledge-based intangibles such as training, research and development, patents, licensing, design and marketing. In this context, economies of scope, derived from the ability to design and offer different products and services with the same technology, are becoming a powerful

[20]. Jamil Salmi, *Tertiary Education in the Twenty-first Century: Challenges and Opportunities*, The World Bank, Human Development Department, June 2000, pp.4-5.

> factor of expansion. In high-technology industries like electronics and telecommunications, economies of scope can be more of a driving force than traditional economies of scale....At the same time, there is a rapid acceleration in the rhythm of creation and dissemination of knowledge, which means that the life span of technologies and products gets progressively shorter and that obsolescence comes more quickly....in addition, in many fields the distance between basic science and technological application is narrowing or, in some cases, disappearing altogether. The implication is that pure and applied research are not separate any longer....This is underlined by a rich body of evidence on the impact of universities on regional development and the spillover effects of academic research on industrial research and technology and local innovation.

Finally, the rapid developments now taking place in the areas of information and communication now mean that countries and their institutions can effectively communicate and collaborate with each other and their stakeholders in the shortest possible time, in fact almost instantaneously. This innovation is no where as evident as in the field of education where distance learning technologies are now the norm in many countries as they seek to provide better quality education to more learners.

But perhaps the most sinister challenge which globalization poses for the region comes in the way it which trade liberalization and the policies of the World Trade Organization (WTO) have been compounding the vulnerability, and literally undermining the capacity of the small states of the region to channel adequate resources to such areas as health and education. The damaging effects of these policies have been detailed by Edwin Carrington, Secretary General of the Caribbean Community (CARICOM).[21] He has observed that as a result of WTO policies the Windward Islands in particular have had their preferential access to traditional banana markets, especially the European market, severely undermined thereby considerably weakening their economies. Indeed, banana exports for the CARICOM region as whole declined from US$193 million in 1992 to US$152 million in 1995 ultimately reaching a low in 2000 of US$97 million. In fact, export earnings for seven of the eleven main products exported by CARICOM countries have experienced decline. Further, as a result of the global trade agreements, imports into the region

[21]. Edwin Carrington, "Swimming against the tide: Small and micro states in the changing international dynamic". Feature address delivered by CARICOM Secretary General Edwin Carrington at the relaunching of the Council of External Trade of Saint Lucia 15 August 2002, Castries Saint Lucia.

doubled between 1999 and 2000 with the gap in balance of trade widening since imports rose by 39% and exports only by 14 %.

Efforts by regional governments to offset these losses through new initiatives including the enhancement of the financial services sector as a means of attracting foreign investments have also encountered severe difficulties as result of the Organization for Economic Cooperation and Development (OECD) pressures. Exacerbating the problems of the region is the fact that the Caribbean is now finding it increasingly difficult to access international financial resources from the international private sector as well as the international donor countries and agencies since they have shifted their funding focus to other parts of the world deemed poorer than the Caribbean. Other compounding factors have also been alluded to by Secretary General Carrington who noted:[22]

> The Caribbean has prided itself on the excellent results of its education system. In fact we advertise this factor as one of the attractions of the Region. Our educational standards allow our work force to be easily trained to adapt to the changing global environment. The challenge which we currently face however, is the drain of our skilled resources especially in the health and education sectors through active recruitment drives, especially from certain developed countries. This is occurring at the same time that these countries are making it more difficult and costly for our students to enter their educational facilities as well as at the same time as countries are forced to receive criminals elements with minimum links to the region who are being deported from these countries. The double negative social and economic impact of these policies are currently being seen in many of our Member states as critical institutions- hospitals, schools- are inadequately manned and crime surges.

Additionally, the global pandemic of HIV/AIDS is also putting stress on the capacities of regional governments to allocate more resources to education and other sectors. The Caribbean region now has the fastest growing rate of infection in the world, and in many countries HIV/AIDs has become the leading cause of death among young people, thereby negating the investments governments would have made in these young persons through education and training

[22]. Ibid.

opportunities.

These multiple challenges and implications are among the major ones which global phenomena present for Caribbean countries and their capacity to build stronger and more relevant tertiary education institutions. Obviously, if tertiary institutions are to achieve the maximum development of the region's human resources then they must necessarily be characterized by multiple paradigm and perceptual shifts in the next millennium. These new dispensations are urgent requirements if these educational institutions are to be instrumental in turning the region into 'learning societies', that is, societies imbued with a strong sense of identity, an enduring desire among citizens to engage in life-long learning, resilience, innovativeness, guile, a capacity to change, and all the other attributes integral to an effective response to a rapidly changing global environment.

Any review of the national development plans of the various CARICOM countries, as well as the policy statement of regional institutions, will confirm that they want their education systems and institutions to produce citizens who are not only capable of adjusting to the requirements of the changes in the labour market, but more important who are well-rounded persons capable of sharing the values needed for living together, and for engaging in nation building through active participation in civil society. Perhaps the most explicit statement to this effect has come from CARICOM which has indicated that the ideal Caribbean citizen should possess the following characteristics:

- be imbued with a respect for human life
- be emotionally secure with a high level of self confidence and self esteem
- see ethnic, religious and other diversity as a source of potential strength and richness
- be aware of the importance of living in harmony with the environment
- have a strong appreciation of family and kinship values, community cohesion, and moral issues
- have an informed respect for cultural heritage

- demonstrate multiple literacies, independent and critical thinking
- demonstrate a positive work ethic
- value and display creative imagination in the economic and entrepreneurial spheres and all other areas of life
- develop the capacity to create and take advantage of opportunities to control, improve, maintain and promote physical, mental, social and spiritual well being and to contribute to the health and welfare of the community and the country; and
- nourish in him/herself and in others, the fullest development of each person's potential without gender stereotyping, and embraces differences and similarities between females and males as a source of mutual strength.

These ideals are deemed by Caribbean policymakers to be vital not only in assisting citizens to integrate in the new global environment but also in helping them to preserve and nurture their identity as a people with a special Caribbean civilization. In essence, educational institutions at all levels, including the tertiary level, are challenged to train and educate young citizens and adults for the ultimate goals of personal, community, national and global fulfillment, security, peace, prosperity and development.

The following sections of this document seek to present an overview of how tertiary education institutions and systems in the region have been attempting under public sector and private sector leadership and initiatives, to cross these perceptual thresholds and effect necessary paradigm shifts with respect to, access, quality of education, relevance of education, management and governance of institutions and national systems, lifelong education, financial sustainability, innovations and reforms, international cooperation, and future development plans. It is recognized that these are among the main areas in which interventions are required, and are taking place, as regional educational institutions struggle to remain relevant and dynamic in pursuing the primary development function of higher education in the Caribbean region, namely to unleashed and harness the full potential of every citizen for their personal enhancement and fulfillment as well as the collective good of the region as a whole. The governments of the region recognize that the

extent to which these goals are achieved will inevitably influenced the capacity of the citizens of the region not only to lead productive lives, but also to co-exist in harmony and in their respective societies, thereby contributing to world peace and stability.

Finally, it should be noted that this study or review of tertiary education in the region has tended to focus more on highlighting processes of change across the region using selected examples, and as such does not pretend to be an authoritative discourse on the peculiarities and particularities of each country in the region. In fact, it may justly be claimed that some countries have not received the degree of attention justified but this is in part due to the fact that other studies are being undertaken focusing on selected countries such as the Bahamas, Guyana, and Suriname.

Chapter 2

Access to Tertiary Education

We must train every talent we possess or condemn ourselves to poverty".
(Sir Arthur Lewis)[1]

Not surprisingly, there is ongoing debate throughout the Region, not so much about the principle of economic integration, but about the actual strategies for achieving a viable regional system which would ensure that the expectations of specific countries, communities and various groups, including youth and women, would materialize within a realistic time frame and that requisite benefits would accrue to them. Thus, when our Heads of Government met in Montego Bay [Jamaica] in 1997 and outlined a HRD Strategy for the Region, it was in full recognition of the fact that in order for the countries of the Caribbean to achieve the necessary competitive advantage, a new approach had to be developed. At that time, they were particularly concerned that tertiary level enrolment at under 6 per cent of the adult population in the Caribbean was too low to sustain our development objective. Our 6 per cent level paled in comparison with the over 12 per cent in Latin America, 15 percent in South East Asia and over 20 per cent in Europe and North America. A target of 15 percent by the year 2005 was agreed on to be set for the Region, and at least one country set a national target of 20 per cent by that date.

(*Secretary General of CARICOM, Edwin Carrington*)

[1]Sir Arthur Lewis, "A Region in Crisis", in UWI, *Unlocking the Potential of a Region*, Kingston Jamaica: Lithographic Printers Ltd, 1996/97.

Section 1: Development & Characteristics of Post-Secondary/Undergraduate Education

2.1 The Early Emergence of Educational Opportunities[2]

Prior to the entry of the Europeans in the West Indies there existed no systems of formal education or schooling among the Amerindian populations and there was no need for any such systems. The skills and values necessary to ensure survival and communal life were imparted to successive generations through the institutions of the family as well as through the village collective. Similarly, during the era of slavery education was at least initially, more informal and non-formal among the black slave population, while formal education was more of a reality among the white population, at least those who could afford it. Only about 5% of the West Indian slaves at the point of emancipation in 1834 possessed basic literacy, that is possessed the ability to read and write or understand simple written material and convey coherent and legibly written information. Slaves were generally not thought by their European owners to need any formal education to perform their duties as labourers. Indeed, educating slaves was regarded by slave owners and government officials alike as being a dangerous threat to social order, and the very lives of the whites. Thus where slave education was allowed, especially under the auspices of the established churches, its objectives were to help reinforce the relationship between masters and slaves and more generally instill in them the virtues of obedience and respect for authority. Those free coloureds in slave society who could afford to did, however, try to ensure that their children acquired some degree of formal education, both locally and in the metrople. They were acutely aware that formal education was a main means of moving upwards within the rigidly stratified class and colour conscious West Indian societies.

However, despite the expectations of the coloured freed men to be accepted by white society as a result of educational and cultural achievements, they were more often than not never really fully accepted by white society. This was not surprising because as the Jamaican planter, Bryan

[2]. This introductory historical section first appeared in Glenford Howe, "Our Coming of Age: Historical Reflections on Developments in Anglophone Caribbean Education", in *CARICOM Perspectives: A Century of achievement* (Vol2), No.69 June 2000, pp. 36-41 & p.68.

Edwards noted in his 1819 publication, “It very frequently happens that the lowest White person, considering himself as greatly superior to the richest and best educated Freeman of colour, will disdain to associate with a person of the latter description, treating him as the Egyptians treated the Israelites, with whom they held it an abomination to eat bread”. In Barbados free coloureds were not permitted in local literary clubs or libraries. Indeed, even white and coloured children who attended the same schools in Europe and became close friends would no longer mix with each other on their return to the West Indies.

Roughly 60% of the whites were literate though most of the “landless whites” were illiterates. While the white plantocracy generally opposed the provision of education for non-whites, they themselves, for the most part, were only interested in education for their own children and not for all whites in general, especially the poor whites. Overseas education at some of the most prestigious schools including Oxford, Cambridge and Harvard, was seen by the wealthy whites as a means whereby their children would be able to access the higher echelons of British society, and also symbolized the wealth and status of the West Indian planter. In the main, white females unlike their male counterparts were educated locally in such subjects as music, needle work and other skills deemed necessary to make them good wives and mothers.

2.2 The Post Emancipation/Colonial Era 1834-1960s

The ending of slavery however witnessed a significant expansion in the availability of formal education to the ex-slaves, coloureds, poor whites and the Indian population, all of whom formed the lower strata of West Indian society. The main mechanisms through which the spread of formal education was facilitated was the Negro Education Grant. Under the terms of this scheme which was instigated by the British Government and the protestant missionary societies of that country, an annual subsidy of 30,000 pounds sterling was provided between 1835 and 1845 (with a gradual reduction after 1841) to construct schools and pay the salaries of teachers. Though a measly sum this money created the basis for the spread of mass education in the British colonies. Another main provider of elementary schooling in the period after emancipation was the Mico Charity, a non-denominational but protestant oriented educational trust. The Mico Charity schools, apart

from providing moral education also taught English and served to spread British values and customs in the colonies. By the 1840s a number of non-denominational or secular schools run by the colonial governments had also emerged in several of the territories.

Between emancipation and the 1930s a number of reports were commissioned by local and British officials to investigate the state of education in the West Indies. Among the most notable of these were the Keenan Report of 1869; the Mitchinson Report of 1875; the Lumb Commission Report of 1898; the Mayhew-Marriott Report of 1931-2; the Kandel Report of 1943, and the Irvine Report of 1945. Collectively these reports led to major institutional and curricula advances and changes in regional education. The reports addressed a wide range of issues including the production of text books which focussed on the indigenous history and environments of the islands; compulsory primary and secondary education; the need for "female" education; the need for greater expenditure on primary education; the development of tertiary/university education; the development of island scholarships; and greater efficiency in education management. Further reforms and developments were to be recommended in the aftermath of the disturbances of the 1930s which were investigated by the Moyne Commission in 1938. The recommendations of that commission led to the establishment of a regional planning mechanism labelled the Colonial Development and Welfare, whose mandate was to administer a major imperial grant for the social and economic development of the region.

The outbreak of the Second World War led to some degree in implementation of the commission's far reaching recommendations, but the years after the war saw a rapid expansion in world trade which brought major expansion and benefits to the economies of the trading nations of the Caribbean. As the economies of the region expanded so too did the striving for greater self-government and the need to get rid of Crown Colony government where it existed. Throughout the late 19th and early 20th centuries a number of newspapers and black radicals sought to educate the masses about the need for an education more rooted in the Caribbean experience.

2.3 Nature & Content of Colonial Education

The provision of Education in the post emancipation era was principally intended to meet the goals of the key stakeholders, including missionaries, the local white oligarchy, and the British Government, involved in the provision of that education. As such, at both the primary and secondary levels religious and moral instruction were essential to the curriculum, as was emphasis on teaching the ex-slaves to accept their place, (as with the lower classes in England), within the existing social and economic structure of the society. However, an even greater goal which shaped the curriculum of the schools in the West Indies was the desire by the British government to ensure that British culture was transferred effectively to the colonies thereby creating the basis for ensuring loyalty between the colonies' inhabitants and the mother country.

Yet, from a functional perspective this process was critical to educated blacks in particular since it enabled them to gain access to those social and economic opportunities such as jobs within the lower echelons of the civil service from which they had been historically excluded. The 'mastering' of the imperial cultural practices allowed the colonial subject to demonstrate his suitability to participate in 'civilized' society. Nevertheless, the education system was also intended to curtail and control the aspirations of blacks. The elites in the colonies whose attitudes were significantly influenced by aspects of Victorian ideology, felt justified in insisting that the various classes of society should be equipped through education for their divinely sanctioned stations and roles in life. This meant that girls of the lower-class were to be instructed in the art of house keeping while the boys were to undergo training to perform the role of labourers primarily for the plantations whose survival were still regarded as crucial to the perpetuation of civilization in the colonies.

2.4 Post-War Expansion of Educational Opportunities

After the Second World War to the late seventies Caribbean territories underwent two profound experiences which facilitated major changes in the education curriculum, and the general expansion and improvement of education in the region. One was the further expansion and improvement in regional economies. This was accomplished by focussing mainly on exportable agricultural goods, mining for raw materials, and import substituting manufactures. Even though

the development of the economies followed the patterns and ebbs and flows of international trade the general prosperity of the islands allowed them to invest heavily in housing, education and other social services, and unemployment rates fell significantly, as governments became major employers. It did not seem to matter much as several West Indian academics, and others of the "New World" group argued at the time that greater integration into the international economy would increase the level of dependency and vulnerability of Caribbean economies.

The other main development to impact in a major way on Caribbean education was the escalation in the nationalist movement which gained momentum especially from the 1930s, during and after the Second World War, but rooted in earlier nationalist philosophies of people like Marcus Garvey. As a consequence of the nationalist enterprise, which was boosted by trade union affiliated parties, by the early 1980s many of the countries had achieved political independence. These included, Trinidad & Tobago (1962); St Vincent (1979); Jamaica (1962); St Lucia (1977); Guyana (1966); Grenada (1974); Belize (1981); Barbados (1966); Antigua (1981); and the Bahamas (1973).

In Trinidad, for example, the government under the leadership of Dr Eric Williams believed that many of the problems associated with education and society in general were due to its colonial orientation. As such that government, as with others in the region, made great strides to West Indianize the curriculum and rectify many of the other structural problems in the education system including inequality to access to secondary education, the lack of integration in the teaching service, as well as the dependence on external examination. Throughout the Eastern Caribbean governments began to expand and enhance the capacity of their respective tertiary level institutions including national colleges and community colleges. One of the main failures or oversights of all these reforms was the inadequate attention paid to the increasing marginalization of males in the teaching profession and the corresponding feminization of the profession. Another inadequacy was the failure to really devote as much attention to the area of education and training for agriculture in the light of its critical importance to regional economies, and the stigma attached

to it as a result of the slavery experience. Even greater problems were to develop as the region entered the decade of the eighties.

2.5 The Crisis of the 1980s and Regeneration in the 1990s

Between the late seventies and especially from the early eighties to the early nineties, most Caribbean states experienced very trying economic times characterized by spiralling inflation and heavy international indebtedness, which impacted quite negatively on all aspect of society especially the social sectors like health and education. In the late 1970s commodity prices and international trade declined sharply resulting in sharp rises in inflation especially from about 1980. Governments were forced to borrow heavily from overseas resulting in burdensome national indebtedness and depletion of foreign exchange used to make interest payments on loans. During this period, known as the Structural Adjustment era, successive International Monetary Fund agreements and loan arrangements from the World Bank forced the various territories to adopt quite painful remedial economic measures. These included devaluation, layoffs, salary cuts, increases in severance and unemployment contributions, decreased benefits, increased taxation, and major cuts in government spending. These measures threatened to reverse the accomplishments of the previous several decades. In Jamaica, for example, expenditure on primary education declined by approximately 30 per cent between 1977 and 1987. This reduction plus the drastic increases in the cost of living made it difficult for both parents and teachers to maintain their commitment to education, and this led to a decline in performance levels and other negative impacts. In the area of education governments were forced to adopt such measures as cutting free text book schemes, reduce spending on school maintenance, and reduce student welfare programmes, among other things. For the first time since the nationalist impetus of the 1950s and 1960s, the perception that free education was the "God given" right of all Caribbean citizens, underwent profound shock and reconsideration. Particularly hard questions were asked of tertiary/higher level education especially in the light of studies by the Rate-of-Return analysts who argued that investments in higher education had a lower rate of return than investment in secondary and especially primary education.

By the middle of the nineties however, the region had weathered the worst part of the economic storm and the various stakeholders in education provision were once more able to turn their attention to the task of rectifying the damage of the eighties and begin to create new educational opportunities. The cumulative effects of the measures of the 1980s included an increase in school indiscipline and violence, a fall off in attendance and a general undermining of the human resources of the region. One benefit of the crisis was that it dramatically illustrated the fact that West Indian scholarship and intellectual thought had made significant strides since emancipation. The crisis confirmed the predictions of the New World which had warned of the profound dependency of Caribbean economies and the consequences that would result. Despite the weaknesses in the process of expanding education opportunities and improving the curriculum in the region, as well as the problems associated with the crisis of the 1980s, however, there is no disputing the fact that by the start of the decade of the nineties West Indian education had in many respects come of age. Even though it may be said that the expansion of education in the region was uneven and was guided more by Development Plans than clearly articulated philosophies of education, it nevertheless brought some clear benefits such as the fact that many countries significantly improved their ability to educate and train citizens to fill roles in governments, private sector organizations, the economies, and politics.

Driven by concepts as “Education for All” and “Each One Matters”, international and regional developmental agencies such as UNESCO, the World Bank, and the Caribbean Development Bank (CDB) have through systematic collaborative effort and partnerships with regional educational institutions and ministries have been able to produce the exceptionally high levels of literacy as the basis for improving and enhancing the quality and human resources of the region. Even though there continues to be much debate about literacy and literacy rates and the relationship between formal schooling and literacy, as well as one ability to function in today’s society and economy, there can be little quibbling over the assertion that this substantial educating of the peoples of the region as reflected in literacy rates, and the far reaching implications thereof, represent the single most important, alongside achievements in Health, accomplishment in the development of Caribbean societies since the period of slavery.

The development, expansion, and blossoming of indigenous educational institutions such as the University of the West Indies (UWI) and the Caribbean Examinations Council (CXC) have made possible major curriculum changes in Caribbean education; changes making the educational experiences and outcomes more directly relevant, meaningful and indigenous to the Caribbean environment. From the establishment of its first campus in Jamaica in 1948 as a result of the Irvine Report the UWI has developed a reputation as being a center of academic excellence capable of producing graduates (such as Sir George Alleyne, Director of the Pan American Health Organization), of the finest quality. Its academics, including St Lucian, Sir Arthur Lewis an economics Nobel Prize winner, Edward Kamua Brathwaite the Barbadian poet, and Hilary Beckles the Barbadian historian, and Rex Nettleford the current Vice Chancellor of the UWI, have also achieved world recognition for their scholarship and contribution to world scholarship and development; a scholarship rooted in the experiences of the Caribbean. Equally important the graduates of the UWI are to be found in key positions in virtually every aspect of leadership in areas of Caribbean economy and society, including several of the current set of regional Prime Ministers.

The Caribbean Examinations Council which was established in 1972 by fifteen English-speaking Caribbean countries likewise represents another of the outstanding achievements of West Indian education and intellectual pursuit. Before the establishment of the CXC children wrote secondary school leaving examinations administered by overseas Boards mainly Cambridge and London. The CXC not only replaced these external examination bodies but also provide subject certification for a candidate population of a wider ability range than was catered for under the foreign-based examinations. Now the CXC has gone a step further by launching the Caribbean Advance Proficiency Examinations (CAPE) which are to replace the advanced levels examinations which are set and administered by British Examination Boards. The establishment of CAPE it is hoped will not only further help to better equip students to function in the Caribbean environment, and internationally, but also to help meet the regional challenge of increasing enrollments at the tertiary level, a fundamental component of the region's developmental strategy.

However, while these achievements and triumphs provide a rich context for conceptualizing and grasping the extent to which education contributed to the development of Caribbean societies, they, most especially at this important juncture in our history and development, must also be seen too as laying the basis for Caribbean people to transcend and fully grasp future educational and developmental challenges and opportunities which have since the 1990s in particular become increasing pronounced. Among these major educational challenges is unquestionably that of the massification or democratization of tertiary level education through significantly increased access.

2.6 Systems-wide Educational Reforms Since the 1990s

It is always worth bearing in mind that the tertiary sector is an integral part of a wider education system of any country and therefore it is not surprising that reforms at the tertiary level more often than not takes place in the context of system wide adjustments. This link has been explicitly acknowledged by the World Bank:[3]

> Tertiary education plays a key role in supporting basic and secondary education, thereby buttressing the economic externalities produced by these lower levels. Improved tertiary education is necessary for sustainable progress in basic education. The supply of qualified teachers and school leaders, capacity for curriculum design, research on teaching and learning, economic analysis and management- these and many more components of basic education reform are hampered by weak tertiary education systems. A comprehensive approach to the development of the education sector is required, along with a balanced distribution of budgetary resources to ensure that countries invest appropriately in tertiary education....When looking at the public benefits of tertiary education, it is important to note the existence of joint-product effects linked to the complementarity between tertiary education and the lower levels of education....

In the English-speaking Caribbean the changes now occurring in the tertiary sector are being undertaken in the context of reforms throughout all levels of the various national education systems, even though the governments have adopted different approaches to these reforms.[4]

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[3]. World Bank. *Constructing Knowledge Societies: New Challenges for Tertiary Education*. Washington DC: The World Bank, 2002, p. xxii.

[4]. See,Errol Miller (ed.) *Educational Reform in the Commonwealth Caribbean*. Washington DC:

Some countries including Barbados, the Bahamas, Trinidad and Tobago, and the countries of the Organisation of Eastern Caribbean States (OECS), namely, Antigua and Barbuda, Montserrat, St Kitts and Nevis, Dominica, St. Lucia, and St. Vincent and the Grenadines have developed comprehensive reforms strategies and plans emanating out of the consultations of National Commissions, National Task Force or Working Groups. Other countries such as Belize, Guyana, Jamaica and the Turks and Caicos Islands have opted for a more project-driven approach involving specific interventions directed at particular aspects or levels of their education system, but nevertheless undertaking widespread consultations. In spite of differing approaches to the process of reform it is still possible to identity a core set of themes and issues around which the reforms have been centred. These include:[5]

- Improving the quality of primary education
- Modernizing the schools and the classrooms through wider use of technology
- Rationalizing secondary education through curriculum reform, restructuring admission and promotion procedures, and greater career guidance
- Expanding tertiary education, including the use of the distance education modality, and linking this level of education more closely to the labour force demands, especially in the priority economic sectors such as tourism and hospitality services, financial services, light manufacturing, and agro-industry
- Increasing and improving foreign language teaching at the secondary and tertiary levels and linking these to the global market place and tourism
- Improving the status, salary, and training of teachers
- Restructuring the financing of education to increase cost effectiveness and

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INTERAMER/Organisation of American States, 1999.

[5]. Listed in, Errol Miller. "Educational Reform in the Commonwealth Caribbean: An assessment, in Errol Miller (ed.) *Educational Reform in the Commonwealth Caribbean*. Washington DC: INTERAMER/Organisation of American States, 1999, p.8.

including cost recovery, cost sharing, and special taxes to meet educational expenditure

- Introducing various value-oriented projects and materials to influence character formation, promote conflict resolution, and influence the development of wholesome and positive attitudes.

- Improving the management of schools through the greater involvement of communities and parents and more accountability measures for schools and teachers.

- Promoting greater partnerships among communities, the private sector, non-governmental organizations, and the State in the support and delivery of public schooling

The effectiveness and outcomes of these reforms have been mixed but Errol Miller has observed the following about them:[6]

> When the reforms of the 1990s are compared with those of the independence period, one glaring point emerges. In some countries, for example Barbados and The Bahamas, the two sets of reforms constitute a continuous, almost evolutionary, progression. The 1990 reforms are an evolutionary and incremental step built upon the previous reforms. This conveys a sense of stability and predictability and the ability to plan long term. In some countries, for example Jamaica and Guyana, some of the reforms represent reversals of previous reforms. Free secondary and tertiary education have been replaced by cost sharing and user fees. This gives the impression of stops and starts in the sequence of educational change, and conveys a sense of instability and uncertainty that harbors short-term commitment.

These observations from Miller seem to add credence to the findings of the World Bank that "comprehensive reforms can be more effective than piecemeal ones" and likely to bear more fruits when interventions are integrated into the broad reform programme based on a global change.[7] However it should also be borne in mind that "the preference for comprehensiveness does not

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[6]. Errol Miller. "Educational Reform in the Commonwealth Caribbean: An assessment, in Errol Miller (ed.) *Educational Reform in the Commonwealth Caribbean*. Washington DC: INTERAMER/Organisation of American States, 1999, p.9.

[7].World Bank. *Constructing Knowledge Societies*, p. xxv

mean that all aspects of a reform should be packed into a single operation [since] sequencing provides the tools for responding to and adjusting to evolving challenges."[8]

Regional bodies including CARICOM have also sought to influence the reforms taking place in the region through their own investigations, consultations, conferences and Task Force. Among these initiatives were the Regional Strategy for Technical and Vocational Education and Training emanating out of CARICOM in 1990. Other regional and international organizations including the Caribbean Development Bank (CDB), the Inter-American Development Bank (IADB), the World Bank, and UNESCO have also been helping to support and influence the education reform processes which have been taking place in the region. Two examples specific to tertiary education will suffice.

2.6.1 Example 1: Impact of the World Conference on Higher Education

The World Conference on Higher Education held in 1998 and the consultations which preceded, as well as followed it, helped to clarify and sharpen the focus on a number of issues affecting Caribbean tertiary education, and helped to provide a global picture of how similar concerns and challenges were being tackled in other countries. In fact, it would be true to say that the World Conference on Higher Education highlighted the similarities, as well as differences, of the problems, issues and opportunities facing countries in the developing world, as well as in the developed world thereby revealing the interconnectedness and global nature of educational issues of especially since the 1990s. Among the main issues illuminated by the conference were:

- the challenge of meeting the rapid expansion in demand for tertiary education.
- how to foster excellence and relevance in research
- the task of strengthening institutional management and governance capacities
- financing education in sustainable ways, especially in light of the inadequacy of the availability of resources from the state.

[8]. Ibid.

% coping with internationalization.

% developing quality assurance mechanisms for training and education

% articulation and institutional collaboration

% challenges created by globalisation

% the need for greater efficiency in the delivery of education services

% the role of the teacher in the new information age

% the lower achievement of boys across all educational levels

% the importance of lifelong learning; and

% the need for upgrading and rethinking technical and vocational education

2.6.2 Example 2: CDB/IADB & UWI Development

Throughout the decade of the 1980s but especially in the 1990s the UWI has been under severe pressure, both internally and externally, to increase its educational and training capacity, and relevance and to more effectively meet the developmental needs of its contributing member states. Reflective of this need for greater effectiveness and efficiency in its provision of education and training to the region, the UWI's Ten Year Development Plan and its Strategic Plan for 1997-2002, articulated a vision in which through profound structural and institutional changes and expansion the University would attempt to meet the challenges of nurturing and developing the human and social capital of the region. Particular emphasis was placed on plans to increase the access of the non-campus countries (NCCs) and rural areas of campus countries to the programmes and resources of the UWI. The plans endorsed the need for a major distance education thrust to help rectify the severe imbalance in access to the UWI, and tertiary education in general, which existed between the people in the campus countries and those in the NCCs. The UWI desperately wanted to reverse a declining trend in student enrollment from the non-campus countries. In 1960/61 students from campus countries comprised 66.5% of the total University enrollment, students from the OECS countries 11.8%, and those from other territories constituted

21.7 %. By 1988/89, however, students from the campus countries made up 93.5 % of the total enrollment, while those from the OECS countries and the British Virgin Islands together only comprised 4% of the enrollment, and those from Belize, The Bahamas, Turks and Caicos, and the Cayman Islands made up 1%. This further decline it was recognised was not simply a matter of the prohibitive cost of on-campus study, but also related to a number of other factors, including inadequate student loans schemes in the OECS, and persons commitments to family and work.

In 1992/1993 the Caribbean Development Bank (CDB) and the Inter-American Development Bank (IADB) agreed to provide the UWI with development loans of approximately US$82.0 million. US$ 9.1 million of the funds were utilized for a massive expansion and upgrading of the UWI distance education system and programmes aimed at, among other things, significantly broadening access (especially in the non-campus countries) to university level education. With the university attempting to increase its range of programme offerings and the number of enrolments, to the order of 20,000 (full-time equivalent) students by the year 2001, up from a level of 16,000, it was anticipated that up to 1000 students per year of this increase might be achieved through distance learning programmes. The distance education or outreach component of the project involved the following:

- an expansion and upgrade of the communication technology for distance education, and teleconferencing at 27 sites in sixteen countries.
- construction, furnishing and equipping of 62,000 square feet of space in sixteen countries
- curriculum development and modification
- production of learning material
- 480 person months of staff training; and
- the engagement of consultants to provide services related to architecture and engineering, needs assessment, curriculum development, and staff development and technical assistance in the areas of organization, management and telecommunications

- provision of project management, and logistical support.

By targeting these areas the funding support provided by these regional institutions contributed significantly to the expansion of the distance education programmes (considered in the next chapter) now being offered by the UWI, and facilitated greater communication between the campuses and the various units of the School of Continuing Studies located in the other non-campus countries.

2.7 Defining Tertiary Education

In the Caribbean, as Peters has quite correctly observed, the term "higher" is used interchangeably with 'tertiary but both are intended to be inclusive and reflect a recognition "that education and training provisions in these third level institutions may and in fact do include non-university and university level programmes, technical and vocational education and training, professional and paraprofessional training, and continuing education programmes."[9] Students attending these institutions are usually over the age of sixteen and would normally be required to meet certain minimum academic or experiential standards to be eligible for admission to these institutions which deliver a variety of formal post-secondary education to middle and high-level personnel in degree, diploma and certificate programmes.

2.8 Scale of Regional participation in Tertiary Education

In 1998 UNESCO's Institute for Statistics estimated that there were 93,550 students from the wider Caribbean involved in tertiary education. The countries involved in this estimate included Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Netherlands Antilles, St Kitts and Nevis, St. Lucia, St Vincent and the Grenadines, Suriname, Trinidad and Tobago, and the Turks and Caicos Islands. Those undertaking tertiary level education were primarily based in their respective countries but some were also studying in other Caribbean countries as well as further abroad, particularly in Canada, the USA and OECD countries.

[9]. See for further details, Bevis Peters, *The Emergence of Community, State and National Colleges in the OECS member countries: An institutional Analysis*. Cave Hill, Barbados: ISER, pp1-22.

Caribbean student mobility was deemed as arising out of several factors including a general trend among students worldwide to be more mobile, the lack of (or inadequate) programme offerings locally, while some students started programmes at home and then relocated to another country to complete their studies.

Despite the mobility among some students, however, the numbers actually studying in their respective country was approximately 80 per cent. Of the total studying in a country other than their own, 1900 were studying in another Caribbean country while 16,550 were studying in an OECD country. Tables 2 to 8 provide varying details Caribbean students studying in tertiary institutions overseas, while tables 9 and 10 show the relatively smaller numbers of students from other countries coming to the Caribbean to undertake tertiary education reflecting the fact that the region needs to more actively seek to attract students from overseas; the potential gains both socially, culturally and financially, are likely to be quite significant. Notably, Jamaica had the highest number of students studying outside the Caribbean region, that is, some 3560 students, or 14 per cent of the total number of Jamaican students involved in tertiary education. Also, noteworthy was the fact that there were five Caribbean countries which had more than 50 per cent of their tertiary students studying at institutions outside the Caribbean. The overseas enrollment was most pronounced in the British Virgin Islands (93%), Dominica (83%) and Antigua and Barbuda (79%). In contrast, some countries had a much smaller percentage of their students studying overseas, for example, Aruba (5%), St Lucia (8%) and Barbados (13%).

These variations between the two sets of countries are no doubt influenced by such factors as the capacity of the local tertiary sector, government policies, and socio-cultural attachments to the UK, USA and Canada, as well as a historical and widespread perception that “foreign is better”. But there is also another issue to be raised here, namely the problem of the “Brain Drain”. It is well known that many Caribbean students who are trained overseas do not return home and thus those countries who send most of their students overseas for training face an additional risk. According to the World Bank “the rising international mobility of skilled human resources can have positive as well as negative effects on countries at all levels of development. Developing

countries, however, tend to suffer largely adverse consequences, as they may lose the very technical and professional specialists who would be capable of contributing to poverty-alleviating improvements in the living conditions of the local population."[10]

As noted in chapter one, the overall participation rates in tertiary education in the Caribbean are quite low in comparison to many other countries, especially with Latin America, the East Asian countries and the OECD and other developed countries. These contrasting enrollment situations are symptomatic of a wide and increasingly widening gap between the developed and developing world. For example, whereas in 1980 the tertiary enrollment rate in the USA was around 55 per cent, the average for developing countries was 5 per cent, and by 1995 the respective rates had moved to 81 per cent for the USA but only a mere 9 per cent for developing countries.[11] The disturbingly low level of tertiary enrollment in the Caribbean has been for several years a major concern of Caribbean policy makers and regional institutions including the Caribbean Community (CARICOM). Secretary General of CARICOM, Edwin Carrington explains why and what that body proposed by way of solutions:

> Not surprisingly, there is ongoing debate throughout the Region, not so much about the principle of economic integration, but about the actual strategies for achieving a viable regional system which would ensure that the expectations of specific countries, communities and various groups, including youth and women, would materialize within a realistic time frame and that requisite benefits would accrue to them. Thus, when our Heads of Government met in Montego Bay [Jamaica] in 1997 and outlined a HRD Strategy for the Region, it was in full recognition of the fact that in order for the countries of the Caribbean to achieve the necessary competitive advantage, a new approach had to be developed. At that time, they were particularly concerned that tertiary level enrolment at under 6 per cent of the adult population in the Caribbean was too low to sustain our development objective. Our 6 per cent level paled in comparison with the over 12 per cent in Latin America, 15 percent in South East Asia and over 20 per cent in Europe and North America. A target of 15 percent by the year 2005 was agreed

[10] World Bank. *Constructing Knowledge Societies,* p.18

[11]. World Bank. *Constructing Knowledge Societies,* p.46-47. The tertiary enrollment rate measures the proportion of the population in the 18-24 age group that is actually enrolled in a tertiary education institution.

> on to be set for the Region, and at least one country set a national target of 20 per cent by that date.[12]

In fact, there is also an awareness among regional policy making institutions that inadequate access to tertiary education could in some Caribbean countries contribute to societal instability. An appraisal report commissioned by the Caribbean Development Bank (CDB) on further education in the Turks and Caicos Islands in 1997 noted that:[13]

> The economic and social development of the TCI [Turks and Caicos Islands] is constrained by limited numbers of belongers with tertiary level education and training. This short-fall is primarily due to inadequate provision of post-secondary education and training programmes locally....If continued economic growth is to be attained without total reliance on an expatriate labour force, then the education and training sector must be enhanced to equip persons with the requisite skills, knowledge and attitudes to meet the demand of a serviced-based economy, and an increasingly competitive international environment. Additionally, in order to mitigate the risk of social discontent that is usually associated with an environment in which the vast majority of high level managerial posts are occupied primarily by expatriates, increased access to appropriate post-secondary education and training must be provided to belongers, to enable them to compete for these positions, and to help direct the development process.

This recognition of the inadequacy of the levels of participation in tertiary education in the context of the region's developmental needs, and the changes taking place in the labour market as a result of globalisation provided the context for a number of education reform initiatives which are now being developed in the region.

2.9 Current Structure of Tertiary Education in the Region

The tertiary education sector in the English-speaking Caribbean consists of over 150 tertiary level institutions of which over 60% are national or publicly supported institutions with about 30% being private and the rest under private ownership with some governmental support. Among the

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[12]. Remarks of Mr Edwin Carrington, Secretary General, Caribbean Community at the opening of the Fifth meeting of the Council for Human and Social Development, Georgetown, Guyana, 3 October 2001.

[13]. CDB. *Appraisal Report on Further Education- Turks and Caicos Islands*. Report prepared for the CDB's 175th meeting of the Board of Directors held on October 16, 1997.

private institutions are an increasing number of 'off-shore' distance providers based mainly in North America and the United Kingdom which utilize traditional and modern distance learning technologies, have been using the new distance-learning technologies to offer their programmes. Among the network of institutions the University of the West Indies (UWI) is the largest with three campuses in Jamaica, Trinidad and Barbados, as well as a number of extra-mural centres or schools of continuing studies in the other fourteen Caribbean countries which provide financial support to the UWI. It also utilizes distance technologies to deliver its programmes across the region, as well as has a number of articulation and affiliation arrangements with various other tertiary institutions to deliver its programmes, and provide access for their students.

2.10 Articulation and Collaboration

As elsewhere, the tertiary education sector in the English-speaking Caribbean is quite diverse comprising local and regional institutions, technical and vocational colleges, a technological university, traditional university such as the University of Belize (UB), the UWI, University of Guyana (UG) and the University of the Virgin Islands (UVI), and multi-disciplinary and special entities. Furthermore as Roberts[14] has observed, diversity is also to be found with respect to the governance of the institutions, the student population, the staffing composition, the mission of the institutions. While this diversity generates both advantages and disadvantages for many of the institutions they are still able to find common ground through bodies such as the Association of Caribbean Tertiary Institutions (ACTI) to collaborate in terms of seeking regional equivalence, articulation, and accreditation. These avenues of collaboration which are being explored by the various institutions have provided the basis for greater access to, and opportunities for, the pursuit of tertiary education. Roberts describes the models of articulation being utilized in the region as follows:[15]

> There are several models of institutional articulation which have emerged in the region. Structurally, the commonest are hierarchical arrangements which

[14]. Vivienne Roberts, "Programme Articulation: The making of a regional Tertiary Education System", *Journal of Education and Development in the Caribbean* vol. 3, no.2 1999, p.145-169.

[15]. Ibid.

> emphasize vertical linkages allowing students to progress from one level to another; lateral linkages allowing for transfer between similar programmes and networks allowing for multidirectional transfers. These directional types of linkages are built on conceptions of an emerging system depicted variously as pyramids, hubs and spokes, and spheres. The dynamics of these interactions rest on agreed or perceived relationships between mentor and student, senior and junior, or equal partners sharing dynamic and shifting dominance.

Articulation takes place not only among institutions located in the Caribbean region but also between Caribbean institutions and institutions in the United States and elsewhere both through formal and informal arrangements between the various institutions. The goals of the various articulation arrangements may be listed as follows:[16]

- the promotion of access through multiple pathways.
- the pursuit of equity through the provision of opportunity to the disadvantaged or non-traditional students.
- the practice of cost-efficiency through provision for the achievement of relevant objectives in a less costly modality, in an institution where unit cost is less, or in a shorter time but with no loss in quality.
- the provision of opportunities for the use of prior learning in one institution to gain access to another institution or programme without loss of time or credit for past achievement.
- the establishment of functional links and partnerships to promote quality and cohesion in the educational system.

Thus even though diversity might be an enduring feature of the tertiary education sector in the region there remains tremendous scope of collaboration at multiple levels to achieve the various goals and objectives of these institutions. Given the small size of the region and the commonalities of the problems, as indeed opportunities, shared by these institutions they might find it more productive and useful to continue to pursue avenues for collaboration and partnerships rather than engaging in any excessive and unproductive competition for students, staff or financial resources, as well as in the area of programme offerings.

[16]. Ibid, p.162.

Section 2: UWI and Tertiary Education Provision: A Case Study

2.11 Changing Characteristics of the Demand for Tertiary Education

The UWI's current strategic plan has identified the following as among the changing characteristics of the demand for tertiary education in the region:

- A substantial and growing proportion of applicants are young adults in their mid-twenties to early thirties rather than newly graduated sixth formers
- Many prospective students are prepared to trade the benefits of face-to-face programme delivery for accessibility and convenience
- Prospective students are firm in their expectations that programme content bears direct relevance to vocational or career paths
- The students expect that digital communications and learning technologies are used by higher education institutions to create a facilitatory learning environment and enhance their educational experience
- Competing higher education providers excel with respect to the efficiency of their delivery systems; and
- Students actively seek value for their educational investments and are impatient with administrative inefficiencies.

2.12 UWI Undergraduate Enrollment patterns 2000/2001[17]

[17]. Special thanks to the Office of the Vice Chancellor for providing details and analysis of UWI enrollment, which was originally prepared by the Office of Planning. The related enrollment statistics for the UWI are presented in Tables 11 to 34 of Appendix 4.

2.12.1 UWI Student Registrations

A total of 23,762 students had registered in on- and off-campus programmes at the three campuses of the university during the 2000/2001 academic year. This translated into a marginal increase of 1.5% over the previous academic year. As was the case in 1999/2000, this was indicative of sluggish growth in student numbers. Increased numbers of off-campus students had fueled much of the growth in the university student population. The 13% increase in these student numbers was in direct contrast to a decrease of 0.6% in the number of on-campus students. This was no doubt, influenced by the earlier transfer of Social Science certificate programmes to Tertiary Level Institutions.

The majority of off-campus students (59%) were registered in distance education programmes. It proved to be a strong growth area given that enrollment in these programmes grew by almost 16% over the previous year. This was followed by a 9% increase in student numbers at Tertiary Level Institutions and 8% for Affiliated institutions. In terms of campus comparisons, the St. Augustine campus was the only campus that had a positive increase in on-campus student numbers. This increase was relatively small, in the region of 2%. On the other hand, the Cave Hill and Mona campuses suffered marginal decreases in these student numbers in the magnitudes of 1.4% and 2.4%, respectively.

2.12.2 Full Time Equivalent (FTE) Registrations

The increase in FTE numbers fell well below the University's yearly target of 1,000 that was stipulated in its Strategic Plan for the period, 1997-2002. This represented an increase of 21 FTEs over the previous academic year. Both the Cave Hill and St. Augustine campuses had moderate increases in FTE numbers of 103 and 13, respectively. However, these gains were offset by a decline in Mona's FTE numbers of 213.

The university was close to achieving the goal outlined in the Strategic Plan of increasing enrollment in the areas of Science and Technology to 40% of the total student population. This actual proportion remained at the level of 38% for a second consecutive year. At the campus

level, this target was surpassed only at the St. Augustine campus with 55% of its FTE numbers registered in Science and Technology areas. However, this proportion represented a marginal decrease of 2% compared to previous year's figure of 57%. By comparison, the proportions of Science and Technology students at Cave Hill and Mona were 27% and 29%, respectively.

As was the case in 1999/2000, 16% of FTE students were registered in postgraduate degree programmes. This was in striking distance of the Strategic Plan's target of 20% of total university student enrollment. At the campus level, Mona was closest to this goal with 18% of its FTE students registered in these programmes. The figures for Cave Hill and St. Augustine were 13% and 15%, respectively.

2.12.3 Full-time and Part-Time Registrations

In a pattern similar to that of previous years, student registrations were mostly full-time. There were 12,768 full-time students and 7,019 part-time students registered in on-campus university programmes. This was in effect, a slight increase of 1.4% in the number of full-time students over last year's figure of 12,587. In contrast, the number of part-time students actually declined, albeit, a small decline of 4% from the previous year's figure of 7,317.

The number of students in off-campus programmes continued to increase, no doubt indicative of a positive trend. The figure increased to 4,141 in the 2000/01 academic year from 3,883 in 1999/2000. Mona retained its position as the campus with the largest number of off-campus students, that is, 2,097, an increase of approximately 5% over last year's figure of 2,001. The numbers of off-campus students also increased at Cave Hill and St. Augustine with 1,359 and 685 in 2000/01 as compared to 1,209 and 673 in 1999/2000.

2.12.4 Gender

The gender imbalance in the university student population was still evident during the 2000/01 academic year, as in previous academic years. There was almost a 2:1 ratio of females to males as there was a total of 15,950 females and 7,978 males registered at the university in both its on- and

off-campus programmes. As was the case in previous years, this gender imbalance varied by faculty. An analysis of on-campus registrations in first-degree programmes showed that males were in the majority in the Faculty of Science and Technology at Cave Hill and also at the Engineering faculty at St. Augustine. Females on the other hand, dominated enrollment in the Faculties of Arts/Humanities, Law, Social Sciences and the various Schools of Education across the campuses. The Faculty of Pure and Applied Sciences/School of Natural Sciences was the only faculty/school with an almost equal proportion of males and females. Attention still needs to be focused on the relatively weak enrollments of women in the Engineering and Science faculties, and perhaps on whether women of the lower socio-economic and disadvantaged groups are really accessing tertiary education in equitable numbers. However, even greater concern must be expressed about the overall poor enrollment rates of males and their under performance at most levels of the entire education sector.

2.12.5 Student Registrations by Faculty and Programme

The Social Science Faculty remained the largest faculty in terms of student numbers. With an enrollment of 7,469 students, this faculty accounted for 44% of total on- and off-campus student enrollment across the three campuses. (The previous year's figure was 45%). At the campus level, the situation was no different. The proportions of Social Science students at Cave Hill, Mona and St. Augustine were 54%, 51% and 29%, respectively. The second largest faculty was that of the Humanities/Arts and Education /Humanities and Education, which accounted for almost a quarter of total university student enrollment. The proportions at Cave Hill, Mona and St. Augustine were 20%, 27% and 21%, respectively. In contrast, the Law faculty remained the faculty with the lowest student numbers at both the university and faculty levels. With an enrollment figure of 440 students, it had approximately 2% of the total university enrollment. Faculty enrollment at Cave Hill stood at 7%, but was less than one percent at both the Mona and St. Augustine campuses.

The biggest growth in student numbers took place in the Faculty of Humanities/Arts and Education/Humanities and Education and particularly in the Arts section. Growth rates for Cave

Hill, Mona and St. Augustine were 6%, 8% and 4% and for the university, 6%. Growth rates for the Schools of Education and the Law faculty were similar, that is, in the region of one percent at the university level. Indicative of sluggish growth, the Faculty of Science and Technology/Pure and Applied Sciences/Natural Sciences grew by less than one percent. Against the background of physical capacity constraints, the Medical Science faculty had a marginal decline of less than one percent. However, the most surprising development was the negative growth of 4% experienced by the Social Science faculty (at the university level). This could no doubt, be attributed to increased competition from other tertiary level institutions and in particular, the offshore universities and also, the economic effects of globalization on the regional job market. The impact of these factors varied by campus. In that vein, both the Cave Hill and Mona campuses recorded declines of 7% and 8% which was not offset by St. Augustine's 10% increase.

2.12.6 Geographical Distribution of Students

In terms of the number of students from each contributing country who had registered in on-campus university programmes in the 2000/01 academic year. 43% of all on-campus students were Jamaicans. The second largest grouping was from Trinidad and Tobago with 32%. This was followed by Barbados with 17%. It was apparent that nationals of the Campus countries tended to dominate on-campus enrollment at their local campuses. 78% of all on-campus students at the Cave Hill campus were Barbadians. 93% of Mona students were Jamaicans and 86% of St. Augustine students were from Trinidad and Tobago.

Approximately 4% of on-campus students at the university came from the member countries of the Organization of Eastern Caribbean States (OECS). This was almost a decline of one percent when compared to the previous year's figures. Notwithstanding, the enrollment figure for 2000/01 has been consistent with the trend over the past six years. Cave Hill continued to have the largest share of OECS students registered in their on-campus programmes, which amounted to 50% of all OECS students at the university. Mona had approximately 20% and St. Augustine, 30%.

In terms of trends, the number of OECS students registered at Mona has declined steadily over

the years, from 310 in 1995/96 to 156 in 2000/01. This was in stark contrast to St. Augustine which witnessed an increase in its numbers from 143 to 254 over the same period. Similarly, Cave Hill had a steady increase in its OECS student numbers over the six-year period, moving from 317 in 1995/96 to 413 in 2000/01. At the university level, the number of OECS students has increased by a modest 7% over the last six years, moving from 770 in 1995/96 to 823 in 2000/01 after peaking at 1,000 in 1999/2000.

2.12.7 Access for Students with Disabilities

While most of the tertiary institutions in the region have long acknowledged the importance of enabling students with disabilities to access their programmes, the region as a whole has not yet developed any clear guidelines or policies to enhance the participation of the disabled in tertiary education. As yet no comprehensive study has been undertaken to establish the numbers of students throughout the region who can with the necessary assistance undertake tertiary education. The experiences of disabled persons who have actually attended institutions like the UWI vary and depend very much on the goodwill of interested persons, although the UWI, for example, has sought to make its building structurally accessible to the disabled and the library has acquired the necessary specialized equipment to enable blind and deaf students to use its resources. The Mona Campus, which is the largest UWI campus had an enrollment of thirty nine students with disabilities in the academic year 1998/99, thirty-one students in 1999/2000, and thirty in 2000/01. The majority of these students were enrolled in the faculties of Arts and Education, and Social Sciences with smaller numbers in the faculties of Medical Sciences, and Pure and Applied Sciences.[18] More data needs to be collected on the total experience of disabled students at the various tertiary institutions in the region in order that the full potential, skills and the knowledge which disabled persons in the region possess might be effectively harnessed for national development, and foster their integration in society in more meaningful ways.

[18]. UWI, Mona campus. Memorandum of Estimates of Needs for the Biennium 2002/2004. Jamaica: UWI, Mona Campus, February 2002.

2.12.8 Access for Mature Students

The UWI has now recognized that more mature students are taking up the challenge of pursuing tertiary education but often many do not have the necessary academic prerequisites to make a successful application for entry into the university's programmes. As a result the Board of Undergraduate Studies which has responsibility for all undergraduate matters, including admissions, recently revised the regulations making it easier for mature students to enter the university's programmes.[19] Mature students are now defined as persons over the age of 21 who do not have the traditional academic entry requirements. However, the entry of more mature students have created additional challenges for the university in that these students tend to be more discriminating, not easily satisfied with the quality of teaching and learning, and many are stressed as a result of family and other commitments.

[19]. Hilary Beckles, Anthony Perry and Peter Whiteley. The Brain Train. Quality Higher education and Caribbean Development, Mona, Jamaica: Board for Undergraduate Studies/Pear Tree Press, 2002, p.58.

Section 3: Rationalisation for Greater Access: Case Study of Barbados

2.13 Local & Regional Imperatives for Rationalisation

As the governments of the region attempt to broaden access to tertiary education in their respective countries they may opt to chose one or more of a number of options and strategies by which this goal might be achieved. In the context of Barbados the government has chosen not only to seek massive increases in enrollment at each of the four post-secondary institutions located in that country, but additionally, to further facilitate these increases through an overall rationalization strategy for these institutions.[20] The rationalisation of these institutions is also intended to facilitate greater collaboration among the institutions so as to optimize the use of scarce human and financial resources, as well as help resolve a number of issues relating to articulation, accreditation, and certification, among the institutions. At the same time, the rationalisation efforts are intended to meet the mandate of the Eighteenth Special Meeting of the CARICOM Standing Committee of Ministers Responsible for Education (SCME) held in Barbados in May 1997. At that time the Committee mandated that human resources development strategies in the region should ensure that education and training were not undertaken in a mechanistic manner, but that the strategies needed to take into account a number of challenges including the following:

- The emerging profile of the workforce which will be needed to enhance a country's competitiveness.
- The re-organisation of the production processes; and
- The development of abilities, attitudes, skills and technological knowledge necessary for jobs, entrepreneurial development and human well-being.

[20]. Much of the information provided for this case study of Barbados' efforts at increasing access were obtained from the Ministry of Education, Government of Barbados.

2.14 Barbados' Public Tertiary Education Sector

The Government of Barbados has long recognized the value of its tertiary education sector as a key mechanism in the country's development and productivity and thus allocates significant resources to public tertiary institutions located in that country namely the Cave Hill campus of the university of the West Indies, the Barbados Community College (BCC), the Samuel Jackman Prescod Polytechnic (SJPP) and Erdiston Teachers' Training College (ETTC). Table 72 which provides a summary of expenditure on post-secondary/tertiary institutions in Barbados for the period 1995/96 to 2000/2001 reflects the steady increases in expenditure over this period.

2.15 Demand for and Access to Tertiary Education in Barbados

Consequent on Barbados' declining birth rate (lower than many/most other Caribbean countries) now compounded by deaths from HIV/AIDs, the number of students entering and graduating from primary and secondary school has significantly decreased from an estimated 60,000 in the 1980s to 48,000 by 1999/2000, and this figure is expected to be as low as 25,000 by the year 2015. However, analysis of the output from secondary school reveals that a larger number of students are qualifying for entry into post-secondary/tertiary education, and there has also been a rise in the number of adults seeking tertiary education. In addition, the government, in response to the changes taking place in the economy as a result of globalisation, has committed itself to act proactively by offering training, and re-training opportunities at the tertiary level not only to fulfill current needs of the economy, but also in anticipation of jobs which do not yet exist, as well as jobs existing outside Barbados which Barbadians could perform.

The sectors of the Barbados economy which the government believes are in need of more adequately trained persons include tourism, financial; services, information and communication technology and entrepreneurship. The emphasis on these areas is symptomatic of the fact that Barbados has made a transition from being largely an agrarian-based economy to being a service-based economy. In this service-based economy life-long learning opportunities are regarded as being of critical importance, not merely because of the need to remain on the cutting-edge of developments, but also because jobs and job descriptions and requirement are in a continuous

state of flux and evolution. That there is clear and growing demand for more tertiary education opportunities in Barbados is reflected by the fact that, as table 73 shows, there are very large numbers of persons applying to the various tertiary institutions in Barbados who are rejected each year not so much so perhaps because of inadequate qualifications but more so because of the inadequate capacity of the institutions to cater to the overwhelming demand. Indeed, even at the level below the tertiary institutions, namely the sixth forms of the secondary schools, many students are rejected. This is a problem also affecting other tertiary institutions in the region including the UWI.

A similar picture emerges when considers the number of students who apply to the Cave Hill campus of the UWI in Barbados. The campus received 3,002 applications for undergraduate programmes from students in all sixteen the Caribbean countries who contribute financially to the university for the academic year 2002/2003. Of this total 1,629 offers were made and 1,231 students accepted places and registered. Of the total number who applied 1761 were from Barbados, reflective of the preponderance of Barbadian students represented in the total number of students on the campus. However, the campus was only able to offer places to 1228 to Barbadian students. 1015 Barbadian students accepted and were registered at the campus. It is worth noting that some of the students who applied to the Cave Hill Campus, may have also applied to other tertiary institutions, especially the Barbados Community College. As is the case throughout the rest of the region the issue of equity, in all of its complex forms, may also arise since, for example, some persons who are unable to accept their places might not be able to do so because of lack of funds or other reasons including family commitments. As such, the issue of equity is one area which is in need of more detailed investigation.

2.16 Rationalisation & the Establishment of a University College of Barbados (UCB)

Against the background of the high number of applicants who were being rejected by the four tertiary institutions, the government of Barbados felt that the establishment of single institution called the University College of Barbados comprising the former Barbados Community College, the Samuel Jackman Prescod Polytechnic, and Erdiston Teachers' Training College, would

provide significant opportunities for the rationalisation of the financial and administrative aspects of tertiary education in Barbados. Additionally, it was felt that this consolidated institution would facilitate a broader range and depth of programming, as well as, be more ideal for the responsive type of training and education up to the level of the Bachelor's degree, and applied research, required for new students and adult learners by the different sectors of the Barbadian economy. But perhaps the most defining feature of the new institution would be that access would be given priority and so the entry requirements and exit qualifications would reflect more flexibility than the tradition university including the Cave Hill campus of the UWI. The University College of Barbados was not conceptualized to compete with the UWI but rather to complement it by focusing more on a wider range of applied programmes for job preparation and upgrading of skills, while the UWI would continue to pursue strong academic and research programmes both at the undergraduate and graduate levels. While the government has acknowledge that there will be challenges in terms of quality, among other things, it has committed itself to putting in place the necessary structures including a quality assurance unit to ensure that level of education and training offered by the University College of Barbados meets international standards, and local requirements.

Section 4: Privatization and Tertiary Education Sector

Private educational institutions, operating at the pre-school, primary, secondary and tertiary levels, have long operated in the English speaking Caribbean but since the 1980s the region has seen further growth and expansion among the tertiary institutions, and the emergence of new ones as well. However, unlike in countries such as Korea, Brazil, Columbia, the Philippines, and Indonesia, where private sector share of tertiary education enrollments account for between 60 and 80 per cent of total tertiary enrollments, in the Caribbean tertiary education remains predominatly the business of the public sector.

The growth of the private institutions may rightly be seen in the context of the global expansion private tertiary institutions and the increasing privatization and commodification of education. These institutions are characterized by heterogeneity and diversity in terms of their mission, infrastructural development, programmes, and quality. Nevertheless they all seem to be born out of a recognition and realization that there existed particular niche markets in education and training which they could more adequately serve than, the historically more inflexible traditional public tertiary institutions. One such institution is the Barbados Institute of Management and Productivity (BIMAP), a private institute of business, management and professional studies. BIMAP was granted a licence in 1971 and was officially opened in 1972. Its establishment arose out of collaboration between the private sector and the Government of Barbados. BIMAP has also increased its national and regional standing by forging a relationship with the Postgraduate Business School of the University of Surrey in England, for the delivery of a number of graduate programmes in the field of business studies.

The private tertiary institutions in the Caribbean share many, though in varying degrees, of the characteristics of similar institutions globally, namely:[21]

[21]. For further details on for-profits higher education institutions see, Norman LaRocque/ Arthur Anderson, *Private Higher education in Developing Countries: Private Interests... Public Good*. Presentation to NZAPEP Cooperative Change in Tertiary Education conference, 13 September 2000. Also, The futures Project. *A Briefing on For-Profit Higher Education*, The Futures Project: Policy for Higher Education in a

- Fees are the main source of revenue
- They serve both rich and poor, often giving persons a “second chance”
- There exist a range of institutional types, including franchises, sole proprietorships, for-profit companies, not-for-profits, and religious based organization
- They generally offer a limited range of professional/practically oriented courses, including accounting, management, and english
- They often use part-time staff including practitioners in the field, and professors from public institutions
- Their regulatory framework is usually less developed than for public tertiary institutions.
- They may also have various types of arrangements with the government for support
- Questions are often raised about their quality and accreditation status
- Were born out of a desire to fill a particular niche in the education and labour markets
- They rely less on tradition type libraries and depend more on online resources including journals and electronic databases
- They cater strongly to working students, thereby holding many of their classes at nights
- They tend to focus more on high volume, lower cost courses such as management and business, and information technology training
- May have alumni association but have reduced levels of student services
- Offer opportunities for quicker completion of programmes than in public institutions.
- Increasing they seek to acquire status and accreditation or greater recognition locally and regionally by forging partnerships with well recognised tertiary

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Changing World, Brown University, Providence, Rhode Island, USA, October 2000.

institutions locally, regionally and internationally.

- Some such as the off-shore medical schools in the Caribbean, are financed by powerful consortiums of businesses.

While questions will continue to be raised about their quality, there can be no doubt that the emergence of these private institutions have helped to expand and broaden access to tertiary education in the region. In fact, their presence might be regarded as being responsible for the emergence of specialized "for-profit" type units and institutes at traditional tertiary institutions like the UWI.

The Centre for Management Development (CMD), an autonomous institution located on the Cave Hill campus of the UWI is just one of several such bodies which have emerged in partnership persons for the knowledge based economies which have evolved in the region. The CMD was established on April 17th 1991 out of a recognition on the part of the private sectors of Barbados and those of the OECS that there was a need for a more responsive mechanism to provide high quality training for the changing world of work. The CMD and its sister organizations, the Institutes of Business at the campuses in Jamaica and Trinidad actively provide training, education, ancillary support and consulting services to managers and organizations across the region. Their programmes are accredited by the UWI but they remain autonomous bodies operating under the policy direction of an independent Board. The CMD's two main academic programmes at this time are the Executive Diploma in Management (an undergraduate programme), and the Executive Masters in Business Administration, a postgraduate programme.

Governments too have been establishing institutions specifically geared to training persons for the new demands of the economy. The Management Institute for National Development (MIND) which is an Executive Agency of the Government of Jamaica, is one such body set up by a government to complement the traditional tertiary education institutions.[22] MIND operates a Pay-as-You-Learn easy payment plan and has course schedules which are more convenient for busy

[22]. See, MIND. *Business and Corporate Plans 2002-2005*, Jamaica; Management Institute for National Development, December 17, 2001.

adult learners. In addition, since September 2000 MIND has forged a relationship with the UWI which allows it to deliver Level 1 of the UWI's B.Sc. in Public Administration.

Section 5: Continuing and Lifelong Learning Opportunities

Lifelong learning is now a present reality as Caribbean societies seek to enhance national development and prepare their citizens to deal with the challenges and opportunities of the global economy. Today, individuals and institutions are forced to accept that knowledge and skills acquired may quickly become obsolete, and thus there is a need for continual retraining and reeducating of citizens not only to deal with the world of work but also to be able to function and participate in rapidly changing societies. Not only is the distinction between initial and continuing education becoming blurred but even more fundamental changes are occurring which place more emphasis on learning how to learn. The World Bank explains:[23]

> The lifelong-learning approach stresses the primacy of the learner. Tertiary education institutions will have to organize themselves to accommodate the learning and training needs of a more diverse clientele: working students, mature students, stay-at-home students, traveling students, part-time students, day students, night students, weekend students, and so on. New patterns of demand are emerging whereby learners attend several institutions or programs in parallel or sequentially, thus taking the initiative to define their own skill profiles on the labor market. Another important consequence of the acceleration of scientific and technological progress is the diminished emphasis on remembering countless facts and basic data and the growing importance of methodological knowledge and analytical skills - the skills needed for learning to think and to an analyze information autonomously. Today, in a number of scientific disciplines, elements of factual knowledge taught in the first year of study may become obsolete before graduation. The learning process now needs to be increasingly based on the capacity to find and access knowledge and to apply it in problem solving. Learning to learn, learning to transform information into new knowledge, and learning to translate new knowledge into applications become more important than memorizing specific information. In this new paradigm, primacy is given to analytical skills; that is, to the ability to seek and find information, crystallize issues, formulate testable hypotheses, marshal and evaluate evidence, and solve problems. The new competencies that employers value in the knowledge economy have to do with oral and written communications, teamwork, peer teaching, creativity, envisioning skills, resourcefulness, and the ability to adjust to change.

[23]. World Bank. *Constructing Knowledge Societies*, pp.27-29.

The emergence of the various private tertiary training and educational institutions mentioned above very much reflects the requirements of the learning society in the twenty-first century. However, the School of Continuing Studies (SCS) of the University of the West Indies still represents one of the more effective public institutions preparing regional citizens for the new realities of the economy and society in the region. Headquartered on the Mona campus of the UWI in Jamaica the SCS has centres or extra-mural departments in all the countries which contribute to the university. The mission of the School of Continuing Studies is to provide opportunities for lifelong learning through a variety of high quality academic, technical and vocational programmes designed to contribute to the social, cultural and economic development of the people of the Caribbean region. During the academic year 2000-2001 over 19,000 students were enrolled in programmes being offered by the SCS across the region. Increasingly, the SCS's programmes reflect a recognition that equally emphasis must be placed on creating opportunities for citizens to access tertiary education and on adult education utilizing formal, informal, and non-formal teaching-learning modalities. Tables 36 to 46 show the clusters of programmes currently being offered by the SCS, and provide further details of the programmes. A number of new programmes are also being developed to further enhance the relevance and effectiveness of the SCS in the developmental process across the region.

2.17 New Programme Development

2.17.1 Certificate in Labour Studies

This programme being developed by the Trade Union Education Institute is a regional programme designed to deliver foundation level education and training in labour studies. It will streamline the current offerings and provide a more structured and professional approach to certifying professionals in that field of work. The Institute will offer this programme throughout the region in collaboration with the Labour Colleges and through the use of UWI distance education facilities and at University Centres in NCCs.

The following programmes being developed by SCS in the British Virgin Islands will be offered at the certificate level. The programmes will be delivered locally during the initial phase; however, it is anticipated that they will subsequently be offered regionally.

2.17.2 Certificate in Offshore Finance and Trust Management

The certificate is geared toward training persons employed at the supervisory level position in the offshore financial sector. The programme is being developed in conjunction with private sector companies involved in the industry.

2.17.3 Certificate in Human Resources Management

The certificate is targeted at persons involved in the human resource management function within the public and private sector who are seeking to develop their professional and academic skills. The Labour Department of the BVI Government has made contributions to the development of this programme.

2.17.4 Certificate in Immigration Studies

This is a two-year Certificate programme designed for the practical training of the BVI's immigration officers. The course of study would include Administrative and Immigration Law, Language Skills, Introduction to Computers and Information Systems, Spanish (both oral and written), Public Sector Accounting, Management and Criminal Justice. The Immigration Department of the BVI Government has made contributions to the development of this programme.

2.17.5 The Dental Auxiliary Training Programme

The Dental Auxiliary Training Programme being developed by the School at St. Augustine encompasses three different programmes, a certificate and two Associate Degrees. The one-year certificate for the training of Dental Assistants can be a terminal qualification or will be the first year of the 2-year Associate Degree programmes for Dental Hygienists and Dental Laboratory Technicians. The training will be conducted in collaboration with the School of Dentistry of the

Faculty of Medical Sciences at St. Augustine. Generally Dental Auxiliary training takes place on the job without external certification. The proposed programme would ensure common standards and certification of persons engaged in dental auxiliary roles.

2.17.6 Associate Degree in Public Sector Management

The Associate of Science Degree Programme in Public Sector Management will be offered in multi-mode with part-time courses designed to deliver management education and training for public sector organization. The programme will be delivered on a part-time basis and is structured as a 2½+ 2 year offer, which will allow the holder to move from the Associate degree to the Bachelor's degree by doing two additional years of study. All the courses will address the fundamentals of public sector management. Courses will be delivered through face-to-face, distance & web-based delivery systems, with further academic support of related CDs, audiotapes, & print packages.

2.17.7 Adult Education Transition Programme

This programme is a non-credit, introductory and remedial programme in pre-University Mathematics and English and study skills for mature students to provide them with a firm foundation in preparation for University undergraduate courses.

2.18 Programme Review

To ensure that its programmes remain relevant in content and delivery, the School of Continuing Studies has started a process of reviewing all programmes in accordance with the established academic quality assurance procedures with support of the Instructional Development Unit at the St. Augustine campus of the UWI. The goals of the review exercise are to:

- standardise and integrate some of the disparate course programmes offered in the same field of knowledge by the various units of the School;
- enhance the quality of the programmes in structure and content, ensuring academic integrity as well as serviceableness to the region;
- facilitate articulation with courses offered at higher levels at the UWI and

other universities; and

- satisfy the requisite criteria both for substance and format to enable the programmes to attract university accreditation in total or in part.

2.19 Scholars and Artistes in Residence in Non-Campus Countries

Further, as noted previously the SCS also places emphasis on combining formal education with informal and non-formal educational programmes as part of its strategy to stimulate learning, and encourage the sharing of information and talents across the region. One example of this was the recent establishment of a programme called the Scholars and Artistes in Residence in Non-campus Countries. This programme allows selected scholars and artistes to reside and work for short periods in Caribbean countries where the UWI does not have a campus. Appointees have an opportunity to pursue their own intellectual and creative work while contributing to the intellectual and cultural life of the community. Their contributions may take the form of workshops, seminars, lectures, discussions, exhibitions, clinics, or other consultations in which the appointees offer members of the community access to their knowledge and skills.

The programme fulfils several goals. It provides residents, students, artistes and scholars with access to mentors, counterparts and possible collaborators who would not otherwise be readily available. It facilitates research relevant to these countries and stimulates intellectual, creative and artistic activity in them. Through this initiative access to high quality teaching and learning is not only expanded, but also broadened in such a way that it affects all groups and levels of society.

Section 6: Graduate Studies

> In spite of the expected inability of the economy to absorb a growing number of well-educated persons, the demand for education in the Latin American and the Caribbean region is likely to remain intense. As the population gets more educated, persons with higher qualifications replace the less educated, even if no new jobs are being created, and if the economy is not growing or changing in a significant way. This relative advantage of the more educated is a very powerful incentive for individuals, even when the social and economic benefits of educational mobility for society are negligible or even negative. This expectation of better income and more stable jobs, however, is only part of a broader generational movement for more education, which is also part, if one wishes, of globalisation. (Simon Schwartzman)[24]

Over the last decade the UWI has made significant strides in improving access to postgraduate studies in the region. It remains today, despite postgraduate offerings by other institutions the main provider of the largest numbers and types of high quality programmes at the postgraduate level. Across the campuses, the various faculties, departments and research institutions, as well as the School for Continuing Studies in the various NCCs have developed or helped to facilitate the implementation of a range of postgraduate programmes comprising taught Masters degrees and Research degrees in various disciplines. The taught programmes such as the Masters in Education and the Masters in Library Studies, usually consist of lectures, course-work and project or research papers. The Research degrees on the other hand are based on independent study assisted by a panel of supervisors and the eventual production of a thesis. However, all research degrees, such as the Masters of Philosophy (M.Phil), the Doctor of Medicine (MD) and the Doctor of Philosophy (PhD), now carry a taught component. One of the main wishes of the University has always been that where possible the student should be encouraged to pursue the research on areas relating to their home countries. Consequent on a number of constraints, not least of which has been access to adequate supervision and supervisors, this wish is often not met especially with respect to the non-campus countries.

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[24]. Schwartzman, Simon. *The Future of Education in Latin America and the Caribbean*. Working Paper presented to the Seventh Meeting of the Intergovernmental Regional Committee of the Major Project in the Field of Education in Latin America and the Caribbean, 2001, p.11.

With the start of the implementation of the Governance Report by 1994, and the formation of the Board for Non-Campus Countries, and the School for Graduate Studies and Research, however, much more progress has been made in expanding the provision of postgraduate studies to the citizens of the region. The Board for Non-Campus Countries and Distance Education has responsibility for promoting, developing and administering the work of the university in the non-campus countries and to facilitate the delivery of programmes to these countries. The mandate of the Board is fulfilled through its three constituent departments, the Distance Education Centre (DEC), the School of Continuing Studies (SCS), and the Tertiary Level Institutions Unit (TLIU). The School for Graduate Studies and Research on the other hand is mandated to increase graduate student enrollment and to foster research through intra-university, regional and international collaboration and partnerships. The increase in postgraduate offerings has also been as a result of the formation of active and well-led postgraduate student associations, as well as the strengthening, and in some cases revival, of the UWI Guild of Graduates in the various contributing countries and internationally.

2.20 Constraints on Expansion and Quality of Graduate Studies at UWI

In spite of these advances, however, and as in the case of undergraduate enrollment patterns, enrollment in graduate programmes among students from the non-campus countries continue to lag significantly behind the campus countries because of a number of constraints internal and external to students in the NCCs, including inadequate financial resources and unavailability of trained supervisors, among others. Postgraduate enrollment is arguably also constrained and hampered by the variety of difficulties which post graduate students have historically and currently face. These may be itemized as follows:

- Reduction in the number of postgraduate scholarships and grants, particularly in time of economic recession
- Inadequate housing for graduate students on the campuses, articularly those from the NCCs.
- The lack of responsibility on the part of some supervisors

- The absence of an Ethics Committee and a formal structure to enforce fair supervision
- Cost of travel to and from the campus countries
- Delays in vetting theses by the library
- Inadequate remuneration (graduate students serving as teaching assistants/ demonstrators
- Cramped conditions in certain Postgraduate Sections
- A lack of student loan assistance for graduate students
- A feeling of being inadequately prepared at the undergraduate level for work at the postgraduate level.

2.21 Towards a More Effective & Vibrant Graduate Studies Programme

Some attempts have been made by the University, perhaps not systematically enough, to alleviate some of these difficulties encountered by post graduate students. However, in more recent times carefully articulated and defined initiatives detailed have been developed by the School for Graduate Studies and Research. The main strategies now being adopted may be summarized as follows:

- That there is a need for the University to develop and implement a credit based fee structure for graduate programmes which non-sponsored students can afford and which would enable them to pay for and accumulate their required credits over a period of time.
- Further financial and institutional strengthening of the various postgraduate associations should be undertaken.
- There should be an increase in the number of teaching assistantships available to postgraduate students as well as improvement in their remuneration.
- Academic staff applying for research grant from the Campus Research and Publications Committees should be encouraged, as is being done presently, to demonstrate an inclination to involve postgraduate students in their research projects.

- The various Institutes and Centres of the university should be encouraged to play an expanded role in the development of graduate studies, especially in terms of the NCCs.

- There should be a programme of systematic training for persons wanting or qualified to be academic supervisors.

- The provision of more adequate funding for graduate students through a variety of strategies including the development of a Caribbean Regional Funding Agency, encouraging governments to include graduate students in loan schemes, or to provide more scholarships to pursue graduate studies and, strategic research partnerships with public and private sector bodies.

- Create other strategies which would enable the typical potential graduate student to be able to effectively pursue his/her studies while working. A 1998 survey of graduate students at the Mona campus (whose finding were regarded by the School for Graduate Studies and Research as been equally applicable to the Cave Hill and St. Augustine campuses) revealed that 53% are heads of households, and 44% parents of children under the age 20. Approximately 85% were employed and 87% held senior or middle management positions.

- Modularization of courses (linked closely to a credit based fee structure) was seen as one way of providing students with the flexibility of doing modules in a manner convenient to them while they worked steadily towards earning the degree.

- The greater use of distance education modalities, such as the Internet should be encouraged to facilitate the delivery of graduate programme. Distance modalities were seen as one way of reducing costs involved in pursuing post graduate degrees, as well as, facilitating the work/study paradigm presently being pursued by most postgraduate students, and enabling continuing education.

- Measures should be adopted to encourage diversity among the graduate student population in terms of facilitating the entry of disadvantaged groups such as the disabled and lower income women, as well as others including persons from the indigenous groups of the region including, for example, the Amerindians in Dominica and Guyana.

- More workshops, seminars, fact-finding and promotional visits by UWI officials and, increased marketing should be undertaken to better inform potential graduate students in the NCCs of the range of opportunities and programmes offered by the UWI.

- A final strategy which has been proposed relates to the development of co-supervision programmes for graduate students, especially those in the NCCs. It should be noted that the current University regulations governing graduate studies

> allow for co-supervision of students by persons deemed suitably qualified but who are not members of the UWI regular staff, along with a regular UWI staff. To this end the Board for Non-Campus Countries and Distance Education has undertaken the task of compiling a database of potential co-supervisors located in all contributing countries. These persons are to be utilized in the training and supervision of greater numbers of students at the graduate levels from throughout the non-campus countries.

There is no questioning the fact that at this juncture in the regions development there is a confluence of factors which make it imperative that the University seeks to more aggressively expand its graduate programmes. Firstly, there is growing recognition that it is through their postgraduate programmes that any university might best effect its mandate or desire to make a direct and meaningful impact on the development issues affecting the society in which it exists. Secondly, it is increasingly being recognised that the expansion of higher education may well be a defining factor in the sustained development of any country. Thirdly, with the gradual decrease in the value of a first degree, as such degrees become more common, it seems that greater emphasis must necessarily be put on post graduate qualifications and training. Fourthly, within the NCCs more and more people are acquiring graduate degrees including the MA, M.Phil and PhD degrees, thereby generating an increased awareness of the utility and possibilities of acquiring such advanced qualifications. This awareness is further bolstered by that gained by students from the NCCs who have studied at the UWI campuses or other external universities which are now placing greater emphasis on graduate studies. Fifthly, through the modalities of distance education it is possible to reach more and more persons and afford them the opportunity of gaining advanced degrees while working, and at a relatively cheaper cost than conventional programmes. Finally, the proliferation of tertiary education institutions throughout the region has provided a healthy context for the UWI and other teriary institutions in the region to have access to the calibre of persons who might act as co-supervisors for its graduate programmes.

2.22 Conclusion

There can be no doubt that among the most pressing challenges facing the tertiary education sector in the region, as indeed, other developing countries is that of creating greater access at both the post-secondary, undergraduate, and postgraduate levels. However, increased access can

be at a great price if this expansion is not properly conceptualized and managed. As the World Bank report, *Higher Education in Developing Countries. Peril and Promise* observed:

> In most developing countries higher education exhibits severe deficiencies, with the expansion of the system an aggravating factor. Demand for increased access is likely to continue, with public and private sectors seeking to meet it with an array of new higher education institutions. Rapid and chaotic expansion is usually the result, with the public sector generally underfunded and the private (for profit) sector having problems establishing quality programmes that address anything other than short-term, market-driven needs.... Developing countries are left with a formidable task— expanding their higher education system and improving quality, all within continuing budgetary constraints."[25]

It may, however, be possible for the tertiary institutions in the region to put more emphasis on exploring and utilizing the enormous potentials the revolution in communication has brought to education, and the teaching-learning processes in particular. The following chapter provides some indication of how the UWI, and other tertiary providers outside the Caribbean have been attempting to harness the benefits of distance education teaching-learning modalities to provide greater access and more programme choices for citizens of the region.

[25]. World Bank. *Higher Education in Developing Countries. Peril and Promise*. Washington DC: World Bank Task Force on Higher Education and Society, 2000, p.36.

Chapter 3

ICR and Expansion of Tertiary Education Provision

> One specific dimension of scientific and technological progress that is already having a strong effect on the tertiary education sector is the information and communication revolution..... Today, technological innovations in informatics and telecommunications are once more revolutionizing capacity to store, transmit, access, and use information. Rapid progress in electronics, telecommunications, and satellite technologies, permitting high-capacity data transmission at very low cost, has brought about the quasi neutralization of physical distance as a barrier to communication and as a factor in economic competitiveness.
>
> (The World Bank: *Constructing Knowledge Societies*)

3.1 Introduction

The significant developments resulting from the information and communication revolution (ICR) have generated tremendous challenges and opportunities for tertiary institutions in the Caribbean. They are being challenged like never before to utilize the new modalities of the communication revolution, not least the internet, to help broaden and expand access, as well as provide training and education to enable citizens to cope with the rapid changes in the economy and society of the region. This chapter provides an overview of the ongoing efforts of especially the UWI to utilize the new technologies for teaching and learning. The emphasis on the UWI being justified since the new distance technologies are only being marginally utilized by few other institutions including the University of Guyana, the University of Technology in Jamaica, and the University of Belize, all of which acknowledge the benefits that these new technologies can provide in helping them to meet their specific educational mandates. The second part of this chapter, however, considers how the over seventy-four (74) foreign institutions presently operating in the region's tertiary education market have been seeking to exploit the rising demand for tertiary education in the region.

Section 1: Distance Education at the UWI

3.2 Origins, Rationale and Early Initiatives 1978-1983[1]

Although distance education is often spoken of as a recent development in terms of UWI policy, in reality the concept is one which has been utilized, albeit in a very limited way, by the University since 1970 when the University Council endorsed recommendations for the further development of its work in the non-campus countries.[2] Early interest in distance education was generated by the belief that this mode of teaching had various benefits which would enable the University to enhance and increase its service beyond the campus countries. Distance education was seen as both a means of overcoming barriers of distance, and as a way of increasing significantly, educational opportunities of people who because of their geographical location or socio-economic position in society would otherwise find it difficult to benefit from university level education.

Against the background of the perceived need for, and benefits of distance education, the UWI through the Schools of Continuing Studies/University Centres, launched in 1977/78 the Challenge Programme through the Faculty of Social Sciences at Mona, and subsequently at the other campuses, offering the BSc Part 1 to off-campus students situated in campus and non-campus countries. The objective was to allow these students the opportunity to register for and write or 'challenge' the UWI final examinations. Typically, students in non-campus countries registered at the campus nearest to their home country. Although it is possible to claim that in its early phase the programme did achieve some of its intended policy, its organization and implementation left much to be desired. As one report would later observe, the Challenge scheme was truly a challenge since the University only provided the syllabus, booklists, and access to the library at

[1]This description of the evolution of distance education first appeared in Howe, Glenford. '>From Ideas to Practice: The Development of the University of the West Indies Distance Education Policies and Programmes' in Glenford Howe (ed.), *Higher Education in the Caribbean. Past Present and Future Directions*, Kingston Jamaica: University of the West Indies Press, 2000.

[2] Marjorie Moyston, *Report on Challenge/UWIDITE Programmes*, prepared for Distance Education Centre, Cave Hill Campus, 1995/96, p.2

each Extra Mural Centre but little else.[3]

By the early 1980s, however, some of the problems of the Challenge initiative had been alleviated and there was an effort by the faculty to provide course material, visits from staff to non-campus territories prior to examinations to assist the students, recruiting of and liaison with local tutors and, the offering of programmes to off-campus students in campus territories. This shift in the orientation and administration of the Challenge Programme meant that these students no longer existed in virtual isolation from the University. What developed instead was a moderately interactive relationship between the Challenge students and the University.[4] Many Challenge students, including this present writer, eventually moved on to a campus country to complete or start a new degree. However, many problems remained chronic in the Challenge enterprise.

Importantly, by the early 1980s the UWI had also become interested in the further expansion of its distance education programmes so as to provide a better and broader range of services to its constituents, especially the non-campus countries. This interest was partly rooted in the University's development strategy which included, for example, a process of decentralization to, among other things, enable the individual campuses to responded to challenges and opportunities more effectively and rapidly. Decentralization, especially after the major restructuring initiative in 1984, however, had the unintended effect of compounding the problem of neglect of the non-campus countries as the various campuses became more inward looking and parochial in their outlook.[5] Change was however also a consequence of pressure from the non-campus countries for the University to play a more active role in the overall development in those territories.[6] These

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[3] Gerald C. Lalor and Christine Marrett, *Report on the University of the West Indies Distance Teaching Experiment*, (Senate House, UWI, Mona Jamaica, November 1986), p.52.

[4] Moyston, *Report on Challenge/UWIDITE Programme*, p.4

[5] See, Neville V. Nicholls and Ivan L. Head (Co-Chairmen), *A New Structure. The Regional University in the 1990s and Beyond. Report of the Chancellor's Commission on the Governance of UWI*, July 1994. Hereafter referred to the *Report of the Chancellor's Commission*, p.32

[6] Zellyne D. Jennings, *Innovation in tertiary education in the Caribbean: Distance Teaching in the Faculty of Education at the University of the West Indies*, Centre for the Study of Education in

countries felt that they were missing out on such benefits as employment opportunities for non-academic staff and benefits from research which is conducted mainly in and on the campus countries. At the same time, even campus countries like Trinidad and Tobago were criticizing the University for among other things failing to adopt a leadership role in any national effort in science and technology.[7]

In addition, throughout the period of the Challenge Programme no real effort was made, as was a major objective of the programme, to foster the development of educational resources in the non-campus countries. What happened instead was the perpetuation of University/Campus control over all aspects of the teaching and learning involved in Challenge.[8] An unwieldy management /organizational structure also created much delay and confusion in the implementation of the Challenge Programme. The successful administering of the programme depended on a great number of persons and bodies dispersed over a wide geographical area but there was no single unit which co-ordinated the programme. As a result, there was confusion among students and Resident Tutors as to whom complaints should be addressed, and other people described the Challenge Programme as often appearing 'uncoordinated, haphazard and at best only incidental to the main on-campus operations'.[9] Partly in an effort to counteract what they perceived to be neglect on the part of the UWI but also as a result of their own national developmental plans non-campus countries like St. Lucia, Antigua and Grenada began to develop or expand their own national tertiary institutions.[10]

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developing Countries, The Hague, February 1990, p.7

[7] Ibid, p.7

[8] E.P Brandon, *Distance Education in the Restructured UWI: Policy and Problems*, Unpublished paper, 1996

[9] Moyston, *Report on Challenge/UWIDITE Programme*, p.16.

[10] See Patrick A.M. Emmanuel, 'Academic Relations of Power: The case of UWI', Paper prepared for the XVIIIth Annual Conference of the Caribbean Studies Association, Jamaica, May 1993,
pp.1-28.

3.3 OUS and UWIDITE 1983-1992

In response to the various developments in, and pressures from, the non-campus countries, the University established the Office of University Services (OUS) to co-ordinate and manage its outreach programmes. The policy decision to create the OUS was based on the belief that this office could rationalize the delivery of the University's services, including those performed by the various extra-mural centres which existed in all contributing Caribbean countries.[11] This rationalization was however never realized. Instead, the OUS and the extra-mural departments which were grouped under the School for Continuing Studies (SCS), operated and developed separately as autonomous organizations with separate leadership. One consequence of this anomalous situation was that the expected benefits from the pooling of expertise and resources were not realized.[12]

Another major response of the UWI to these challenges and pressures was to launch in 1983 its Distance Teaching Experiment (UWIDITE). This enterprise followed upon an earlier experiment in 1978 called 'Project Satellite' which linked, in the first instance, the Mona and Cave Hill campuses via two National Aeronautics and Space Administration (NASA) satellites. The success of the experiment led to the Caribbean Regional Communications Study (CARCOST), a feasibility analysis undertaken to determine whether and how interactive distance teaching and teleconferencing could contribute to education and the public service in the Caribbean.[13] UWIDITE represented an attempt to explore further the potential for utilizing telecommunications technology to expand the University's educational service to sites remote from the campuses of the UWI. The CARCOST report provided the blueprint for UWIDITE, and a three year grant of US$600,000, the audio equipment for teleconferencing rooms, approximately US$220,000 for communication costs and funds for technical assistance and training were

[11] Ibid, p.25.

[12] *Report of the Chancellor's Commission*, p.34.

[13] Jennings, *Innovation in tertiary education in the Caribbean*, p.7

provided by USAID.[14] The project was implemented jointly under the auspices of the UWI and the Washington based Academy for Educational Development (AED). Each UWIDITE site or Centre was equipped with microphones, speakers and audio-graphic equipment for interactive teleconferencing and various printed material were used to support on-line and off-line interaction.[15] The initial teleconference was held in March 1983 between the five existing sites in Jamaica, Barbados, Trinidad, St. Lucia, and Dominica.[16]

With its limited resources and inadequate planning, however, the early UWIDITE operation was plagued with numerous problems which significantly affected the implementation process. One of the first difficulties which surfaced was the scepticism expressed by some faculty members who expressed the concern that the UWIDITE student would not be able to cover as much material as in a classroom setting, that the absence of face to face contact with lecturers would impact negatively on the amount and quality of learning, and that the students would not be able to read sufficiently widely.[17] Even though some faculty and administrative staff, the 'street-level bureaucrats', eventually developed greater confidence in the UWIDITE initiative, there subsequently emerged a widespread attitude that distance education was an 'add-on', extra work, and somewhat of an 'outside child' of the University.[18] Some faculty members objected to

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[14] Lalor and Marrett, *Report on the University of the West Indies Distance Teaching Experiment*, p.12. Various organizations and regional governments also made contributions to the project. See, Ibid., p.12.

[15] Hall and Marrett, *Quality Education via Distance Mode*, p.87.

[16] Gerald Lalor and Christine Marrett (with input from Robert Davis and Vilma McClenan), *UWIDITE: Report 1986-1993*, April 1994, p. 1-2.

[17] Lalor and Marrett, *Report on the University of the West Indies Distance Teaching Experiment*, p.74.

[18] Verieux Mourillon, 'A University's desire to be rapidly transformed to a Mixed Mode Institution: What is the role of Staff development in this transition?', Dissertation submitted in part requirement for the Med degree of the University of Sheffield, January 1995. See appendix V11 entitled 'Excerpts of statement to UWI round table on distance education, Pro-Vice Chancellor responsible for distance education (January 1995)'; See also, *Report of the Chancellor's Commission*, p.35.

writing material for the distance education students on the basis that this amounted to spoon-feeding of the students while others maintained that their subject could not be taught in this manner.[19]

It was also felt by campus staff that the work of distance education, in addition to their regular teaching or administrative work, was too strenuous and the remuneration in terms of assessment and promotion quite miserly. At the same time the locally based staff at the tertiary institutions who assisted with the teaching of the University's courses felt isolated from their colleagues and departments in the campus countries.[20] One consequence of the negative attitude on the part of UWI campus staff to UWIDITE was that the assignments done by the UWIDITE students were not always treated with the necessary urgency. Another problem which plagued UWIDITE was that of the breakdown and at times confusion with the teleconferencing facilities. Although the UWIDITE teleconferencing system was impressive, there were times when the equipment at a site could be down for an entire session in consecutive weeks, and there were also times, as happened in Trinidad, when the system could be down for weeks.[21] In addition, many lecturers did not possess and did not develop the necessary familiarity and skills to be able to use the teleconferencing system effectively; there was no systematic or sustained training programme organized for these lecturers.

A number of complaints were made by the UWIDITE students about various things including the costliness of transportation, as well as, the difficulties encountered with transport in getting to and from the UWIDITE centers. For example, students in the rural areas of Dominica who could not get a bus to return home after 4 pm were therefore forced to remain overnight in the city until they could get a bus about 1 pm the following day. This meant that attending class at the

[19] Jennings, *Innovation in Tertiary education in the Caribbean,* p.15.

[20] *Report on the Chancellor's Commission,* p.35.

[21] Lalor and Marrett, *Report on the University of the West Indies Distance Teaching Experiment,* p.21; Jennings, *Innovation in Tertiary education in the Caribbean,* p.12.

UWIDITE center often involved the loss of two full working days.[22] The easy and cost effective education which the UWIDITE project was to facilitate for people in remote areas was thus often thwarted. Another difficulty which the students encountered was that the printed materials invariably arrived from the campus too late to allow students adequate time to use them in preparation for the interactive sessions. Although this problem was in part a consequence of difficulties with the regular mail system, the problem was also rooted in the fact that distance education was viewed by campus staff as being of secondary importance. To compound the problem the libraries and resource centers in the non-campus countries were often lacking in the necessary support and reference materials. Resident Tutors and other teaching staff in the non-campus countries therefore often had to rely heavily on personal contacts in order to obtain timely responses from the faculties and administrative staff on behalf of the UWIDITE students.[23]

Difficulties also arose with the articulation of the Challenge and UWIDITE courses with the full degree program on the campus. It was possible, for instance, for students, such as those taking Law or Social Sciences courses, to successfully 'challenge' the University exams in the home country but subsequently find that there was no room for them on the campus to complete their degree.[24] In the Law faculty this problem stemmed in part from the very rigid quotas for entry into the LLB programme. Country quotas, among other things, have meant that for years many students who want to pursue a career in Law have found it difficult if not impossible to do so. Overwhelming pressure and fierce competition for places in the faculty of Social Sciences also meant that students completing Part One of any of the Social Sciences programmes by distance education are not guaranteed that they will be accepted by the faculty to complete their degree, even though the faculty has moved to significantly increase its intake of students. Clearly, in this case the University's promises of what distance education would mean especially for non-campus students, were only partially fulfilled. An unwieldy and bureaucratic system of organization of the

[22] Jennings, *Innovation in Tertiary Education in the Caribbean*, p.13.

[23] *Report on the Chancellor's Commission,* p.35.

[24] Brandon, *Distance Education*, pp.2-3.

distance education programme, and the University more generally, also contributed to many of the problems and frustration experienced by UWIDITE students and staff in the non-campus countries.[25]

However, to stress the numerous problems and challenges which UWIDITE experienced since its conception is not meant to give the impression that the programme was a failure, or that it was heavy on rhetorical policy and short on implemented policy. Any assessment of UWIDITE must necessarily seek to establish the extent to which it was or was not able to achieve what it was intended to do as outlined in its objectives which included:

- demonstrating that a sufficient level of demand existed to support an operational system
- creating within UWI an interest towards meeting identified demands by teleconferencing so that the institution would incorporate these as part of its armoury
- establishing a core of experience, and of experienced workers, to allow the efficient design, staffing and implementation of a fully operational system for distance teaching and outreach
- helping to develop mechanisms and expertise for the production of educational materials, for example, print, audio, and audio-visual materials
- developing a proposal for a permanent service.

This type of assessment was precisely what the 1986 *Lalor and Marrett Report* sought to do and it concluded that UWIDITE had gone far in terms of meeting these objectives.[26] The report noted that under UWIDITE multiple programmes had been organized for community aids, technicians, teachers, nurses, university undergraduates and government agencies. This it argued demonstrated that there was enough demand to support a distance education programme over the

[25] *Report on the Chancellor's Commission,* pp.34-36.

[26] Lalor and Marrett, *Report on the University of the West Indies Distance Teaching Experiment*, p.78.

long term. Moreover, the report maintained, 'the number and variety of programmes; the increasing number of programmes being developed in direct response to requests from governments or organizations in the countries on the network; the numbers of participants; and the extent of usage during term time; and the keenness of the other countries to join the system show clearly that a real demand exists to support an operational system'.[27] Significantly, between the inaugural teleconference in March 1983 and 1999, UWIDITE sites were increased from five to over twenty-five in fourteen countries around the region.[28] This expansion can be regarded as symptomatic of the demand for UWIDITE services and was critical in helping UWIDITE to overcome some of its problems and achieve its stated short term objectives.

In terms of the second stated objective the report observed that UWIDITE had been accepted as part of the University's armory. While there is much truth in this assertion one has to be cautious in accepting this conclusion of the report. As noted earlier, even though university official policies acknowledged the integral and important role of UWIDITE in its delivery of teaching, it must be remembered that many in the various faculties, the 'street-level bureaucrats' still viewed the distance education enterprise as an 'add-on' and as peripheral to the university's mission. The third and fourth objectives, as the report rightly concluded, were pursued with some measure of success. Efforts are still continuing to create a pool of expertise in the region to support the distance education programme and to date various educational materials have been produced by the limited pool of experts so far developed. In terms of the final objective there can be no doubt that this was met in large measure. This is, however, not the type of goal which can ever be fully and completely achieved. Given that policy making and analysis is by nature an iterative and ongoing process it can be expected that any plan or policy for UWIDITE, and more generally, for distance education, will be subject to a continuous process of evaluation, refining and reformulation. Indeed, it is this process which led to what can be regarded as the third phase in the development of UWI distance education policy making and programmes. This third phase, it can be argued, started with the creation of the Board for Distance Education which held its first

[27] Ibid, p.78.

[28]. DEC, UWI: *The UWI Distance Education Centre*, Document produced by DEC, 1996/97, p.3

meeting in September 1993.

3.4 A New Dispensation, 1992-Present

The Board replaced the Advisory Committee, which when UWIDITE was established in 1983, was convened to advise on the structure and content of UWIDITE programmes, and to liaise with the wider University community. The main functions of the Board for Distance Education included the clarification of the goals and objectives for distance education; reviewing and restructuring of distance education at the UWI; and devising methods and techniques in distance education for the development and delivery of programmes as well as, rectifying the problems affecting the emerging system.

The many problems of the UWI distance education enterprise were in part revealed by the various mechanisms for feedback which the University had built into its planning and implementation process. These mechanisms included periodic visits and regular dialogue between campus-based distance education officials and the implementors in the non-campus countries, as well as the contracting of consultants to assess the implementation process. These reports were critical in not only highlighting deficiencies in the system. The recommendations incorporated in them were to lead to the rethinking and refining of the University's distance education policies.

The most significant of the reports, the Renwick Report (1992), was in fact to provide the blueprint for profound changes in the University's distance education policies and programmes. The Renwick Report recommended, among other things, that distance education needed to be fully incorporated as an integral part of the UWI teaching and learning system which meant that the University would become a dual mode institution. The report also recommended that a Distance Education Centre be established to liaise with the faculties and manage and coordinate all distance education programmes.[29] A Caribbean Development Bank (CDB) Appraisal Report also provided the basis for the development of a new and more cohesive approach to distance

[29] William Renwick, Doug Shale and Chandrasekhara Rao. *Appraisal of Distance Education at the University of the West Indies*. Vancouver: The Commonwealth of Learning, 1992. (hereafter The Renwick Report, p.5; Report of the Chancellor's Commission p.19.

education policy formulation. The Appraisal Report was, for instance, critical of the University's uncoordinated distance education programme, technical quality, and delivery of teaching. It also called for closer relations between the UWI and the tertiary level institutions of the region, and emphasized the need for a needs assessment survey, and for the quality and cost effectiveness of the University's distance education programme to be improved.

In July 1992 the powerful decision making body, the University Academic Committee (UAC) decided that the UWI should become a dual mode institution as recommended by the Renwick report. This decision was taken within the wider context of a major restructuring exercise gradually being undertaken in the University. The principal policy guide for this reform was to be the 1994 Report of the Chancellor's Commission which had been set up to review the governance of the University in the light of its current and prospective developmental role in the region, and of relevant developments in university administration and practice elsewhere.[30] In the execution of its task the commission was to be fully cognizant of the resolve of regional governments, as expressed in the July 1989 Grand Anse Declaration, to maintain the University as a regional institution indefinitely. The Commission's report was significant for the distance education process in that it reiterated the numerous educational problems being experienced by the non-campus countries, endorsed the need for a major distance education thrust to help rectify these problems, and called for a structural reform of the distance education system of governance.

Various reasons, some old and some new, were advanced by analysts and university officials, to explain the urgency and necessity for a revived distance education programme. It was argued that because distance education was closely linked to modern telecommunications technology, it had the potential to extend its benefits to greater numbers of people than in the past.[31] Distance education was also seen as a response and attempt by the governments to meet the tremendous demands for educational services in the region. Moreover, it would enable the University to help the governments to extend the opportunities available for training and retraining, and in this way

[30] *Report of the Chancellor's Commission*, p.3

[31] The *Renwick Report*, p.13.

the University could fulfill the wish of the governments that it maintain its regional character.[32] Distance education was also seen as a way for the University to shed its elitist image through greater enrollment especially from the non-campus countries. This potential benefit of distance education was likewise expressed in terms of helping the islands to fulfill national goals by increasing access to higher education and thereby help to bring about greater equality of educational opportunities. For others, distance education was a way to help stem the 'brain drain' or steady outward migration of the region's brightest and most skilled people. This view was linked to the belief that an effective UWI distance education programme was urgently required in order to survive the serious challenge and aggressive competition from off-shore universities in the United Kingdom and the United States.[33]

The challenge from foreign universities took on additional importance given that the UWI desperately wanted to reverse a declining trend in student enrollment from the non-campus countries. In 1960/61 students from campus countries comprised 66.5% of the total University enrollment, students from the OECS countries 11.8% and those from other territories constituted 21.7 %. By 1988/89, however, students from the campus countries made up 93.5% of the total enrollment, while those from the OECS countries and the British Virgin Islands together only comprised 4% of the enrollment and those from Belize, Bahamas, Turks and Caicos and the Cayman Islands made up 1%.[34] This significant shift in enrollment from the OECS and other non-campus countries, it was recognized, was not simply a matter of the prohibitive cost of on-campus study. As part of its overall marketing strategy it was promised that under the new dispensation distance education would no longer be regarded as an 'add-on' or 'outside child', but as an integral part of the University. At the same time, there was a call for the University to become more customer-oriented, and recognize in this regard that its key customers are the students.[35]

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[32] *Report of the Chancellor's Commission*, p.32.

[33] Ibid, p.35.

[34] Ibid, p.32.

[35] *Report of the Chancellor's Commission*, p.32.

Consequent on the Renwick Report and the Report of the Chancellor's Commission, in early March 1995 a Distance Education Unit (Centre), headed by a Director, was established at the Cave Hill Campus in Barbados under the overall leadership of the Pro-Vice Chancellor for the now defunct Office of Academic Affairs. The centre's three main functional areas include curriculum development, programme delivery and the telecommunications network. It also engages in research and evaluation, training, and special projects and continuing education.[36] Another important structural change which resulted from the Commission's report was the establishment of a Board for Non-campus Countries and Distance Education, to manage the distance education relationship and programmes in the non-campus countries. To complement these structural changes several other investigations were undertaken which focussed on various distance education issues and areas. These included a needs assessment survey conducted by personnel of the Open University (United Kingdom) which aimed to establish the level and types of needs for distance education in the English speaking Caribbean as voiced by potential students and their sponsors. This report, which clearly was performing an iterative function in the distance education policy process, reconfirmed the view of earlier reports that there was a tremendous need for UWI's distance education programmes in the non-campus countries.[37] Another report, this time by a local consultant, played a pivotal role in the creation of a Distance Education Unit, and the development in distance education awareness and work on the St. Augustine Campus in Trinidad.[38]

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[36] DEC, UWI: *The Distance Education Centre*, Document produced by DEC, 1996/97, p.1; Edith Bellot et al., *The University of the West Indies Distance Education Unit: Mission and policy, Course Development procedures and plans, Support Services for Distance Students,* Discussion Draft prepared by Edith Bellot, David Geer, Don MacDonald, Vilma McClenan, John Moore and Bevis Peters, DEC, September 1995.

[37] Alan Woodley, *Outcomes from the UWI Distance Education Needs Assessment Survey. Final Report*. Student Research Centre, Institute of Educational Technology, The Open University, United Kingdom, June 1995.

[38] Claudia Harvey, *Third and final report of the Consultancy on Distance Education 15th April- 31st July, 1996 on the St. Augustine Campus The University of the West Indies,* report submitted by Dr. Claudia Harvey, Consultant, Distance Education Centre, St. Augustine Campus, UWI, 2nd August 1996.

All of these developments were, in large measure, made possible through development loans provided under a US$82.0 million, Inter-American Development Bank (IADB) and Caribbean Development Bank (CDB) loan package to the University. US$ 9.1 million of the funds were utilized for a massive expansion and upgrading of the UWI distance education system and programmes aimed at, among other things, significantly broadening access (especially in the non-campus countries) to university level education. With the university attempting to increase its range of programme offerings and the number of enrolments, to the order of 20,000 (full-time equivalent) students by the year 2001, up from 16,000 in the 1990s, it was anticipated that up to 1000 students per year of this increase might be achieved through distance learning programmes.

This continuous process of evaluation and policy modification or reformulation resulted in and reflected an attempt by the University since the early 1990s to overhaul its distance education policies and programmes and to develop a new and comprehensive statement of policies, principles and procedures the first draft of which was produced and adopted by the Board for Non-campus Countries and Distance Education in September 1996.[39] Recognizing that the establishment of a vibrant distance education programme is an ongoing process the Board in the preamble to this statement acknowledged that the document would be modified in the light of experience and consultation.[40] The 2001 Strategic Plan[41] articulated for the University's distance education enterprise focused on identifying and meeting the higher education learning needs of a wider population of the university students across the Caribbean and, where appropriate, beyond; identifying and developing or modifying programmes for areas in which there was high demand; developing programmes that would significantly increase UWI enrolments; developing programmes to meet the needs of all campus and non-campus countries; and developing

[39] Board for NCC & DE. *Distance Education at the University of the West Indies. Statement of Policies, Principles, and Procedures*, Board for Non-campus Countries and Distance Education, Adopted September 1996.

[40] Ibid.

[41] Board for NCC & DE, *Distance education at the University of the West Indies, Strategic Plan August 1996- July 2001*, adopted by Board for Non-campus Countries and Distance education, September 1996.

programmes identified by UWI and its stakeholders as important for economic, cultural and social development.

While it would be fair to claim that the UWI has made significant strides in the development of its distance education initiative much more needs to be done to enhance the results. The UWI Strategic Plan 2002 to 2006 has made the following observation about the current status of distance education at the UWI:[42]

> UWI's distance education programmes have ... been evolving but the distance education market place is a rapidly changing environment and it is fair to say that the gap between the University's distance education products and that of its competitors is widening. There are only 2,500 students enrolled in distance education programmes at UWI at the present time. UWI's distance education programmes are heavily concentrated in the Social Sciences complemented by other offerings mainly in Education and the Humanities. The operational model is characterised by synchronous delivery of tele-lectures and teleconferencing. Course material is predominantly paper-based. The quality of academic and administrative support services to students is generally poor. Students frequently get their examinations results late. Interactivity with academic staff is very limited. The communications infrastructure imposes severe capacity constraints on programme expansion. The programme is seriously under- resourced and the existing organizational structures appear to be inadequate to support the efficient delivery of a modern and substantially enlarged distance education programme.

Added pressure is also being exerted on the system by the growth in enrollment and increasing diversification of programed offerings. Enrollment in distance education programmes have actually increased from 582 in 1990/1991 to 1,447 in 1997/1998 to 2,663 in 2000/2001. Currently the Distance Education Center offers such programed as the Certificate in Public Administration, Certificate in Business Administration, Certificate in Education, Certificate in Adult Education, B.Sc Social Sciences (Level 1), B.Sc in Management Studies, B.Sc in Agribusiness Management, B.Ed in Educational Administration, and a Postgraduate Diploma in Construction Management. Further programed are being developed for delivery within the next three years include the Certificate in Gender Studies, Certificate in Records Management,

[42]. UWI: *The University of the West Indies (Draft) Strategic Planning Framework Document 2002/03-2006/07: UWI in 2007- Shaping our Future: A Position Paper*. Office of Planning, St Augustine campus August 30, 2001, p.44.

Bachelor in Education, M.Sc in Family Medicine, M.Sc in Counseling, Postgraduate Diploma in Cultural Studies, Post Graduate Diploma in Distance Education, and Diploma in the Management of Non-Governmental Organizations. From a systems perspective the UWI's distance education network has also grown. The UWI's Distance Education Center (UWIDEC) now has within its regional network 30 University Centers with 46 teleconference rooms and 29 computer labs, each approximately 800 square feet and equipped with 12 push-to-talk and one lock-on microphone for interactivity, and 20 inch viewing monitors, high performance audio speakers and a desk top personal computer.

3.5 The Future of Distance Education

There can be no arguing over the fact that the new telecommunication technologies have brought significant benefits to tertiary education in terms of the use of multimedia, the Internet, computers and related technologies. These innovations have in turn heralded new pedagogical strategies and approaches, creating potentials for greater access, improved quality, and the overall enhancement of teaching and learning, as well as improved efficiencies and effectiveness, but they also bring challenges. According to the World Bank:[43]

> Appropriate, well-functioning information and communications technologies are of vital importance to tertiary education because they have the potential to (a) streamline and reduce administrative tasks and, in general, make possible greater efficiency and effectiveness in the management of tertiary education systems and institutions; (b) expand access and improve the quality of instruction and learning on all levels; and (c) vastly broaden access to information and data- cross-campus, or across the globe. The appearance and the rapid evolution of ICT have created at least two major challenges for education: to achieve the appropriate integration of ICT into overall education systems and institutions, and to ensure that the new technologies become agents of expanded access and equity and increase educational opportunities for all, not just for the wealthy or the technologically privileged.

It is in the light of these potential benefits (but recognizing the challenges) that the UWI's Strategic Plan for the period 2002 to 2006 argues that given the geographical dispersion of the university's constituency distance education should continue to be positioned as a necessary and

[43]. World Bank. *Constructing Knowledge Societies,* p.15

natural extension of the UWI's on-campus delivery channels, with several strategic objectives of inclusion including:

- to make higher education and training opportunities accessible to more people in the non-campus countries.
- to bring higher education to potential students in the remote, rural areas of the campus countries.
- to bring higher education to non-traditional students in general.
- to use distance technologies to deliver programmes in such areas as Caribbean cultural studies, in which the university has a strategic advantage, to prospective students in Canada, the United States and the United Kingdom, especially where there are large concentrations of people from the Caribbean or with Caribbean lineage.
- to use distance education to more adequately meet the need for continuing professional education, and the training and development needs of corporations.

In the context of attaining all these objectives it is envisaged that there needs to be an increase in distance education enrollment from the present level of about 2,663 to between 7,500 and 10,000 students. However, in order to successfully achieve these objectives the Strategic Plan suggests that the following changes should be made to current distance education strategies:

- a shift to asynchronous delivery of distance education programmes, facilitating learning on an "anytime anywhere" basis
- de-linking of distance education from the faculties
- adoption of Web-based delivery of programmes as the preferred mode of delivery of these programmes
- greater provision of course material on a downloadable basis or in the form of CD-ROMs, and extensive use of course-authoring software applications with strong technical support and training for course developers.
- commitment to the provision of greater opportunities for interactivity through electronic communication modes such as e-mail, chat-rooms, interactive teleconferencing etc.
- adherence to a policy of giving faculty involved in the provision of distance

education full credit for that time in the allocation of academic workloads.

- improved academic support for distance education, including early incorporation of the needs of the programmes in implementing the new computerized student administration system

- budgeting of adequate resources for delivery and management of the distance education programmes, on a centralized basis that gives the Distance Education Center effective control of required resources and accurate costing of services and accountability.

- targeting of potential students outside the region

- active use of the quality assurance mechanism to enforce appropriate standards

- strengthening of the public relations effort in relation to outreach, including development of a consolidated university publication to be issued on a regular basis

- implementation of a differential pricing mechanism consistent with the strategic objectives outlined in the paragraph above

- aggressive and effective marketing of the distance education programmes.

The UWI strategic Plan also warns against believing that delivering a high quality distance education programmes is cheap but acknowledges that in the long term potential economies of scale are possible. At present the UWI mainly utilizes its various distance education sites located in School of Continuing Studies across the region for the delivery of distance education programmes but there is a case to be made for a more widespread use of the technologies to accomplish more significant interface between the UWI and the range of other tertiary institutions in the region. This imperative will become increasing evident especially in the light of the increased activity in the region's tertiary education market by educational institutions based mainly in the United States, Canada, Britain, and even Australia.

Section 2: Foreign Tertiary Providers in the Region

> The globalization of higher education can have damaging as well as beneficial consequences. It can lead to unregulated and poor-quality higher education, with the worldwide marketing of fraudulent degrees or other so-called higher education credentials a clear example. Franchise universities have also been problematic, where the parent university meets quality standards set in the home country but offers a substandard education through its franchised programs in other countries. The sponsoring institution, mainly in the United States or Europe, often has a "prestige name" and is motivated by pecuniary gain, not by spreading academic excellence to developing countries.
> (World Bank: *Higher Education in Developing Countries. Peril and Promise*)

An examination of foreign tertiary/higher education providers in, or impacting on, the Anglophone Caribbean, is primarily and essentially an exploration of the still unfolding dynamics of the increasingly significant virtualization of tertiary education provision in the region, as well as, the use of new educational technologies to meet the triple challenges of access, cost and quality. Increasingly, educational institutions are being challenged and mandated to reach out to, and educate, an ever extending and broadening range of learners, irrespective of their location, disabilities, work or home schedules, or other traditional barriers to access to formal education. The challenge is not only to educate greater numbers and types of learners but equally important, to provide the type and quality of education which can produce as many enlightened and productive citizens as possible as the basis for continued and enhanced national development, cohesion, prosperity and competitiveness. But achieving these goals with persistently shrinking budgets is no easy task for educational and other national officials.

These realities have been as mentioned previously, the basis of the rapid expansion in the tertiary education market over the past two decades. While the various public and private tertiary institutions in the region have been making the necessary adjustments to meet the demands for expansion and broadening of access, they are certainly not the only ones interested in exploiting the region's tertiary education market. A number of foreign education providers, some located in the Caribbean and others operating from bases in the USA, UK and elsewhere, have been seeking to use the new technologies to enter the rapidly expanding regional and especially

international tertiary education market, particularly in the areas of business and management related programmes, medical/veterinary studies, and science & technology programmes. Internationally there has been a phenomenal growth in what is alternatively called digital, online, or virtual educational providers, including universities and various consortia. Formal schooling is now no longer restricted by limitations of space or time as at a rapid pace the new communication technologies such as the Internet, have made possible interactive connectivity between learners, teachers, researchers and other stakeholders, in an ever closely knit virtual learning society. Even though there are varying degrees of virtuality being displayed by these education providers, the new educational arrangements and modalities have the capacity, to among other things:

> more effectively deal with the urgent and changing needs of employers for certain types of trained workers.
>
> enhance students' ability to access better incomes and vocational opportunities.
>
> promote the attributes of life long learning
>
> transcend time and space in the teaching learning environment.
>
> provide better and more effective customization of programmes being offered
>
> overcome, in many ways, the need for large expenditures on physical educational and administrative structures.
>
> provide synchronous and asynchronous student-faculty interaction.

There are, of course, many questions and challenges which accompany the increasing virtualization of tertiary education in the Caribbean. Potential students will, for example, need significant assistance in distinguishing and evaluating the quality of programed being offered by the virtual mode, while employers will increasingly have to make judgements on the quality of credentials acquired by students via the virtual mode. While it is true that issues of certification and accreditation have always been difficult to address, the advent of the virtualization of higher education has produced unparalleled difficulties for all including students, teachers and employers.

Another major challenge attendant on the virtualization of higher education relates to the issues of access and cost. It may be true that the new technologies such as the Internet transcend limitations of space and time, but they do little to rectify the inequalities and disadvantages caused by disparities in income. Indeed, the new technologies may even exacerbate the inequality of access to tertiary education for not only do many students and potential students, not have access to, or training to utilize the new technologies, those fortunate few who do can now use their access to these enabling and dynamic technologies to compound the disparities and further widen the educational divide. The challenge then is in making the new technologies work effectively within the context of developing countries, as those in the Caribbean. As Professor Badri Koul, Director of Distance Education at the UWI has pointed out, the numerous benefits of technology in education can only be realized when efforts are focused on making judicious and affordable applications of technologies as this can then reduce inequalities and disparities.

At present there are over seventy-four (74) foreign institutions which have been operating in or impacting on the Anglophone Caribbean tertiary education sector, and this number is likely to increase in the future. In 2000 a survey[44] was conducted of foreign institutions operating in the region, and at that time some sixty-three significant institutions were identified, but this figure might have been an under-estimation, since more recent figures suggest that the current number might be as about 74 institutions. However, of the sixty-two (62) institutions surveyed in 2000, it was found that 16 of the institutions have a primarily medical focus; 5 are either veterinary or schools or involved in veterinary related activities; 23 offer a wide range of subject areas; 11 are mainly business and management oriented in focus; 4 are involved in the areas of the environment, and Science and Technology; 2 are involved in law programmes; and 1 is involved in offering theology related subjects.

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[44]. Howe Glenford (with assistance from Edwin Brandon). *Foreign Tertiary Education Providers Functioning in the Anglophone Caribbean.* Report Prepared for the Office of the Board for Non-Campus Countries and Distance Education, Cave Hill Campus, UI, Barbados, January 2001. Summary of this report also appeared in Howe Glenford. "The Virtual Learning Society: The changing face of education in the Caribbean". in *CARICOM Perspective Projections for the future*, No70, June 2001, 34-38.

Most of the medical and veterinary schools, while providing a good source of revenue for the countries in which they are located, seem to be having very little impact on enrollment in local institutions since the overwhelming majority of their students are drawn from areas outside the Caribbean. Competition is mainly being provided from those institutions offering general or multi-disciplinary and those offering business related programmes. Although it is difficult to make the point definitively, it also seems that greatest competition for local tertiary educational institutions emanates from those well established institutions operating out of the UK & USA, and who are now using the various distance education technologies to access student demands in the Caribbean.

At least 8 different delivery or teaching mode types of tertiary institutions, including the indigenous and foreign ones, are presently operating in the Anglophone Caribbean, reflecting some of the various types of combination of distance and face to face teaching modalities which are possible. These categories are not rigid since as institutions develop and grow or rethink their delivery strategies, their methods of programme delivery may also reflect changing and varying degrees of use of education technology.

> Caribbean Government-funded, primarily face to face, (with the exception of UWI with its emerging Distance Education programme) National colleges, Community colleges, University Colleges, and Polytechnics.
>
> Caribbean Private Sector Funded, primarily face to face, such BIMAP: Barbados Institute of Management and Productivity and the numerous other specialist training institutions in the region.
>
> Well established or traditional institutions based in UK & USA especially offering programmes to the Caribbean by traditional correspondence (with a limited but perhaps increasing degree of modern distance education modality) which may also involve some visit to the institution's home base for face to face teaching. This category would include the University of London Law degree programmes.
>
> Well established or traditional institutions based in UK, USA, Australia etc offering programmes via modern day distance technologies such as Internet.
>
> Foreign Offshore institutions with Physical Structures in the Caribbean such as St Georges University Medical School in Grenada, as well as, most of the other

offshore medical schools. The actual size and sophistication of these physical structures vary considerably among the institutions.

Foreign Offshore Virtual Universities based in the Caribbean and offering programmes to all parts of the globe. This would include such institutions as the Eastern Caribbean University based in St Kitts, and the Commonwealth Open University located in the British Virgin Islands.

Foreign Offshore (mixed mode institutions based in the Caribbean and offering courses to all parts of the globe. This category would utilize the physical infrastructure of a local institution such as a community college since they have no physical structures of their own. Much of the teaching is done using various distance technologies but there are intermittent periods of residency in the Caribbean at the facilities of the community college or host institution. One such example is Berne University in St Kitts, which utilizes the facilities of the Clarence Fitzroy Bryant College.

Professional Societies (usually with local branches/chapters) operating out of USA, UK, Canada, etc offering professional qualifications to people across the globe. These would ACCA, CGA, etc.

3.6 Some Considerations for the Future

Given the rapidly changing nature of tertiary education provision in the region it seems imperative that both local and foreign institutions seek at the earliest possible opportunity to create mechanisms which would allow them to learn from each other's experiences with a view to achieving greater efficiencies and effectiveness in the delivery of their programmes. Likewise, greater collaboration can produce substantial benefits not only in terms of meeting CARICOM and other educational enrollment targets for the tertiary education sector, but equally important with respect to producing the type of trained, productive and enlightened citizen the region desires.

It seems somewhat of an anomaly to have membership of an organization like the Association of Caribbean Tertiary Institutions (ACTI) restricted to, or composed of, those institutions regarded as local or indigenous. In many ways some of the so-called, or perceived to be, foreign education institutions including St. Georges University in Grenada, have a very legitimate claim to be categorized as local or indigenous institutions. Apart from the fact that they are located no where

else, many now play a critical role in the development of the cultural, social and economic infrastructure of the region.

Furthermore, as a group, the various foreign institutions operating in the region display some features which might be usefully adopted and adapted by the University of the West Indies and other local tertiary institutions. These include, for example:

Flexible admissions policies and admission dates.

An entrepreneurial approach to the marketing of their programmes and a belief that the world is their market place.

Work internship programmes which may count for credits in a given academic programmes while bridging the gap between the academic institution and the workplace.

Closer collaboration among the various institutions in the region can also provide the basis for stemming some of foreign exchange drain which results from Caribbean students having to do a range of professional qualifications through foreign bodies located primarily in the United States and the United Kingdom. Among the professional and accreditation bodies operating in the region are the:

ACCA: Association of Chartered Certified Accountants

ACP: Association of Computer Professionals

CGA: Certified General Accountants (Canada)

CIM: Chartered Institute of Marketing

CIMA: Certified Institute of Management Accounting (British version of CMA)

CMA: Certified Management Accountants (Canada & USA)

IMIS: Institute for the Management of Information Systems

It would be quite informative to find out just how much money flows out of the region to these external accreditation bodies. To see the magnitude of the problem one only needs to reflect on the fact, for example, that increasingly most accounting and management students feel or are being pressured to acquire professional qualifications such as the ACCA, CGA or CMA, in order to get a "good" job. For the most part, education stakeholders tend to see the operations of these accreditation bodies as being acceptable and unavoidable, with little reflection on developing Caribbean/Latin American based accreditation institutions, associations and organizations, which may possibly be affiliated with those overseas.

Such a move can be seen as desirable for the simple reason, as noted previously, that no one can question that the income which goes to these foreign accrediting organizations on an annual basis is substantial, even if not precisely known. We may therefore justifiably ask whether a consortia of universities in the Caribbean and Latin America, and including some of the foreign tertiary education providers in the region, through CARICOM or the Association of a Caribbean States could not develop appropriate accreditation programmes for the subject areas, which are comparable in quality to the ACCA, CGA, etc. One should remember that most of these graduates end up working in the Caribbean and Latin America, anyway. The experience of the Caribbean Examinations Council (CXC) as an indigenous testing and accreditation institution, now being used as a model for other countries around the world, should serve to inspire and build confidence in our ability to develop such bodies at the tertiary education level.

There is clearly a compelling need for a paradigm shift within the regional education sector which emphasizes the development of more effective collaborative frameworks between those institutions regarded as indigenous and those regarded as being foreign. Such productive relationships ought necessarily to be the basis for any fundamental changes in curricular content as

well as in teaching/delivery modalities. This type of interface within the regional education sector is required not only to attain efficiency and effectiveness in the delivery and content of education, but also to properly define and develop quality assurance and bench-marking mechanisms and measures for the region's tertiary education sector. The critical challenge for the various tertiary education institutions is not whether they can afford to develop these collaborative mechanisms and processes, but rather, in the light of the changing face of education world wide, whether they can afford not to institute the desired changes in a timely manner.

Chapter 4

Governance, Innovations & International Cooperation

> In many countries rigid governance models and management practices are preventing tertiary education institutions from embracing change and launching reforms and innovations.....
>
> (World Bank: *Constructing Knowledge Societies*)

> To successfully fulfill their educational, research, and informational functions in the 21st century, tertiary education institutions need to be able to respond effectively to changing education and training needs, adapt to a rapidly shifting tertiary education landscape, and adopt more flexible modes of organization and operation.
>
> (World Bank: *Constructing Knowledge Societies*)

4.1 Introduction

Against a background of change and turmoil in the social and economic environments in which they operate educational institutions in the Caribbean are now recognizing, albeit in varying degrees, that there is need for more adequate consideration of issues of governance, innovations and international cooperation. Older institutions are now more cognizant that their structures and relations of governance and management are in need of transformation and re-engineering to achieve success, and remain relevant in the new highly competitive global environment. This includes a reconsideration of their relationships with the state, student and staff bodies, industry, the Alumni, other tertiary institutions both locally, regionally and globally, as well as a rethinking of their own financial operations, leadership styles and institutional capacities, among other concerns. But they also realize that good governance also stems from and requires innovations, as well as, regional and international cooperation.

In this chapter illustrations will be drawn primarily from the UWI experiences since it is that institution which has undergone the most sustained attempts at reform over time. Furthermore while it may be true that other institutions such as the Sir Arthur Lewis Community College, and the Barbados Community College, among others, have been involved in institutional reorganization with their own unique features, it would be fair to claim that the lessons of experience, both good and bad, of the UWI's change process have helped to inform the processes of change now taking place in other tertiary educational institutions in the region. The changes at the UWI have also in turn been influenced by experiences of other tertiary education institutions, and business institutions, regionally and globally.

4.2 Definition and Configuration of Governance

Governance is perceived and defined in this chapter much in the same way that the World Bank report "*Higher Education in Developing Countries*" conceptualizes the term. According to that report:[1]

> The term 'governance' indicates the formal and informal arrangements that allow higher education institutions to make decisions and take action. It includes external governance, which refers to relations between individual institutions and their supervisors, and internal governance, which refers to lines of authority within institutions. Governance overlaps considerably with management; the latter is seen as the implementation and execution of policies... Formal governance is official and explicit. Informal governance refers to the unwritten rules that govern how people relate to each other within higher education: the respect accorded professors and administrators, the freedom to pursue research, and the traditions of student behaviour, to name a few.

With the proliferation of private and public tertiary institutions in the region over the past two decades it is not surprising that there is considerable diversity in their approaches, methods and relations of governance. Roberts makes the following observation:[2]

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[1]World Bank. *Higher Education in Developing Countries. Peril and Promise*. Washington DC: World Bank Task Force on Higher Education and Society, 2000.

[2]. Vivienne Roberts, "Programme Articulation: The Making of a Regional Tertiary Education System", *Journal of Education and Development in the Caribbean*, Vol.3, no.2, 1999, p.147

> Governance arrangements are ... varied with many institutions falling directly under the direction and management of the Ministries of Education; others are statutory under the control of a Board of Directors and yet others are private corporations. Governance structures usually impact on institutional autonomy in terms of academic programme development and quality assurance. Some public institutions under the direct control of ministries perceive disadvantages of flexibility, and responsiveness in programming and constraints on appointments, promotions and staff development. Even in these situations, however, some colleges at the operational level enjoy a considerable amount of public trust and institutional autonomy but aspire to official autonomy through legislation and stated philosophy. The variations in mission and extent of political control are reflected in the variations in programming–the range, levels and purposes of programmes. Depending on the college's location and orientation, there may be more or less basic or advanced programmes, technical/vocational or academic programmes, part-time or full-time offerings, short or long-term programmes.

It is therefore problematic to make sweeping generalizations with respect to governance at these institutions. Nevertheless, the experiences of the UWI and other institutions cited in this chapter might be instructive given the common nature of the challenges they face, and the environment in which they function.

Section1: The Crisis of Governance

4.3 Evolution of Governance at the UWI

While the establishment of the UWI in 1948 can be said to have been in part the product of West Indian nationalist impulse, it also represented according to Lloyd Brathwaite, "a parting gesture intended to ensure the consolidation of an ideological and cultural venture by the British in the era of political independence".[3] As such, when the UWI began its teaching functions in Jamaica in October 1948, it was as a college in tutelage to the University of London. From the outset, then, the UWI was to inherit from the University of London on which it was modelled, a system of governance and organizational structure of the bureaucratic type. Significant, too, the original concept behind the founding of the UWI was that there would be one institution with a single campus, a central Governing Body, residential, with staff and students from throughout the West Indies and a programme of extra-mural studies. However, not only were new faculties added to the Faculty of Medicine which was the first unit of the UWI to be established in Jamaica, but other campuses were subsequently established at St. Augustine in Trinidad and at Cave Hill in Barbados. As a result the UWI was to evolve an even more elaborate, burdensome, and complicated organizational structure.

The system of governance which developed at the UWI since its founding has been described by Emmanuel as being more, federal or plural than unitary, reflecting the reality of three campuses in three different independent states, as well as, several non-campus countries (NCCs) who are also contributing members.[4] There developed a hierarchy of officials including a Chancellor, Vice-Chancellor, Campus Principals, Deputy Principals, Pro-Vice Chancellors (PVCs), Deans (including University and Campus Deans), and Heads of Departments, including Directors of

[3]As quoted in, Hopeton L.A. Gordon, 'University and Nation Building in the Commonwealth Caribbean: Early Commitments', *Journal of Caribbean Education*, vol. 11, nos.1 & 2, April- Sept., 1984, p.187

[4] Patrick A.M. Emmanuel, 'Academic Relations of Power: The Case of the UWI', paper prepared for the XV111th Annual Conference of the Caribbean Studies Association, May 1993, Jamaica, p.10.

Institutes. The UWI's organizational structure also consisted of a main University Council and other Councils for each of the campuses, comprising Government and University representatives. It also had a Senate which through a smaller University Academic Committee (UAC) was responsible for management of academic affairs. Appointments, tenure and promotion fell under the control of Appointments Committees of the University as a whole and of each campus as well as, a University Assessment and Promotions Committee which acted in an advisory capacity to the Appointments Committees.

On each campus academic administration was handled, in descending, order by Campus Academic Boards, made up of representatives across Faculties, then of Faculty Boards and at the bottom level, Departments of each Faculty. The main point then is that the University was essentially run by a plethora of committees, some of which had overlapping functions. This elaborate system of committees might on the surface be regarded as being based on a Systems Approach to management but because of its size, complexity, and overlaps, among other things, in reality the system of governance did not function in harmony and close collaboration. Instead, what resulted was an enormous amount of 'red tape', much delay, and lots of paper being generated since a single item was likely to be addressed in various papers of different committees within and across campuses.[5]

The managerial system which evolved was one in which power, as in most highly bureaucratized organizations was centralized and restricted to a small number of people at the top of the administrative hierarchy. Emmanuel attempted to capture the essence of this situation when he pointed out that in addition to the Vice Chancellor and the Principals, Deputy Principals and other PVCs belonged as full members to all the key University (cross-campus) committees, especially the Academic Committee, the Appointments Committee and the Assessment and Promotions Committee, and they also sat on the parallel campus committees on their respective campuses. [6] This situation, in addition to grossly insufficient interaction between officials and staff, may partly

[5] Ibid, p.14.

[6] Ibid, p.12.

explain why there existed within the University "an absence of transparency in administrative decision-making" as well as, a "disturbing absence of the responsibility that Democracy demands".[7] The situation was compounded by the poor communications mechanisms within the University. The 1994 Chancellor's Commission of Inquiry discovered much evidence which showed how poorly informed many staff were about how the University worked and what its policies were.[8] The Inquiry revealed that this ignorance was due to the lack of effort on the part of the University to keep staff informed. It concluded that morale at the University would be greatly enhanced if staff were better informed, and misunderstandings and conflict would be less likely to arise if more information was available on a regular basis and in a digestible form. Clearly, a combination of the systems approach to management, emphasizing the interrelatedness of the parts of the University, as well as, the Human Relations approach, focussing on the workers as people, was required to significantly improve this state of affairs.

Most of the academic staff only participated in University's administration through membership of Department and Faculty Boards. As such, most had no institutionalized direct access to the University's directorate. This does not mean that there was no opportunity for staff to consult with senior officials, but rather that the nature of any such contact tended to be individualistic rather than collective. To some degree then it would be fair to say that Michel's thesis about bureaucratic organizations inevitably producing oligarchy, or rule by a small elite (the iron law of oligarchy), could be used to describe the managerial system which eventually developed at the UWI.[9]

One consequence of this apparent lack of meaningful participation in the running of the UWI, was the development of a pervasive sense of alienation and cynicism among staff. The Chancellor's Commission of Inquiry noted that throughout the UWI there existed "severe dysfunctions and a

[7] *Report of the Chancellor's Commission*, pp.8-10.

[8] Ibid, p.42.

[9] See, Robert Michels, *Political Parties: A Sociological Study of the Oligarchical Tendencies of Modern Democracy*, New York: The Free press; London: Collier Macmillan, 1962.

disturbingly low level of morale" within and between academic and administrative staff and students, as well as, a "pervasive, unhealthy suspicion of the motivation and acts of others".[10] The report concluded that within the UWI unity was more evident in rhetoric than in reality.[11] This alienation as Thoms, and others have observed, is usually a major consequence of a bureaucracy and results from a deficient integration of the individual's needs, interests, and potentials with the goals of the organization.[12] This 'floating paranoia', as C. Wright Mills described it, usually results from people feeling that they have little control over their job situation and the over-centralization of power.[13]

Throughout the period of its development there has been little real evidence of the encouragement of the ideals (self-realization, trust and openness), of the Human Relations Approach to management which might have helped to integrate the individual and the organizational goals. This alternative approach would, equally important, have helped to fulfill the multiple expectations, needs, rights, privileges, duties and obligations, of both the individual and the organization, which although they do not form part of a formal agreement, nonetheless exercise significant influence on staff behaviour and the overall people-organization relationship. In other words, there would have been a greater sense that the *psychological contract* between the staff and the organization was being satisfactorily honoured.

Following the line of B. Guy Peters[14], who argued that public apathy was the greatest danger to bureaucratic accountability and a democratic state, Emmanuel has suggested that the academic staff of the UWI must bear the major part of the responsibility for the sense of alienation which

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[10] *The Report of the Chancellor's Commission*, pp.8-10.

[11] Ibid, p.8.

[12] Douglas J. Thoms, *Educational Management and Leadership: Word, Spirit and Deed for a Just Society*, Alberta: Detselig Enterprises, 1993, p.44.

[13] Quoted in Thoms, *Educational Management*, p.44.

[14] Cited in Ibid, p.321.

emerged.[15] According to him the staff failed to develop a professional association to promote and safeguard professional interests in the management of the University. Moreover, he maintained, the academic staff seemed incapable of manifesting anything higher than a 'trade union consciousness' so that the West Indian Group of University Teachers (WIGUT), which is registered as a trade union, seemed obsessed only with issues of pay and perquisites.

However, while there may be a good deal of truth in Emmanuel's assessment, it may be argued that he failed to capture the complexity of the UWI's staff response to the effects of the bureaucracy. More specifically, he seemed to have ignored the informal aspects of UWI's organization, which are just as important, even if not very visible, in determining the culture at the UWI. Modern analysts of organizations have pointed out that people tend to deal with the shortcomings and ill-effects of bureaucracy by forming social groups or operating a 'mock' bureaucracy and acting instead within an informal organization that they themselves establish. These informal groups often develop their own aims which may or may not be consistent with those of the formal organizations. Significantly, however, while these groups represent important coping strategies among lower level staff, they may also operate among senior administrative staff and may be important in determining power relations between both groups. Although the configurations of these informal groups have never been easily identifiable at the UWI or any other tertiary organizations, in the region, the effects they produce are often readily felt.

4.4 Different Bottles, Same Wine?: Examples from St Lucia, Dominica, Belize & Jamaica

4.4.1 Sir Arthur Lewis Community College

The experiences of the Sir Arthur Lewis Community College which has also been the subject of attempts at reform reveal, arguably, striking similarities to the UWI, of the inadequacy of existing governance structures which existed, and which precipitated initiatives to transform that institution. Due to repeated calls from staff and other stakeholders for a review of the college's operations, in 1992 the Board of Governors of that institution appointed a team of educational

[15] Emmanuel, *Academic Relations of Power,* p.14.

experts to undertake an assessment exercise under the auspices of the Association of Caribbean Tertiary Institutions (ACTI). The ACTI report concluded the following in respect of the weaknesses of the college:[16]

> The organisational structure of the management and the divisional structure of the programmes engenders fierce loyalties to Divisions but undermine and subvert college unity. The organisational and divisional structures reflect the fact that the College is an amalgamation of several institutions: the `A' Level College, Technical College, Teacher's College, Nursing School and Agricultural College. These separate institutions have been incorporated in the College as Divisions and Departments, where the former Principals have become Deans or Co-ordinators. While staff and students remain very loyal to their Divisions, College unity and a collegiate spirit are still objectives to be achieved at some time in the future.
>
> While the divisional structure can be credited as a factor in the high levels of student achievement.... it is wasteful in the deployment of teachers as several duplications occur in the arrangements made for teaching the same subjects to students in different Divisions. Also, the divisional structure does not create the circumstances in which such wasteful deployments can be easily reconciled.
>
> One of the main weaknesses of this structure is that it is a fertile breeding ground for feelings and perceptions of discrimination, superiority/ inferiority, isolation, alienation and conflict. Another weakness, of equal importance, is that aspects of structural divisions of the College are reflective of social divisions within the larger St. Lucian society. Taken together it means that the College as it is currently organised, is making little contribution to deepening the bonds of unity, solidarity and social cohesion within St. Lucian society. This is an important consideration in that most of the future leadership of the society is likely to arise from the ranks of students educated at this College.
>
> Human relations in the college manifest several strains, anxieties and tensions that could eventually jeopardise the public image of the College and hamper its further development by generating unnecessary conflicts. Staff and students perceive themselves as remote from the governance of the College. At the same time their participation in College life is limited almost entirely to their substantive teaching and learning responsibilities. The results are inadequate communication between all the major stakeholders, feelings of alienation and frustration on the part of some

[16]. In July 1992, the Sir Arthur Lewis Community College Board of Governors appointed a team consisting of Dr. Alfred Sangster, Professor Errol Miller, Dr. Keva Bethel, Mr. Carol Keller, Mr. Fred Williamson, Ms. Mary Grant, Ms. Fay Saunders and Ms. Patricia Charles to review the work and progress of the College after five years of operations. This extract is from their report, sections of which was provided by the Ministry of Education, St Lucia.

staff and students, and perceptions of staff and students' resistance and lack of co-operation on the part of the leadership of the College.

Underlying these strains in human relations are some important structural weaknesses. The Board has no representatives from the College. Inside the College, decision-making is largely confined to the Principal, Registrar, Deans and Co-ordinators with limited input from the rest of the staff and almost no input from the Students. At the same time student government is not effectively organised. This limits the possibility to mobilise their participation in College governance.

The concatenation of these circumstances have led to many misperceptions of roles, responsibilities and actions and several misunderstandings concerning several sound and wise decisions taken by the Board and leadership of the College. This is despite the fact that the College plans, processes and procedures are well documented.

The team of reviewers also expressed concern over the overwhelming number of courses and scheduled classes with which students had to cope. In some programmes, for example, students had to carry as many as fourteen subjects per semester and attend classes from 8am through 3pm or 4pm without any significant break for lunch. This problem, concluded the reviewers, was not only unhealthy, uncharacteristic of tertiary level education, expensive and counterproductive, but also made it impossible for staff and students to participate in research and exploration on their own, or be involved in important non-academic activities deemed vital to meaningful staff and student interaction outside of the classroom. These numerous problems of governance and management at the college led to major restructuring exercises with the additional help of advisors from Nipissing University. The ongoing re-organization of the college has been seeking to among other things:

- allow both full-time and part-time students, with appropriate counseling and advice from College Advisors, to plan their programmes and to move expeditiously and economically towards their academic goals.
- reduce the cost of College operations by reducing the cost of designing and redesigning programmes
- allow for better time-tabling and more efficient and effective use of physical space and full-time college staff.

4.4.2 Dominica: Towards a Dominica College

The tertiary education system in Dominica is presently composed of three colleges namely, the Nursing School, Clifton Dupigny Community College and the Dominica Teachers Training College which together have a combined enrollment of approximately 759 students, 47 full-time and 25 part-time instructors. Even though Dominica has had a college system for more than twenty-eight years it is generally acknowledged that a major cause of low productivity and lack of competitiveness in Dominica is the lack of trained human resources participating in the country's economy, and the tertiary education system's lack of capacity to deliver the required training for the knowledge economy was very weak. A recent (2000) study by Thomas and Peters carried out under the auspices of the OECS Tertiary Education programme reform strategy made the following uncompromising comments with respect to the challenges facing the tertiary education system in Dominica:[17]

> Tertiary education and training in Dominica have been severely affected over the last two decades, mostly because of severe systems' deficiencies and a general lack of vision at various levels of Government. The tertiary education system experiences a series of severely dilapidated buildings, archaic equipment, shortage of educational supplies, including minimum library facilities, and staff with severe training and professional deficiencies. For the past two decades, there have been unsuccessful attempts to amalgamate the existing three post-secondary institutions and make them more effective and responsive. One reason for those failed attempts has been the general lack of commitment by Government to follow-up and to implement those recommendations. This lack of action by government has been attributed, according to some senior Ministry of Education officials, to its lack of vision and its ability then, to successfully resist the pressure to change. Today, re-developing its post-secondary education system is not an option for government. It is an absolute necessity. Sources of development funding and technical assistance from traditional donor countries have literally evaporated. Dominica, like its other Caribbean neighbours, must develop its own base of human resources to replace the shortage of developmental capital and technical assistance that were once in abundance.....
>
> However, the task to modernize will not be easy. There are numerous systemic and other difficulties endemic within the current college system in Dominica.

[17]. Thomas, Hilroy, and Donald C. Peters. *Re-Development Plan for The Dominica College. Final Report. Prepared for the Government of Dominica and the OECS Tertiary Education Programme*, Castries St. Lucia, November 2000., pp.5 & 38.

> Those difficulties range from the critical under-funding of both physical and learning/teaching resources (as is indicated by current expenditure on tertiary education representing 7% of the total education budget); a constricted and limited system of institutional leadership; inefficiency in programme content, development an delivery; to an overall deficiency in mission, vision, creativity and critical resources.

In spite of the severity of these challenges and with the help of the OECS Secretariat, and other institutions, a clear plan has been formulated in an effort to help rectify the problems and weaknesses of the tertiary education sector in Dominica. The main aspects of the Dominica College's redevelopment strategy seek to:[18]

- Provide the new re-developed college with the legislative authority to govern and regulate itself, and develop programmes and services independent of the Ministry of Education.
- Consolidate and amalgamate the three existing colleges under one unified college structure and governance.
- Upgrade and expand existing programmes and develop new ones along the lines of other similar programmes regionally and overseas.
- Expand new programmes to include Hotel and Business, Agriculture and Environmental Science, Informational Systems, and Continuing and Adult Education.
- Form affiliations with regional and international agencies and institutions to ensure the college system delivers quality programmes and services; that graduates of the college system meet industry standards; and they can proceed overseas for further training with the confidence that their education in the Dominica college system is equal in value to that of any other country in the world.
- Obtain assistance from overseas institutions and governments for staff (on loan) and for professional and academic training for existing college staff.
- Obtain assistance from overseas sources to develop and expand the physical facilities to create a truly "college campus environment" characterized by high academic achievement, student residence, recreational facilities and modern

[18]. Ibid.

equipment and other resources.

The review by Thomas and Peters concluded that: "Today, there is no more room to resist the pressures to change and re-develop the college system. Traditional sources of development funding and technical assistance from donor countries are rapidly disappearing. Dominica must quickly develop the technical and professional skills of its citizens to be able to adequately compete globally in this ever-changing social and economic environment."[19]

4.4.3 Challenges of Technical and Vocational Education in Belize

The problems plaguing the tertiary education sector in the region are not restricted to the more academic type institutions, many of which also provide some degree of technical and vocational education and training. There is some evidence to suggest that throughout the region the technical and vocational sub-sector of the tertiary education systems have also being experiencing difficulties which impact on their capacity to meet the needs of national economies which are becoming increasingly knowledge based. A year 2000 Caribbean Development Bank commissioned report focusing on the technical and vocational education and training sector in Belize provided the following details on the problems and challenges currently facing that sub-sector of the education system, in the broader context of the overall tertiary system.[20]

> The post-secondary/tertiary education system is not very well developed and includes the Junior Colleges which offer programmes in general education at the General Certificate of Education (GCE)/Caribbean Examinations Council (CXC), GCE Advanced Level and business education disciplines at the Associate Degree level. The Belize College of Agriculture (BCA), the Belize Technical College (BTC) and the University College of Belize (UCB) offer several technical specialties, such as Building and Construction Technology; Architectural Technology; Veterinary Technology; Mechanical and Electrical Technology; and Business Education to the Associate Degree level. The Belize Nursing School and Belize Teacher Training College (BTTC) produce nurses and teachers, respectively, for the public service. Five of the tertiary level institutions (BTC, BCA, UCB, Belize School of Nursing and BTTC) are to be merged to become the

[19]. Ibid.

[20]. CDB. *Appraisal Report on Enhancement of Technical and Vocational Education and Training-Belize*., October 2000.

University of Belize (UB) in an effort to increase access and efficiency in the tertiary system.

Access to tertiary education is very limited and restricted providing limited career options and opportunities for the thousands of students leaving the secondary schools. In 1998/99 while there were 11,720 students enrolled in 33 secondary schools there were only 1,600 enrolled in all tertiary "schools" and UCB. It is estimated that between 6.5% and 8% of the age cohort, 18-24 are enrolled in tertiary education which falls short of the Caribbean Community (CARICOM) target of 15% and the 51% and 21% for developed and middle income developing countries, respectively. Given the limited capacity at the post-secondary level, access is likely to be adversely affected as efficiency in secondary education improves and more graduates exit placing increasing demands at the post-secondary level.

TVET which represents a broad mix of programmes intended to prepare students for entering and progressing in the world of work is offered at the secondary and post-secondary level of the system.

Planning and coordination of the TVET sub-sector is deficient in many respects, being characterised by a centralised management structure which limits opportunities for interventions and participation of critical stakeholders. There is no official national policy framework within which TVET activities are planned and implemented. There is a multiplicity of activities taking place in the sub-sector from the informal and pre-vocational activities conducted by NGOs to the more formal higher level programmes offered by MOES, yet they all operate in isolation of each other and of the economic imperatives and labour market.

There is limited, usable and shared information about programmes which are in operation as it relates to enrolment, the level of programmes and the kind of certification to be gained at the end, and how each programme relates to, and articulates with others offered elsewhere. This situation has potential for causing duplication, fragmentation and waste of scarce resources. Further, there is no system for evaluating the usefulness of these initiatives and to provide feedback for making improvements and taking other kinds of corrective measures. The planning of TVET activities is not now being informed by appropriate labour market information.

Arising from the deficiency in planning, there is a clear over emphasis on the supply side issues to the almost total exclusion of demand considerations of the labour market and the economic opportunities in the society. There also appears to be an almost exclusive focus on the basic and entry level education and training of youths while neglecting the needs of existing workers and adults in the society for retraining to meet certification requirements and for coping with new and emerging technologies, being introduced into the workplace.

Obviously, while the Belize case cannot be used to generalize about the region as a whole, it does nevertheless provide some insights into the myriad of difficulties facing the technical and vocational sector of education in the region, especially given the similarities of the challenges faced by the various Caribbean countries, with respect to economies and the technological and information/communication revolution's impact on the world of work..

4.4.5 From College to University Status: The Challenges of Change of UTECH, Jamaica

This final example of the multiplicity of governance and managerial difficulties faced by the region's tertiary sector seeks to highlight the fact that the various institutions not only have difficulties in their current state, but that these problems are often compounded and new ones added when they seek to upgrade from one level of the tertiary system to a higher level, as was the case of the University of Technology in Jamaica which was upgraded in 1995 from being the College of Arts, Science and Technology (CAST). The following were among the problems identified by a recent SWOT Analysis carried out on the University of Technology, with respect to the change from College status to a University status:[21]

- That the leadership of UTECH had limited experience in management of degree level programmes, or in the exploitation of its "entrepreneurial" potential or in coping with the rapidly changing environment in which the institution operated.
- That UTECH needed a strong research component but that those skills being lacking among the staff and therefore had to be imported until systems could be put in place for developing/transferring this orientation to current staff not so disposed.
- That staff were not sure what qualifications were needed for even though they knew the level of qualification required some might be acquiring them in inappropriate disciplines, or from unacceptable institutions.
- That technical support staff in a number of faculties were inadequately prepared to

[21]. GMS Inc: SWOT Analysis of the University of Technology, Jamaica. Document provided by the Caribbean Development Bank, 2002. The document is Appendix A of another unspecified report.

provide the required support services in a university environment.

- That most of the university was not wheelchair accessible whereas this type of accessibility was essential if the university was to be seen as serving the entire community.

- That there was limited articulation between UTECH and UWI programmes, or with other private institutions operating in Jamaica and the Caribbean.

- That there was no evidence of the existence of administrative and support staff development policies at UTECH.

- That UTECH's academic student services including academic counselling and access to learning centres were very weak.

- That there was a lack of well defined academic management framework that clearly defined the roles and responsibilities of academic staff beyond teaching and marking of tests and examinations.

- That UTECH's relationship with its alumni was somewhat ad hoc, because there was no capacity within UTECH to sustain a strong alumni network.

- Finally, that UTECH was caught between the CAST tradition of attracting students who were otherwise not eligible for admission to UWI, and the transition to degree programmes.

Again, the UTECH experience ought not be used to make sweeping generalizations about the process of upgrading institutions within the tertiary education sector but there are certainly many lessons which may be learnt from the UTECH case and which will no doubt become evident as Barbados, for example, implements its rationalization of its tertiary institutions to form the new University College of Barbados. It was in the light of these numerous and widespread difficulties throughout the region's entire tertiary education sector that most governments and other stakeholders by the late 1990s had come to general consensus that reform of that sector was an urgent imperative

Section 2: The Experiences of Implementing Change

4.5 The Era of Change: The UWI Experience

It was against the background of a state of increasing bureaucratization and its ill-effects that in 1984 the UWI engaged in what was supposed to be a beneficial major restructuring exercise involving significant decentralization. In October 1984 a new mechanism for the governing of the UWI, usually called the 'restructuring of the University', was implemented.[22] The objective of this restructuring was to give the campuses greater autonomy in order that the University could respond and contribute more effectively to the perceived national needs of its contributing members. The Vice Chancellor, Aston Preston explained that the contributing governments agreed that they wanted to retain the regional University but they felt that the former highly-centralized structure was not sufficiently responsive to their needs and hence they wanted a mechanism which would enable them to make a more direct input into the management and organization of the campus in their territory.[23]

At the same time the non-campus countries wanted some means of safeguarding their interests and ensuring that their needs were met. Additionally, members of the academic community felt that the time had come for each campus to have greater control over academic matters at the campus and that whereas central decision-making was essential for the maintenance of high and uniform academic standards, the procedures needed to be revised to eliminate delays.[24] The 1984 restructuring was made against the background of a search since the 1970s especially, for ways of achieving devolution in order to allow the University to play a greater and more meaningful role in the national development of the campus and non-campus countries. To this end in 1972 the Charter and Statutes of the University were revised to facilitate the process of devolution.

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[22] Sir Roy Marshall (Chairman), *The Marshall Report on the University of the West Indies Cave Hill Campus*, 1986, p.4.

[23] Gordan, *University and Nation-Building*, p.184.

[24] Ibid.

As part of the 1984 restructuring and new system of governance, the Council, the Senate, the Appointments Committee, the Joint Assessment and Promotions Committee, the University Grants Committee and the Technical Advisory Committee were retained. In addition, however, new bodies were added at the campus level, paralleling the ones at the Centre. On each campus there was added a Campus Council, a Campus Grants Committee along with a Campus Technical Advisory Committee, and a Campus Finance and General Purposes Committee, to which the Campus Council delegated some of its responsibilities.[25] These new committees were composed mainly of persons from the respective campus countries, but there was some representation from the non-campus countries, as well as, from the University's central administration.

Under the new system, the responsibilities of local matters was under the control of the campus officials while matters of general concern were dealt with by Central administration. The University Council thus maintained general responsibility for all common services, University programmes, and programmes in the non-campus countries, as well as, for senior administrative appointments. The Senate remained the main body responsible for academic matters and for the award of degrees, diplomas, and certificates. All other matters now became the responsibility of the local Campus officials. The Campus Council and the Campus Finance and General Purposes Committee were given control of the finances of the Campus. These bodies were responsible for, among other things, the appointment and promotion of faculty up to the level of senior lecturer.

As mentioned previously, these changes were intended to strengthen significantly the ability of all the University and more precisely, the Campuses, to respond more effectively and efficiently to the challenges of development in both the Campus and non-campus countries. In many ways, however, the expanded bureaucracy of the UWI only served to compound the difficulties which existed prior to the restructuring, even though the campuses now had greater autonomy and power, while the control and influence of Central Administration was significantly weakened. The proliferation of new committees at the campus level significantly slowed down the speed in

[25] *The Marshall Report*, p.4.

decision-making.[26] The 1994 Report of the Chancellor's Commission in commenting on the extent of increased bureaucratization and confusion created by the restructuring observed that:

> The constitutional changes implemented in 1984 gave much greater powers of internal management to the campuses but left much of the decision-making in the hands of a University committee structure. This committee structure is extraordinarily costly to maintain, very slow and cumbersome to manage, and tends to stifle initiative by imposing an artificial conformity on judgements about academic matters which does not correspond to the variety of needs within the region. One study has identified 161 different committees to govern the University Centre and a single campus. The result is a bureaucratic edifice which is highly academically conservative and which represents a severe restraint on the University's development.[27]

In addition, the concept of the University as a regional institution was adversely affected, leading to the further marginalization and alienation of the non-campus countries. This was for example reflected in the dramatic decline in student enrollment from the non-campus countries. In 1960/61 students from campus countries composed 66.5% of the total University enrollment, students from the OECS countries 11.8% and those from other territories constituted 21.7 %. By 1988/89, however, students from the campus countries made up 93.5% of the total enrollment, while those from the OECS countries and the British Virgin Islands together only comprised 4% of the enrollment and those from Belize, Bahamas, Turks and Caicos and the Cayman Islands made up 1%.[28] This significant shift in enrollment from the OECS and other non-campus countries, it was recognized, was not simply a matter of the prohibitive cost of on-campus study. Decentralization had the unintended effect of compounding the neglect of the non-campus-countries as the various campuses became more inward-looking and parochial in their outlook.[29]

Partly in an effort to counteract what they perceived to be neglect on the part of the UWI, but

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[26] *Ibid*, p.7.

[27] *Report of the Chancellor's Commission*, p.12.

[28] Ibid, p.32.

[29] Ibid.

also as a result their national development plans, non-campus countries including St. Lucia, Antigua, and Grenada began to develop or expand their own national tertiary institutions. They also became more receptive to the overtures of foreign universities from the United Kingdom and especially, the United States who were becoming increasingly interested in increasing the student enrollment from the Caribbean. In response to these various developments in the non-campus countries (in no small way a consequence of the cumbersome nature of UWI's bureaucratic system), the University established the Office of University Services (OUS) to co-ordinate and manage its outreach programmes.

The policy decision to create the OUS was based on the belief that this office could rationalize the delivery of the University's services, including those performed by the various extra-mural centres which existed in all contributing countries. This rationalization was, however, never realized. Instead, the OUS and the extra-mural departments which were grouped under the School for Continuing studies (SCS), operated and developed separately as autonomous organizations with separate leadership. One consequence of this anomalous situation was that the expected benefits from the pooling of expertise and resources were not realized.[30] In many ways then the realities of the UWI's attempts to restructure, especially since 1984, clearly confirmed the view put forward by many theorists and analysts of organizations, that educational institutions which are usually very bureaucratic, often find it very difficult and slow to accept and implement change. An examination of the UWI's relationship with the non-campus countries since its formation would show that bureaucratic form of management is incapable of effectively and efficiently meeting their needs and fulfilling their expectations. It would show that what may be required is a systems approach which would regard the students of the non-campus countries as an integral and interrelated part of the UWI system whose concerns and needs must be met effectively if the entire university system is to flourish.

In the light of, among other things, pressures from the external environment, as well as within the UWI, and the problems created or exacerbated by the restructuring exercise of 1984, another

[30] Ibid, p.23.

major effort was again launched in 1993/94 to reform the UWI. The primary mechanism for this latest reform was the Report of the Chancellor's Commission on the Governance of the UWI (referred to earlier). The Commission had been requested to review the governance of the University in the light of its current and prospective developmental role in the region, and of relevant developments in University administration and practice elsewhere. It was asked to pay particular attention to the need to:[31]

- Achieve the greatest possible cost effectiveness in the operations of the University.
- Speed-up the processes of decision making.
- Assign well defined lines of responsibility to the principal officers and organs of the University.
- Further clarify the relationship between the Centre and the campuses.
- Achieve greater transparency in, and accountability for, the University's operations, including specific identification of the financial implications of decisions made and projects being undertaken, as well as more adequate and timely financial reporting.
- Improve communications between central administration and other parts of the University community.
- Make provision for the increasing importance of outreach activities in the work of the institutions.
- Provide for greater participation in the management of the University, and by outside persons.
- Deal with any other major matters pertaining to governance.

[31] *The Report of the Chancellor's Commission*, p.3.

The identification of these areas for special consideration clearly suggests that the University officials had now come to realize that the UWI was not performing as efficiently and effectively as it could because of the dysfunctions of it bureaucratic structures and relations. This point was forcefully articulated by the Commission which noted:[32]

> To the casual observer, UWI retains its image as a vibrant institution. In the judgement of the Chancellor's Commission, however, based on the overwhelming weight of evidence presented to it, the health of the University of the West Indies is seriously endangered. In the absence of fundamental reforms within, and major attitudinal changes from without, UWI will not survive in recognizable form.

The report further argued that the burden of structures borrowed from abroad, and processes imitative of other institutions, no longer served the peculiar needs of the UWI or responded positively to the introduction of modern techniques and technologies. It warned that unless the constitutional structure and other areas of the University were streamlined and simplified there was the danger of serious breakdowns and the strangling of the University.[33] The Commission strongly urged that the following six principles of governance be implemented in order to achieve the necessary reform:[34]

- There must be a clear division of responsibilities between the centre and the campuses and the elimination of overlaps, redundancies, and confusion. This principle relates to **clarity**.
- There must be an adequate assignment of authority, commensurate with the responsibilities to be discharged, to those responsible. This principle relates to **competence**.
- The responsibilities so assumed, and the authority so assigned, must be transparent, as must the acts of all persons who are engaged in one or the other.

[32] Ibid, p.8.

[33] Ibid, p.12.

[34] Ibid, p.11.

- The procedures employed for assignment, assumption, and discharge must provide for **accountabilit**y to those University officers so delegated, and publicity to the several interested publics.

- The composition of all governance structures must reflect with integrity the composition of the University community and not, as now, represent almost exclusively the academic staff and the senior administration alone.

- Cost effectiveness must be introduced as a salient ingredient into the decision-making processes of all governance and management bodies.

These principles have now become central to the University's attempt to significantly reduce its bureaucracy, as reflected in the new governance arrangements depicted in and to create an institution more responsive to its various clients and stakeholders, and the overall achievement of its developmental role in the region. But what it may be asked, is the likelihood that this attempt at reforming the UWI will succeed? Although many factors will determine the success or failure of this ongoing and latest initiative, success is possible this time around because unlike the recommendations of 1984 which focussed on structural reform, those of the Chancellor's Commission, recognized, in addition, that 'human action and intention' are as Greenfield and Ribbins, put it, 'the stuff from which organizations are made'.[35] It is this reality which has been the basis for a number of innovations which have been undertaken at the UWI, some of which utilize modern technologies to enhance management and governance to achieve greater flexibility, accountability and responsiveness.

4.6 ICR Enabling Innovations at the UWI

Since the governance report in 1993 the UWI has committed itself, as other tertiary institutions in the region have been doing, to creating more student friendly and student centred environments. In the case of the UWI this meant improving the registration process; increasing contact hours between students and academic staff; enhancing academic counselling services; creating more classroom and study space; increasing student access to computers facilities; and facilitating

[35] Thomas Greenfield and Peter Ribbins, *Greenfield on Educational Administration: Towards a Humane Science*, London and New York: Routledge, 1993, p.1.

student exchanges, as well as improved housing and recreational facilities.[36] These many changes and improvements hold lessons for other tertiary institutions throughout the region which are thinking about or actually in the process of undertaking such reorganization in their management and governance structures and relations with the aid of innovative ideas, concepts and strategies. But institutions are also recognizing that implementation of these processes of change and innovations cannot simply be national or regional exercises but must necessarily interface with those changes and innovations taking place globally. Significant progress has already been made in achieving these goals but much more still needs to be done.

From the perspective of administration, the UWI has long recognized that the new information and communication technologies can play a central role in improving governance and achieving administrative efficiencies. But there is also an acknowledgment that the issues surrounding the acquisition and use of the new technologies can be quite perplexing. The University Registrar of the UWI, Mrs Gloria Barrett-Sobers explains:[37]

> For administrators, no less than faculty and students, issues related to technology are compelling. The cost and difficulty of keeping track of new information are major concerns but are not the only ones. The questions challenging administrators are relentless. How can the technology help us track our students? Is there a system that will effectively handle the variety of contract types and reflect the peculiar weightings of research and publications alongside teaching for our faculty? To what extent should the systems be integrated, and how is this best done? What computer platform is best? What database management system? Which software? Who needs what technology, and how do we decipher what is essential and what is superfluous? How will we identify and pay for the increasingly expensive and elusive information technology professionals, to design, implement and maintain the systems?

Despite these challenges the various tertiary institutions across the region have adopted in varying degrees the challenge of using the new technologies to enhance the quality of communication and

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[36]. *UWI Strategic Plan 2002-2006,* p.34.

[37]. Gloria Barrett-Sobers, "Management Information Systems in Universities: Is the University of the West Indies on Target?" in Glenford D Howe (ed). *Higher Education in the Caribbean, Past, Present and Future Directions*. Mona, Jamaica: UWI Press, 2000, p.343.

service with their multiple stakeholders, not least the students. To this end the UWI has now moved to implement a number of technology related improvements including the following:[38]

X A VSAT network that will link 23 non-campus locations around the Caribbean, thereby facilitating video transmissions from any of the three campuses to the regional site, as well as, provide for inter-campus video conferencing.

X The computerization of two major administrative functions, namely, financial management and human resource management.

X A CTC Banner Financial Management System has now been in use by the Bursaries for over five years, and is currently being extended to the faculties and other administrative departments.

X A PeopleSoft a Human Resource Management System has also been implemented.

X More recently the University acquired the Banner2000 Student System which will modernize the university's student administration systems by permitting among other things, on-line applications, student recruitment, automated admissions letter generation, on-line course selection and registration, tuition and fee-assessment calculations, class scheduling and on-line application for transcripts

X There is an ongoing initiative to implement a computerized maintenance management system (CMMS) software with assistance from the IADB.

X The libraries of the different campuses are also in the process of being fully computerized to allow for, among other things, easier access to materials.

• Each campus also possesses well-equipped computer laboratories that provide training in the science, application and development of computer hardware and software and provide access to computing capabilities needed for analysis in other disciplines.

• There is in place on each campus a fibre-optic campus backbone and system interconnected local area networks (LANs) with scores of network access points to Internet Access, internal e-mail, file sharing, and shared access to application software and other departmental resources, and a wide area network (WAN) which will connect the campuses is now being tested.

[38]. *UWI Strategic Plan, 2002-2006,* pp.38-39

All these innovations which have been made possible by the information and communication revolution will no doubt significantly improve the management and governance of the UWI, and provide lessons of experience for other institutions in the region who desire to use the new technologies for these purposes.

4.7 Future Prospects and Threats to Governance

Obviously, there are no definitive or final solutions to the problems of organization and governance, not least because of the nature of educational institutions and the fact that the environment in which they operate is becoming increasingly complex and subject to continual change. The frustrated attempts, as well as, the hard earned successes of reforming the UWI over the last decade have revealed much about the nature and dysfunctions of highly bureaucratic organizations such as educational institutions. More important, the developmental experiences of the UWI suggest very forcefully the need for the adoption of new techniques and strategies. However, it is critically important that the adoption or adaptation of new concepts and principles from alternative approaches to governance and management be done in a sensible, strategic, flexible and timely manner, taking into consideration the peculiarities of the Caribbean experience. This is why the current experiments with new innovations must be continually subject to scrutiny, analysis, and refinement so that each institution, system and nation may be in a better position to pin-point what best suits their particular needs. At the same time, the region must seek to exploit the opportunities and benefits which increased collaboration among institutions, locally, regionally, and internationally can bring to their educational institutions. The challenges faced, especially by developing countries, must out of necessity be seen as requiring a "shared responsibility" approach if maximum success is to be achieved in the quest for educational excellence.

4.8 Scourges of HIV/AIDS and Violence

Notably, however, the new challenges which are now manifesting themselves within the tertiary education sector are potentially among the most devastating to a conducive teaching, learningand research environment in the Caribbean. HIV/AIDs, it is increasingly being acknowledged by

educational planners and officials in the region can have devastating impact on the region's educational institutions both in terms of finance and human resources depletion, particularly since the region has the fastest growing rates of infection world wide. Approximately one half million Caribbean (broadly defined) citizens are infected, and HIV/AIDs is now the leading cause of death in the 15 to 44 year age group in the Caribbean. The UWI, CARICOM, and the various national governments have in response launched a number of multi-sectoral programmes and initiatives aimed at stemming the rising incidence of infections in the region.

The impact of violence while being given fleeting acknowledgment seems to be generally ignored with stop -gap plasters being placed on sores of violence whenever isolated cases erupt. Violence, both in its physical and psychological forms, as phenomenon is not new to the educational setting in the region but as its incidence increases and/or character becomes more violent, the tertiary education sector is being threatened and affected as never before. Violence is being reflected in for example:

- Suicides
- Threats of violence and actual violence within and between the student and staff population, with spill over effects in the family setting of both groups
- The destruction of the private belongings and research of other persons
- Gang violence from surrounding communities being transferred onto the campus/institutional setting at, for example, student recreational activities such as fetes; and
- Attacks, including rapes and robberies of students and staff by criminal elements.
- Slander, and the deliberate spreading of malicious rumours

In the context of the educational setting in small island states, the impact and implications of these forms of violence are amplified many times over, often with severe implications for the health and well-being of those being affected, and the image of the institution internally and externally.

Although the phenomenon of violence within the tertiary education sector in the region remains largely unrecognized and understudied, it may still be possible to speculate about some of its root causes which may include the following:

- Deterioration in physical environments of some institutions
- Changing student expectations and intolerance with poor service
- Lack of modern and adequate emotional support services for both staff and students.
- The prevalence of drugs on campus
- Increased stress and mental illnesses associated with studying, and coping with the responsibilities of work, studying and family commitments, particularly with respect to the growing numbers of part-time or working students.
- Personal conflicts between and among students and staff
- Images of violence in educational settings elsewhere but particularly in the USA
- Poor and deliberately divisive managerial styles of Supervisors, Heads of Departments, Deans, Principals, and other senior managers in the educational settings, as a strategy of inducing physical or mental illness, or causing embarrassment and distress to the person (s) being targeted for harassment, or to be discredited. These managerial styles severely undermine staff morale and collegiality within the educational environment.
- Student and staff inability to cope with information overload characteristic of the learning societies emerging within the region.
- Inadequate security in and surrounding educational institutions.
- Inadequate legal sanctions for violations of confidential staff and student medical and other records, or the laxness in enforcing legal penalties even where they exist on paper.
- A growing anti-intellectual atmosphere, and aversion to research and scholarship, and a preoccupation by some staff with being “managers”.

- Racism
- Religious proselytization and intolerance within the educational setting
- Ethnic animosities
- Class conflict
- Conflict between part-time and full-time staff
- Inter-island and inter-generational conflicts

If urgent collaborative measures are not adopted to curb and combat these and other emerging challenges to an environment conducive to teaching and learning, it is likely that their human and financial impacts will be nothing short of devastating. Only through the combined emphasis on more effective governance, innovations and cooperation can solutions be found to these new problems which compound and exacerbate traditional ones.

Section 3: Collaboration and International Collaboration

> As this 20th century ends we are witnessing processes of internationalization and globalization in all fields. Caught in the grip of the prevailing economic liberalism, markets are becoming global: many trade transactions take place without the goods being seen or touched by middlemen; capital is circulating more quickly than individuals; businesses relocate according to the ebb and flow of advantage; highly skilled human resources are becoming increasingly mobile; the competition to win contracts demands an ever-higher level of skill in lowering costs and improving quality. But this frenzied race to achieve an ever better and cheaper product reaching the greatest possible number of people relies on the dependence of economies on the applications of advanced knowledge, and research and thus on higher education. Society is becoming increasingly a knowledge society and therefore increasingly dependent on the quality of higher education and its openness to the outside world.
>
> As the 21st century approaches the challenges are many. Not only profound changes affecting all elements of society but inequalities of all kinds persist and may even increase without vigorous action: regions suffering from war, famine and malnutrition, an increasingly unequal distribution of resources among the regions of the world (whether financial, material, technological or educational resources). Without a reconsideration of co-operation policies, higher education will be unable to meet the challenges it faces. (UNESCO: World Conference on Higher Education)[39]

Implicit in the processes of globalization and the inevitable impetus towards the internationalization of higher education is the compelling imperative for universities and other institutions of higher learning to engage in mutually beneficial dialogue and practical cooperation. Increasingly, it is being realized that inter-college/university collaboration as expressed in staff and student exchanges and joint research projects, in distance and continuing education, among other areas, can provide a unique and lasting way of fostering international cultural understanding and appreciation, and building civil society. This section explores some, by no means all, of the collaborative initiatives the UWI has been involved over the past decade or two, and serves as a way of providing a sampling of the types of collaborative initiatives which might, or are already

[39]. UNESCO. World conference on Higher Education: Higher Education in the Twenty-First Century, Vision and Action, Vol. 3- Commissions (Part 1. Working and Background documents) Paris: UNESCO, 5-9 October 1998, p. 50.

being undertaken by other tertiary institutions in the region.

4.9 Case Study of UWI Collaborative Initiatives

It was against the background of the importance of internationalization that on 5 November 1991 the Planning and Estimates Committee (UPEC) of the University of the West Indies (UWI) adopted a policy statement on the university's co-operative programmes with regional and international universities. On 31 October 1994 a revised version of this statement was endorsed by the University Academic Committee (UAC). The development of a policy statement reflected the significant benefits the UWI had derived from co-operative programmes with various other tertiary and university-level institutions, the proliferation of requests for co-operative relationships, the several still-born projects conceived in memoranda of understanding, the uncoordinated approach to the development and implementation of programmes, and the rapid expansion over the years of staff, student, and technological exchanges among tertiary institutions worldwide. The statement was also reflective of the UWI's mission to increase knowledge, foster intellectual stimulation, promote regional and international educational and cultural understanding, and to advance the priority programmes as described in its strategic plans, and to fulfill its commitment to developing relationships with similar institutions which conduce to those ends, including those which facilitate interchange in the area of foreign languages,

To this end the UWI has sought to enter into co-operative and collaborative relationships with:

- regional and international higher education institutions of high quality which possess resources to facilitate collaboration.
- research centres, governmental and non-governmental, regional and international, which pursue programmes of research and other intellectual activity which harmonize with the interests of the UWI; and
- such other universities, colleges and research centres which facilitate cultural ties or enable UWI to meet specific international obligations.

Among the objectives of these co-operative programmes are, the improvement of undergraduate and postgraduate programme delivery; enhancement of staff development opportunities; sharing

of knowledge and skills in areas of competence; promotion of research; advancement of knowledge and skills in the area of management of institutions of higher education and, the promotion of cultural and educational ties between Caribbean students everywhere. The strategies for achieving these objectives may include, among other things, staff exchanges and joint appointments, consultancies, research collaboration, joint publishing, programme development, and the specific focus of this section, namely Student Exchanges and Study Abroad schemes.

4.10 Scope of UWI Collaborative Relationships

4.10.1 International Links

To date the UWI has developed, both at the formal and informal levels, an extensive network of collaborative programmes with various colleges and universities throughout the Caribbean and Latin America, as well as internationally, including Aoyama Gakuin University in Japan, Aalborg University in Denmark, the University of Aix-Marseille in France, and the University of Turku in Finland, but especially with institutions in the United States, Britain, Canada and various Commonwealth countries. The UWI has active links with such American colleges and universities as Brown University, Bucknell University, City University of New York (Medgar Evers College), Florida International University, Florida State University, Louisiana State University, Colgate University, Meredith College, Morehouse School of Medicine, New York University, Spelman College, St. John's University, Tulane University, University of California, University of Florida, University of Georgia, University of Wisconsin-Madison, etc. Its United Kingdom link partners include the University of North London, University of Sheffield, University of Surrey, University of Sussex, University of Warwick, and the United Medical and dental Schools (University of London), while on the Canadian side there are links with York University, Concordia University, and the University of Toronto.

Co-operation with over thirty other universities in the United Kingdom, Canada and other areas of the Commonwealth are also being facilitated through the Commonwealth Universities Study Abroad Consortium (CUSAC), of which the UWI is a founding member and active participant.

CUSAC developed out of a need to diversify and increase student mobility from industrialized to developing countries and among developing countries. Even though the CUSAC arrangement does not involve the direct provision of funding for collaboration among its members the member universities have agreed to provide appropriate opportunities for their students to study in other member universities as a part of their course, and to initiate joint programmes for this purpose.

Sometimes co-operative programmes may be initiated by an external institution and/or promoted by an external agency. Over the years the UWI has benefitted significantly from its participation in one such scheme initiated by the Committee for International Cooperation in Higher Education (CICHE) on which the Overseas Development Administration, the British Council and British universities were represented. The Committees general objective was to help higher education institutions in the Third World contribute to national and regional development through cooperation with British institutions. In terms of the UWI, the specific aim of the CICHE initiative was to support the university in its role as a major resource for economic, social and cultural development in the Caribbean region. As such, the emphasis has been on helping the UWI implement programmes with a direct impact on development related to the wider community or to increase its capability to undertake such programmes. The CICHE programme has benefitted the UWI in areas such as planning and development, heritage studies, educational planning and research, waste chemistry, industrial mineralogy, environmental chemistry, agroforestry, construction management, public sector management, academic control and community health.

4.10.2 Regional Links

The UWI has developed a number of cooperative programmes with various tertiary institutions within the Caribbean and Latin America. The basis has, for example, been laid for collaboration between the UWI and Antom De Kom University in Suriname in such areas as teaching or supervision of undergraduates and graduate students or staff, joint research activities, and collaboration in Distance Education, among other things. Significantly, the UWI's collaborative programmes with universities in the hemisphere has had as a main component the development and strengthening of the foreign language programmes of the cooperating institutions. Currently,

the UWI's foreign language students have benefitted from links with such institutions as the Universidad Nacional De Colombia, University of Brasilia (Brazil), Universite des Antilles et de la Guyane (Martinique), Universite de Merida (Mexico), Universidad Simon Bolivar (Venezuela), Universidad de Quintana Roo (Mexico), and the Universidad de Concepcion (Chile). Foreign language students also stand to benefit from the UWI's signing of a "Protocol of Intent of International University Cooperation" with the Universite de Caen in France.

As with CUSAC, but in an even more immediate way, the Association of Caribbean Universities and Research Institutes (UNICA), has been a key mechanism for fostering inter-regional university cooperation. UNICA was founded in 1968 by a Conference of Caribbean University Heads and represents the vision and initiative of Sir Philip Sherlock, the first Vice-Chancellor of the UWI. The organization was conceived and continues to function as a voluntary pan-Caribbean association dedicated to positive, directed efforts for Caribbean development, by fostering cooperation among institutions of higher learning in the wider Caribbean area. UNICA is composed of institutional members which are universities or research institutes located in the Caribbean, broadly defined. These institutional members are represented at UNICA's annual meeting by university presidents, chancellors or vice-chancellors, rectors and directors of the research institutes.

UNICA's membership presently includes the following institutions: Universidad De Puerto Rico, University of the Virgin Islands, Universite Quisqueya, Instituto Colombiano De Administracion, Universidad Tecnologica Del Cibao, Universite D'Etat D'Haiti, University of the West Indies, Universidad Del Sagrado Corazon De Puerto Rico, Universidad Nacional Pedro Henriquez Urena, Universidad Simon Bolivar, Universite Des Antilles Et De La Guyane, Instituto Tecnologico De Santo Domingo, Universidad Interamericana De Puerto Rico, University of the Netherlands Antilles, Universidad Iberoamericana, Pontificia Universidad Catolica Madre Y Maestra, Fundacion Servicio Para El Agricultor, Universidad Technologica De Santiago, University of Technology, Instituto De Estudios Del Caribe, Institute of International Relations, Institute of Social and Economic Research and, Small Business Development Center Network.

The goals and objectives of UNICA are:

- To encourage multilingualism among members of the universities of the region.
- To promote collaboration among member institutions in the form of student and staff exchanges, (including administrators) and joint research programmes.
- To initiate and/or collaborate in curriculum development and in the design of joint degree programmes in selected fields.
- To establish a comprehensive data bank within the broader framework of a Caribbean network.
- To develop collaborative projects in the areas of information technology and distance education.
- To promote Summer Institutes, Workshops or Seminars on subjects of significant importance to the Caribbean region.
- Since its establishment UNICA has facilitated collaboration among its member institutions in such areas as culture, agriculture, science, education, and administration, and has facilitated a highly successful project in natural resource management (the Consortium of Caribbean Universities for Natural Resource Management). UNICA's multilingualism programme which is being spearheaded by the University Simon Bolivar in Venezuela and Universite Antilles-Guyane in Martinique, as well as its efforts to encourage the exchangeof students, faculty and administrators, will no doubt significantly enhance the process of inter-university cooperation over the next decade.

The LOME IV funded Cariforum University Level Programme which was recently implemented has also served as another vital mechanism for regional inter-university cooperation and cultural collaboration. Six regional institutions participated in the programme which was aimed at developing a critical mass of trained professionals who are expected to have a major influence on the economic, business and political relationships among the Caribbean countries, and on the relationship between the Caribbean and the rest of the global economy. The programme involved Master's degrees in economic development and reform, public sector management, international business, agricultural diversification, natural resource management, and architecture. The degree programmes were also provided with some types of infrastructural support, specifically in

distance education, information technology and language training. The partner institutions involved in the scheme included Pontifica Universidad Catolica Madre y Maestra (PUCMM), Universidad Nacional Pedro Henriquez Urena (UNPHU), Catholic University of Dominican Republic, Quesqueya University of Haiti, and UWI and CAST/UTECH.

4.10.3 UWI Student Exchanges

Recently, the UWI has been signing a number of agreements with various international and regional institutions which facilitate students exchanges. However, even though the programme is only now gaining momentum it is already evident that the movement of students has been mainly into the UWI, with few UWI students being able to go to the collaborating institutions. The lack of participation by UWI students in these student exchange schemes has not been due to ignorance or lack of enthusiasm on their part, but rather the consequence of inadequate institutional and financial support on the part of the UWI. This is not to claim that there is an absence of the necessary policy measures and financial support schemes, which would enable UWI students to participate in the scheme. As indicated before a policy statement is in existence, and there is a UWI Study Abroad Fellowship Scheme which is intended to promote student mobility among the UWI campuses; between UWI and selected Caribbean and Latin American universities; and between UWI and those American and Commonwealth universities with which UWI has entered cooperative agreements.

4.10.4 Future Challenges and Possibilities for International Collaboration

Inter-university cooperation, student exchanges, and cultural collaboration both at the regional and international levels, as facilitated by the UWI and other institutions and organizations including Rotary International, offer many significant possibilities for the fostering of the social, cultural, economic and intellectual development of Caribbean people. More specifically, these forms of cooperation can help the people of the region to fulfill what Dr. Orville Kean, former President of UNICA and President of the University of the Virgin Islands, has identified as fundamental imperatives of higher education programmes and institutions in the Caribbean today. Dr. Kean, at the September 1996 annual meeting of UNICA posited that there was need to:

- Embrace Caribbean ways and traditions in the methodology we use to convey concepts.

- Recognize that our assumptions are not serving the student bodies of the Caribbean and therefore regional educators should endeavor to build curriculums from the inside out. Discontinue the copycat syndrome, rely more on all the knowledge that shapes our lives, and become skilled in using knowledge of the outside world about our selves.

- Consider what we teach our students and recognize the need to have a grounding experience for the students and the faculty that is based on, and builds upon creative energies. Consider how we determine what is knowledge, and also consider what students expect from higher education.

- Recognize our strengths and our own creativity and seize opportunities to create. Enter into discourse about how to help the region to think critically on its own behalf, and become more opportunistic when it serves our needs. Help our students to be able to make the connections to the big world picture.

Focussing on these key issues identified by Dr. Kean, and also acknowledged by the region's brightest and most prolific scholars including Vice Chancellor of the UWI, Professor Rex Nettleford, as being of utmost importance, can help the institutions of the region to respond more effectively and innovatively to "The Winds of Change" which former UWI Vice Chancellor, Sir Alister McIntyre has felt "Blowing Through the Caribbean".

The challenges faced by education systems, institutions, philosophies, strategies and curricula of responding to local and global pressures and imperatives, and of meeting the challenges of access, quality, governance, and financing of higher education and training will no doubt intensify in coming years, and provide further stimulus for institutions to engage in mutually beneficial dialogue. There is also no doubt that the imperatives of globalization, the rise of knowledge based economies and societies and the scourge of HIV/AIDS, among other things, will provide additional reasons for collaboration. But there are a number of major challenges which need to be addressed if the benefits of international cooperation are to be realized. Dumitru Chitoran, the Special Advisor of the Director-General of UNESCO at the World Conference on Higher Education, has thus outlined the following four issues:

- There is a worsening uneven distribution of the benefits of internationalization among higher education institutions in various parts of the world, particularly in the developing world, since at present, net working and other linking arrangements are used primarily by the wealthiest countries, with enormous scientific and cultural benefits for themselves, while those left out of these arrangements feel increasingly marginalized and disadvantaged.

- International cooperation is becoming increasingly complex; size, complexity and rising costs have brought about the need to undertake more systematic research on international cooperation, and on its basis, to ensure that it has better planning, management, efficiency and cost effectiveness.

- There is also the problem with the Brain Drain phenomenon which continues to be a major dilemma for international cooperation, through its negative effects, particularly on those developing countries which lack the critical mass of highly skilled experts capable of putting an end to their perpetual dependence on foreign expertise and securing their self-sustainable development; the phenomenon needs to be addressed in a new, imaginative way since, in the increasingly globalized economy of today, it can no longer be looked at in the old, rather simplified terms.

- Finally, despite the overall increase in the number of foreign students, when compared to the absolute growth in student enrollment worldwide, higher education tends to become, at least percentage-wise, less international in character. This is in part a reflection of the capacity of developing countries to train their own students at home. However, while student mobility in the developed countries is growing at a steady pace, it is increasingly limited to exchanges among themselves, or with the countries which have had a steady economic growth during the last few decades. As a result student mobility is becoming more North-North and less South-North, or South-South so that while the benefits of study abroad are increasingly recognized, because of the costs involved, it is increasingly becoming a privilege for those who can afford it.

If these challenges are not resolved it is clear that the global system of tertiary education will rapidly accelerate towards severe imbalances and the potential benefits of international cooperation will be squandered. A triumphant response to these challenges requires nothing short of the fullest possible collaborative efforts of the international community, both rich and poor nations, but especially the former.

Chapter 5

The Challenges of Relevance, Quality and Sustainable Financing

> The challenge facing the University is necessarily a formidable one. Simply put, given the urgency attaching to the region's need to remain competitive in a world of increasing liberalization and globalization, the UWI is already finding itself being called upon by the governments and peoples of the region to deliver quality education to progressively larger enrolments, and to do so in the context of tight budgetary constraints and often in deteriorating financial situations.(UWI, Chancellor's Commission)[01]

The economic crisis of the 1980s may have exposed the vulnerabilities of the education sector in the region but it also reinforced the fact that if the region wants to remain competitive it must continue irrespective of the financial situation to invest in the development of its human resources. But to inspire continued public and private sector investment educational institutions, particularly those at the tertiary level must demonstrate a capacity to deliver relevant and high quality education and training to meet the developmental needs of the region. Re-occurring financial constraints will perhaps always be features of Caribbean economies given the nature of their integration in the global economy, but the will and capacity of regional tertiary institutions to utilize local skills and talents to generate endogenous solutions to the developmental challenges of the region, or harness and reconfigure internationally generated knowledge must likewise be permanent characteristics of their existence and mandate. Consequently, the quest for relevance, quality and sustainable financing must of necessity be unrelenting priorities and imperatives of the tertiary education sector in the region.

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[1]. UWI. *Chancellor's Commission on the Governance of UWI. A New Structure: The Regional University in the 1990s and Beyond*. Mona, Jamaica: University of the West Indies, 1994, p.50.

Section 1: Relevance and Caribbean Developmental Challenges

> The relevance of higher education is considered primarily in terms of its role and place in society, its functions with regard to teaching, research and the resulting services, as well as in terms of its links with the world of work in a broad sense, relations with the state and public funding and interactions with other levels and forms of education.... The question of relevance arises even more strongly during periods of change when paradoxical situations abound and when the forces in society pull different ways. At such times, higher education must more than ever play a fundamental role by placing all its resources and its spirit of independence in the service of what is relevant to humanity and society in general (UNESCO)[2]

As we have seen, societies and economies in the Caribbean, as elsewhere, are being rapidly transformed as a result of globalization, the information and communication revolution, and the growing importance of knowledge production, reconfiguration and utilization as the central ingredients enabling national development and competitiveness. These forces have begun to redefine the role of tertiary education and its relationship with other levels of education, the state, industry, as well as with its many other stakeholders including students and staff. As such, there is an ongoing rethinking of all dimensions of the teaching and learning process to enable tertiary institutions to meet the expectations and demands of their clients, both in the short and long terms. This of course means that different types, including private, public and other hybrid institutions are being challenged to respond to the specificities, particularities, and exigencies of their own local and regional environments but in the broader context of global changes and trends impacting on them and their immediate socio-economic surroundings.

In the context of the Caribbean this means that a range of tertiary institutions, both old and new, large and small, private and public, must seek to transform their curricula, programmes, teaching and learning environments, research, structures and relations of governance and management, quality, efficiency, and international relations. They are now, more than ever before required to meet the demands and needs of modern-day Caribbean societies and their most critical

[2]. UNESCO. *World Conference on Higher Education: Higher Education in the Twenty-first century. Vision and Action, Volume 3, (Working and Background Documents, Chapter 2*), Paris: UNESCO, 5-9 October 1998, p. 25

developmental challenges including those pertaining to the environment, tourism, culture, agriculture, health, economic and fiscal challenges, as well as crime and violence, among other areas. The effects and impacts of these challenges are often exacerbated given the small size and vulnerabilities of Caribbean states. In essence then, effective responses to the challenges and requirements on the part of tertiary education institutions in the region constitute and reflect what it means to be relevant. Caribbean tertiary institutions must be the catalysts for, and producers of, the type of citizens who can effectively cope with change, devise innovative responses, harness and reconfigure the vast knowledge being generated locally and internationally to identify and solve the most pressing developmental problems facing the region. Relevance, or pertinence as it is sometimes called, must as the1998 World Conference on Higher Education suggested, be considered in terms of the fit or match between what higher education institutions do and what society expects of them. Hebe Vessuri of the Venezuelan Institute of Scientific Research explains further:[3]

> It [relevance/pertinence] is particularly about the role and place of higher education in society, but it also covers access and participation, teaching and learning, the research function of the universities, the responsibility of higher education to other sectors of society, the world of work and the community service function of higher education. No less important is the participation of higher education in the search of solutions to the pressing human problems, such as population, environment, peace and international understanding, democracy and human rights. Another way to consider relevance is to focus on the particular services that higher education delivers and to evaluate the type and extent of this service, how it is delivered and how it is valued by 'clients'. In the competitive contexts of a world increasingly oriented towards the market, actors with differing interests join the game, and thus the dimension of pertinence becomes a field of forces with conflicting values, philosophies and instrumental interests pressing in different directions, some of them quite arbitrary.

In the context of developing countries with their scarce financial resources and underdeveloped or underutilized human talents, the challenge of relevance is however formidable for as the World

[3]. Hebe Vessuri. "Pertinence", paper prepared by Hebe Vessuri, Department of Science Studies, Venezuelan Institute of Scientific Research (December 1997), for *World Conference on Higher Education. Higher Education in the Twenty-first Century (Vision and Action*), Paris: UNESCO, 5-9 October 1998, pp.75-98.

Bank observed:[4]

> Although there are exceptions, the quality and relevance of research, teaching, and learning have tended to decline in public tertiary educational institutions in developing countries. Many universities operate with overcrowded and deteriorating physical facilities, limited and obsolete library resources, insufficient equipment and instructional materials, outdated curricula, unqualified teaching staff, poorly prepared secondary students, and an absence of academic rigour and systematic evaluation of performance. Similar conditions can be found in many of the new private universities and other tertiary institutions that have emerged in many countries, especially those that lack a formal system for licensing or accrediting new institutions.

However, while it is certainly true that the UWI as the region's premier and largest institution has faced and continue to encounter some of the difficulties and challenges outlined by the World Bank it would be equally true to say that the UWI, and indeed the Caribbean tertiary institutions as a whole, have a long and distinguished history of contributing in invaluable ways to the development process in the region. Prof Kenneth Hall, Principal of the Mona campus explains this, as well as how the information communication revolution has added impetus to the region's and the university's quest for continued excellence:[5]

> While the emerging literature on higher education is now stressing the importance of relevance as one of the enduring contributions of universities, the relevance issue has always assumed centre stage for the Caribbean. Here, the development needs of our fragile economies have dictated the geo-political, socio-economic research and development agenda- a pivotal part of the scholarship for which the University of the West Indies has won international acclaim. What has brought about the recent transformation within the UWI, Mona, is the information technology explosion which has opened up myriad possibilities for applying relevant research data into relevant economic development. It is a welcome outcome of the new paradigm that an enhanced relationship between the output of universities and the successful participation of countries in the globalized information/knowledge economy is demanded. In this connection, the use of information and communication technology, innovation in governance, the building of an academic community, the relationship between universities and significant stakeholders such as the private sector and the public sector, and the

[4]. World Bank. *Constructing Knowledge Societies,* p.58.

[5]. UWI. Mona: *Principal's Report 2001,* Mona, Jamaica: UWI, 2001, p.3.

> commercialization of research results are now accepted as normal parts of a university committed to innovativeness, competitiveness and excellence in scholarship. With these heightened expectations, come the associated calls for improved programme quality and better preparedness for the workforce. Graduates are now expected not only to have knowledge of their disciplines but also to emerge from the institutions equipped with competencies that include leadership, communication, computer literacy, quantitative skills, and commitment to service. In the competitive environment of the 21st century, excellence is demanded by the stakeholders in the region to be the standard mark of the University of the West Indies, a distinction by which it can be recognized anywhere in the world.

5.1 Research & Development: Examples of Relevance in Action

The previous sections of this report have already provided some details of how regional tertiary educational institutions have been attempting through, for example, reforms and rationalization, broadening of access, the use of new technologies including distance education modalities, curricula modifications, among other things, to respond to the multiple challenges and needs of the emerging knowledge-based economies of the Caribbean. Very little has been mentioned however about the ways in which through research innovations, whether endogenous, or obtained and reconfigured from other institutions internationally, tertiary education institutions have been attempting to make decisive progress with respect to the many developmental issues and challenges facing the region. In other words, how through research they have been confirming their value and relevance in the twenty-first century. As the World Bank has observed, the research work of higher education institutions provide one of the most compelling reasons and justifications for public support of higher education. According to the Bank:[6]

> One of the most powerful arguments for a public interest in higher education is the value to a country of a well-developed system for research and generation of knowledge. This is of increasing importance within the emerging knowledge economy, allowing a country not only to generate new knowledge, but also to engage in scholarly and scientific commerce with other nations.

While the various faculties of the University of the West Indies have long been engaged in

[6].World Bank: *Higher Education in Developing Countries,* p.42.

outstanding research initiatives, over the past several decades the University has systematically established specialized research institutes and centres to address specific regional issues and developmental challenges, often with the direct support and continuing collaboration of governments, the private sector, with regional institutions such as the Central Banks, the Caribbean Development Bank and CARICOM, as well as with international bodies such as UNESCO, the World Bank, The Welcome Trust, USAID, and the Rockefeller Foundation, among others. These specialized institutes and centres include the:

Sir Arthur Lewis Institute of Social and Economic Studies
Centre for Gender and Development Studies
Centre for Environment and Development
Centre for Nuclear Sciences
Centre for Marine Sciences
Earthquake Unit
Education Research Centre
School of Continuing Studies
Unit for Disaster Studies
ANSA Mc Al Psychological Research Centre
Caribbean Centre for Monetary Studies
The Centre for Caribbean Land & Environmental Appraisal Research
Centre for Language Learning
Institute of International relations
Seismic Research Unit

The following examples, focusing on the responses of Caribbean higher education and research institutions to selected development challenges of the region, will serve to illustrate how through local innovation and international collaboration these institutions have been demonstrating their relevance and importance to the developmental needs of the region.

5.1.1 Example 1: The Challenge of Agricultural Development: CARDI & MPRG

A: **CARDI**

In 1974 the CARICOM Heads of Government decided to create the Caribbean Agricultural Research and Development Institute (CARDI) to replace existing agricultural research units and to provide for the research and development needs of its member states, and integrate the agricultural research and development efforts of the various institutions and agencies within CARICOM. Since then CARDI, which has officers stationed throughout the region, but is headquartered at the St Augustine campus of the UWI in Trinidad, has been playing a leading role in improving agricultural productivity throughout the region thereby reducing the region's dependence on foreign food imports. Much of CARDI efforts have been supported by such agencies as the CDB, USAID and UNDP which have facilitated both institutional development and the transfer of developed world technologies to the Caribbean, while encouraging the development of endogenous solutions, in respect of such areas as farming systems, livestock production, post-harvest technology, crop germplasm improvement, feeding systems, soil and water management and Conservation, integrated Pest management, and information and communications, among other areas.

B: The Microbial Pathogenicity Research Group (MPRG)

The Microbial Pathogenicity Research Group located in the Department of Biological and Chemical Sciences at the Cave Hill Campus of the UWI, headed by Professor Leonard O'Garro has been involved in very active and fruitful research programmes focusing on yams, peppers, tomatoes, onions, papayas and anthuriums, with substantial financial support from UNESCO. The yam programme which was responsible for the rebirth of the yam industry in Barbados after it was decimated by disease focuses on the control of the anthracnose disease caused by *Colletotrichum gloeosporoides*. Commercial production of the White Lisbon yam variety in Barbados now continues to be dependent and driven by MPRG's research, and Grenada has also embarked on a programme to expand yam cultivation utilizing anthracnose control methods made available by the MPRG. A related programme is likewise being implemented in Dominica where a

UWI Ph.D. student is helping to map the genetic characterization of a large collection of the yam anthracnose pathogen, and develop a strategy for anthracnose control in Dominica based on selective deployment of yam genotypes.

The research focus on pepper and tomato is the control of the bacterial spot disease caused by *Xanthomonas axonopodis* pv. *vesicatoria*. During the 2000 academic year, the unit was involved in extensive research aimed at determining the genetic basis for the emergence of new damaging and copper-resistant strains of the bacterial spot pathogen and this research is being used to extend the durability of genes previously deployed for bacterial spot control in Barbados and St. Lucia. The unit's onion research has been confined to efforts to control the onion blast disease in Barbados and efforts are being made to identify weed species which harbour the onion blast pathogen. Information on an extensive range of alternative host of the pathogen has now been made available to the local farming community. A papaya research programme which had been implemented in St. Lucia and Grenada has also been expanded to include St. Vincent and the Grenadines and is aimed at controlling papaya diseases.

The unit also has an anthurium research programme in St. Lucia where in the academic year 2000 over 10,000 specially prepared disease-free anthurium plantlets were made available by the unit's research programme for the purpose of expanding anthurium cultivation under forest conditions in St. Lucia. The unit's other research programme which is being conducted as a collaborative effort between Winthrop-University Hospital in New York and the University of the West Indies is also aimed at introducing new effective chemical agents for control of bacterial diseases in anthurium and other ornamental plants. This initiative represents one of the many ways in which technology from developed countries is being transferred to developing countries to tackle their developmental problems. In this case, modified technology from Winthrop University Hospital is being utilized to bring about the desired effect with respect to the control of bacterial diseases in anthuriums.

5.1.2 Example 2: Meeting the Challenge of Chronic and Epidemic Diseases: The CDRC

With the financial and manpower assistance of a number of international research institutions including the Wellcome Trust, the University has been making a decisive effort to find solutions to the problems of epidemic diseases like HIV/AIDs, and the rapidly emerging crisis of chronic diseases including hypertension, heart disease and diabetes, as well as other health concerns such as the state of the elderly in many countries. The Chronic Disease Research Centre (CDRC) located in the UWI's School of Clinical Medicine and Research in the Queen Elizabeth Hospital in Barbados have for example been involved in a number of joint projects with international health institutions to examine a number of health problems affecting the region. One such initiative was a Wellcome Trust funded research project on amputations due to diabetes in Barbados, involving staff from the CDRC and colleges of the University of London. The study originated because of the very high amputation rate in Barbados with diabetic foot problems accounting for 80 per cent or more of female and 50 per cent or more of male general surgical ward admissions. The aims of this particular study were:

- To determine incidence rates for lower extremity amputations in Barbados in people with and without diabetes.
- To examine risk factors for amputations in persons with diabetes compared to a sample of population based controls who have not had an amputation; and
- To determine the relative difference in risk of amputation in type 2 diabetes in Barbadians compared to British based Afro-Caribbeans and Europeans currently studied in the United Kingdom.

Through these collaborative initiatives the UWI has been able to provide sound guidance to the region's governments on the several health challenges which threaten to undermine the significant accomplishments, such as improvements in diet and life expectancy, which the region has made over the past several decades.

5.1.3 Example 3: The Natural Disasters Threat: Role of the Seismic Research Unit

The Caribbean region is vulnerable to at least five natural hazards, namely hurricanes, floods (and associated hazards such as landslides), volcanic eruptions, earthquakes and tsunamis, which cause

millions of dollars of damage each year. Hurricanes and volcanic eruptions have however caused the most damage, with the former causing severe and region wide devastation each year and the latter being a permanent threat to most states and having totally destroyed two capitals in recent history, namely St. Pierre in Martinique in 1902 and Plymouth in Montserrat in 1997. The Seismic Research Unit based on the St Augustine campus in Trinidad has over the years been the main source information and guidance to regional governments with respect to preparedness, and the ongoing monitoring of the various volcanoes in the region, and along with the British established Montserrat Volcano Observatory, is giving advice on the ongoing volcanic crisis in Montserrat.

5.1.4 Example 4: Barbados's Edutech 2000 Initiative & The UWI's Education Evaluation Centre

The point has already been made (see chapter 2.6) that tertiary education also has a critical role to play in strengthening the primary and secondary levels of the education sector. The relationship between the Education Evaluation Centre based at the Cave Hill Campus of the UWI and Barbados's Education Sector Enhancement Programme (called the Edutech 2000 initiative) provides one clear illustration of how the tertiary sector can be used to assist in the reform processes which may be taking place at the lower levels. Edutech 2000, a technology intensive initiative, evolved out of the government's White paper on Education (1997) which advocated a fundamental rethinking and new approach to education in Barbados, particularly with respect to such issues as the curriculum, teaching and learning methods, assessment, equity of access with respect to those with disabilities, and improving performances in maths and english at the primary and secondary levels. The Edutech 2000 initiative represents a comprehensive attempt to utilize information technology in the primary and secondary schools (and the wider community) to facilitate a paradigm shift to a constructivist notion of learning, enable the educational system to respond to the challenges of the global environment and move from the current emphasis on "chalk and talk" to a more interactive, student-centred and process-oriented model of teaching, learning and assessment. Given the enormous scope of this undertaking and the tremendous

investment involved the Government simultaneously established the Education Evaluation Centre at the UWI in an effort to utilize the skills and experience of highly trained staff to provide careful monitoring of the Edutech programme to ensure that it achieve its desired objectives.

Among the specific objectives of the Centre's evaluation and research programmes are to:[7]

1. ***Firstly, to monitor and evaluate:***

- the present of the relevant technology and the use of information technology in schools for teaching/ learning, communication and management
- the impact of information technology on the teaching/learning process
- the progress, process and quality of curriculum reform
- the training and retraining of teachers to use information technology appropriately and creatively, and to understand and use competently, methods and approaches consonant with the new paradigm
- the training and retraining of Ministry of Education personnel and School information technology Leadership Personnel to manage, supervise and sustain the reform programme
- the pedagogical and technological support provided for teachers
- attitudes and behaviours of administrators, and other leaders, school and systems wide with respect to the change process inherent in the reform programme
- the development and relevance of approaches to and systems of, assessment congruent with the new technologies, paradigms and methodologies
- the extent to which schools communicate with, seek to educate and to involve parents in the education of their children especially with respect to the reform programme

[7]. UWI. Barbados: *Education Sector Enhancement Programme (Evaluation Proposal)*, 1999 / 2000.

2. ***Secondly, to evaluate and ascertain the extent to which the programme has***:

- enhanced pupil achievement in Language Arts, Mathematics, Social Studies, Sciences and other subject areas in relation to particular curriculum targets
- enhanced pupils' attitudes to. and interest in, learning, schooling, and specific curriculum areas, with particular focus on Language Arts and Mathematics
- promoted cooperative learning skills, thinking skills and creativity
- promoted a greater incidence of student-centred methodologies in classrooms and schools
- promoted a wider repertoire of pupil assessment techniques, including the use of authentic assessment, for example portfolios and profiling
- promoted willingness on the part of teachers and administrators to become more familiar with the use of Information Technologies as a tool for teaching and learning
- promoted more effective management of classrooms and the administration of schools in general, and the use of Information Technology as a management tool
- promoted greater understanding on the part of parents as to the objectives of the Programme.

In fulfilling these research and evaluative objectives the Education Evaluation Centre, like the various teacher education colleges around the region, is making a vital contribution to the overall education system. These evaluative and teacher training institutions make a significant contribution to policy formulation and implementation as well as teacher preparation to meet the challenges of the new millennium. Their activities constitute major developmental functions and more directly, help to ensure a better quality student coming out from the primary and secondary levels, thereby ensuring the quality of the overall pool of citizens available to undertake tertiary education. One of their most pertinent challenges, as for the tertiary education sector as a whole, will therefore be how to enhance their relevance through sustained improvement in the quality of the services they provide.

5.2 Quality as Relevance

> The degree to which an institution successfully meets its stakeholders' expectations will determine the degree to which it will be considered a quality institution. (Jonathan D. Fife)[8]

Since the 1980s the manifold changes occurring with respect to knowledge, technology, and globalization in general, have spawned an aggressive debate surrounding the issue of quality and its link to relevance in the context of tertiary education. The debates surrounding the quality issue are particularly complex. The word quality is often difficult to apply in practice because it is still ill-defined, meaning different things to different persons. Johnathan Fife explains:[9]

> What is meant by the word quality? Most people think they know what quality is when they see it but few know how to define it. The simplest and most often used definition of quality is that it is a perception of the degree that an item, service or organization is able to meet or exceed the expectations of another person. For higher education, the simplicity of this definition raises several very complex questions: Who are the people that a higher education institution needs to be concerned about when assessing quality? How, and in what ways, have their expectations for higher education changed? What must an organization, as complex as a higher education institution, do to ensure that it will meet the expectations of these people? What type of an organizational framework would promote a quality culture? And finally, what processes currently exist that can be used to help an institution monitor and improve efforts to produce consistent quality results..... The first step to understanding how to define and improve the quality of an institution is to understand who has the greatest influence on making the collective decision that "This is a quality institution!".....To understand who the stakeholders of a higher education institution are, it is necessary to understand who gave permission for an institution to exist, who financially supports the institution, who are primarily responsible for the outcomes of the institution, and who receive and benefit from these outcomes.

In the context of the Caribbean these stakeholders include staff, students, parents, trade unions,

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[8]. Johnathan D. Fife. ">From Quality Promised to Quality Certain: Creating systematic Approach to Mission Fulfillment", in Steven M. Janosik, Don G. Creamer and M. David Alexander (eds.) *International Perspectives on Quality in Higher Education*. Virginia: Educational Policy Institute of Virginia Tech, Department of Educational Leadership and Policy Studies, College of Human Resources and Education, 2000, p.27.

[9]. Fife. *From Quality Promised to Quality Certain,* pp.16-39.

non-governmental organizations, governments, industry, regional and international organizations, and most important the general Caribbean population resident in the region and in the diaspora, who provide the bulk of the resources to finance tertiary education in the region. The common philosophical bond among this diverse group of stakeholders is to see these tertiary educational institutions, and particularly the UWI, fulfill their developmental mandate. But this ostensibly straightforward goal is certainly not as simple as it may appear on the surface, for among the stakeholders there exist a diversity of opinions, philosophies and views of how best this goal might be achieved, what are the priorities, and indeed, what the developmental mandate is all about.

The pertinent task of tertiary education meeting and exceeding the expectations of its stakeholders strikes at the very root of an even more fundamental issue, namely, the purpose and role of education in society, especially in societies increasing being influenced by neo-liberal ideas and philosophies. Some may indeed, interpret quality and relevance in terms of education and training meeting the changing needs of the knowledge-based economies but even within this labour-market orientation perspective there has already evolved an awareness of the inadequacy of this narrow focus. As Fife notes:[10]

> The business sector used to define quality as meeting the expectations of their customers and a customer as anyone who buys and uses their goods or services. Increasingly, this simple concept of quality as solely being measured by customer satisfaction is being seen as inadequate in producing an overall quality organization because it does not include the indirect customer who has a stake in how an organization performs. Examples of these indirect customers would be employee unions that are concerned with fair wages and benefits, the surrounding neighbourhoods of the organization that are concerned with pollution, or state and federal regulatory agencies who are concerned with fair trade or employee safety standards. Thus, more frequently the narrow concept of customer satisfaction is being broadened to the more inclusive concept of stakeholder satisfaction.

Caribbean educational policymakers are keenly aware of these competing conceptions and orientations of education but as Nettleford rightly points out, tertiary educational institutions in

[10]. Ibid, pp.16-17.

the region must keep focused on both the short and long term goals of education as well as the specificities of the cultural context of the region :

> For some years now there has been an ongoing global debate as to the place of higher education in development. For a developing region like the Caribbean the issue is more precisely the role of quality higher education in its growth and development.... The multi-cultural and multi-racial nature of our region continues to provide special challenges and the inculcation of a greater knowledge and appreciation of the cultures of the Caribbean must be a central focus of our education systems. The University of the West Indies (UWI) must ensure that its graduates are not only well trained in their particular disciplines but also sensitive to these various issues, and imbued with a strong sense of social responsibility, in order that they might contribute to the debate.[11]

In the trenches of everyday life and in the regular interface of tertiary institutions with their manifold stakeholders the often conflicting perceptions of the role of education in society can, however, evoke heated emotions, condemnations and even reorientation of funding. Yet despite these difficulties there is a growing recognition that improving quality is a critical responsibility of tertiary education at this time, not only because of the swelling enrollments and fears about its impact on quality or because of the ongoing reconfiguration and diversification occurring among the institutions in the region but equally important because issues of accountability and relevance are now centre stage in the developmental discourse.

5.3 Evolution of Quality Mechanism in the Caribbean

As in the case of many other developing regions of the world, quality assurance systems evolved with local institutions relying heavily on external mechanisms for approval that their quality was "good". Roberts has documented this phenomenon in the Caribbean context:[12]

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[11]. Rex Nettleford, "Foreword" in Beckles, Hilary, Anthony Perry and Peter Whiteley. *The Brain Train. Quality Higher Education and Caribbean Development,* Kingston Jamaica: Pear Tree Press, 2002.

[12]. Roberts, Vivienne. 'Global Trends in Tertiary Education Quality Assurance. Implications for the Anglophone Caribbean'. *Journal of Educational Management & Administration* vol. 29, no. 4, 2001, p.437.

> Formal quality assurance systems in the Caribbean are now emerging. Historically, the university used selectivity, results, external examiners, as such mechanisms. Some colleges like the teachers' and theological colleges earned programme validation through endorsement from the local University of the West Indies, or from overseas universities, as in the case of Codrington College from Durham University. Many colleges demonstrated and controlled their quality through the taking of external examinations from the Royal Society of Health, City and Guilds and the University of Cambridge. Most were guided by standards set or approved and monitored by their Ministries of Education. The offerings of overseas universities in countries or overseas were often assessed and granted equivalence by Ministries of Education. It is true to say therefore that... Ministries of Education have exerted considerable control over tertiary education quality assurance in the Caribbean.

But while this aspect of the region's colonial legacy has without doubt served some good there has long been a recognition that it was inadequate for the needs of the Caribbean, particularly in terms of influencing what was relevant or "excellence" in the context of regional development. Thus increasingly there has been a shift both by regional educational institutions, and in particular the UWI, to engage in institutional reform for the purposes of enhancing relevance and quality. One component of these reforms, evident in institutions in the developing world, being attempts to develop stronger internal procedures for programme review and improvement.[13]

Since the late 1980s there has been as shift in the Caribbean from a situation where the locus of control has moved from a purely external to a mixed system of quality assurance. This has been reflected in the emergence of, for example:[14]

- the University Council of Jamaica (UJC) as a national accreditation body established in 1987;
- the Regional Nursing Body (RNB) as a regional regulatory body for nursing

[13]. See, Elaine El-Khawas, *Developing Internal Support for quality and Relevance*, Washington DC: The World Bank. Latin America and the Caribbean Regional Office, November 1998; Elaine El-Khawas, Robin DePietro-Jurand and Lauritz Holm-Nielsen, *Quality Assurance in Higher Education: Recent Progress; Challenges Ahead*, September 1998.

[14]. Roberts. *Global Trends in Tertiary Education Quality Assurance*, p.437.

established in 1972;

- the University of the West Indies Quality Audit Initiative set up in 1997; and a
- Regional Mechanism for Articulation, Equivalency and Accreditation proposed in 2000.

5.4 The Development of the UWI Quality Assurance Unit

The development of formal quality assurance processes and mechanisms at the UWI perhaps deserve some further elaboration for the simple reason that its efforts to respond to the quality challenge in this manner has been the most extensive and there is the real likelihood that its efforts, and lessons of experience, will inform and influence similar efforts at other tertiary education institutions in the region. Following years of planning and consultations around 1997/1998 the Board for Undergraduate Studies which has responsibility for general policy at the undergraduate level, embarked on the establishment of a moderately staffed quality assurance unit to formulate and develop quality assurance policies and strategies across the three campuses of the UWI. At present the responsibilities of the Quality Assurance Unit includes:

- organizing quality assurance reviews of undergraduate and postgraduate taught programmes
- supporting the major self-assessment that is undertaken before each review, and guiding the work of review teams during the visits and drafting the reports of the reviews.
- conducting audits of the learning environment, such as those into the operation of the Summer School, registration procedures, foundation courses, the operation of the libraries etc.
- participating in activities and visits to monitor quality assurance within the development of articulation agreements between UWI and regional tertiary institutions; and
- supporting professional faculties and departments in preparations for accreditation visits, with a particular focus on the quality assurance procedures being employed (and with, when necessary and useful, a quality audit-that is, a review of these quality assurance procedures).

Although the quality audits and reviews inevitably have implications for staff and departments being reviewed, the objective of these measures is to improve quality as opposed to being punitive. This was made explicit in the Unit's 2002 publication *"The Brain Train. Quality Higher Education and Caribbean Development"* which explained: [15]

> At UWI periodic reviews of teaching of all the different disciplines are undertaken in a five-year cycle. These reviews are quite separate from the academic assessment of members of staff, which is the responsibility of the Campus or University Appointments Committee. Quality assurance reviews do not assess individuals and, in contrast to the assessment of staff members for promotion or contract renewal, the internal quality assurance system at UWI is of a formative and developmental nature. The intent is to assure stakeholders of the continued high quality and standards of UWI's academic work and to enhance that work.

5.5 Future Considerations for Relevance and Quality Assurance in the Region

5.5.1 The Future of Relevance & Research

The search for relevance will no doubt continue to be a major preoccupation of tertiary education institutions in the region. To this end it may be possible to identify a few issues which are likely, or will continue, to be areas of concern and challenge in the future. These include:

- The need for more endogenous research, but also more reconfiguration given that so much of the cutting-edge research is done outside developing countries
- Constant evaluation to maintain relevance and quality
- The lack of adequate comparable educational statistics to inform research and policy formulations.
- The need to expand graduate programmes to provide cadre of quality researchers

[15]. Beckles, Hilary, Anthony Perry and Peter Whiteley. *The Brain Train. Quality Higher Education and Caribbean Development*, Kingston Jamaica: Pear Tree Press, 2002, p.68.

- The challenge of getting more staff involved in research, and in the case of colleges upgraded to university status, more assistance in creating a high quality research environment.
- More but better directed research funding
- Greater regional and international inter-institutional linkages, to facilitate technology transfer and knowledge sharing.
- Building more dynamic linkages between research and teaching
- More efficient use of the new technologies to enhance research and communication
- More research on issues affecting non-campus countries; and
- More basic but also more applied research in order to increase relevance with respect to the link between education and industry, as well as mitigating or solving the other key developmental challenges and issues of the region.

5.5.2 The Future of Quality Assurance

Although it is unlikely that the quality assurance movement will disappear as have some educational "fads", it is reasonable to believe that over time the very notion of quality will undergo further rethinking, and quality assurance processes and strategies will likewise be altered to reflect the new realities and conceptualizations. Nevertheless, there is much value in the assertions of Salenga & Fazel, that the following obstacles ought to be considered in achieving success and avoiding failure in developing strong internal quality assurance initiatives and mechanisms:[16]

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[16]. G. Salegna and F. Fazel. "Obstacles to implementing quality", *Quality Progress*, July 2000, pp.53-57. As cited in Johnathan D. Fife. "From Quality Promised to Quality Certain: Creating systematic Approach to Mission Fulfillment", in Steven M. Janosik, Don G. Creamer and M. David Alexander (eds.) *International Perspectives on Quality in Higher Education*. Virginia:

- An organization wide definition of quality that is unclear .
- A formalized strategic plan for change that is imprecise.
- A stakeholder focus that is ill defined.
- Inter-organizational communication that is inefficient.
- Poorly conceived employee empowerment programs.
- Low employee trust in senior management.
- Senior management that views quality programs as a quick fix.
- Quality systems are seen as a way to achieve short-term financial results.
- Politics and turf issues are ignored when implementing a quality program.
- A strong motivation for the implementation of a quality system throughout the organization is absent.
- A feeling that there is a lack of time available to devote to a quality initiative.
- And, a lack of serious, committed leadership.

Educational Policy Institute of Virginia Tech, Department of Educational Leadership and Policy Studies, College of Human Resources and Education, 2000, pp.27-28..

Overcoming these challenges and issues may indeed appear daunting since they relate to an organization's culture as well as to its management, organization and strategic planning. However, as Fife has indicated, "most of these obstacles are overcome when the principles of quality culture are firmly integrated with a quality culture organization framework.".[17] But this is no easy task.

The development of internal quality assurance processes is certainly desirable throughout the tertiary education sector in the region but as with all such new educational initiatives there needs to be ongoing evaluation of the benefits versus the costs, and a constant search to achieve greater efficiencies. Quality assurance systems have been known to bring such institutional benefits as making academic institutions give greater attention to issues of effective teaching and learning, improvements in degree completion rates in some systems, as student services and advising have received more attention, and greater acceptance today of the need for having open and accountable management procedures.[18] However, a number of drawbacks have also been identified, including concern that quality assurance systems have led to "compliance" behaviour and inordinate paperwork burdens, as well as considerable administrative and financial burdens on governments.[19] Thus in their search for quality a constant consideration of educational institutions and systems is often the financial implications of every educational initiative towards that goal.

[17]. Fife. *From Quality Promised to Quality Certain*, p.27-28

[18]. El-Khawas et. al, *Quality Assurance in Higher Education*, p.7.

[19]. Ibid.

Section 3: Towards Sustainable Financing

> ...very small nations have to invest more heavily in their human resources given that their participation in the world trading system depends on their being able to adjust their output quickly in the light of changes in demand. Their resilience, adaptability, and capacity to respond to change are a function of their production frontier which, in the case of very small countries, is defined more directly by the skills and knowledge that reside in their human resources. Thus, whatever the system of financing education, there is need for such countries to mobilize a high level of resource provision for education. (Ralph Henry)[20]

> The twenty-first century knowledge-based economy needs more and more young (and not so young) students from all groups in society benefitting from higher education. Successive governments have recognized this and are working to create a truly mass system. They do not admit publicly however that taxpayers cannot afford to fund in full a mass system." (David Greeanway et.al)[21]

How Caribbean governments and societies view education and expenditure on education, in relation to the development process and the value of their human capital, will to a large extent determine their willingness or unwillingness to provide more adequate resourcing for education at all levels (preschool, primary, secondary and tertiary), as well as for technical and vocational and continuing, life-long education and training, whether in formal, informal or non-formal educational learning environments. Yet, whatever the predispositions of the governments and peoples of the region towards educational spending there is a growing recognition spurred by certain economic constraints and developmental imperatives that the region's entire approach to education financing is due for comprehensive reconsideration and overhaul in order to respond to the challenges and opportunities inherent in the new global economic and political environments of the twenty-first century. This section will provide a brief description of the historical and evolving nature of tertiary education financing in the Anglophone Caribbean, (with focus on the

[20]. Henry, Ralph, *Report on Economic and Financing issues in Education in the Caribbean*: Final Report, Washington DC: World Bank, March 2000, p.vii.

[21]. Greenaway David and Michelle Haynes. *Funding Universities to Meet National and International Challenges.* School of Economics Policy Report, University of Nottingham. Report commissioned by the Russell Group of Universities, 2000, p.4.

UWI), the factors which impact on the availability of funds especially for public tertiary educational institutions, and focus on the mix of strategies required and are being adopted in this new century to more adequately provide the resources needed to make tertiary education provision more expansive, equitable, relevant and quality oriented.

In spite of the relatively recent emergence of private, for-profit tertiary educational institutions, it would still be accurate to claim that the tertiary education sector in the region, which is dominated by public institutions, is overly dependent on governments for its financing. Given the demonstrated and historical economic vulnerabilities of regional economies, tertiary educational institutions have in recent times, found themselves in a situation of double jeopardy. On the one hand they are being pressed by their stakeholders, including regional governments, to broaden access, democratize and remove inequities from tertiary education, and produce better quality products, while on the other, there is declining financial support from governments. This bind which public tertiary institutions in particular, have found themselves in has been dramatically illustrated by the experiences of the UWI as the region's largest provider of tertiary educational opportunities, but is also very evident at other institutions such as the University of Guyana where the bind is even much tighter and more difficult to escape.

5.6 Regional Economic Travails and UWI Financial Woes

The 1993 Chancellor's Commission which investigated the conditions at the UWI was appalled at the extent of the financial predicament which existed at the UWI at that time. The following extract from its report clearly reveals the degree to which over reliance on government support had resulted in a dire situation developing at the UWI:[22]

> The financial difficulties which UWI has been experiencing for the past several years are so serious that it would be no exaggeration to state that the University is facing a financial crisis of major proportions. This is intended, not as an alarmist statement, but rather as a call to Contributing Governments and the University itself to take urgent action to address the University's financial problems. Failure to do so effectively and in a timely manner could seriously endanger the continued

[22]. *Report of the Chancellor's Commission*, pp.44-47.

existence of the University..... The present decade [1990s] has already provided Contributing Countries with problems and challenges more difficult and complex than those which they faced during the 1970s and 1980s. But unfortunately, these problems and challenges are arising at a time when many of the Contributing countries are less equipped, in economic terms, to face them and when the international economic environment is much less favourable than in earlier decades. It is in this deteriorating economic and financial situation, with the worsening fiscal performance of Contributing Governments, and especially of the three campus governments, that there has been a significant build-up in arrears of contributions to UWI. At the end of July 1992, arrears of contributions amounted to US$52 million or 53% of Governments' accrued contributions to UWI for the financial year ended on that date.

The precarious financial situation of UWI clearly poses a serious threat to the institution's continued operation unless urgent steps are taken by Contributing Governments to eliminate arrears. Contributing Governments must, therefore, face reality and recognize the plain economic truth that the economies of Commonwealth Caribbean countries cannot afford or support adequately free University education, especially if wider access to such education is to be provided. This situation is unlikely to improve in the foreseeable future.....Consequently, the Commission considers that the UWI and the Governments of its Contributing Countries need to work out some alternative budgetary process and funding approval mechanism for the University.

5.7 Impact of the Crisis on the UWI

The financial crisis had a profoundly negative impact on the operations of the University and its ability to address in aggressive and innovative ways, many of the pressing developmental issues and challenges of the region. The Commission outlined the following as among the negative effects stemming from the financial crisis:

- The UWI was forced to operate on substantial bank overdrafts with its commercial bankers at each campus, especially at Mona and St. Augustine. These large overdrafts were very costly either for the UWI or for the relevant campus Government where the Government accepted financial responsibility for the overdraft.

- To avoid exceeding overdraft limits, UWI meetings scheduled to take place at one campus at very short notice had to be switched to another campus thus causing the disruption of administrative arrangements originally made for the meeting.

- There were unacceptably long delays and arrears in payments by UWI campus authorities to suppliers of goods and services

- A considerable amount of time of Campus Bursars and Deputy Bursars, especially at Mona and St Augustine was spent in arranging overdraft facilities to prevent interruption of essential teaching and other activities on the campuses.

- The campuses were unable to engage with any degree of confidence in meaningful medium to long-term planning as a result of financial uncertainty.

- Campuses were unable to carry out the required maintenance of campus buildings and infrastructure, etc., which led to a depreciation of the building stock, and an earlier need to replace it than would otherwise be necessary, and at great capital cost. This led to inadequate and worsening physical facilities for students, and academic and administrative staff.

5.8 Recommendations of the Chancellor's Commission

In the light of the deteriorating conditions and their impact on every aspect of the governance and operations of the UWI the Commission made the following recommendations with respect to funding alternatives and creating a sustainable financial situation at the UWI:

- That Governments should accept, especially in the light of planned expansion in student numbers that the University could no longer be financed on the basis of a free education for all students.

- That the UWI should move towards full recovery of economic costs and must ensure that all of its activities are carried out cost-effectively, including streamlining its governance structure, and reducing administrative costs through greater utilization of new information technologies.

- That the UWI must ensure that any "perks and privileges" provided to its senior academic and administrative staff are not out of line with those provided by private sector employers to similar levels of their employees, especially if the UWI expected to raise, on a continuing basis, increasing amounts of financing from the private sector.

- That there should be an expansion of the distance education modality at the UWI as a way of reducing unit costs of delivering courses and facilitating greater access.

- That the University should continue as a matter of urgency to seek external funds.

- That the University should review the financing of graduate education in order to put it on a more secure and equitable footing.

- That the Governments should make provision for an adequate system of student loans to ensure that no eligible person is denied access to the University because of a lack of financial means.

5.9 UWI's Response to Crisis & Search for Sustainability

Since the difficulties of the 1980s and early 1990s, the UWI has emerged a much stronger institution financially and otherwise, due in large measure to the governments of the region clearing up their arrears, thanks in part to some encouragement from the CDB and other regional organizations, as well as to the rise to power of a number of former UWI graduates as Prime Ministers in several Caribbean countries who displayed a renewed commitment to the UWI. In addition, the UWI has been adopting an entrepreneurial approach to its operations. The following are some of the measures, both cost cutting and income generating, adopted by the UWI to meet the challenge of achieving financial sustainability.

- The achievement of greater efficiencies through the utilization of new technologies in administration and governance.

- The establishment of a number of Profit-Centres including the building of more Halls of residence for students, and the upgrading of the bookshops on the campuses.

- The establishment of Summer School programmes offered at the three campuses during the long vacation period around July and August. In the academic year 2000/2001 the Summer School programme at the Mona campus in Jamaica had 2871 registered students. Enrolment is usually heaviest in the Faculty of Social Sciences, but also significant in the Faculty of Humanities.

- The generation of income from technical services and consultancies aided by the establishment of Business Development Offices on each of the campuses.

- The establishment of a Capital Campaign, which is led by the Vice Chancellor of the University, to mobilize financial resources from throughout the region and internationally.

- At the Mona campus several commercial leases with private sector companies such

as Kentucy Fried Chicken, and the Bank of Nova Scotia, have in addition to generating income from rents, resulted in spin-offs including improvements to the building stock, beautification, and contributions to scholarships.

- At the Mona campus the Senior Common Room was recently refurbished into a modern facility with a number of exquisitely decorated hotel rooms and state of the art conference and banqueting facilities.

- At the St Augustine campus a large multipurpose sports gymnasium with numerous facilities and playing grounds to facilitate a variety of sporting activities has also been recently constructed, and is intended to be a source of income generation.

- A number of specialized units have been established by various faculties to undertake applied research for commercial purposes. These include at Mona campus the Natural Products Institute, and the Mona Institute of Applied Sciences.

- Additionally, a UWI Development and Endowment Fund has been established to help raise funds for the UWI. The UWI Development and Endowment Fund, a separate legal entity with its own Board of Directors, was established in 1990 to assist in soliciting funds particularly from the local business community to help with the upgrading and development of projects and programmes. There are Development and Endowment Offices on each of the three campuses. Since 1995 the Mona Fund alone has provided over Jamaican $40 million to support such projects as the establishment of Distance Teaching Centres in Jamaica, the work of the Campus Research and Publications Committee, the building of computer labs, the creation of the Hopwood Medical Education Computer Centre, provision of grants for overseas study in the Department of Government, etc.

Through the combined efforts of these various initiatives the UWI is once again becoming a financially vibrant institution but much more needs to be done by way of innovative entrepreneurial initiatives to substantially reduce its dependence on governments, and before its quality and other institutional strengthening initiatives could be self-sustaining.

5.10 Resolving Inequities in Regional Access:

5.10.1 The Case of the OECS/Non-Campus Countries

As we seen in chapter two of this report, students from the non-campus countries, many of which are OECS states, have historically suffered severely from the inability or lack of commitment by

their governments to fund large-scale participation in tertiary education. Former Pro-Vice Chancellor of the UWI Gerald Grell outlined the predicament faced by students in these countries relative to their colleagues in the campus countries:

> UWI students admitted from the campus Countries of the UWI are automatically sponsored by their respective Governments, and it is the general expectation that this approach to developing the human resources potential of citizens of the Caribbean will be implemented by all UWI contributing countries. Except for scholarship holders and other specially supported OECS students, Non-campus Country (NCC) students have traditionally had, individually, to find financial support and pay the full economic cost to attend UWI at one of the three campuses. Only recently Jamaican and Trinidad and Tobago students have had to pay a small "Cess" instituted by their Governments so that the concept of "payment" is now becoming a palpable issue to students of all contributing countries of UWI except those from Barbados who are still entirely funded by Government." (Gerald Grell p.63.)

While it is true that students in Barbados do not pay major costs like tuition they do however pay minor fees pertaining to such things as registration, obtaining student identification cards, caution money and Guild fees. Since the early 1990s the situation with respect to government support for students from the non-campus countries have improved marginally with some governments undertaking to meet the economic cost of many more students accepted by the UWI, particularly in priority areas of national development. The Governments of the OECS have also undertaken other initiatives to help their citizens access tertiary education particularly among their various national colleges and other tertiary institutions located in the subregion One such initiative is the OECS Centres of Excellence Endowment Fund which is now being created.

The OECS Secretariat is now in the process of creating an endowment fund to assist in increasing access of OECS citizens to tertiary educational opportunities. The specific aim of the Fund "is to provide a continuous stream of income to help support regional collaboration in human resources development in the key sectors of the economy in the OECS".[23] The Fund which is to be independently managed by the Eastern Caribbean Central Bank will be used to support students

[23]. White, Michael. *OECS Centres of Excellence Endowment Fund.* Revised Draft Fund Instruments prepared for the OECS/OERU, February 2002.

who wish to attend college in one of the OECS Member states for the full length, or part of their training and education programme, and would cover such items as tuition, living expenses, learning resources and other special expenses. The Fund will target four main areas for financial support to students, namely Tourism, Agriculture, Information Technology, and Marine Services.

In addition, as part of the OECS education enhancement programme which is in part being funded by the European Union, an investigation was recently completed focusing on the financing of tertiary education in the subregion. The report prepared by consultants Gaston Franklyn and Monica Woodley made the following recommendation with respect to increasing opportunities for citizens of the OECS to access tertiary education:

- That the governments of the region and their individual colleges should establish a comprehensive financial assistance programme for college education students that recognize both academic needs and financial needs. This would include the provision of scholarships, bursaries, government loans, and special opportunity grants targetted to designated special needs groups such as women in rural communities.
- That the OECs governments create greater accessibility to scholarships and bursaries by allocating an equal number of these to students going to academic tertiary institutions and those going to technical and vocational institutions.
- That tertiary institutions be allowed the legal flexibility to engage more directly with the private sector and the community to obtain financing.
- That cost recovery schemes be instituted for the various colleges in the OECS; and finally that,
- That there be greater sharing of college staff/resources across the sub-region.

5.11 Conclusions and Future Prospects for Financing

It is very likely that the recommendations made with respect to the OECS will significantly contribute to the broadening of access to tertiary education among citizens in that sub-region. However, as for the rest of the English speaking Caribbean, the governments must continue to nurture the perspective that the democratization of access to tertiary education can and will bring

numerous developmental benefits. As such, adequate funding must be provided to develop the tertiary level of the education sector while encouraging rationalization and greater efficiencies in the use of scarce resources. Ultimately, however, citizens across the English-speaking Caribbean must acknowledge the fact that the governments of the region are severely constrained and cannot provide the levels of funding needed or which they might want to provide. As such, the funding of higher education, as with investments in other developmental areas, must be a shared responsibility among all relevant stakeholders, including students, and their families, and the private sector. These groups in particular because of the enormous private returns which accrue to them must assume an increasing responsibility and share of the costs of providing tertiary education in the region. At the same time, governments must recognize that they have an obligation to put mechanisms in place to ensure that no citizen, particularly those from disadvantaged groups, including the poor and disabled, is excluded from accessing tertiary education, even though they might academically or otherwise, be suited to undertake this level of learning.

Appendix 1

Declaration About Higher Education in Latin America and the Caribbean[1]

Ratifying the terms of the Universal Declaration of Human Rights, which states in its article 26, paragraph 1 that 'every person has the right to education'... and that 'the access to higher education studies will be equal for all, on the basis of their corresponding merits'. Ratifying, in turn, the contents of the Convention against Discrimination in Education (1960), which states in its article IV, that the signatory States commit themselves 'to ... offer all people alike higher education on the basis of a real equality and pursuant to the skills of each individual .....'

Starting by assuming the trends identified in the Policy Paper for Change and Development of Higher Education, published by UNESCO in 1995. And on the bases of the studies, debates and reflections on that document that have been performed since that date in the region, which have set forth the recommendation of strengthening equity, quality, relevance and internationalization of higher education.

Taking into account the fact that as we enter the XXI century, and faced with the growth of unemployment, poverty and misery, mankind must actively address the following issues: growth with equity, the protection of the environment and the peace-building process. Furthermore, following the recommendations made by the United Nations, via: (a) the Programme for Peace, that contains principles and suggestions bearing on the preventive measures that will protect peace, as well as effective actions for restoring peace when uncontainable conflicts emerge, and (b) the Programme for Development, that sets forth the conceptual bases for fostering a

[1]Regional Conference on Policies and Strategies for the Transformation of Higher Education in Latin America and the Caribbean, Havana, Cuba, 18-22 November 1996; Also, World Conference on Higher Education: Higher Education in the Twenty-first Century Vision and Action, UNESCO, Paris, 5-9 October 1998, Vol.1, Final Report.

sustainable and permanent human development.

Highlighting that human development, democracy and peace are inseparable elements -as stated in the medium-term strategy of UNESCO (1996-2001), that aims the higher education programmes of the Organization at three objectives: expanding access to higher education with no discrimination whatsoever, as well as expanding permanence in the system and the possibilities of having success; improving its management and strengthening the links with the labour work; while at the same time contributing to build peace and foster a development founded on justice, equity, solidarity and freedom.

Taking up the report submitted to UNESCO by the International Commission on Education for the Twenty-first Century. The latter, in fact, does not only reaffirm the above mentioned options. It also sets forth that the universities of developing countries have the obligation of carrying out a research that can help solve the most serious problems that those countries are suffering. This is due to the fact that 'they are the ones that should propose new approaches for development, so that they can build a better future and do so in a more effective manner.'

Acknowledging that economic and social development highly depend on training a highly skilled staff, specifically in this most special stage in history, characterized by the emergence of a new production paradigm based on the power of knowledge and the adequate handling of information. Acknowledging, in turn, that it depends on the potential to create a knowledge that satisfies the specific needs and lacks of the region, and that the latter is derived almost solely from higher education institutions - the knowledge instances that generate, criticize and disseminate it.

Accepting, on the one hand, that the gap that is currently setting aside the countries of the region from the developed nations, is evidenced -among other aspects- in the following elements: education (rates of third-level schooling), technological research and development (size of the scientific and technical staff, investment in R&D), as well as information and communications. In fact, these aspects are set forth in the Report on Human Development of the United Nations

Development Programme, that was published in 1996. Likewise, accepting, on the other hand, that the source of R&D in almost all the countries in the region is public and that the highest percentage of research units operates within the framework of universities, as set forth in the World Report on Science published by UNESCO in 1993.

Warning that, without adequate higher education and research institutions, developing countries can not except to adopt and apply the most recent development. And warning, likewise, that it would be even less feasible for them to make contributions of their own to development and to close the gap that keeps them away from industrialized nations.

Taking due note of the fact that higher education in the region evidences the following trends: (a) an outstanding expansion of the student roll; (b) a persistence of inequalities and difficulties when attempts are made at democratizing knowledge; (c) a relative restriction of public investments in this sector; (d) a fast-paced increase and diversification of institutions that work in the field of third-level education; and, (e) a growing participation of the private sector in the composition of the education offer.

Estimating that efforts have been made by higher education institutions, the governments of some Latin American and Caribbean countries, or else, the societies themselves of several countries that make up the region, aimed at increasing the rates of post secondary education. And further estimating that, despite those efforts, many of these nations are still far from achieving the coverage and quality required by globalization, regionalization and economic opening processes, as well as from achieving a real democratization of knowledge.

Specifying that these trends are also evidenced at an international level. And, further, specifying that they coincide with simultaneous, though sometimes contradictory processes, namely: internationalization, regionalization, polarization, democratization, isolation and fragmentation, that have an effect on the development of higher education. And specifying, in turn, that the burden of the foreign debt, the increase in the value of imports of goods and services, the drop in

the share of world trade, are elements evidenced in the region leading to a situation of social inequality. Furthermore, specifying that the countries of the area make attempts at facing the latter problems with regional and sub-regional groups and implementing several social policies.

Highlighting that, in these times of economic, political or social change - both positive and negative in nature - higher education is called to take up a leading role and to critically study these changes, while at the same time making prospective efforts aimed at predicting and even conducting them via the creation and dissemination of the pertinent knowledge. And, further highlighting that, to this end, higher education must take up its own transformation with the help of society as a whole, not only that of the education sector alone.

Reminding that in the case of Latin America, the Cordoba Reform (1918) - though responding to the needs of a society that was completely different from our own - was characterized by its clear support to the movement of university democratization. Reminding, in turn, that it insisted on the need to create solid and diversified links between university activities and the needs of society - a process that is currently re-emerging to guide the process of transformation of higher education that is underway in the region. And, further reminding that the latter is seen as a continuous phenomenon aimed at designing an original institutional scheme adapted to satisfy the current and future needs of their countries.

Pointing out that any attempt at improving the quality and relevance of higher education requires a significant transformation of the education system as a whole. Furthermore, pointing out that the solution of the financial problems faced by higher education in Latin America and the Caribbean will not stem from redistributing the scarce resources that are allocated to the different levels in this sector. Likewise, pointing out that, on the contrary, they will be the result of transferring resources of other sectors that are not a real priority, while at the same time improving the distribution of income and diversifying financing sources. Pointing out, in turn, that all this has to be the result of a search undertaken with the participation of the State, the civil society, professional and business communities in order to respond - jointly and equitably - to the

needs of the different sectors that make up society.

The participants of the Regional Conference of UNESCO on Policies and strategies for the transformation of higher education in Latin America and the Caribbean, coming from 26 countries, and assembled in Havana, Cuba, from November 18 to 22, 1996, do hereby declare that

1. Education, in general, and higher education, in particular, are essential instruments for facing up with success the challenges posed by the modern world and for educating citizens that can thus build a more open and fair society. It will be a society based on solidarity, respect for human rights and the shared use knowledge and information. At the same time, higher education is an unavoidable element for social development, production, economic growth, strengthening the cultural identity, maintaining social coherence, continuing the struggle against poverty and the promotion of the culture of peace.

2. Knowledge is a social asset that can only be generated, transmitted, criticized and recreated for the benefit of society, in plural and free institutions that have a full autonomy and academic freedom. However, the latter must also have a clear awareness of their responsibility and a will of service that cannot be turned down. Hence, they will be prepared to search for solutions to the demands, needs and lacks of society. This is indeed a society it should be accountable to - as a requirement - in order to exercise fully its autonomy. Higher education will be able to fulfil this important task only if it demands itself the highest quality. In this respect, a continuous and permanent assessment is indeed a most valuable instrument.

3. Higher education must strengthen its capacity to perform a critical analysis, to anticipate and to have a prospective vision. It must do so in order to prepare alternate development proposals and face the emerging problems of a reality undergoing a process of continuous and rapid transformation, in a long term horizon.

4. Higher education institutions must adopt organizational structures and education strategies that render them highly dynamic and flexible, thus enabling them to respond with both the timeliness and anticipation needed to creatively and efficiently face an uncertain future. They are called to facilitate an exchange of students between institutions and between different degree courses of the same institution. They will have to take up - without any further delays - the paradigm of permanent education. They will have to turn into pertinent centres for facilitating professionals to be up to date, duly retrained and reconverted. Hence, they will have to offer a solid training in the basic disciplines, along with a wide diversification of programmes and studies, intermediate diplomas and links between courses and subjects. Likewise, they must endeavour to ensure that the activities of extension and dissemination are an important element of the academic life.

5. The nature itself of contemporary knowledge -in a process of constant renewal and most sudden and dramatic growth - fully agrees with the current notion of permanent education. This must be an indissoluble supplement of studies aimed at obtaining degrees and titles. They offer graduates the possibility of taking refresher courses and of adapting to changing realities that are very difficult to anticipate. Besides, permanent education should also enable any person - at whatever stage of his/her life - to go back to the classrooms and to find in them the opportunity to be a part of the academic life once again. In this way, people are allowed to attain new levels of professional training. In fact, the competence acquired has a value in itself that goes beyond the mere credential.

6. Higher education must implement pedagogical methods based on knowledge, in order to train graduates that learn how to learn and how to undertake. In this way, they will be better prepared to generate their own jobs. They might even be able to create production entities that can help combat the scourge of unemployment. There is a clear need for promoting the spirit of inquiry. Hence, the student will have the tools to search for knowledge in a permanent and systematic manner. In turn, this implies revising the

pedagogical methods that are currently in effect and the emphasis now placed on the transmission of knowledge will switch to the process for generating it. In this way, students will count on the instruments they require in order to learn how to learn, how to know, how to live together and how to be.

7. A changing society demands people to have a comprehensive, general and professional education. The latter must encourage the development of a person as a whole and should favour his/her personal growth, autonomy, socialization and the skills to turn the assets that perfect it into elements having real value.

8. A higher education system will be fulfilling its responsibility and conscientiously carry out its mission - thus turning into a profitable social element - if a part of its teaching staff and institutions also performs intellectual creation (scientific, technical and humanistic) activities. The latter, in turn must be in agreement with the specific objectives of the institution, its teaching capabilities and its material resources

9. It is absolutely necessary to introduce a solid culture of information in the higher education systems of the region. The adequate combination of information and communication redefines the need to update pedagogical practices at a university level. Besides, its players need to participate in the major academic networks and have access to the pertinent exchange with all the related institutions. Likewise, they must increase their degree of opening and their interactions with the international academic community. At the same time, higher education institutions must take up the main task of preserving and strengthening the cultural identity of the region. In this way, the above mentioned opening will not endanger the cultural values that are typical of Latin America and the Caribbean.

10. Among the challenges posed by this turn of the century, higher education is now facing the need to participate resolutely in the qualitative improvement of all the levels of the education system. Its most concrete contributions can be made a reality via: training

teachers; transforming students into active agents of their training; promoting socio-educational research into problems as could be the case of early school drop-out and repeating; and ensuring its contribution to the design of State policies in the field of education. Every higher education policy must be comprehensive and must address and take into due account all the components of the education system. Most specifically, it must do so under the umbrella of an 'education for all', as set forth in the Conference of Jomtien (Thailand, 1990) - at a world scale and in the Main education project for Latin America and the Caribbean - at a regional level.

11. Higher education institutions of our region must instil in their graduates the awareness that they really belong to the community of Latin American and Caribbean nations. Hence, they must promote processes aimed at regional integration. Furthermore, cultural and educational integration should be the bases for political and economic integration. Faced with the formation of new economic spaces within the current framework of globalization and regionalization, higher education institutions must address their studies of Latin American integration in the light of their economic, social, cultural, ecological and political aspects, among others. This will be their main task and they should address the problems with an interdisciplinary approach.

12. Founded on the Regional convention and the international recommendation on validation of studies, degrees and diplomas, there is a need to encourage academic and professional mobility. The purpose is no other than that of favouring the process of economic, educational, political and cultural integration of the region.

13. Both the transfer and the exchange of experiences between higher education institutions - key elements of the UNITWIN/UNESCO Chairs programme - are indispensable for promoting knowledge and ensuring that the latter is applied to encourage development. Interuniversity co-operation can be further facilitated by the constant progress evidenced in the field of information and communication technologies. In turn, it can be

strengthened by the current economic and political integration processes, as well as by the growing need for a real inter-cultural understanding.

14. The considerable expansion of different types of networks and other instruments and mechanisms for linking up institutions, professors and students is a key issue in the collective search for equity, quality and relevance in higher education. This is specifically the case now, when no institution can hope to master all the areas of knowledge.

15. Public support for higher education is still indispensable. The challenges faced by higher education are also challenges for society as a whole. They include governments, the production sector, the labour world, the organized civil society, academic associations, along with regional and international organizations that are responsible for the training, research, development or financing programmes.

16. On account of all the considerations above, all the social players must combine efforts and start acting so as to foster the process of in-depth transformation of higher education. To this end, they must be based on a new 'social consensus' that enables higher education institutions to be better positioned and thus have respond to current and future needs for a sustainable human development. In the immediate future, this aspiration will gradually turn more concrete, as the action plan designed in this Conference will be executed.

Appendix 2

List of Major Anglophone Caribbean Tertiary Education Providers

Jamaican Tertiary Level Institutions

B & B Institute of Business

Bethlehem Moravian College

Brown's Town Community College

Caribbean Graduate School of Theology

Church Teachers' College

College of Agriculture, Science and Education

Edna Manley College of the Visual and Performing Arts

Excelsior Community College

G.C. Foster College of Physical Education and Sport

Individual Systems Ltd.

Institute of Computer Technology

Institute of Management and Production

Institute of Management Sciences

Institute for Theological and Leadership Development

Insurance College of Jamaica

Jamaica Constabulary Force Staff College

Jamaica Institute of Bankers

Jamaican Institute of Management

Jamaica Maritime Institute

Jamaica Theological Seminary

Knox Community College

Management Institute for National Development

Mico Teachers' College

Moneague College

Montego Bay Community College

PBS Training Institute

Portinore Community College

Production Institute of Management Sciences

Sam Sharpe Teachers' College

School of Medical Radiation Technology

School of Physical Therapy

Shortwood Teachers' College

St. Joseph's Teachers' College

St. Michael's Seminary

Toolmakers Institute

United Theological College of the West Indies

University of Technology

University of the West Indies, Mona Campus

University of the West Indies Department of Nursing Education

University of the West Indies School of Physical Therapy

Vector Technology Institute

Vicariate of Mandeville College

Vocational Training Development Institute

West Indies College

West Indies School of Public Health

Trinidad Tertiary Level Institutions

Caribbean Union College

Eastern Caribbean Institute of Agriculture & Forestry (ECIAF)

John S. Donaldson Technical Institute

Joint Services Staff College

NIHERST Information Technology College

NIHERST School of Languages

Royal Bank Institute of Business and Technology (ROYTEC)

San Fernando Technical Institute (SFTI)

Trinidad and Tobago Hospitality and Tourism Institute (TTHTI)

Barbados Tertiary Level Training Institutions

Barbados Community College

Erdiston Teachers' College

BIMAP: Barbados Institute of Management & Productivity

Non-Campus Tertiary Level Training Institutions

Antigua State College

Belize Technical College

Belize College of Agriculture

Clarence Fitzroy Bryant College (St. Kitts / Nevis)

Clifton Dupigny Community College (Dominica)

College of Bahamas

Community College of the Cayman Islands

Community College of St. Vincent and the Grenadines

Dominica's Teachers' College

H. Lavity Stoutt Community College (BVI)

Montserrat Technical College

Princess Margaret Hospital School of Nursing (Dominica)

Sir Arthur Lewis Community College (St Lucia)

St Vincent Technical College

T.A. Marryshow Community College (Grenada)

Appendix 3

Categorizations of Main Foreign Institutions Operating in The Caribbean

Categorization by Country/Region of Operation

The categorization used here does not simply imply that institutions actually have physical bases in, or operate from the country under which they are listed. This is only so in some cases, and these are identified by means of an asterisk(*). Rather, the categorization reflects evidence of actual physical bases, or operations run from the respective countries, as well as, evidence that students in the respective countries do programmes offered by these institutions, either directly through the use of distance education technologies such as the Internet, or traditional correspondence, or various combinations, or through local institutions administering the programmes on behalf of the foreign institutions.

Antigua

*School of Medicine, University of Health Sciences Antigua (UHSA)

Aruba, Netherlands Antilles

*Universidat di Aruba

Bahamas

Douglas University

Nova Southeastern University

St Thomas Moore University

University of Miami

Barbados

Carnegie Mellon University (in collaboration with Barbados Community College)

Civil Service College of Singapore in collaboration with BIMAP

Commonwealth Secretariat in collaboration with BIMAP

McGill University (Canada): Via UWI Bellairs Institute in Barbados

University of Surrey (UK)in collaboration with BIMAP

Belize

*School of Medicine, Central America Health Sciences University (CAHSU)

*St Matthews University School of Medicine (Affiliated to St Joseph's College of Maine & Intercollege of Cyprus)

British Virgin Islands

*Commonwealth Open University

SUNY University

*University of the Virgin Islands (may rightfully be regarded as an indigenous institution. Based in the US Virgin Islands.)

Wright State University

Cayman Islands

University of Liverpool (Law degree programme)

Dominica

*Ross University School of Medicine

*University of New Orleans (pending)

Grenada

*Saint Georges University

Guyana

*American International School of Medicine (AISOM)

Jamaica

Barry University

Florida State University

Nova Southeastern University

University of Manchester (in collaboration with the Jamaica Institute of Bankers)

University of New Orleans

University of Wales (in collaboration with the Jamaica Institute of Bankers)

Montserrat & St. Maarten

*American University of the Caribbean (AUC) [Relocated to St. Maarten due to volcanic activity]

*St. Johns University (Pending)

Saba:

*Saba University School of Medicine

St. Eustatius, Netherlands Antilles

University of Sint Eustatius School of Medicine

St Vincent:

*Kingston Medical School

St Lucia:

* Spartan Health Sciences University

St Kitts & Nevis

*Berne University

Chicago Medical School (via Ross Vet. See No 10)

*Caribbean Primates Ltd). McGill University

*Eastern Caribbean University

*Grace University School of Medicine

*International University of the Health Sciences (IUHS) in St. Kitts

*Medical University of the Americas (MUA)

*Norma Ross International University

*Northwestern University (via Ross Vet. See No.10)

*Ross University School of Veterinary Medicine

*Windsor University School of Medicine

Yale University (via Ross Vet)

Trinidad

Drexel University (in collaboration with T&T Institute of Technology)

Southern Alberta Institute of Technology (in collaboration with T&T Institute of Technology)

University of New Brunswick

Caribbean Region-Wide Institutions

Athabasca University

British School of Computing & Commerce

Edinburgh Business School

Heriot-Watt University

Howard University

ICS Learning Systems

Institute of Marketing & Business Studies

Leicester University

London College of Management

Memorial University

Mount St Vincent University

Nottingham Trent University

Ryerson University

University of Greenwich

University of London

University of Sunderland

University of Sheffield

Alphabetical List of Foreign Tertiary Institutions Operating in Caribbean[2]

The country/region indicated in square brackets point to the primary base from where the institution is operating.

American University of the Caribbean (AUC) [Caribbean]

American International School of Medicine (AISOM) [Caribbean]

Athabasca University [Canada]

Barry University [USA]

Berne University [Caribbean]

British School of Computing & Commerce [UK]

Chicago Medical School (via Ross Vet/St Kitts Biomedical Research Foundation)[USA]

Civil Service College of Singapore (in collaboration with BIMAP) [Singapore]

Commonwealth Open University [Caribbean]

Commonwealth Secretariat (in collaboration with BIMAP) [Canada]

Douglas University [USA]

Drexel University (in collaboration with T&T Institute of Technology) [USA]

Eastern Caribbean University [Caribbean]

Edinburgh Business School [UK]

Florida State University [UK]

Grace University School of Medicine [Caribbean]

Heriot-Watt University [UK]

Howard University [USA]

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[2] As has been indicated in the case of Northern Caribbean University and the University of the Virgin Islands (and others like the American University of the Caribbean may be added) the categorization of some institutions as being "foreign" may be problematic and may need revisiting in the future as more data is collected. Fundamental questions which may be asked in terms of what represents a foreign institution may allude to such issues as the location, ownership and national/regional acceptance of the particular institution. Delineation of these issues may help us to develop a clearer understanding of the term "foreign institution".

ICS Learning Systems [USA & UK]

International University of the Health Sciences in St. Kitts (IUHS) [Caribbean]

Kingston Medical School [Caribbean]

Leicester University [UK]

London College of Management [UK]

McGill University (business of staff member: Caribbean Primates Ltd) [Canada]

McGill University (Canada): Via UWI Bellairs Institute [Canada]

Medical University of the Americas [Caribbean]

Memorial University [Canada]

Mount St. Vincent University [Canada]

Norma Ross International University [Caribbean]

Northern Caribbean University (Despite external linkages might be considered an indigenous institution [Caribbean]

Northwestern University (via Ross Vet) [USA]

Nottingham Trent University [UK]

Nova Southeastern University [USA]

Ross University School of Medicine [Caribbean]

Ross University School of Veterinary Medicine [Caribbean]

Ryerson University [Canada]

Saba University School of Medicine [Caribbean]

School of Medicine, University of Health Sciences Antigua (UHSA) [Caribbean]

School of Medicine, Central America Health Sciences University (CAHSU) [Caribbean]

Southern Alberta Institute of Technology (in collaboration with T&T Institute of Technology) [USA]

Spartan Health Sciences University [Caribbean]

St Thomas Moore University [USA]

St Matthews University School of Medicine [Caribbean]

St. Johns University [Caribbean]

St. Georges University [Caribbean]

SUNY University [Caribbean]

Universidat di Aruba [Caribbean]

University of Wales (in collaboration with the Jamaica Institute of Bankers) [UK]

University of Manchester (in collaboration with the Jamaica Institute of Bankers) [UK]

University of Sint Eustatius School of Medicine [Caribbean]

University of New Brunswick [Canada]

University of New Orleans [USA]

University of Surrey (in collaboration with BIMAP) [UK]

University of Sheffield [UK]

University of Sunderland [UK]

University of London (UK)

University of Greenwich (UK)

University of Miami [USA]

University of the Virgin Islands (may be considered indigenous) [Caribbean]

University of Liverpool [UK]

Windsor University School of Medicine [Caribbean]

Wright State University [USA]

Yale University (via Ross Vet) [USA]

Explicitly Questionable/Dubious Institutions

American University of the Suriname

This dubious university is owned by the same individuals who own other dubious universities including Capitol University and Ashington University, and Trinity Colleges & University. Capitol University is apparently registered in the BVI, and as such claims to be a British university. Capitol University is apparently owned by one Dr Kristiaan De Ley who interestingly has a PhD from Trinity College & University. A Dr. Payne is mentioned as a reference for Dr. Ley who lives in Louisiana, USA.

There is also at least one University Registered in the Caribbean Region (most likely for tax purposes) but located elsewhere. This is *St. George University International*. This university is located in Naruto, Japan, but its business name is registered in the Turks & Caicos Islands in the Caribbean.

Categorization of Institutions by Discipline/Curriculum Focus

In this category some institutions may be listed under more than one sub-heading in order to distinguish major areas of focus of the institution in question, in the context of their offerings in the Caribbean.

Alphabetical List of Medical Institutions

American International School of Medicine (AISOM)
American University of the Caribbean (AUC)
Grace University School of Medicine
International University of the Health Sciences in St. Kitts (IUHS)
Kingston Medical School
Medical University of the Americas (MUA)
Norma Ross International University (Psychology)
Ross University School of Medicine
Saba University School of Medicine
St. Georges University
School of Medicine, University of Health Sciences Antigua (UHSA)
School of Medicine, Central America Health Sciences University (CAHSU)
Spartan Health Sciences University
St Matthews University School of Medicine
St. Johns University
University of Sint Eustatius School of Medicine
Windsor University School of Medicine

List of Veterinary Institutions

Caribbean Primates Ltd (McGill University: business of staff member)
Chicago Medical School (via Ross Vet/ St Kitts Biomedical Research Foundation)
Northwestern University (via Ross Vet/St Kitts Biomedical Research Foundation)

Ross University School of Veterinary Medicine

St. Georges University

Yale University (via Ross Vet/St Kitts Biomedical Research Foundation)

List of General (multiple disciplines) Category Institutions

Athabasca University

Barry University

Berne University

Commonwealth Open University

Douglas University

Eastern Caribbean University

Florida State University

ICS Learning Systems

Leicester University

Memorial University

Mount St. Vincent University

Nova Southeastern University

Ryerson University

Saint Georges University

St Thomas Moore University

SUNY University

Universidat di Aruba

University of New Brunswick

University of New Orleans

University of Sheffield

University of Greenwich

University of Miami

Wright State University

List of Business & Management Oriented Institutions

British School of Computing & Commerce

Civil Service College of Singapore (in collaboration with BIMAP)

Commonwealth Secretariat (in collaboration with BIMAP)

Edinburgh Business School

Heriot-Watt University

London College of Management

Nottingham Trent University

University of Manchester (in collaboration with the Jamaica Institute of Bankers)

University of Surrey (in collaboration with BIMAP)

University of Sunderland

University of London

University of Wales (in collaboration with the Jamaica Institute of Bankers)

List of Environment, Science & Technology Oriented Institutions

Drexel University (in collaboration with T&T Institute of Technology)

McGill University (Canada): Via UWI (Cave Hill) Bellairs Institute

Southern Alberta Institute of Technology (in collaboration with T&T Institute of Technology)

University of Sunderland

List of Law Oriented Institutions

University of Liverpool

University of London

List of Theology Oriented Institutions

Howard University (USA)

Some International Accrediting Associations & Organizations Operating in the Caribbean

These organizations listed below (and there are others operating in the Caribbean covering a wide variety of subject areas) are regarded as being important in any analysis of foreign offshore educational providers even though for most part we tend to see their operation as being acceptable and unavoidable. We need to reflect on developing Caribbean/Latin American based accreditation institutions, associations and organizations. Such a move can be seen as desirable for the simple reason that no one can question that the income which goes to these foreign accrediting organizations on an annual basis is very substantial. One only needs to reflect on the fact, that increasingly most accounts and management students feel the need, or are being pressured, to acquire professional qualifications such as the ACCA, CGA or CMA, in order to get a "good" job. We may justifiably ask whether a consortia of universities in the Caribbean and Latin America, through CARICOM or the Association of a Caribbean States could not develop appropriate accreditation programmes for the subject areas, which are comparable in quality to the ACCA, CGA, etc. One should remember that most of these graduates end up working in the Caribbean and Latin America, anyway.

ABE: Association of Business Executives
ACCA: Association of Chartered Certified Accountants
ACP: Association of Computer Professionals
CGA: Certified General Accountants (Canada)
CIB: Chartered Institute of Bankers
CII: Chartered Insurance Institute
CIM: Chartered Institute of Marketing
CIMA: Certified Institute of Management Accounting (British version of CMA)
CMA: Certified Management Accountants (Canada & USA
ICSA: Institute of Chartered Secretaries and Administrators
IMIS: Institute for the Management of Information Systems

APPENDIX 4

TERTIARY EDUCATION AND RELATED EDUCATIONAL STATISTICS

List of Tables

Table 1 - Socio-economic data for the Caribbean sub-region, 1998

Area (km2) Estimated Inhabitants GDP per capita
Population per km2 (US$)

	Area (km^2)	Estimated Population	Inhabitants per km2	GDP per capita (US$)
Anguilla	96	8 103	84	11 678
Antigua and Barbuda	442	66 843	151	9 370
Aruba	193	93 979	487	…
Bahamas	13 878	296 110	21	11 395
Barbados	430	268 106	624	8 717
Belize	22 696	229 796	10	2 741
Bermuda	53	63 568	1 199	38 652
British Virgin Islands	153	20 263	132	29 795
Cayman Islands	264	35 739	135	27 187
Dominica	751	70 770	94	3 630
Grenada	344	93 065	271	2 997
Guyana	214 969	849 559	4	846
Haiti	27 750	7 952 408	287	443
Jamaica	10 990	2 538 284	231	2 707
Montserrat	102	10 678	105	3 570
Netherlands Antilles	800	212 694	266	13 827
St Kitts and Nevis	261	39 044	150	7 440
St Lucia	622	150 232	242	4 081
St Vincent and the Grenadines	388	112 374	290	2 815
Suriname	163 265	413 786	3	2 454
Trinidad and Tobago	5 130	1 282 897	250	4 622
Turks and Caicos Islands	430	15 623	36	…

Source: UNESCO Statistics and Indicators on Education, 1998/90 , The Caribbean and Latin America - 'Good Neighbours: Caribbean Students at the Tertiary Level of Education'. 2001

Table 2 - Tertiary enrolment by country of origin and location of study, 1998

	Studying in the Caribbean		Studying in OECD countries	Total tertiary enrolment	Total primary plus secondary enrolment	Tertiary enrolment as % total prim/sec enrolment	Total population	Total number of tertiary students per 10 000 population
	not in home country	in home country						
Anguilla	12	-	...	...	2 581	...	8 103	...
Antigua and Barbuda	83	-	305	388	...	...	66 843	58
Aruba	-	1 446	75	1 521	15 255	10.0	93 979	162
Bahamas	155	...	2 138	...	79 411	...	296 110	...
Barbados	251	6 317	970	7 538	...	...	268 106	281
Belize	56	...	444	...	66 336	...	229 796	...
Bermuda	2	1 942	967	2 911	9 525	30.6	63 568	458
British Virgin Islands	10	-	127	137	4 268	3.2	20 263	68
Cayman Islands	3	196	...	...	...	...	35 739	...
Dominica	56	-	269	325	19 170	1.7	70 770	46
Grenada	64	...	219	...	...	...	93 065	...
Guyana	57	...	562	...	173 702	...	849 559 .	..
Haiti	1	...	1 567	...	...	...	7 952 408	...
Jamaica	388	21 217	3 560	25 165	...	...	2 538 284	99
Montserrat	24	...	...	...	664	...	10 678	...
Netherlands Antilles	-	2 320	345	2 665	40 824	6.5	212 694	125
St Kitts and Nevis	82	-	143	225	11 690	1.9	39 044	58
St Lucia	216	3 881	379	4 476	...	...	150 232	298
St Vincent and the Grenadines	117	...	181	...	...	...	112 374	...
Suriname	8	3 000*	1 056	4 064	98 591	4.1	413 786	98
Trinidad and Tobago	301	6 860	3 011	10 172	287 215	3.5	1 282 897	79
Turks and Caicos Islands	20	27	48	95	2 936	3.2	15 623	61
Total**	1 906	75 100	16 550	93 556	4 018 300	2.3	14 823 921	63

Source: UNESCO Statistics and Indicators on Education, 1998/90 , The Caribbean and Latin America - 'Good Neighbours: Caribbean Students at the Tertiary Level of Education', 2001

*** Totals include UIS estimates when data are not available.*
** National estimates.*

Table 3 - CARIBBEAN TERTIARY STUDENTS STUDYING IN OTHER CARIBBEAN COUNTRIES, 1998

Country of origin	Country of study				Total	Total (%)
	Barbados	Cayman Islands	Jamaica	Trinidad and Tobago		
Anguilla	9	-	3	-	12	0.6
Antigua and Barbuda	42	-	23	18	83	4.2
Aruba	-	-	-	-	-	-
Bahamas	24	-	74	57	155	7.9
Barbados		3	106	142	251	12.7
Belize	10	-	34	12	56	2.8
Bermuda	-	-	-	2	2	0.1
British Virgin Islands	7	-	2	1	10	0.5
Cayman Islands	-		3	-	3	0.2
Dominica	24	-	9	23	56	2.8
Grenada	25	-	7	32	64	3.3
Guyana	17	3	18	19	57	2.9
Haiti	-	-	-	1	1	0.1
Jamaica	120	21		247	388	19.7
Montserrat	14	-	8	2	24	1.2
Netherlands Antilles	-	-	-	-	-	-
St Kitts and Nevis	38	-	40	4	82	4.2
St Lucia	63	-	46	107	216	11.0
St Vincent and the Grenadines	43	-	33	41	117	5.9
Suriname	-	-	-	8	8	0.4
Trinidad and Tobago	152	1	148		301	15.3
Turks and Caicos Islands	6	-	12	2	20	1.0
Unspecified	4	-	57	2	63	3.2
Total Caribbean students in other Caribbean countries	598	28	623	720	1969	100.00

Source: UNESCO Statistics and Indicators on Education, 1998/90 , The Caribbean and Latin America - 'Good Neighbours: Caribbean Students at the Tertiary Level of Education', 2001

Table 4 - CARIBBEAN TERTIARY STUDENTS STUDYING IN OECD COUNTRIES BY COUNTRY OF ORIGIN, 1998

		Canada	France	Germany	Ireland	Japan	Netherlands	New Zealand	Spain	Sweden		United Kingdom	United States	Other OECD	Total	Total (%)
Antigua and Barbuda	-	34	-	-	-	-	-	-	1	-	-	49	221	-	305	1.9
Aruba	-	2	-	-	-	-	-	-	-	-	-	-	73	-	75	0.5
Bahamas	-	171	1	2	1	-	-	-	2	-	-	157	1802	2	2138	13.1
Barbados	1	107	2	3	-	-	2	1	1	3	-	289	560	1	970	5.9
Belize	-	13	1	24	1	1	-	1	1	-	-	30	370	2	444	2.7
Bermuda	-	237	-	-	-	-	-	1	-	-	-	217	512	-	967	5.9
British Virgin Islands	-	8	-	-	1	-	-	-	-	-	-	37	81	-	127	0.8
Dominica	1	25	14	6	-	7	-	-	2	1	1	43	168	1	269	1.6
Grenada	-	16	3	1	-	-	-	-	1	1	-	34	163	-	219	1.3
Guyana	2	30	13	4	-	-	5	-	2	-	-	82	423	1	562	3.4
Haiti	45	127	464	29	-	-	-	-	6	1	22	9	862	2	1567	9.6
Jamaica	5	121	8	7	-	3	1	1	2	-	2	544	2859	7	3560	21.8
Netherlands Antilles	2	1	-	-	1	-	2	1	-	-	-	-	338	-	345	2.1
St Kitts and Nevis	-	17	-	-	-	-	-	-	-	-	-	24	102	-	143	0.9
St Lucia	-	65	10	1	-	-	-	1	-	2	1	145	154	-	379	2.3
St Vincent and the Grenadines	-	15	2	-	-	-	-	1	-	-	-	41	122	-	181	1.1
Suriname	23	-	9	1	-	-	901	1	-	-	-	3	114	4	1056	6.5
Trinidad and Tobago	1	293	19	12	21	2	2	7	2	2	-	509	2138	3	3011	18.4
Turks and Caicos Islands	-	2	-	-	-	-	-	-	-	-	-	11	35	-	48	0.3
Caribbean1 students in OECD countries	80	1284	546	90	25	13	913	15	20	10	26	2224	11097	23	16366	100.0
Total (%)	0.5	7.8	3.3	0.5	0.2	0.1	5.6	0.1	0.1	0.1	0.2	13.6	67.8	0.1	100.0	

ISCED 5A and ISCED 6 only

Source: *UNESCO Statistics and Indicators on Education, 1998/90 , The Caribbean and Latin America - 'Good Neighbours: Caribbean Students at the Tertiary Level of Education', 2001*

Table 5 - CARIBBEAN TERTIARY STUDENTS IN OECD COUNTRIES BY COUNTRY OF ORIGIN AND BY LEVEL OF STUDY, 1998

Country of Origin	Numbers enrolled			Percentage	
	Total	ISCED 5B	ISCED 5A/6	ISCED 5B	ISCED 5A/6
Antigua and Barbuda	50	1	49	2	98
Bahamas	164	13	151	8	92
Barbados	303	22	281	7	93
Belize	59	-	59	-	100
Bermuda	218	8	210	4	96
British Virgin Islands	36	7	29	19	81
Dominica	75	8	67	11	89
Grenada	40	4	36	10	90
Guyana	108	9	99	8	92
Haiti	578	30	548	5	95
Jamaica	581	47	534	8	92
Netherlands Antilles	5	1	4	20	80
St Kitts and Nevis	24	3	21	13	87
St Lucia	160	11	149	7	93
St Vincent and the Grenadines	44	2	42	5	95
Suriname	942	10	932	1	99
Trinidad and Tobago	559	144	415	26	74
Turks and Caicos Islands	11	-	11	-	100
Total	3957	320	3637	8	92

Note: Not all OECD Countries provided the enrolment counts by level of education

Source: UNESCO Statistics and Indicators on Education, 1998/90 , The Caribbean and Latin America - 'Good Neighbours: Caribbean Students at the Tertiary Level of Education' , 2001.

TABLE 6 - CARIBBEAN TERTIARY STUDENTS IN CANADA BY LEVEL OF STUDY AND GENDER, 1990 AND 1998

	1990				1998			
	Graduate	**Under-graduate**	**Career Technical**	**Total**	**Graduate**	**Under-graduate**	**Career technical**	**Total**
Total	247	1486	289	2022	212	1249	414	1875
Females	90	821	147	1058	109	769	244	1122
Males	157	665	142	964	103	480	170	753
Males in %	64	45	49	48	49	38	41	40

Source: UNESCO Statistics and Indicators on Education, 1998/90 , The Caribbean and Latin America - 'Good Neighbours: Caribbean Students at the Tertiary Level of Education', 2001

TABLE 7 - STUDENTS FROM THE ENGLISH-SPEAKING CARIBBEAN ENROLLED IN HIGHER EDUCATION INSTITUTIONS IN THE UNITED STATES: 2000/2001

Country of Origin	Undergraduate	Postgraduate	Other	Total
Anguilla	62	1	0	63
Antigua	224	51	12	287
The Bahamas	1,525	239	38	1,902
Barbados	521	157	23	701
Belize	317	139	8	464
British Virgin Islands	77	5	1	83
Cayman Islands	232	17	0	249
Dominica	195	54	7	256
Grenada	229	59	4	292
Jamaica	2,963	650	149	3,762
Montserrat	15	3	0	18
St. Kitts/Nevis	164	27	5	196
St. Lucia	199	28	4	231
St. Vincent	184	21	4	209
Trinidad and Tobago	2,235	457	70	2,762
Turks and Caicos Islands	77	17	0	94
All Contributing Countries	**9,319**	**1,925**	**325**	**11,569**

Source: Institute of International Education/UWI Strategic Plan 2002/UWI Strategic Plan (Data)

TABLE 8 - CARIBBEAN STUDENTS IN BRITAIN (1999/00)

Country	Total # students	# ug	# pg taught	# pg (research)
Jamaica	580	139	353	41
Trinidad and Tobago	465	164	122	46
Barbados	290	109	147	27
St. Lucia	153	69	70	9
Bahamas	143	77	49	10
Cayman Islands	95	67	24	4
Guyana	78	22	38	15
Antigua and Barbuda	53	30	21	1
Montserrat	47	28	9	3
St. Vincent and the Grenadines	46	18	23	2
Dominica	39	18	171	
St. Kitss and Nevis	32	9	17	3
Belize	28	9	15	2
Grenada	28	9	13	3
British Virgin Islands	27	17	6	3
Anguilla	19	8	9	1
Turks and Caicos Islands	17	10	4	2
Cuba	15	3	5	5
Other West Indies/Leeward/ Windward Isles	82	20	44	6
Totals	**2,237**	**826**	**986**	**184**

Source: HESA Student Return December 1999/Higher Education Statistics Agency Limited, 1999
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TABLE 9 - NUMBER OF FOREIGN STUDENTS IN THE CARIBBEAN, 1998

Region of Origin	Country of study				
	Barbados	Cayman Islands	Jamaica	Trinidad and Tobago	Total
Africa	-	-	-	19	19
Asia	-	1	-	123	124
Europe	-	8	-	56	64
Oceania	-	1	-	-	1
Caribbean	598	28	623	720	1969
Other North and South America	-	11	-	86	97
Total	**598**	**49**	**623**	**1004**	**2274**
Total minus the Caribbean students	-	21	-	284	305

Source: UNESCO Statistics and Indicators on Education, 1998/90 , The Caribbean and Latin America - 'Good Neighbours: Caribbean Students at the Tertiary Level of Education'

TABLE 10 - TERTIARY STUDENTS COMING TO THE CARIBBEAN BY COUNTRY OF ORIGIN, 1998

Country of origin	Country of study		
	Cayman Islands	Trinidad and Tobago	Total
Africa	-	19	19
Nigeria	-	10	10
Rest of Africa	-	9	9
North America	10	84	94
Canada	5	37	42
United States	3	45	48
Rest of North America	2	2	4
South America	1	2	3
Asia	1	123	124
India	-	19	19
Malaysia	-	86	86
Sri Lanka	-	12	12
Rest of Asia	1	6	7
Europe	8	56	64
United Kingdom	7	53	60
Rest of Europe	1	3	4
Oceania	1	-	1
Total	21	284	305

Source: UNESCO Statistics and Indicators on Education, 1998/90 , The Caribbean and Latin America - 'Good Neighbours: Caribbean Students at the Tertiary Level of Education', 2001.

TABLE 11 - REGIONAL OUTPUT OF SECONDARY SCHOOL GRADUATES SATISFYING UWI'S LOWER LEVEL MATRICULATION, 2000 EXAMINATIONS (School Candidates Only)

Country	Number of Candidates Sitting CXC General Proficiency Exams	Number of Candidates Sitting 5 or more subjects	Number of Candidates Obtaining 5 or more CXC passes at a single sitting	Success Rate among Candidates Sitting 5 or more subjects (%)	Ratio of Candidates Obtaining 5 or more passes to Total Candidates (%)
Barbados	2,865	1,296	812	62.7	28.3
Jamaica	24,417	10,803	5,021	46.5	20.6
Trinidad and Tobago	22,499	12,414	6,040	48.7	26.8
Sub-total, Campus Countries	*49,781*	*25,513*	*11,873*	*48.4*	*23.9*
Antigua	518	442	280	63.3	54.1
Belize	850	456	273	59.9	32.1
Dominica	452	413	305	73.8	67.5
Grenada	1,327	833	449	53.9	33.8
St. Kitts	363	227	174	76.7	47.9
St. Lucia	1,167	1,020	696	68.2	59.6
St. Vincent	719	521	354	67.9	49.2
Other Contributing Countries	386	197	128	65.0	33.2
Sub-Total, NCCs	*5,782*	*4,109*	*2,659*	*64.7*	*46.0*
Regional Total	**55,563**	**28,622**	**14,532**	**50.8**	**26.2**

Source: Compiled from CXC Examinations Statistics/UWI Strategic Plan 2002-2006

Note: Lower-level Matriculation is defined as passes in five subjects at CXC General Proficiency or GCE 'O' Level (including English Language); prior to 1998 only CXC Grades I or II qualified, since 1998 Grade III is accepted.

TABLE 12 - REGIONAL OUTPUT OF SECONDARY SCHOOL GRADUATES ACHIEVING 2 OR MORE PASSES AT ONE SITTING CAMBRIDGE GCE ADVANCED LEVEL EXAMINATIONS

Country	1995 EXAMINATIONS		2000 EXAMINATIONS	
	Candidates Sitting Examinations	**Candidates Obtaining Passing Grades in at least 2 subjects**	**Candidates Sitting Examinations**	**Candidates Obtaining Passing Grades in at least 2 subjects**
Barbados	625	566	547	283
Jamaica	4,288	1,324	4,527	1,340
Trinidad and Tobago	2,455	2,065	3,772	2,730
Sub-Total, Campus Countries	*7,368*	*3,955*	*8,846*	*4,353*
Antigua/Barbuda	284	55	313	49
Belize	286	71	120	23
Dominica	199	99	187	97
Grenada	336	107	479	137
St. Kitts/Nevis	197	78	322	75
St. Lucia	241	154	345	225
St. Vincent	198	88	413	115
Other Contributing Countries	32	25	8	0
Sub-Total, NCCs	*1,773*	*677*	*2,187*	*721*
Regional Total	**9,141**	**4,632**	**11,033**	**5074**

Source: UWI Strategic Plan 2002-2006

TABLE 13 - CURRENT DEMAND AND SUPPLY FOR UNDERGRADUATE PLACES AT UWI: HIGH-LEVEL GAP ANALYSIS

FACULTY	Cave Hill	Mona ⊥	St. Augustine	UWI
Humanities and Education				
Qualified Applicants	349	1,764	988	3,101
Total Offers	283	1,182	580	2,045
Offers Accepted	228	845	378	1,451
Law				
Qualified Applicants	1,023	---	---	1,023
Total Offers	320	---	---	320
Offers Accepted	249	---	---	249
Medical Sciences				
Qualified Applicants	---	539	485	1,024
Total Offers	---	144	211	355
Offers Accepted	---	107	172	279
Pure and Applied Sciences				
Qualified Applicants	511	861	751	2,123
Total Offers	411	674	424	1,509
Offers Accepted	311	328	329	968
Engineering				
Qualified Applicants	---	---	972	972
Total Offers	---	----	283	283
Offers Accepted	---	---	271	271
Social Sciences				
Qualified Applicants	1,099	2,195	1,144	4,438
Total Offers	616	956	791	2,363
Offers Accepted	483	873	444	1,800
All Programmes				
Qualified Applicants	**2,982**	**5,359**	**4,340**	**12,681**
Total Offers	**1,630**	**2,956**	**2,289**	**6,875**
Offers Accepted	1,271	2,153	1,594	5,018

Source: UWI Strategic Plan 2002-2006

TABLE 14 - SCENARIO II (HIGH GROWTH) ENROLMENT PROJECTIONS

CAMPUS/ENROLMENT STATUS	ACTUAL ENROLMENT			PROJECTED ENROLMENT		
	2000/2001	Change 1995/96-2000/01	Average Annual Growth Rate	Annual Growth Rate	Cumulative Increase	2006/2007 Enrolment Level
CAVE HILL						
Full-Time Undergraduate Enrolment	1,963	195	2.1	5.0	542	2,505
Part-Time Undergraduate Enrolment	1,239	186	3.3	5.0	342	1,581
Total Undergraduate Enrolment	3,202	381	2.6	5.0	885	4,087
Full-Time Postgraduate Enrolment	321	216	25.0	12.0	245	566
Part-Time Postgraduate Enrolment	193	23	2.6	5.0	53	246
Total Postgraduate Enrolment	514	239	13.3	9.6	298	812
Total On-Campus Enrolment	3,716	620	3.7	5.7	1,1183	4,899
Total On-Campus FTE Enrolment	3,000	516	3.8	5.8	985	3,985
MONA						
Full-Time Undergraduate Enrolment	4,695	287	1.3	3.6	907	5,602
Part-Time Undergraduate Enrolment	2,115	431	4.7	3.0	338	2,453
Total Undergraduate Enrolment	6,810	718	2.3	3.4	1,245	8,055
Full-Time Postgraduate Enrolment	776	286	9.6	7.5	340	1,116
Part-Time Postgraduate Enrolment	1,091	57	1.1	2.1	119	1,210
Total Postgraduate Enrolment	1,867	343	4.1	4.5	459	2,326
Total On-Campus Enrolment	**8,677**	**1,061**	**2.6**	**3.7**	**1,704**	**10,381**
Total On-Campus FTE Enrolment	7,074	817	2.5	3.9	1,475	8,549
ST. AUGUSTINE						
Full-Time Undergraduate Enrolment	4,264	810	4.3	12.3	3,336	7,600
Part-Time Undergraduate Enrolment	637	241	10.0	8.0	299	936
Total Undergraduate Enrolment	4,901	1,051	4.9	11.7	3,635	8,536
Full-Time Postgraduate Enrolment	365	205	17.9	15.1	371	736
Part-Time Postgraduate Enrolment	1,277	391	7.6	10.0	780	2,057
Total Postgraduate Enrolment	1,642	596	9.4	11.2	1,151	2,793
Total On-Campus Enrolment	6,543	1,647	6.0	11.6	4,78	11,329
Total On-Campus FTE Enrolment	5,586	1,331	5.6	12.0	4,246	9,832
TOTAL UNIVERSITY						
Full-Time Undergraduate Enrolment	10,992	1,292	2.5	7.5	4,785	15,707
Part-Time Undergraduate Enrolment	3,991	858	5.0	4.5	980	4,971
Total Undergraduate Enrolment	14,913	2,150	3.2	6.8	5,765	20,678
Full-Time Postgraduate Enrolment	1,462	707	14.1	10.6	956	2,418
Part-Time Postgraduate Enrolment	2,561	471	7.2	6.5	952	3,513
Total Postgraduate Enrolment	4,023	1,178	?	8.1	1,908	5,931
Total On-Campus Enrolment	18,936	3,328	?	7.0	7,673	26,609
Total On-Campus FTE Enrolment	15,660	2,664	?	7.4	,707	22,367

Source: UWI Strategic Plan 2002-2006

TABLE 15 - HIGH-GROWTH ENROLMENT PROJECTIONS FACULTY-LEVEL DISTRIBUTIONS

FULL-TIME EQUIVALENT (FTE) BASIS

CAMPUS/FACULTY	ACTUAL ENROLMENT			PROJECTED ENROLMENT		
	2000/2001	Change 1995/96-2000/01	Average Annual Growth Rate	Annual Growth Rate	Cumulative Growth Rate	2006/2007 Enrolment Level
CAVE HILL						
Humanities and Education	615	113			159	774
Law	345	-28			50	395
Medical Sciences	77	8			30	107
Science and Technology	782	241			464	1,246
Social Sciences	1,182	183			282	1,464
Total On-Campus Enrolment	**3,000**	**516**	**3.8**	**5.8**	**985**	**3,985**
MONA						
Humanities and Education	2,012	306			201	2,213
Law	55	17			6	61
Medical Sciences	743	10			105	848
Science and Technology	1,266	-164			653	1,919
Social Sciences	2,954	605			496	3,450
Total On-Campus Enrolment	**7,030**	773	**2.4**	**3.8**	**1,460**	**8,490**
ST. AUGUSTINE						
Humanities and Education	1,023	350	**5.6**	**12.0**	577	1,600
Law	1,175	287			1,110	2,284
Medical Sciences	37	5			17	54
Pure and Applied Sciences	900	216			551	1,451
Science and Technology	1,120	60			1,024	2,144
Social Sciences	1,333	414			967	2,299
Total On-Campus Enrolment	**5,586**	**1,331**			**4,246**	**9,832**
TOTAL UNIVERSITY						
Humanities and Education	3,650	769			937	4,587
Law	1,175	287			1,110	2,284
Medical Sciences	436	1			73	509
Science and Technology	1,719	233			686	2,405
Social Sciences	3,168	136			2,141	5,308
	5,469	1,201			1,745	7,213
Total On-Campus Enrolment	**15,615**	**2,620**	**3.8**	**7.4**	**6,692**	**22,307**

Source: UWI Strategic Plan 2002-2006

TABLE 16 - COMPARATIVE STUDENT REGISTRATIONS AT ON- AND OFF CAMPUS LOCATIONS IN 1999/2000 AND 2000/01

Student Registration	1999/ 2000	% of total	2000/ 2001	% of total	Number change	% change
On-Campus						
Cave Hill	3995	20.1	3938	19.9	-57	-1.4
Mona	9073	45.6	8854	44.7	-219	-2.4
St. Augustine	6839	34.4	6995	35.4	156	2.3
Total On-Campus	**19907**	**100.0**	**19787**	**100.0**	**-120**	**-0.6**
Off-Campus						
Distance Education Programmes	2066	58.8	2395	60.3	329	15.9
Tertiary Level Institutions	1250	35.6	1364	34.3	114	9.1
Affiliated Institutions	200	5.7	216	5.4	16	8.0
Total Off-Campus	**3516**	**100.0**	**3975**	**100.0**	**459**	**13.1**
GRAND TOTAL	**23423**	**-**	**23762**	**-**	**339**	**1.4**

Source - UWI Vice Chancellor's Report to Council 2000/2001

TABLE 17: Comparison of FTE* Enrollment between 1999/2000 and 2000/01

CAMPUS & FACULTY/SCHOOL	1999/2000	2000/01	Number change	% change
CAVE HILL				
Humanities	502	522	20	4
Education	96	94	-2	-2
Law	337	347	10	3
Clinical Medicine & Research	88	77	-11	-13
Science & Technology	755	782	27	4
Social Sciences	1326	1385	59	4
TOTAL	**3104**	**3207**	**103**	**3**
MONA				
Arts	1430	1509	79	6
Education	598	597	-1	0
Law	54	56	2	4
Medical Sciences	800	810	10	1
Pure & Applied Sciences	1339	1284	-55	-4
Social Sciences	3223	2975	-248	-8
TOTAL	**7444**	**7231**	**-213**	**-3**
ST. AUGUSTINE				
Agriculture	295	233	-62	-21
Humanities	761	787	26	3
Education	378	393	15	4
Engineering	1152	1165	13	1
Law	43	37	-6	-14
Medical Sciences	937	933	-4	0
Natural Sciences	883	894	11	1
Social Sciences	1291	1429	138	11
TOTAL	**5740**	**5871**	**131**	**2**
UNIVERSITY				
Agriculture	295	233	-62	-21

Arts/Humanities	2693	2818	125	5
Education	1072	1084	12	1
Engineering	1152	1165	13	1
Law	434	440	6	1
Medical Sciences/Clinical Medicine and Research	1825	1820	-5	0
Natural Sciences/Pure & Applied Sciences/Science & Technology	2977	2960	-17	-1
Social Sciences	5840	5789	-51	-1
TOTAL	**16288**	**16309**	**21**	**0**

* For the purpose of computing FTE, 2 part-time students are counted as one FTE. No weighting is given for postgraduate students. It should be noted that these FTE figures are only computed for on-campus students.

TABLE 18 - ACTUAL FTE ENROLLMENT BY CAMPUS AND FACULTY/SCHOOL, 2000/01

FACULTY/SCHOOL	CAVE HILL	MONA	ST. AUG.	TOTAL
Agriculture	0	0	233	233
Arts/Humanities	522	1509	787	2818
Education	94	597	393	1084
Engineering	0	0	1165	1165
Law	347	56	37	440
Medical Sciences/Clinical Medicine & Research	77	810	933	1820
Natural Sciences/Pure & Applied Sciences/Science &	782	1284	894	2960
Social Sciences	1385	2975	1429	5789
TOTAL	**3207**	**7231**	**5871**	**16309**
Science & Technology %	**27**	**29**	**55**	**38**

Note: The Science and Technology group includes the faculties of Agriculture and Natural Sciences, Science and Technology, Pure and Applied Sciences, Engineering, Medical Sciences and the School of Clinical Medicine and Research.

Source - UWI Vice Chancellor's Report to Council 2000/2001

TABLE 19: FTE ENROLLMENT BY CAMPUS, STUDENT STATUS AND PROGRAMME - 2000/01

	UNIVERSITY			CAVE HILL			MONA			ST. AUGUSTINE		
	T	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**
ON-CAMPUS												
Undergraduate												
1st Degree	12,397	4,471	8,466	2,585	846	1,739	5,725	1,677	4,048	4,627	1,948	2,679
Certificate	223	71	152	0	0	0	20	2	18	203	69	134
Diplomas	327	90	237	203	60	143	110	26	84	14	4	10
Sub-Total	**13,487**	**4,632**	**8,855**	**2,788**	**906**	**1,882**	**5,855**	**1,705**	**4,150**	**4,844**	**2,021**	**2,823**
Graduate												
Higher Diplomas	108	35	73	0	0	0	0	0	0	108	35	73
Higher Degree	2,645	1,039	1,606	419	164	255	1,325	474	851	901	401	500
Sub-Total	**2,753**	**1,074**	**1,679**	**419**	**164**	**255**	**1,325**	**474**	**851**	**1,009**	**436**	**573**
Specially Admitted	69	20	49	0	0	0	51	15	36	18	5	13
TOTAL	**16,309**	**5,726**	**10,583**	**3,207**	**1,070**	**2,137**	**7,231**	**2,194**	**5,037**	**5,871**	**2,462**	**3,409**
Postgraduate Degree %	**16**	**18**	**15**	**13**	**15**	**12**	**18**	**22**	**17**	**15**	**16**	**15**

Source - UWI Vice Chancellor's Report to Council 2000/2001

TABLE 20: UNIVERSITY ENROLLMENT BY CAMPUS, STUDENT STATUS AND PROGRAMME - 2000/01

	UNIVERSITY			CAVE HILL			MONA		
	T	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**
TOTAL ENROLLMENT	**23,928**	**7,978**	**15,950**	**5,297**	**1,614**	**3,683**	**10,951**	**3,198**	**7,753**
ON CAMPUS	**19,787**	**6,895**	**12,892**	**3,938**	**1,334**	**2,604**	**8,854**	**2,668**	**6,186**
Full-time	12,768	4,526	8,242	2,466	802	1,664	5,585	1,709	3,876
Part-time	7,019	2,369	4,650	1,472	532	940	3,269	959	2,310
OFF CAMPUS	**4,141**	**1,083**	**3,058**	**1,359**	**280**	**1,079**	**2,097**	**530**	**1,567**
Full-time	-	-	-	-	-	-	-	-	-
Part-time	-	-	-	-	-	-	-	-	-
ON-CAMPUS									
Undergraduate									
1st Degree	14,892	5,054	9,838	3,202	1,065	2,137	6,748	1,959	4,789
Certificate	381	130	251	0	0	0	20	2	18
Diplomas	368	101	267	222	67	155	123	29	94
Sub-Total	**15,641**	**5,285**	**10,356**	**3,424**	**1,132**	**2,292**	**6,891**	**1,990**	**4,901**
Graduate									
Higher Diplomas	181	61	120	0	0	0	0	0	0
Higher Degree	3,840	1,515	2,325	514	202	312	1,867	651	1,216
Sub-Total	**4,021**	**1,576**	**2,445**	**514**	**202**	**312**	**1,867**	**651**	**1,216**
Specially Admitted	125	34	91	0	0	0	96	27	69
TOTAL	**19,787**	**6,895**	**12,892**	**3,938**	**1,334**	**2,604**	**8,854**	**2,668**	**6,186**

Source - UWI Vice Chancellor's Report to Council 2000/2001

TABLE 21: PERCENTAGE DISTRIBUTION OF MALE AND FEMALE REGISTRATIONS IN ON-CAMPUS FIRST DEGREE PROGRAMMES BY FACULTY/SCHOOL AND CAMPUS - 2000/01

FACULTY/SCHOOL	CAVE HILL		MONA		ST AUGUSTIN	
	M	F	M	F	M	
AGRICULTURE	-	-	-	-	36.2	6
ARTS/HUMANITIES	23.5	76.5	19.2	80.8	16.1	8
EDUCATION	14.3	85.7	17.8	82.2	21.3	7
ENGINEERING	-	-	-	-	77.3	2
LAW	22.5	77.5	18.2	81.8	16.2	8
MEDICAL SCIENCES/CLINICAL MEDICINE & RESEARCH	37.0	63.0	39.1	60.9	48.1	5
NATURAL SCIENCES/ PURE & APPLIED SCIENCES /SCIENCE & TECHNOLOGY	53.4	46.6	47.4	52.6	41.5	5
SOCIAL SCIENCES	28.9	71.1	27.5	72.5	28.5	7

Source - UWI Vice Chancellor's Report to Council 2000/2001

TABLE 22: ON-AND OFF-CAMPUS STUDENT REGISTRATIONS BY PROGRAMME AND CAMPUS - 2000/01

PROGRAMME LEVEL	UNIVERSITY			CAVE HILL			MONA			ST. AUGUSTINE		
	M	F	T	M	F	T	M	F	T	M	F	T
ON CAMPUS												
Undergraduate	5,054	9,838	14,892	1,065	2,137	3,202	1,959	4,789	6,748	2,030	2,912	4,942
Certificates	130	251	381	0	0	0	2	18	20	128	233	361
Diplomas	101	267	368	67	155	222	29	94	123	5	18	23
Advanced Diplomas	61	120	181	0	0	0	0	0	0	61	120	181
Higher Degrees	1,515	2,325	3,840	202	312	514	651	1,216	1,867	662	797	1,459
Specially Admitted	34	91	125	0	0	0	27	69	96	7	22	29
TOTAL	**6,895**	**12,892**	**19,787**	**1,334**	**2,604**	**3,938**	**2,668**	**6,186**	**8,854**	**2,893**	**4,102**	**6,995**
OFF CAMPUS												
Distance Education Programmes	581	1,814	2,395	255	1,006	1,261	212	577	789	114	231	345
Aff. Inst.	101	115	216	0	0	0	67	44	111	34	71	105
Tert. Level	297	1,067	1,364	25	73	98	251	946	1,197	21	48	69
External	104	62	166	0	0	0	0	0	0	104	62	166
SUB-TOTAL	**1,083**	**3,058**	**4,141**	**280**	**1,079**	**1,359**	**530**	**1,567**	**2,097**	**273**	**412**	**685**
TOTAL REGISTRATION	**7,978**	**15,950**	**23,928**	**1,614**	**3,683**	**5,297**	**3,198**	**7,753**	**10,951**	**3,166**	**4,514**	**7,680**

Source - UWI Vice Chancellor's Report to Council 2000/2001

TABLE 23: Comparison of On-Campus Student Enrollment between 1999/2000 and 2000/01

CAMPUS & FACULTY/SCHOOL	1999/2000	2000/01	% change
CAVE HILL			
Humanities	715	755	5.59
Education	131	135	3.05
Law	339	347	2.36
Clinical Medicine & Research	88	77	-12.50
Science & Technology	856	890	3.97
Social Sciences	1866	1734	-7.07
TOTAL	**3995**	**3938**	**-1.43**
MONA			
Arts	1731	1862	7.57
Education	704	704	0.00
Law	54	56	3.70
Medical Sciences	841	852	1.31
Pure & Applied Sciences	1482	1443	-2.63
Social Sciences	4261	3937	-7.60
TOTAL	**9073**	**8854**	**-2.41**
ST. AUGUSTINE			
Agriculture	355	295	-16.90
Humanities	950	992	4.42

Education	589	596	1.19
Engineering	1313	1329	1.22
Law	43	37	-13.95
Medical Sciences	956	954	-0.21
Natural Sciences	992	994	0.20
Social Sciences	1641	1798	9.57
TOTAL	**6839**	**6995**	**2.28**
UNIVERSITY Agriculture	355	295	-16.90
Arts/Humanities	3396	3609	6.27
Education	1424	1435	0.77
Engineering	1313	1329	1.22
Law	436	440	0.92
Medical Sciences/Clinical Medicine and Research	1885	1883	-0.11
Natural Sciences/Pure & Applied Sciences/Science & Technology	3330	3327	-0.09
Social Sciences	7768	7469	-3.85
TOTAL	**19907**	**19787**	**-0.60**

Source - UWI Vice Chancellor's Report to Council 2000/2001

TABLE 24: TOTAL ON-CAMPUS REGISTRATION OF STUDENTS BY FACULTY/SCHOOL AND COUNTRY OF ORIGIN - 2000/01

TERRITORY	F A C U L T Y / S C H O O L									
	AGRICUL-TURE	ARTS/ HUM ANITI ES	EDUCA-TION	ENGINEER-ING	LAW	MEDICAL SCIENCES/ CLINICAL MEDICINE	NATURAL SCIENCES/ PURE & APPLIED SCIENCES/ SCIENCE & TECHNOLOGY	SOCIAL SCIENCES	TOTAL	%
ANGUILLA	1	1	0	2	1	1	0	3	9	0.05
ANTIGUA	3	17	0	3	6	15	17	65	126	0.64
BAHAMAS	1	11	2	0	22	98	25	15	174	0.88
BARBADOS	10	707	105	59	54	175	810	1,396	3,316	16.78
BELIZE	2	3	4	5	14	13	5	39	85	0.43
BRITISH VIRGIN ISLANDS	0	0	2	0	7	4	1	6	20	0.10
CAYMAN ISLANDS	0	0	0	0	0	1	0	1	2	0.01
DOMINICA	3	3	2	1	9	13	6	50	87	0.44
GRENADA	2	8	2	4	10	7	11	38	82	0.42
GUYANA	4	4	1	4	3	12	8	24	60	0.30
JAMAICA	37	1,793	692	131	144	661	1,337	3,776	8,571	43.38
MONTSERRAT	1	4	4	0	1	4	4	4	22	0.11
ST. KITTS/NEVIS	3	9	6	0	11	14	12	49	104	0.53
ST. LUCIA	5	33	8	11	14	19	19	129	238	1.20
ST. VINCENT	9	30	6	11	9	14	16	69	164	0.83
TRINIDAD & TOBAGO	210	948	593	1,089	123	574	1,034	1,736	6,307	31.92

TURKS & CAICOS	0	3	0	0	1	5	3	2	14	0.07
OTHER	4	22	6	6	11	254	17	57	377	1.91
ALL COUNTRIES	**295**	**3,596**	**1,433**	**1,326**	**440**	**1,884**	**3,325**	**7,459**	**19,758**	**100.00**

Source - UWI Vice Chancellor's Report to Council 2000/2001

TABLE 25: NUMBER OF OECS STUDENTS AS A PERCENTAGE OF TOTAL ON-CAMPUS STUDENT POPULATION BY CAMPUS, 1995 - 2000

	1995-96	Total Students	%	1996-97	Total Students	%	1997-98	Total Students	%	1998-99	Total Students	%	1999-2000	Total Students	%	2000-01	Total Students	%
CAVE HILL	317	16,573	1.9	317	17,482	1.8	229	18,864	1.2	381	19,282	2.0	546	19,926	2.7	413	19,758	2.1
MONA	310		1.9	262		1.5	236		1.2	181		0.9	195		1.0	156		0.8
ST AUGUSTINE	143		0.9	179		1.0	218		1.1	227		1.1	259		1.3	254		1.3
TOTAL	770		4.7	758		4.3	683		3.5	789		4.0	1,000		5.0	823		4.2

NOTE:

The Organization of Eastern Caribbean States (OECS) is comprised of the following countries, Antigua, Dominica, Grenada, Montserrat, St. Kitts/Nevis, St. Lucia and St. Vincent.

With the exception of 1998/99, the figures for the previous years' enrollment were updated with more recent information from the University of the West Indies - Official Statistics Booklets (various years).

Source: UWI Vice Chancellor's Report to Council 2000/2001

TABLE 26: TOTAL ON-CAMPUS ENROLLMENT BY CAMPUS AND COUNTRY OF ORIGIN - 2000/01

TERRITORY	UNIVERSITY			CAVE HILL			MONA			ST. AUGUSTINE		
	T	M	F	T	M	F	T	M	F	T	M	F
ANGUILLA	9	5	4	3	0	3	3	2	1	3	3	0
ANTIGUA	126	55	71	93	35	58	22	11	11	11	9	2
BAHAMAS	174	55	119	30	6	24	79	24	55	65	25	40
BARBADOS	3,316	1,174	2,142	3,074	1,067	2,007	108	38	70	134	69	65
BELIZE	85	32	53	40	15	25	35	10	25	10	7	3
BRITISH VIRGIN ISLANDS	20	7	13	15	3	12	4	4	0	1	0	1
CAYMAN ISLANDS	2	0	2	0	0	0	2	0	2	0	0	0
DOMINICA	87	26	61	50	12	38	19	7	12	18	7	11
GRENADA	82	32	50	47	20	27	9	2	7	26	10	16
GUYANA	60	33	27	20	11	9	18	9	9	22	13	9
JAMAICA	8,571	2,626	5,945	123	23	100	8,222	2,452	5,770	226	151	75
MONTSERRAT	22	9	13	12	6	6	7	2	5	3	1	2
ST KITTS/NEVIS	104	48	56	67	31	36	22	11	11	15	6	9
ST LUCIA	238	73	165	76	26	50	38	8	30	124	39	85
ST VINCENT	164	68	96	68	21	47	39	16	23	57	31	26
TRINIDAD AND TOBAGO	6,307	2,423	3,884	182	39	143	144	32	112	5,981	2,352	3,629
TURKS AND CAICOS	14	7	7	5	3	2	9	4	5	0	0	0

OTHER	377	214	163	33	15	18	74	36	38	270	163	107
ALL COUNTRIES	**19,758**	**6,887**	**12,871**	**3,938**	**1,333**	**2,605**	**8,854**	**2,668**	**6,186**	**6,966**	**2,886**	**4,080**

Source - UWI Vice Chancellor's Report to Council 2000/2001

Table 27 – Environment for Technician Courses in Technical Schools in Trinidad and Tobago, by Course, Year and Sex, 1996/97

	Total			Year I		Year 2		Year 3	
Course	**Both Sexes**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
XTotal	2618	1743	875	821	480	601	333	321	62
XFull-Time	1250	802	448	396	240	295	181	111	27
XPart-Time	1368	941	427	425	240	306	152	210	35
COMMERCIAL									
XAccounting[a]	75	11	64	10	48	1	16	0	0
XAccounting[b]	34	9	25	5	17	4	8	0	0
XAccounting Managment[b]	76	19	57	15	40	4	17	0	0
XBusiness Management[a]	102	37	65	18	34	19	31	0	0
XBusiness Management[b]	121	37	84	14	34	14	32	9	18
XExecutive Secretary[a]	104	3	101	3	62	0	39	0	0
XExecutive Secretary[b]	25	0	25	0	14	0	11	0	0
XSupervising Management[b]	105	50	55	26	30	24	25	0	0
TRADE, CRAFT AND INDUSTRIAL									
XAir Conditioning and Refrigeration[a]	26	25	1	25	1	0	0	0	0
XGraphic Design[a]	18	12	6	0	0	0	0	12	6
XGraphic Design[b]	16	11	5	0	0	11	5	0	0
XPrinting[a]	17	8	9	0	0	0	0	8	9
XProcess Plant Operator[a]	22	20	2	20	2	0	0	0	0
XProcess Plant Operator[b]	64	60	4	60	4	0	0	0	0
XLibrary Studies[b]	21	2	19	2	19	0	0	0	0
ENGINEERING									
XCivil Engineering[a]	37	32	5	0	0	16	2	16	3
XCivil Engineering[b]	77	72	5	13	3	25	1	16	1
XElectrical/Electronic Engineering[a]	209	197	12	108	4	89	8	0	0
XElectrical/Electronic Engineering[b]	177	165	12	52	4	74	6	39	2
XConstruction[a]	89	65	24	24	9	26	8	15	7
XConstruction[b]	127	114	13	49	7	22	2	43	4
XDraughtsmanship[a]	88	78	10	45	3	33	7	0	0
XDraughtsmanship	107	87	20	38	7	26	8	23	5
XIndustrial Instrumentation[b]	15	15	0	15	0	0	0	0	0
XMechanical Enginering[a]	254	241	13	102	8	79	3	60	2
XMechanical Engineering[b]	231	224	7	86	2	69	3	69	2
HOME ECONOMICS									
XDietecics[a]	28	2	26	0	0	2	26	0	0
XHome Economics[a]	38	3	35	3	35	0	0	0	0
XHome Economics[b]	47	1	46	0	29	1	17	0	0
XScience[a]	81	20	61	10	31	10	13	0	0
XScience[b]	76	37	39	17	26	20	13	0	0
TRANSPORT AND COMMUNICATIONS									
XTelecommunications[a]	62	48	14	28	3	20	11	0	0
XTelecommunications[b]	49	38	11	15	4	12	4	11	3

Notes: a. Full-time
b. Part-time

Source: Government of Trinidad and Tobago, 1997/ ILO Caribbean Studies and Working Papers, No. 5, 2000

TABLE 28 - PROGRAMME OFFERINGS AT SAMUEL JACKMAN PRESCOD POLYTECHNIC

Agriculture Department Agriculture Landscaping and Horticulture	**Electrical Engineering Department** a.Consumer Electronics (radio and television) b.Micro Electronics c.Electrical Installation d.Electrical Installation (wiring) (one year) e.Home Appliance Servicing Registration f.Network Technologies
Mechanical Engineering Department Maintenance and Repair of Office Equipment Mechanical Engineering Printing	
Automotive Engineering Department Autobody Repairs Auto -mechanics Fishing Vessel Maintenance Small Engine Repairs Welding	**Human Ecology Department** XCare of the Elderly XCatering XClothing Craft (level 2) (one year) XClothing Craft (level 2) XCosmetology XEsthetics XHome Economics
Commercial Department Commercial Studies	
Building Trades Department Architectural Drafting Blocklaying and Concreting Boat Building Cabinet Making Carpentry and Joinery (one year) Carpentry and Joinery (one year) Plumbing (one year) Shoemaking and Upholstery Tourism	**Day-Release and Special Course** XAuto-mechanics XBook-Binding XCarpentry XClothing Craft XComputer Maintenance XElectronics XHome Economics XMasonry XShoemaking XWelding
EVENING COURSES	

XAdvanced Cookery
XApplied Electronics for Technicians
XArchitectural Drafting
XAutomotive Electrics
XBasic Autocad
XBasic Cookery
XBasic Car Maintenance
XBasic Machine Shop
XBasic Mechanical Maintenance
XBookbinding (level 1)
XBookbinding (level 2)
XBuilding Drawing
XCake and Pastry Making (basic)
XCarpentry and Joinery
XChild Care
XComputer Maintenance
XConstruction Supervisor
XConsumer Equipment Servicing
XCXC English
XCXC Mathematics
XDressmaking (advanced)
XDressmaking (basic)
XElectrical Installation (part 1)
XElectrical Installation (part 2)
XGents Tailoring (basic)
XGents Tailoring (advanced)
XIndustrial Refrigeration
XLadies Tailoring (advanced)
XLadies Tailoring (basic)
XMasonry
XMessage Therapy
XMotor Vehicle Diploma
XMotor Vehicle Engine (level 1)
XMotor Vehicle Engine (level 2)
XNetwork Administration
XNetwork Cabling
XOccupational Health, Safety and Welfare
XPattern Design
XPlant Maintenance
XPlumbing
XPrinciples of Accounts (advanced)
XPrinciples of Accounts (intermediate)
XPrinciples of Business
XPrinting and Camera
XRefrigeration and Air-conditioning
XServicing of Diesel Fuel Injection Equipment
XShorthand (elementary)
XShorthand (intermediate)
XShorthand (advanced)
XSmall Builders Foremanship
XSmall Business Management (level 1)
XSmall Business Management (level 2)
XSpreadsheets
XSupervisory Management (intermediate)
XSupervisory Management (advanced)
XTypewriting (elementary)
XTypewriting (intermediate)
XTypewriting (advanced)
XWelding Operatives
XWelding Process Experience
XWord Processing

Source: ILO Caribbean Studies and Working Papers, No. 5, 2000

TABLE 29 - SAMUEL JACKMAN PRESCOD POLYTECHNIC STATISTICS BASED ON THE PASS AND DROP-OUT RATES FOR CERTIFICATION IN FULL-TIME PROGRAMMES, 1997/98

Courses	No. of Students	No. of Passes	No. of failures	% passed	% failed	No. of drop-outs	% drop-outs
DEPARTMENT OF AGRICULTURE							
Agriculture	18	9	5	50	28	4	22
Landscaping	9	3	3	33.3	33.3	3	33.3
Total	27	12	8	44	30	7	26
DEPARTMENT OF AUTOMOTIVE ENGINEERING							
Autobody Repairs	16	12	4	75	25	-	-
Auto-mechanics	19	19	-	100	-	-	-
Fishing Vessel Operations	17	7	10	41	59	-	-
Small Engine Repairs	17	8	6	47	35	3	18
Welding	14	11	2	79	21	1	-
Total	83	57	22	69	26	4	5
DEPARTMENT OF BUILDING TRADES							
Boat Building	5	3	-	60	-	2	40
Building Construction	12	10	-	83	-	2	17
Cabinet Making	14	4	6	28.5	43	4	28.5
Carpentry and Joinery	15	14	-	93	-	1	7
Masonry and Tiling	15	15	-	100	-	-	-
Plumbing (one year)	15	11	4	73	27	-	-
Plumbing	14	14	-	100	-	-	-
Tourism Craft	17	6	10	35	59	1	6
Total	107	77	20	72	19	10	9
DEPARTMENT OF COMMERCIAL STUDIES							
Commercial Studies	68	55	9	81	13	4	6
Total	68	55	9	81	13	4	6
DEPARTMENT OF ELECTRICAL ENGINEERING							
Computer Maintenance	43	32	11	74	26	-	-
Consumer Electronics	15	12	-	93	-	1	7
Electrical Installation (Wiring)	16	11	5	69	31	-	-
Electrical Installation	18	18	-	100	-	-	-
Micro-Electronics	12	8	4	67	33	-	-
Total	104	83	20	80	19	1	1
DEPARTMENT OF GENERAL STUDIES							
Architectural Drafting	25	25	-	100	-	-	-
Total	25	25	-	100	-	-	-
DEPARTMENT OF HUMAN ECOLOGY							

Courses	No. of Students	No. of Passes	No. of failures	% passed	% failed	No. of drop-outs	% drop-outs
Care of the Elderly	47	42	-	89	-	5	11
Catering	17	11	5	65	29	1	6
Clothing Craft (level 1)	12	11	-	92	-	1	8
Clothing Craft (level 2)	12	9	-	75	-	3	25
Cosmetology	16	13	1	81	6	2	13
Esthetics	17	14	3	82	18	-	-
Home Economics	20	17	1	85	5	2	10
Total	141	117	10	85	7	14	10
DEPARTMENT OF MECHANICAL ENGINEERING							
Maintenance and Repair of Office Equipment	17	8	7	47	41	2	12
Mechanical Engineering	14	12	2	86	14	-	-
Printing	15	11	3	73	20	1	7
Total	46	31	12	67	26	3	7

Source: ILO Caribbean Studies and Working Papers. No. 5. 2000

TABLE 30: Total Enrolment in Higher Degree Programmes (ending April 30, 2001) – Mona Campus

STATUS	Fac. Arts & Education	Fac. Medical Sciences	Fac. Pure & Applied Sciences	Fac. Social Sciences	Total
Full Time	**87**	**249**	**173**	**272**	**781**
Part Time	**378**	**61**	**109**	**497**	**1045**
Total	**465**	**310**	**282**	**769**	**1826**

Source: Campus Coordinators Report, 2001

TABLE 31: Registration in Graduate Programmes – Cave Hill Campus

	1997/98	1998/99	1999/2000	2000/2001	% INCREASE
Humanities	**45**	**54**	**70**	**85**	**89%**
School of Education	**60**	**106**	**117**	**117**	**95%**
Law	**47**	**37**	**20**	**18**	**-62%**
School of Clinical Medicine and Research	**17**	**16**	**17**	**22**	**29%**
Science and Technology	**60**	**73**	**90**	**92**	**53%**
Social Sciences					
Including EDM	**276**	**246**	**387**	**-**	
Excluding EDM	**96**	**95**	**162**	**178**	**85%**
Total*	**325**	**379**	**476**	**512**	**57%**

*Excluding EDM

EDM is Executive Diploma in Management which was re-graded to an Undergraduate Programme in 1999-2000.

Source: Campus Coordinators Report, 2001

TABLE 32: Postgraduate Student Enrolment for Schools/Faculties – St. Augustine Campus for the period 1996/97 to 2000/2001

FACULTY	1996/97	1997/98	1998/99	1999/2000	2000/2001
School of Agriculture	**133**	**125**	**146**	**132**	**126**
School of Humanities	**74**	**71**	**84**	**108**	**121**
School of Education	**131**	**146**	**129**	**219**	**199**
Faculty of Engineering	**333**		**408**	**396**	**426**
Faculty of Medical Sciences	**45**	**48**	**48**	**45**	**57**
School of Natural Sciences	**140**	**168**	**179**	**200**	**197**
Faculty of Social Sciences	**445**	**473**	**470**	**487**	**516**
TOTAL	1302	1405	1464	1587	1642

Source: Campus Coordinators Report, 2001

TABLE 33: Postgraduate Degree Registrations 2000/2001 – St. Augustine Campus

FACULTY	TAUGHT MASTERS	QUALIFYING	M.PHIL	PHD	PG DIPLOMA	TOTAL
	78	**2**	**36**	**10**	**-**	**126**
School of Humanities	**44**	**2**	**63**	**12**	**-**	**121**
School of Education	**66**	**1**	**34**	**14**	**84**	**199**
Faculty of Engineering	**357**	**7***	**50**	**12**	**-**	**426**
Faculty of Medical Sciences	**27**	**-**	**23**	**6**	**1**	**57**
School of Natural Sciences	**84**	**7**	**78**	**28**	**-**	**197**
Faculty of Social Sciences	**335*****	**7**	**66**	**16**	**92**	**516**
TOTAL	**991**	**26**	**350**	**98**	**177**	**1642**

* 1 M Phil
** 166 MBA and 169 MSc

Source: Campus Coordinators Report, 2001

TABLE 34 – Recurrent Expenditure on Education in Selected Countries (Period Averages*)

Country	Total US$ (000)	% OF GDP	Per Capita US$
The Bahamas	105 680	2.7	186.7
Belize	19 812	4.8	102.7
Barbados	117 318	7.2	450.4
Dominica	81 333	4.7	114.3
Grenada	10 202	4.8	106.7
Guyana	12 545	3.3	44.9
Jamaica	112 755	3.1	47.3
St. Lucia	19 844	4.5	145.9
St. Kitts/Nevis	4 166	2.6	99.3
Trinidad and Tobago	203 564	3.0	160.5

* Figures in this table reflect averages over a period due to large fluctuations in expenditures

Source: World Bank (1996, p: 171)

TABLE 35 - HUMAN DEVELOPMENT INDEX

HDI Rank	Life expectancy at birth (years)	Adult Literacy rate (% age 15 and above)	Combined Primary, secondary and tertiary gross enrolment ratio (%)	Education Index	Human Development Index (HDI) value
	1999	1999	1999	1999	1999
Developed Countries					
Norway	78.4	-	97	0.98	0.939
Australia	78.8	-	116	0.99	0.936
Canada	78.7	-	97	0.98	0.936
Developing Countries					
Singapore	77.4	92.1	75	0.87	0.876
Malaysia	72.2	87.0	66	0.80	0.774
CARICOM					
Barbados	76.6	97.0	77	0.90	0.864
Bahamas	69.2	96.7	74	0.89	0.820
Trinidad and Tobago	74.1	93.5	65	0.84	0.798
Belize	73.8	93.1	73	0.86	0.776
Suriname	70.4	93.0	83	0.89	0.758
Dominica	76.2	94.0	-	0.880	0.800
St Kitts and Nevis	70.6	90.0	-	0.848	0.800
Grenada	72.3	96.0	-	0.894	0.795
St Lucia	73.2	82.0	-	0.775	0.749
St Vincent and the Grenadines	73.3	82.0	-	0.775	0.748
Jamaica	75.1	86.4	62	0.78	0.738
Guyana	63.3	98.4	66	0.87	0.704

Sources: Adapted from the UNDP 2001 Human Development Report New York, Oxford University Press. Adapted by CARICOM Secretariat.

TABLE 36 - Enrolment by Programme Cluster

Programme Clusters	**Totals**
Business and Administrative Studies	4,516
Computer Studies	2,770
Health and Human Services Studies	2,105
Languages, Creative Writing, Drama and Media Studies	300
Pre-University and Access Programmes	5,670
Special Offers and External Studies	587
UWI Offers	688
Vocational and Job-Oriented	2,630
GRAND TOTAL	**19,266**

Source: UWI School of Continuing Studies, Annual Report 2000-2001

Table 37 - Student Numbers by Centre
2000-2001

Centre	TOTALS
Antigua	173
Bahamas	26
Barbados	1,115
Belize	231
British Virgin Islands	101
Dominica	273
Grenada	164
Jamaica Eastern	8,889
Jamaican Western	224
Montserrat	177
St. Kitts & Nevis	189
St. Lucia	264
St. Vincent	210
Trinidad & Tobago	7,088
Social Welfare Training Centre	95
Trade Union Education Institute	47
TOTALS	**19,266**

Source: UWI School of Continuing Studies, Annual Report 2000-2001

TABLE 38 - Enrolment Figures by Programme Cluster, Course and Centre, 2000-2001

Business and Administrative Studies

Programme	Local/ Regional	Grand Totals Academic Year		
		M	F	T
Accounts - Intermediate II	St. Lucia	3	10	13
Administrative Corporate Secretaries	Regional	1	27	28
Administrative Professional Secretaries (Yr 1)	Regional		231	231
Administrative Professional Secretaries (Yr 2)	Regional	3	143	146
Business (Accounting) Studies (Yr 1)	Trinidad & Tobago			17
Business (Accounting) Studies (Yr 2)	Trinidad & Tobago			5
Business Administration (CBA)	Regional			374
Business Management	Jamaica Western	4	8	12
Business Management Studies (Yr 1)	Trinidad & Tobago			40
Business Management Studies (Yr 2)	Trinidad & Tobago			23
Business Studies (2-yr)	Jamaica Eastern			1239
Church Management	Barbados	34	6	40
Financial Management (10-wk)	Jamaica Eastern			80
Human Resource Management	Barbados		8	8
Human Resource Management (Yr 1)	Trinidad & Tobago			67
Human Resource Management (Yr 2)	Trinidad & Tobago			61
Internal Auditing	Trinidad & Tobago			16
Legal Studies (ASc)	British Virgin Islands	6	16	22
Managerial Accounting	Jamaica Eastern			103
Managerial Accounting	Jamaica Western	1	6	7
Marketing (10-wk)	Jamaica Eastern			33
Marketing & Sales (10-wk)	Jamaica Eastern			60
Marketing (1-yr)	Jamaica Eastern			259
Marketing	Jamaica Western	2	7	9
Middle Management (NCH)	Barbados	3	10	13
Personnel Management (10-wk)	Jamaica Eastern			33
Personnel Management (2-yr)	Jamaica Eastern			186
Production & Operations Management	Jamaica Eastern			21

Programme	**Local/ Regional**	**Grand Totals Academic Year**		
		M	F	T
Property Management I	Barbados	17	10	27
Property Management II	Barbados	16	3	19
Public Administration (CPA)	Regional			251
Records Management I	Barbados	6	25	31
Records Management II	Barbados			28
School Administration (Yr 1)	Trinidad & Tobago			20
School Administration (Yr 2)	Trinidad & Tobago			18
Small Business Management (10-wk)	Jamaica Eastern			115
Small Business Management (1-yr)	Jamaica Eastern			40
Supervisory Management (10-wk)	Jamaica Eastern			245
Supervisory Management (10-wk)	Jamaica Western	5	13	18
Supervisory Management (1-yr, Cert)	Jamaica Eastern			501
Supervisory Management (1-yr)	Jamaica Western	2	16	18
Supply Management (Yr 1)	Trinidad & Tobago			16
Supply Management (Yr 2)	Trinidad & Tobago			11
Supply Management (Yr 3)	Trinidad & Tobago			5
Tourism Management & Development	Trinidad & Tobago			7
TOTAL				**45516**

Source: UWI School of Continuing Studies, Annual Report 2000-2001

TABLE 39 - Enrolment Figures by Programme Cluster, Course and Centre, 2000-2001:

Computer Studies

Programme	Local/Regional	Grand Totals Academic Year		
		M	F	T
Advanced Computer Maintenance	Trinidad & Tobago			20
ACP Certificate in Computer Programming	Trinidad & Tobago			36
ACP Diploma in Computer System Design	Trinidad & Tobago			20
Advanced Excel	Jamaica Eastern			232
Advanced Word Processing	Jamaica Eastern			240
Advanced Database	Jamaica Eastern			108
Advanced Networking	Jamaica Eastern			116
Business Management Technology (Yr I)	Trinidad & Tobago			18
Business Management Technology (Yr II)	Trinidad & Tobago			12
Computer Applications for the Office	Trinidad & Tobago			91
Computer Literacy	Trinidad & Tobago			231
Computer Maintenance	Trinidad & Tobago			121
Computer Studies	Barbados	5	32	37
Computer Studies - Basic	St. Kitts & Nevis	3	11	14
Computer Studies - Intermediate	St. Kitts & Nevis	4	9	13
Computer Studies - Advanced	St. Kitts & Nevis	4	6	10
Data Communications Level I	Trinidad & Tobago			10
Information Technology	Jamaica Eastern			119
Information Technology	Trinidad & Tobago			33
Introduction to Computers I	Belize	14	22	36
Introduction to Computers II	Belize	14	22	36
Introduction to Computers	Jamaica Western	9	26	35
Introduction to Computers	St. Lucia			11
Introduction to Media Technology	Belize	4	12	16
Introduction to Microcomputers for Business Applications	Jamaica Eastern			823
Institute of Management Systems Diploma	Trinidad & Tobago			27
Management Information Systems	Trinidad & Tobago	8	8	16

Programme	Local/Regional	Grand Totals Academic Year		
		M	F	T
Microsoft-Word, Excel, PowerPoint	Jamaica Eastern			126
Microsoft-Word, Excel, PowerPoint, Access	Jamaica Eastern			119
Microsoft Office	Jamaica Western	1	7	8
Microsoft Word	Jamaica Western	1	10	11
Networking	Belize	5	2	7
QuickBooks Pro	Belize	4	14	18
TOTAL				**2770**

Source: UWI School of Continuing Studies, Annual Report 2000-2001

TABLE 40 - Enrolment Figures by Programme Cluster, Course and Centre, 2000-2001

Health & Human Services Studies

Programme	Local/Regional	Grand Totals Academic Year		
		M	F	T
Addiction Studies	Regional	6	11	17
Basic Child Care - NCH/Action for Children	Barbados			26
Child Psychology	Jamaica Eastern			82
Counselling	Jamaica Eastern			254
Counselling Children & Young Adults	Belize	9	38	47
Criminology (Yr 3)	Trinidad & Tobago			2
Early Childhood Care & Education Level I	Trinidad & Tobago			23
Early Childhood Care & Education Level II (Yr 2)	Trinidad & Tobago			133
Early Childhood Care & Education Level II (Yr 2)	Trinidad & Tobago			68
Early Childhood Care & Education Level III	Trinidad & Tobago			13
Early Childhood Education	Antigua		12	12
Early Childhood Education	Jamaica Eastern			191
Early Childhood Education	Jamaica Western		11	11
General Psychology	Jamaica Eastern			117
Guidance and Counselling	Barbados	10	17	27
Guidance and Counselling Studies (Yr 1)	Trinidad & Tobago			37
Guidance and Counselling Studies (Yr 2)	Trinidad & Tobago			19
Health, Safety & Environmental Studies (Yr 1)	Trinidad & Tobago			59
Health, Safety & Environmental Studies (Yr 2)	Trinidad & Tobago			33
Introduction to Social Work	Barbados	9	18	27
Male/Female Relations	Jamaica Eastern			44
Personality & Behaviour	Jamaica Eastern			96
Physical Education (Yr 1)	Trinidad & Tobago			22
Physical Education (Yr 1)	Trinidad & Tobago			6
Practical Home Nursing	Jamaica Eastern			156
Principles & Practice of Social Work	Jamaica Eastern	14	45	59
Psychology (Yr 1)	Trinidad & Tobago			46

Programme	Local/Regional	Grand Totals Academic Year		
		M	F	T
Psychology (Yr 2)	Trinidad & Tobago			33
Psychology (Yr 3)	Trinidad & Tobago			20
Regional 1-Month Course (Industrial Relations)	TUEI	22	6	28
Social Service (CSS)	SWTC	4	19	23
Social Psychology	Jamaica Eastern			98
Social Work	Jamaica Western	2	15	17
Social Work & Welfare Studies (Yr 1)	Trinidad & Tobago			57
Social Work & Welfare Studies (Yr 2)	Trinidad & Tobago			20
Social Work & Welfare Studies (Yr 3)	Trinidad & Tobago			19
10-Day Intensive Course (Industrial Relations)	TUEI	13	6	19
Working with Adults (NCH)	Barbados		58	58
Youth in Development (CYP)	Regional			86
TOTAL				**2105**

Source: UWI School of Continuing Studies, Annual Report 2000-2001

TABLE 41 - Enrolment Figures by Programme Cluster, Course and Centre, 2000-2001

Languages, Creative Writing, Drama & Media Studies

Programme	Local/ Regional	Grand Totals Academic Year		
		M	F	T
Journalism	Jamaica Western	2	5	7
Language & Communication	St. Lucia	7	12	19
Mass Media & Communication Studies (Yr 1)	Trinidad & Tobago			30
Mass Media & Communication Studies (Yr 2)	Trinidad & Tobago			10
Public Relations	Jamaica Eastern			98
Public Relations, Marketing & Advertising	Barbados			33
Speech Writing & Public Speaking	Jamaica Eastern			93
Teaching of Spanish as a Second Language	Belize			10
TOTAL				**300**

Source: UWI School of Continuing Studies, Annual Report 2000-2001

TABLE 42 - Enrolment Figures by Programme Cluster, Course and Centre 2000-2001

Pre-university & Access Programmes

Programme	Local/Regional	Grand Totals Academic Year		
		M	F	T
CXC/GCE 'O' Level	Barbados	43	53	96
CXC/GCE 'O' Level	Jamaica Eastern			2326
CXC/GCE 'O' Level	Montserrat	18	86	104
English Proficiency Module I	Belize	1	14	15
English Proficiency Module II	Belize		11	11
Enrichment Courses	British Virgin Islands	2	8	10
Fundamentals of English	Jamaica Eastern			37
Fundamentals of Written English	Barbados	29		29
GCE 'A' Level	Jamaica Eastern			444
GCE 'A' Level	Trinidad & Tobago			629
General Education Programme	Trinidad & Tobago			1761
National English Skills	Barbados	21	18	39
Pre-Agriculture N1 Courses	Trinidad & Tobago			83
Remedial Mathematics	Barbados	6	30	36
Remedial Mathematics	Dominica		29	29
Remedial Mathematics	St. Kitts & Nevis			21
TOTAL				**5670**

Source: UWI School of Continuing Studies, Annual Report 2000-2001

TABLE 43 - Enrolment Figures by Programme Cluster, Course and Centre 2000-2001

SPECIAL OFFERS & EXTERNAL STUDIES

Programme	Local/Regional	Grand Totals Academic Year		
		M	F	T
Caribbean Maritime Institute - Diploma in Shipping Logistics	Regional			10
BAPIT - Piano Assessment Series V	Barbados	25	26	51
Effective Oral & Written Communication in the Workplace (for Chefette Ltd)	Barbados			40
External Programmes	Trinidad & Tobago			398
Pan African Studies	Barbados	22	25	47
Programmes for the Hearing Impaired in collaboration with the Lions Club	Barbados			23
Women in Politics	Barbados	2	16	18
TOTAL				**587**

Source: UWI School of Continuing Studies, Annual Report 2000-2001

TABLE 44 - Enrolment Figures by Programme Cluster, Course and Centre 2000-2001

UWI OFFERS

Programme	Local/Regional	Grand Totals Academic Year		
		M	F	T
Advanced Diploma in Construction Management	Regional			1
BA French	Regional			17
BEd in Educational Administration	Regional			47
BSc Agribusiness Management	Regional			4
Bsc Management Studies	Regional			351
BSc Level I - Accounting & Economics Majors	Regional			114
Certificate in Adult Education	Regional			5
Certificate in Education	Regional			114
Diploma in Security Administration	Regional			20
Executive Diploma in Management	Regional			14
External Programme in Agriculture Diploma & MSc	Regional			2
TOTAL				**688**

Source: UWI School of Continuing Studies, Annual Report 2000-2001

TABLE 45 - Enrolment Figures by Programme Cluster, Course and Centre 2000-2001

VOCATIONAL & JOB-ORIENTED

Programme	Local/Regional	Grand Totals Academic Year		
		M	F	T
Advanced Security Management	Barbados	21	11	32
Basic Course for Security Officers	Barbados	50	15	65
Credit Union Operations	Barbados	11	13	24
Customer Service & Telephone Techniques	Jamaica Eastern			55
Food & Beverage Supervision	St. Lucia	4	5	9
Paralegal Studies (Cert)	British Virgin Islands		6	6
Life Underwriting	Barbados	7	16	23
Special Skills Programme	Trinidad & Tobago			1364
Vocational & Job Oriented	Trinidad & Tobago			1052
TOTAL				**2630**

Source: UWI School of Continuing Studies, Annual Report 2000-2001

TABLE 46 - Number of Certificates awarded by Centre [1]
2000-2001

Centre	Totals
Antigua	14
Barbados	403
Belize	178
British Virgin Islands	2
Dominica	24
Grenada	11
Jamaica Eastern	2,143
Montserrat	11
St. Lucia	54
St. Vincent	23
Trinidad & Tobago[2]	485
SWTC	82
TUEI	47
GRAND TOTALS	**3,477**

Source: UWI School of Continuing Studies, Annual Report 2000-2001

[1] Figures do not include Pre-University Programmes, UWI Offers & Special Offers & External Programmes

[2] Trinidad & Tobago figures also do not include Vocational & Job-Oriented Programmes

TABLE 47 - Age Distribution of full-time Academic Staff at the Mona Campus, 2000/2001

Faculty	Number of Staff Members					
	20-29	30-39	40-49	50-59	60 and over	TOTAL
Arts & Education	7	15	39	35	18	114
Law	0	0	2	0	0	2
Medical Sciences	3	30	63	35	17	148
Pure & Applied Sciences	5	26	29	26	14	100
Social Sciences	18	29	34	24	9	114
Centre for Gender & Dev. Studies (Mona Unit)	0	0	0	3	0	3
School of Continuing Studies (Mona)	0	0	1	3	1	5
TOTAL	**33**	**100**	**168**	**126**	**59**	**486**

Source: UWI Mona, Memorandum of Estimates of Needs for the Biennium 2002/2004, February 2002

TABLE 48 - FULL-TIME Academic Staff at the Mona Campus by Faculty/School and Academic Qualification, 2000/2001

Faculty	Qualification				
	Bach	Mast	Doct	Other	TOTAL
Arts & Education	20	37	55	2	114
Law	1	0	1	0	2
Medical Sciences	15	23	103	7	148
Pure & Applied Sciences	10	14	76	0	100
Social Sciences	20	0	1	0	3
Centre for Gender & Dev. Studies (Mona Unit)	2	0	1	0	3
School of Continuing Studies (Mona)	1	4	0	0	5
TOTAL	**69**	**127**	**280**	**10**	**486**

Source: UWI Mona, Memorandum of Estimates of Needs for the Biennium 2002/2004, February 2002

TABLE 49 - Full-time Academic Staff at the Mona Campus, by Faculty/School and Category, 2000/2001

Faculty	Category					
	Professor	**Senior Lecturer**	**Lecturer**	**Asst. Lecturer**	**Other**	**TOTAL**
Arts & Education	10	25	48	11	20	114
Law	0	0	2	0	0	2
Medical Sciences	11	35	82	7	13	148
Pure & Applied Sciences	12	27	53	3	5	100
Social Sciences	8	20	57	16	13	114
Centre for Gender & Dev. Studies (Mona Unit)	0	1	2	0	0	3
School of Continuing Studies (Mona)	0	0	5	0	0	5
TOTAL	**41**	**108**	**249**	**37**	**51**	**486**

Source: UWI Mona, Memorandum of Estimates of Needs for the Biennium 2002/2004, February 2002

Table 50: Enrolment by Main Divisions of Specialization at Sir Arthur Lewis Community College, 1993/94 to 2000/01

Year	Division/Department								Total
	Arts & General Studies	Technical Education and Management Studies	Teacher Education	UWI	Health Services	Agriculture	Home Economics	Continuing Education	
1993/94	358	374	190		59	30	12	1850	**2873**
1994/95	410	400	196	61	61	32	16	1702	**2878**
1995/96	370	408	199	91	66	25	16	2173	**3348**
1996/97	359	442	197	126	88	45	15	3277	**4549**
1997/98	426	451	176	135	86	49	14	3154	**4491**
19998/99	480	440	188	124	87	34	9	2227	**3589**
1999/00	520	492	247	78	80	32	9	2422	**3880**
2000/01	467	519	221	71	72	39	14	2371	**3774**

Source: Ministry of Education, St. Lucia, 2002

Table 51: Male Enrolment by Main Divisions of Specialization at Sir Arthur Lewis Community College, 1996/97 to 2000/01

Year	DIVISION/DEPARTMENT							Total
	Arts & General Studies	Technical Education and Management Studies	Teacher Education	UWI	Health Services	Agriculture	Home Economics	
1996/97	100	239	41	37	7	31	1	**456**
1997/98	140	244	37	29	7	24	0	**481**
19998/99	180	254	38	24	8	22	0	**526**
1999/00	249	297	52	21	8	16	0	**643**
2000/01	167	284	46	22	5	22	0	**546**

Source: Ministry of Education, St. Lucia, 2002

Table 52: Growth of Female Enrolment according to the Main Divisions/Departments of Specialization at Sir Arthur Lewis Community College, 1996/97 to 2000/01

Year	Division/Department							Total
	Arts & General Studies	Technical Education and Management Studies	Teacher Education	UWI	Health Services	Agriculture	Home Economics	
1996/97	259	203	156	89	81	14	14	**816**
1997/98	286	207	139	106	79	25	14	**856**
19998/99	300	186	150	100	79	12	9	**836**
1999/00	271	195	195	57	72	16	9	**815**
2000/01	300	235	170	49	67	17	14	**852**

Source: Ministry of Education, St. Lucia, 2002

Table 53: Percentage Share of Female Enrolment in the Main Divisions/Department of Specialization at Sir Arthur Lewis Community College, 1996/97 to 2000/01

Year	Division/Department							Total
	Arts & General Studies	Technical Education and Management Studies	Teacher Education	UWI	Health Services	Agriculture	Home Economics	
1996/97	72	46	79	71	92	31	93	**64**
1997/98	67	46	79	79	92	51	100	**64**
19998/99	63	42	80	81	91	35	100	**61**
1999/00	52	40	79	73	90	50	100	**56**
2000/01	64	45	77	69	93	44	100	**61**

Source: Ministry of Education, St. Lucia, 2002

Table 54: Percentage of Male Enrolment in the Main Divisions/Department of Specialization at Sir Arthur Lewis Community College, 1996/97 to 2000/01

Year	Division/Department							Total
	Arts & General Studies	Technical Education and Management Studies	Teacher Education	UWI	Health Services	Agriculture	Home Economics	
1996/97	28	54	21	29	8	69	7	**36**
1997/98	33	54	21	21	8	49	0	**36**
19998/99	37	58	20	19	9	65	0	**39**
1999/00	48	60	21	27	10	50	0	**44**
2000/01	36	55	21	31	7	56	0	**39**

Source: Ministry of Education, St. Lucia, 2002

Table 55: Percentage Distribution of Enrolment by Main Divisions/Departments of Specialization at Sir Arthur Lewis Community College, 1994/95 to 2000/01

Year	Division/Department								Total
	Arts & General Studies	Technical Education and Management Studies	Teacher Education	UWI	Health Services	Agriculture	Home Economics	Continuing Education	
1994/95	14	14	7	2	2	1	1	59	**100**
1995/96	11	12	6	3	2	1	1	65	**100**
1996/97	8	10	4	3	2	1	0	72	**100**
1997/98	10	10	4	3	2	1	0	70	**100**
19998/99	13	12	5	4	2	1	0	62	**100**
1999/00	13	13	6	2	2	1	0	62	**100**
2000/01	12	14	6	2	2	1	0	63	**100**

Source: Ministry of Education, St. Lucia, 2002

Table 56: Dropouts at Sir Arthur Lewis Community College by Division/Department, 1994/95 to 1990/00

Year	Division/Department					Total Dropouts	Enrolment	Percentage Dropout Rate
	Arts & General Studies	Technical Education and Management Studies	Teacher Education	Health Services	Agriculture			
1994/95	25	23	3	4	6	61	1115	5.5
1995/96	39	25	3	1	--	68	1084	6.3
1996/97	31	46	1	1	13	92	1272	7.2
1997/98	43	24	4	2	5	78	1337	5.8
19998/99	45	19	2	3	1	70	1362	5.1
1999/00	45	32	1	1	1	80	1403	5.7

Source: Ministry of Education, St. Lucia, 2002

Table 57: Total Leavers at Sir Arthur Lewis Community College, 1998/99 and 1999/00

Year	Dropouts/ Withdrawals	Transfers	Completed (certified)	Completed (uncertified)
1998/99	70	0	507	17
1999/00	80	22	491	208

Note: This Table does not include the Department of Continuing Education

Source: Ministry of Education, St. Lucia, 2002

Table 58: Changes in Student/Teacher Ratios at Sir Arthur Lewis Community College, 1997/98 to 2000/01

Year	Total Enrolment	Number of Teachers	Student/Teacher Ratio
1997/98	1337	176	8
1998/99	1362	151	9
1999/00	1458	133	11
2000/01	1403	127	11

Note: This Table does not include the Department of Continuing Education
Source: Ministry of Education, St. Lucia, 2002

Table 59: Allocations of Expenditure per Student by Ministry of Education for Sir Arthur Lewis Community College, 1994/95 to 2000/01

Year	Total Enrolment	Total Government Allocations in Million EC$	Unit Expenditure Allocation per Student EC$
1994/95	1176	10.6	9014
1995/96	1175	10.6	9021
1996/97	1272	11.5	9041
1997/98	1337	13.5	10097
1998/99	1362	14.3	10499
1999/00	1458	13.8	9465
2000/01	1403	12.5	8909

Source: Ministry of Education, St. Lucia, 2002

Table 60: Total Enrolment by Main Departments of Specialization at Vieux-Fort Comprehensive School - Post Secondary Department, 1996/97 to 2000/01

Year	Division/Department				Total
	A'Level	Business Studies	Secretarial Studies	Carpentry/Joinery	
1996/97	86	16	15	13	130
1997/98	111	39	15	13	178
1998/99	123	69	23	10	225
1999/00	122	94	47	22	285
2000/01	127	103	31	23	284

Source: Ministry of Education, St. Lucia, 2002

TABLE 61: Male Enrolment by Main Departments of Specialization at Vieux-Fort Comprehensive School - Post Secondary Department, 1996/97 to 2000/01

Year	Division/Department				Total
	A' Level	Business Studies	Secretarial Studies	Carpentry/Joinery	
1996/97	31	4	0	13	48
1997/98	34	10	0	13	57
1998/99	32	5	0	10	67
1999/00	45	37	0	22	104
2000/01	63	36	0	23	122

Source: Ministry of Education, St. Lucia, 2002

TABLE 62 - Female Enrolment by Main Departments of Specialization at Vieux-Fort Comprehensive School - Post Secondary Department, 996/97 to 2000/01

Year	Division/Department				Total
	A' Level	Business Studies	Secretarial Studies	Carpentry/Joinery	
1996/97	55	12	15	0	82
1997/98	77	29	15	0	121
1998/99	91	44	23	0	158
1999/00	77	57	47	0	181
2000/01	64	67	31	0	162

Source: Ministry of Education, St. Lucia, 2002

TABLE 63 - Percentage Share of Females by Enrolment by Main Departments of Specialization at Vieux-Fort Comprehensive School - Post Secondary Department, 1996/97 to 2000/01

Year	Division/Department				Total
	A' Level	Business Studies	Secretarial Studies	Carpentry/Joinery	
1996/97	64	75	100	0	63
1997/98	69	74	100	0	68
1998/99	74	64	100	0	70
1999/00	63	61	100	0	64
2000/01	50	65	100	0	57

Source: Ministry of Education, St. Lucia, 2002

TABLE 64 - Allocation Pattern of Current Educational Expenditure by Levels of Education and Programs, 1994/95 to 20001/02

Levels of Education/Programs	Amount in Millions EC$							
	1994/95	**1995/96**	**1996/97**	**1997/98**	**1998/99**	**1999/00**	**2000/01**	**2001/02**
Primary	35.10	37.80	37.33	38.23	37.77	42.13	43.32	44.06
Secondary	19.62	20.59	24.47	25.96	25.21	28.53	28.41	31.20
Tertiary	10.58	10.59	11.53	13.54	14.31	13.81	13.15	13.15
Education Services	6.59	8.81	8.40	8.63	6.60	5.52	5.14	5.58
Agency Administration	2.76	2.77	3.04	3.00	7.52	4.51	3.86	3.69
Human Resource Development					3.90	3.73	2.21	3.00
Special Education	0.91	0.91	0.91	1.13	1.26	1.31	1.45	1.29
Sports					0.53	1.19	1.44	1.25
Cultural/Library	1.78	1.61	1.75	1.97	1.00	1.13	1.16	1.20
Youth Services					0.84	0.99	0.79	0.84
Adult/Continuing Education					0.30	0.65	0.63	0.77
Early Childhood Education	0.17	0.14	0.25	0.38	0.24	0.39	0.36	0.35
UNESCO	0.09	0.05	0.09	0.10	0.16	0.18	0.15	0.17
School Feeding	0.60	0.55	0.57	0.88	0.60	0.63	0.6	0
Labour	0.80	0.70	0.77	0.87				
Total	**78.99**	**84.52**	**89.73**	**95.10**	**99.48**	**103.89**	**102.07**	**106.54**

* Included in the Primary Budget

Source: Ministry of Education, St. Lucia, 2002

TABLE 65 - Percentage Distribution of Current Educational Expenditure by Levels of Education and Programs, 1994/95 to 2001/02

Levels of Education/Programs	Percentage Distributions							
	1994/95	**1995/96**	**1996/97**	**1997/98**	**1998/99**	**1999/00**	**2000/01**	**2001/02**
Primary	44.44	44.72	41.60	40.20	37.7	40.2	42.2	41.3
Secondary	24.84	24.36	27.27	27.30	25.1	27.2	27.7	29.2
Tertiary	13.39	12.53	12.85	14.24	14.3	13.2	12.8	12.3
Education Services	8.34	10.43	9.36	9.08	6.6	5.3	5.0	5.2
Agency Administration	3.49	3.28	3.38	3.15	7.5	4.3	3.8	3.4
Human Resource Management					3.9	3.6	2.2	2.8
Special Education	1.15	1.07	1.01	1.19	1.3	1.3	1.4	1.2
Sports					0.5	1.1	1.1	1.1
Cultural/Library	2.25	1.90	1.95	2.07	1.0	1.1	1.4	1.1
Youth Services					0.8	0.9	0.8	0.7
Adult/Continuing Education					0.3	0.6	0.6	0.7
School Education	0.76	0.65	0.63	0.93	0.6	0.6	0.6	
Early Childhood Education	0.22	0.17	0.28	0.40	0.2	0.4	0.4	0.3
UNESCO	0.12	0.06	0.10	0.11	0.2	0.2	0.1	0.1
Labour	1.01	0.82	0.86	0.92				
Total	100.00	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.1**	**100.0**

Source: Ministry of Education, St. Lucia, 2002

TABLE 66 - Allocation to Education Sector in Relation to Current and Capital Budgetary Expenditures, 2001/02

	Expenditure in Millions EC$			
Sectors	**Recurrent**	**Capital**	**Total**	**% Distribution**
Finance and Economic Affairs	184.4	15.3	199.6	23.28
Education and Human Resource Development	106.5	68.1	174.6	20.36
Development, Planning, Environment and Housing	7.3	116.7	124.0	14.47
Legal Affairs, Home, Labour, Judiciary and DPP	48.7	25.2	73.9	8.62
Communications, Works, Transport and Public Utilities	23.5	46.5	69.9	8.16
Health, Human Services, Family Affairs and Gender Relation	53.1	9.8	62.9	7.33
Agriculture, Forestry and Fishing	12.3	45.7	58.0	6.77
Tourism and Civil Aviation	1.4	23.7	25.0	2.92
Foreign Affairs and International Trade	14.7	0.6	15.3	1.97
Community Development, Culture, Local Government, Cooperatives and Ecclesiastical Affairs	10.2	3.3	13.6	1.58
Public Services	11.5	1.2	12.7	1.49
Prime Minister's Office	7.3	3.4	10.7	1.24
Others	9.7	0.4	10.1	1.17
Commerce, Int'l Financial Services and Consumer Affairs	3.9	3.1	7.0	0.82
Total	**494.4**	**362.9**	**857.3**	**100.00**

Source: Ministry of Education, St. Lucia, 2002

TABLE 67 - Projections of Public Expenditure by Levels of Education and Programs at Current Prices in St. Lucia, 2000/01 to 2005/06

	Expenditure in Million EC$			
Year	**Primary Education**	**Secondary Education**	**Other Programs**	**Total**
2000/01	43.7	28.3	30.7	102.7
2001/02	44.1	31.2	31.2	106.5
2002/03	44.7	34.0	37.1	115.8
2003/04	45.5	38.6	41.5	125.6
2004/05	46.5	45.4	47.4	139.2
2005/06	47.8	54.6	55.1	157.5

Source: Ministry of Education, St. Lucia, 2002

TABLE 68 - Actual and Projected Educational Expenditure at Current Prices in Reaction to Gross Domestic Product, 1994/95 to 2005/06

	Year	Educational Expenditure	GDP at Current Prices	Educational Expenditure as a Percentage of GDP
Actual	1994/95	78.99	1191	6.6
	1995/96	84.52	1280	6.6
	1996/97	89.73	1299	6.9
	1997/98	95.10	1328	7.2
	1998/99	100.2	1407	7.1
	1999/00	104.7	1518	6.9
	2000/01	102.7	1560	6.6
Projected	2001/02	106.5	1607	6.6
	2002/03	115.8	1655	7.0
	2003/04	125.6	1705	7.4
	2004/05	139.2	1756	7.9
	2005/06	157.5	1808	8.7

Source: Ministry of Education, St. Lucia, 2002 - Education Expenditure

GDP: For projection purposes the GDP has been assumed to increase at an annual rate of 3 percent

TABLE 69 - Actual and Projected Educational Expenditure in Relation to Total Government Recurrent Expenditure, 1994/95 to 2005/06

	Year	Educational Expenditure	GDP at Current Prices	Government Recurrent Expenditure	% Share of Government Expenditure of GDP	% Share of Education in Total Government Expenditure
Actual	1994/95	78.99	1191	288	24.2	27.4
	1995/96	84.52	1280	328	25.6	25.8
	1996/97	89.73	1299	386	29.7	23.2
	1997/98	95.10	1328	388	29.2	24.5
	1998/99	100.2	1407	391	27.8	25.6
	1999/00	104.7	1518	414	27.3	25.3
	2000/01	102.7	1560	435	27.9	23.6
Projected	2001/02	106.5	1607	494	30.7	21.6
	2002/03	115.8	1655	509	30.7	22.8
	2003/04	125.6	1705	524	30.7	24.0
	2004/05	139.2	1756	540	30.7	25.8
	2005/06	157.5	1808	556	30.7	28.3

Sources: *Source: Ministry of Education, St. Lucia, 2002 - Recurrent Educational Expenditure and GDP*

Total Government Recurrent Expenditure for 1994/95 to 1999/00 from Government Annual Budget Estimates.

Notes: Total Government Recurrent Expenditure for 2000/01 to 2005/01 to 2005/06 has been projected by applying 3 percent annual growth rate, same as applied to GDP Projections.

TABLE 70 - BCC Full-time Student Statistics 2000 - 2001

DIVISION	STUDENT ROLL - ANALYSIS BY SEX AND YEAR												
	1st Year Day			2nd Year Day			3rd Year Day			4th Year Day			
	Total Day	M	F	T	M	F	T	M	F	T	M	F	T
Commerce	**530**	91	205	**296**	64	170	**234**	–	–	**–**	–	–	**--**
Comp. Studies	**280**	78	71	**149**	75	56	**131**	–	–	**–**	–	–	**--**
Fine Arts	**122**	25	54	**79**	12	6	**18**	4	8	**12**	10	3	**13**
General/Cont Education	**57**	6	20	**26**	8	23	**31**	–	–	**–**	–	–	**--**
Health Sciences	**334**	39	169	**208**	16	46	**62**	14	50	**64**	–	–	**--**
Hospitality Institute	**437**	38	106	**144**	66	227	**293**	–	–	**–**	–	–	**--**

Language Centre	**283**	57	158	**215**	7	61	**68**	–	–	**–**	–	–	**--**
Liberal Arts	**233**	36	104	**140**	25	68	**93**	–	–	**–**	–	–	**--**
Physical Education	**24**	18	6	**24**	–	–	**–**	–	–	**–**	–	–	**--**
Science	**271**	63	93	**156**	51	64	**115**	–	–	**–**	–	–	**--**
Technology	**131**	86	15	**101**	29	1	**30**	–	–	**–**	–	–	**--**
TOTALS	**2702**	537	1001	**1538**	353	722	**1075**	18	58	**76**	10	3	**13**

Source: Barbados Community College

TABLE 71 - BCC Student Enrollment According to Division - 2000 – 2001

DIVISION	DAY		EVENING		TOTAL
	MALE	FEMALE	MALE	FEMALE	
Commerce	155	375	104	342	**976**
Computer Studies	153	127	106	174	**560**
Fine Arts	51	71	13	64	**199**
General Education	14	43	15	44	**116**
Health Science	69	265	1	14	**349**
Hospitality Institute	104	333	63	240	**740**
Language Centre	64	219	33	101	**417**
Liberal Arts	61	172	–	–	**233**
Physical Education	18	6	–	–	**24**
Science	114	157	–	–	**271**
Technology	115	16	57	4	**192**
TOTALS	**918**	**1784**	**392**	**983**	**4077**
TOTAL	**4,077**				
Less cross divisional students	**- 233**				
Real Student Enrolment	**3,844**				

Table 72: Summary of Expenditure on Post-Secondary/Tertiary Institutions for the Period 1995/96 - 2000/01

Financial Year	Total Expenditure on:			% of Education Budget spent on:	
	Education	UWI, BCC and SJPP and ETTC	BCC, SJPP and ETTC	UWI, BCC, SJPP and ETTC	BCC, SJPP and ETTC
1995/96	238,465,000	52,239,238	16,411,747	21.9	6.9
1996/97	278,273,000	64,247,308	20,553,891	23.1	7.4
1997/98	318,387,000	82,341,136	22,712,223	25.9	7.1
1998/99	317,571,000	79,926,018	25,129,452	25.2	7.9
1999/00	351,269,000	71,912,815	29,127,662	20.5	8.3
2000/01	378,648,144	89,660,950	26,552,587	23.7	7.0

Figures for 1999/00 and 2000/01 represent Approved Expenditures and not actual expenditures.

Source: *Ministry of Education*, Government of Barbados

Table 73: No of Applications Accepted and Not Accepted at BCC, SJPP and ETTC in 2000/01

INSTITUTION	NO. OF APPLICANTS	NO. ACCEPTED	NO. NOT ACCEPTED
BCC	3,134 (Full Time)	1,517 (Full Time)	1,617 (Full Time)
	3,324 (Part-Time)	1,083 (Part-Time)	2,241 (Part-Time)
	6458 (Total)	2,600 (Total)	3,858 (Total)
SJPP	3,297 (Full Time)	622 (Full Time)	2,828 (Full Time)
	3,408 (Part-Time)	1,438 (Part-Time)	1,970 (Part-Time)
	6,705 (Total)	1,907 (Total)	4,798 (Total)
ERDISTON	119 (Full Time)	77 (Full Time)	42 (Full Time)
GRAND TOTAL	**13,282**	**4,584**	**8,698**

Source: *Ministry of Education*, Government of Barbados

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